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## Employment in Europe 1998

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## Employment in Europe 1998

### Abstract

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The Report has pioneered the use of new concepts – like the employment rate which has improved our understanding of our employment potential in Europe and which, this year, is the subject of a special report to the European Council.

### Keywords

Europe, European union, growth, jobs, member states, economy, social partner, industry, employer, labour law, worker, globalization, Lisbon, labour market, industrial relations, employment, skills, productivity. international

### Comments

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# Employment in Europe 1998

Jobs for people — people for jobs:  
turning policy guidelines into action

Employment & social affairs

Employment and European Social Fund

**European Commission**

Directorate-General for Employment, Industrial Relations  
and Social Affairs  
Unit V/A.1

Manuscript completed in October 1998

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A great deal of additional information on the European Union is available on the Internet.  
It can be accessed through the Europa server (<http://europa.eu.int>).

Cataloguing data can be found at the end of this publication.

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## Foreword

This year is the tenth anniversary of *Employment in Europe*. For a decade now this Report, and the thinking behind it, has provided the analytical bedrock for the Commission's increasingly important role in supporting Member State employment and labour market policies.

The Report has pioneered the use of new concepts — like the employment rate which has improved our understanding of our employment potential in Europe and which, this year, is the subject of a special report to the European Council.

The Report has encouraged better labour market measurement by the promotion and exploitation of Eurostat's Community Labour Force Survey and other series. It has developed the systematic analysis of employment in which individual Member State performance is seen in the context of Europe as a whole — an increasingly important factor in understanding the importance of the Single Market and its potential.

It has sought to illuminate. It has served also, as one of my Commissioner colleagues once aptly remarked, to destroy myths. Employment has been one of the most contested areas of public policy. In the past, speculative theories and plausible-sounding stories were the order of the day. Those who shouted loudest too often seemed to win the argument. The *Employment in Europe* reports have helped change much of that. Objective, factual evidence, carefully analysed and presented, has

progressively replaced assertion and dogma.

*Employment in Europe* is an analytical report, not a policy making document. However its scientific strength and rigour has contributed directly to policy development. I have particular reason to value this. The Report's analyses provided me with the material on which I based the Framework Initiative on Employment in early 1993, soon after my arrival in Brussels, together with the Employment and Social Affairs Ministers from the Member States.

That led directly to the White Paper on Growth, Competitiveness and Employment at the end of that year — a combination of political process and technical analysis that created the first really open debate on the European employment policy challenge.

Today, as you will know, employment policy has come of age in Europe. Last month I presented to the Commission the first Joint Report on the progress of our Member States in fulfilling the political commitments they made at the November 1997 Luxembourg Jobs Summit, following the major Treaty revisions agreed in Amsterdam in June.

Times have changed with the new Treaty. The Union now treats employment, not just as a Member State responsibility, but as a 'matter of common concern'. This is a recognition that poor economic and

employment performance affects the vitality of the whole of Europe and not just individual Member States. It is a recognition that we need to learn to solve our employment problems together.

The Joint Report will now be discussed with the Council of Ministers — Employment Ministers and Finance Ministers — before being submitted to the European Council in Vienna. It will be accompanied by the Commission's proposed employment policy guidelines for 1999, building on the established four pillars of employability, entrepreneurship, adaptability and equal opportunities.

In keeping with these developments, this year's Report updates some of the evidence that underpins the guidelines.

Employability — providing people with the necessary skills — depends crucially on the development of education and the acquisition of skills as technological change and economic progress advance. The Report illustrates the interplay of age and education in explaining some of the differences in employment and unemployment patterns across Member States.

Entrepreneurship — the key to future job creation — depends crucially on the healthy growth of new small businesses. Small businesses — over 20 million separate enterprises — account for 40 per cent of all people employed in the European Union. And two-thirds of them

work in businesses of less than 10 people.

While keeping decision-making up-to-date with the data and trends, the Report continues to address other employment concerns and issues. The chapter on globalisation demonstrates that, while the internal market is still the dominant force for change in the Union, world market changes do affect domestic employment opportunities.

The chapter on employment trends in Central and Eastern Europe outlines, likewise, the extent to which the process of structural change that precedes, and will accompany, enlargement is under way. In the established tradition of data ‘delving’, this Report also takes advantage of a new earnings survey to look at the structure of earnings between Member States and between men and women.

Ten years on, the *Employment in Europe* Report continues to play its part in the employment challenge — providing the Union with a solid and creative tool for advancing our understanding of the complex changes in economic and social conditions that we must factor into our policy development. This Report is as worthy as all its predecessors. I commend it heartily to you.

*Pádraig Flynn*

# **Employment in Europe 1998**

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## Jobs for people — people for jobs: executive summary

The Employment in Europe Report 1998 presents the latest trends in employment and the labour market and provides the analytical background to the review of the employment strategy and the adoption of the Employment Guidelines for 1999. The full impact of the employment strategy and the broader measures promoting an employment-friendly environment will only be felt in the medium and longer-term. The employment strategy is a multi-annual process and sustainable progress will require a continuing commitment over a number of years by the Member States.

### Recent developments in jobs and employability

Trends and prospects reveal both encouraging signs and positive outcomes of the policies pursued over recent years. They also indicate changes in the nature of labour markets and continuing challenges which must be addressed if the opportunities at hand are to be translated into more and better jobs.

- Economic growth recovered in 1997, rising by 2.7%, and there are good prospects for a continuing robust economic performance in spite of the deterioration in the external economic environment.
- Employment rose by some 800,000 in 1997, to bring total employment to 149 million and the employment rate to 60.5%.
- Women accounted for 62% of the net new jobs created in 1997, a slight decline compared to previous years, and the gender gap in employment rates has fallen to 20 percentage points from 26 percentage points in 1990.
- In recent years, real wage growth has been lower than the rate of growth of productivity, allowing for an improvement in the profitability of investment, and the share of wages in GDP in the Union (60%) is now significantly lower than in the US (66%) and Japan (67%).

- While the employment recovery is weaker than in the 1980s, though stronger than the 1970s, the demographic situation is different, with much slower growth in working-age population in the years to come.
- For the fifth time in six years, there was a decline in the number of full-time jobs and part-time jobs accounted for all the net jobs created.
- Unemployment was still 10% in mid 1998, and the rate of long-term unemployment was unchanged at 5%.
- Most of the decline in unemployment since 1994 has favoured men, and the gender gap in unemployment is now almost 3<sup>1</sup>/<sub>2</sub> percentage points.
- In 1997, around 47% of both unemployed men and women over 25 had no educational qualifications beyond basic schooling, and while high-skilled jobs grew by more than 2% a year between 1992 and 1997, manual jobs declined significantly.

### Employment Guidelines 1999 — deepening the strategy

Even in the context of slower than expected growth in the global economy, the macroeconomic fundamentals in Europe are robust. A vigorous implementation of the employment strategy, therefore, combined with a successful pursuit of the macroeconomic strategy set out in the Broad Economic Policy Guidelines should continue to bring about the desired increase in the employment rate in Europe above its present level. The four pillars of the Guidelines provide the framework for the necessary actions.

### Promoting employability

Tackling the skills gap requires a three-pronged approach to deal with the three dimensions of employability:

- young people must be given the necessary skills and competency which are relevant to labour market needs and adaptable to change;
- the unemployed and particularly the long-term unemployed must have access to the means to upgrade and/or update their skills to compete effectively in the labour market;
- governments, social partners and individuals must combine their efforts to create a society where life-long learning is an integral part of an active employment policy.

The preventive approach of the first pillar, based on early identification of those most at risk and early action to deal with their problems, is designed to improve employability head-on. The first three guidelines, in particular, are fundamental to addressing the problem of the skills gap of the unemployed and young people, defined in a broad sense to include not just formal qualifications but work skills and experience.

### **Promoting entrepreneurship**

The culture of entrepreneurship is not as well developed in the EU as in the United States. Entrepreneurship as a profession must be promoted and entrepreneurial skills integrated in curricula throughout the educational system. Providing a stable macroeconomic environment is a critical element in reducing uncertainty and creating the conditions for enterprises to flourish.

Self-employment and successful small businesses are crucial to the future development of employment in the European Union. Employers and the self-employed account for 13% of total non-agricultural employment. SMEs account for around half of all the jobs in the economy, with a further 19% in large organisations in communal services, 25% in large enterprises elsewhere in the economy and the rest in agriculture.

### **Promoting adaptability in businesses and their employees**

The modernisation of the organisation of work is essential in order to improve the productivity of European firms, the quality of working life and the employability of the work force. Instead of the low road of social dumping, Europe needs to follow the high road of high skill, high trust and high quality in order to improve productivity and create a widely-

shared prosperity. Training is a key element. People need to be equipped with the skills necessary for them to adjust effectively to changes in the way they carry out their work.

The modernisation of work must be based on a partnership approach between the social partners and between these and government in order to create an appropriate framework. Greater adaptability in enterprises should be accompanied by more progress in deregulating product and service markets to facilitate increased productivity and job creation.

### **Promoting equal opportunities between women and men**

Reducing the gender gap in unemployment by actively supporting higher employment rates of women is an essential step towards raising the overall employment rate in the Union. While increasing educational attainment promotes participation of women, it is clear that family circumstances still affect participation markedly. On the demand side, flexible working arrangements are important, but the development of support facilities and certain service activities has been the major factor in facilitating the entry of women into the labour market in Northern Europe.

The European employment strategy calls on Member States to reduce the gender gap, to raise levels of access to care services and to enable women and men to return to the labour market after an absence. Integrating the gender perspective better into labour market policy is one way of encouraging underlying trends to develop.

### **Supporting employment in other Community policies**

The Amsterdam Treaty explicitly recognised the impact of other Community policies on employment. This report examines two areas in which this impact is particularly important.

- The activation of labour market policies — an essential element in the employment strategy — through the restructuring of public expenditure was specifically noted by the Florence European Council. Best practice in some Member States demonstrates that it is both necessary and possible to restructure public expenditure without prejudice to the objectives of fiscal consolidation.

- As in other areas, the overall employment effects of changing environmental policies and priorities will be the net outcome of the positive and negative employment impact of new activities and new technologies. Governments have a critical role to play in creating the appropriate framework in which prices reflect the cost of environmental damage and in which investment decisions — and hence job creation — are made within a long-term perspective of sustainable development.

The Commission has submitted a number of reports on the Employment strategy to the Vienna European Council to carry this process forward. The Joint Employment Report presents an assessment of progress in implementing the strategy. The report on Employment Performance (Employment rates report) analyses the trends in employment rates in Europe and compares these with the United States. These reports underpin the Commission's proposal for the Employment Guidelines in 1999.

## **Enlarging the Union**

Enlargement of the Union will have an impact on the employment situation in both the existing Member States and the candidate countries. At the time of accession, the Amsterdam Treaty and the employment strategy will be part of the *acquis communautaire*. Accession to the Union will require an adjustment in labour markets and labour market policies and, in particular, in the capacity to adapt labour market institutions and policy delivery systems to permit the implementation of the employment guidelines. The Union is actively supporting this adjustment.

## **The way ahead**

The European employment strategy is a medium-term process, which will require the vigorous implementation of the Employment Guidelines over a number of years. It is, therefore, not necessary to change the basic structure of the employment strategy and the guidelines every year but rather to consolidate the strategy making minor adjustments which cover the gaps and take account of the ever-changing nature of labour markets. The four-pillar structure of the Guidelines represents a framework in which Member States can focus their efforts on those areas which have been identified as being likely to tackle the most pressing obstacles to an employment-friendly labour market in Europe and, hence, to a higher employment rate.

The size of the employment challenge and the respective roles of macroeconomic and structural policies are clear: raising the employment rate to 65% over the next five years would imply growth of employment of 1½% a year or more, so that either the average annual rate of growth of GDP would need to be significantly above 3% a year or that the employment-intensity of growth would need to be increased through complementary structural policies.



## Jobs for people — people for jobs: turning policy guidelines into action

The adoption of the Employment Guidelines at the end of 1997 confirmed the recognition of employment as an explicit objective for the European Union and the beginning of the real implementation of the employment provisions of the Amsterdam Treaty.

The Treaty now states that 'Member States ... shall regard promoting employment as a matter of common concern and shall co-ordinate their action'. Further, it requires that 'The objective of a high level of employment shall be taken into consideration in the formulation and implementation of Community policies and activities'.

The four pillars of the Employment Guidelines reflect the broader objectives for employment and working conditions set out in the Treaty. This includes the existence and promotion of 'a skilled, trained, motivated and adaptable work force and labour markets responsive to economic change' as key objectives of a co-ordinated employment strategy, the task of promoting equal opportunities for men and women, as well as the fundamental objective of promoting job creating entrepreneurship in Europe.

The strategy, and the Guidelines, reflect the underlying analysis which the Commission has presented in the *Employment in Europe* report over a number of years, and in particular, the need to raise the employment rate in Eu-

rope to a level closer to that of our major trade competitors and other equivalent developed economies. The Employment Guidelines are designed to address the perceived causes of the low employment rate in Europe: the inability of the European economy to deal with major shocks, and the incapacity of the European labour market to respond with the necessary structural changes to re-absorb those who have lost jobs in declining sectors and activities.

Three issues have to be addressed by the Commission and the Union over the coming months and years.

First, the Commission has presented its proposals for revising the Employment Guidelines for 1999. The employment strategy that the guidelines represent is a medium-term one for bringing about the fundamental structural changes needed in the European labour market to generate lasting jobs. The Commission's proposal is characterised by consolidation: a deepening and a sharpening of the focus of the guidelines in the light of the first year's experience rather than a fundamental revision, which is neither required nor appropriate.

Secondly, the Commission will be carrying forward its work on the support for employment in other Community policies as provided for in Article 127 of the Amsterdam Treaty. In 1998 and 1999, the focus of this analysis will be on a

limited number of priority issues. They include the restructuring of public expenditure to promote active labour market policies, the role of taxation in creating employment and employment and the environment.

Thirdly, the European Union has opened negotiations with the candidate countries with a view to their accession. The enlargement of the Union to these countries will have important implications for employment, both in terms of the impact on the existing Member States, but more importantly, on the capacity of the candidate countries to adopt and implement the employment guidelines themselves. The Commission has begun to carry out a series of employment policy reviews with these countries in order to assess this capacity and identify the action required.

This year's *Employment in Europe* report addresses these issues. In the first section below, it reviews the major trends and developments in the economic and employment situation in the Union. The second section reviews each of the pillars of the employment guidelines and presents the underlying analysis that drives them. The third section presents some of the main messages in relation to the 'mainstreaming' of employment in two of the areas chosen for priority analysis. The final section presents for the first time an analysis of employment developments in the candi-

date countries and the objectives of the employment policy reviews.

## Major Trends in 1997

More detailed analysis of the trends highlighted below is set out in the background analysis in the main report and in a special report on employment performance in Member States which will be submitted to the European Council at Vienna.

## The European economy maintains its strength

Growth recovered momentum in 1997 with a rise in GDP of 2.7% against 1.8% in 1996. Despite an international environment that turned out to be markedly less favourable than expected, prospects for economic recovery are confirmed, as the driving force for growth shifts gradually from exports to domestic demand. According to the Autumn 1998 forecasts, GDP in the EU is expected to grow by 2.9% in 1998 and 2.4% in 1999.

With an underlying trend growth of labour productivity of just under 2% a year, employment rose again in 1997 and is forecast to increase by 1.2% in 1998 and 0.9% in 1999, equivalent to about 3 million net new jobs in these two years. Since labour force participation, predominantly among women, is likely to increase, the employment rate could rise slightly from 60.5% in 1997 to 61.1% in 1999. (The figures used for employment correspond to the benchmark series published by Eurostat for the purposes of analysing employment over time. For a detailed description of this series, see the Box in Part I, Section 1 in the main part of the report.) The unemployment rate, which fell by 0.2% in 1997 from 10.8% in 1996, is forecast to fall further to average 10.0% in 1998 and 9.5% in 1999.

These developments are a modest step in the direction of the objective of a high level of employment specified in Article 2 of the Treaty and further confirmed by the Luxembourg jobs summit (November 1997). Net job creation can only come from that part of GDP growth which is in excess of the increase in labour productivity, which itself is a key to maintaining competitiveness. Such a high employment level relies directly upon the sustainability of a high rate of output growth (Graph I).

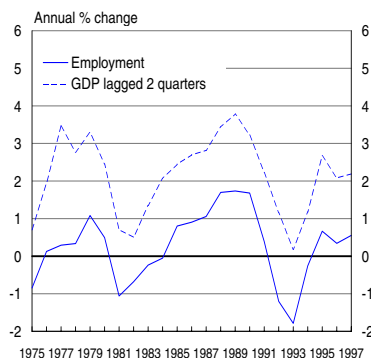
The present recovery, which began at the end of 1993, has produced positive effects, with growing investment increasing both capacity and employment. The sustained efforts towards convergence in the framework of EMU and appropriate wage developments have improved the fundamentals of the European economy: inflation is low, public finances are on a sound footing, and profitability, competitiveness and business confidence are high and

rising. The prospect of moving to EMU warrants a macroeconomic policy mix favourable to relatively high growth for an extended period. In such a context, all the determinants, and notably monetary conditions (including long-term interest rates and exchange rates), are favourable to a healthy expansion of demand. The efforts of the past are now delivering their expected positive results, especially for capital formation (business surveys show a planned increase of 9% in investment in real terms in the EU for 1998 in the manufacturing sector).

The prospect for sustained growth is based on the positive impact on domestic demand of low interest rates and the fact that the EU economy — which is increasingly a single integrated economic entity — is becoming less vulnerable to external shocks. However, it must be recognised that there is some external threat to growth from the Asian and Russian crises which might dampen economic activity. Given the impact of the external financial crisis, the employment prospects might be tarnished if a deteriorating climate of confidence settles in and curtails the dynamism of EU domestic demand, which could fail to compensate for faltering demand outside the Union.

Coupled with the improvement in the macroeconomic policy-setting brought about by EMU, a high medium-term growth path is a realistic opportunity which now needs to be grasped in order to generate the jobs the EU badly needs. Although the introduction of the Euro in itself will not solve the unemployment problem, its advantages are not limited to increased price transparency and the elimination of internal exchange rate costs and risks. The policy framework of EMU is likely to help overcome the ob-

I Growth of employment and GDP in the Union, 1975-97



stacles to sustained growth and job creation that in the past contributed to the unsatisfactory growth and employment performance of the Union.

Even so, unemployment is unlikely to fall rapidly. Structural policies, which are much easier to implement and more likely to be effective in a high growth context, have a key role to play in improving competitiveness, reducing tensions which might impede growth, ensuring that development is environmentally sustainable and turning growth into jobs. To be fully effective, however, they must be coherent with the pursuit of sound macroeconomic policies. In this respect, it is essential that the budgetary costs of structural reform are kept under control and do not lead to excessive borrowing. With growth providing the resources required, labour market and fiscal policies (larger wage differentiation in collective agreements, reorganisation of working arrangements, reductions in the non-wage labour costs of employing low-skilled workers) could possibly increase the employment-content of growth, significantly raising the employment rate.

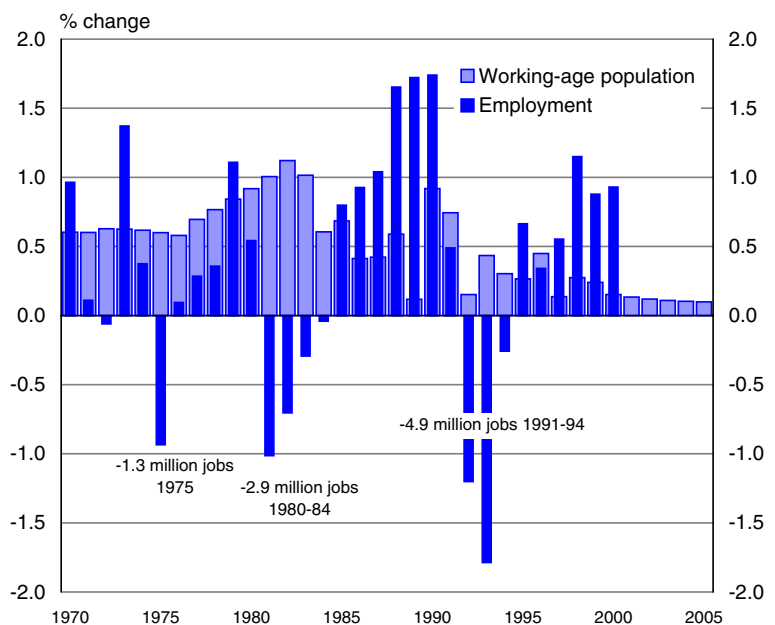
## Employment rising modestly

Employment rose again in 1997, increasing by 800 000, more than the rise of 600 000 in 1996, but below the increase of 1 million in 1995. The total number employed in the Union is now 149 million, the highest since 1992, and some 2 million above the low point of 1994, though still short of the peak of 151 million in 1991. Although the recovery is weaker than in the 1980s, it is stronger than in the 1970s and, in the last three years, the Union has

Key data 1997					
	EU	Lowest	Highest	US	J
Participation rate	67.8	58.4	82.3	77.2	77.2
Employment rate	60.5	48.6	77.5	73.4	74.6
Unemployment rate	10.6	3.7	20.8	4.9	3.4
Youth unemployment rate	21.0	6.7	38.8	11.3	6.7
Long term unemployment rate	5.2	0.6	10.8	0.4	0.7
Share of wages in GDP	60.5	54.4	66.3	65.9	67.1
% part-time	16.9	4.6	37.9	n.a.	n.a.
% temporary employees	12.2	2.1	33.6	n.a.	n.a.
% working 45 hours a week or more*	12.5	1.3	28.3	n.a.	n.a.

n.a.: comparable data not available  
\* Employees in industry and services

## II Change in employment and working-age population in the Union, 1970-2005



made up half the job losses of the early 1990s. At present, it is still short of achieving the rate of growth of employment necessary to absorb the high levels of unemployment and to provide employment for all those who want to work, but the demographic prospects are somewhat different than in the past (Graph II).

The employment rate in the Union rose only marginally in 1997 to 60.5% of working age population, still a full 2 percentage points below the rate in 1991 (Graph III). In both historical and international terms, the Union's employment performance remains unsatisfactory. The current employment rate is a little higher than in the early 1980s, but falls short of the rates of 64% achieved in the mid-1970s. Both the US and Japan, by contrast, continued to record ever higher employment rates (of around 74%) in 1997. This disparity in performance is a reflection of both differences in rates of unemployment (Graph IV) and labour force participation (Table).

The potential employment reserve is highest among women, older workers and young people. The

main differences in employment rates in the first two groups come from lower participation in the labour market, depressed by a lack of jobs, rather than from high unemployment. In a period of high growth it should be possible to mobilise some of this employment potential and provide jobs for those who want to work but who have little prospect of finding employment.

The gap in employment between the EU and US is not in agriculture, manufacturing or the public sector but in services. The difference in employment rates is particularly marked in three broad sectors: communal services, business services and distribution, hotels and restaurants. The differences between the Member States with high and low employment rates essentially lie in these same sectors.

Employment in Europe is significantly lower than in the US in *all* services sectors except public administration. The evidence shows that this applies not only to low skilled jobs but also to highly skilled ones: there is a difference of around 3 percentage points for distribution, hotels and restaurants, but also for

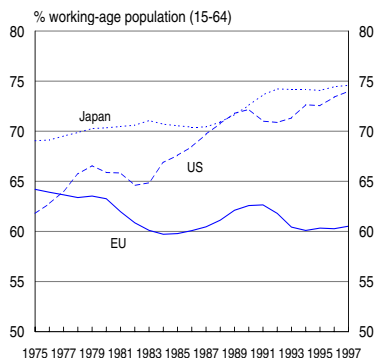
communal services and business services. Within 'communal services', the US employs relatively fewer people in public administration, but this is more than offset by higher employment in education, health and social work and recreational activities.

Performance in the Member States in creating jobs in services generally, and in these sectors in particular, varies widely. In three Member States — Germany, France, Italy — which together account for 50% of total EU employment, growth in these sectors has been below average in recent years, as it has been in the economy as a whole.

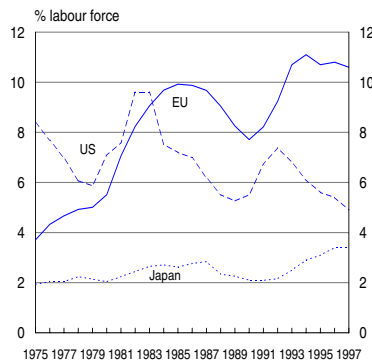
## Part-time work continues to rise

For the fifth year in the last six, there was no net addition to full-time jobs in the Union in 1997. Indeed, there was a decline in the number employed full-time and part-time jobs accounted for more than all of the increase in employment that occurred (Graph V). The growth of part-time working means that there has been some reduction in average hours worked by all

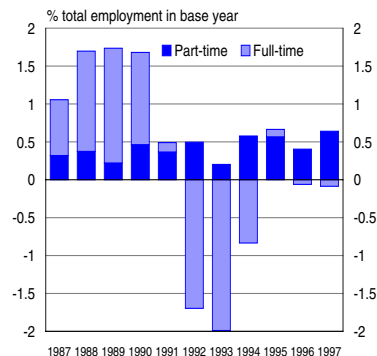
III Employment rates in the Union, US and Japan, 1975-97



IV Unemployment rates in the Union, US and Japan, 1975-97



V Change in part-time and full-time employment, 1987-97





those in employment over the past three years. This would have been larger, however, had the growth of part-time jobs not been accompanied by an increase in the average hours worked by those employed full-time.

In full-time equivalent terms, therefore, (i.e. weighting each person employed by the usual hours they work relative to average full-time hours), employment increased by only ½% in the Union over the three years 1994–97, whereas the number of people in work went up by 1½%. Since working-age population increased slightly over the period, the FTE employment rate remained unchanged. Not only was the FTE employment rate below the level in 1990 at the end of the period of high net job creation, but also below that in 1986 at the end of the recession of the early 1980s.

## Unemployment remains high

The effect of the low rate of job creation in the Union in recent years is reflected in the persistently high rate of unemployment which was still 10.1% in July 1998. Though this is the lowest it has been since January 1993, it has fallen by only 1.2 percentage points since the peak in 1994. Only one Member State (Austria) has unemployment higher than a year ago, although in some it remains considerably higher than before the recession of the early 1990s (in Germany, it is twice as high, in Finland and Sweden, four times higher). Unemployment in Japan is also rising, to 4.2% in July 1998. In the US, continued economic growth has led to further reductions in unemployment and the rate of 4.5% in July was the lowest (apart from April) for 30 years.

## Features of the labour market in Member States

### Fewer young unemployed

In the early 1980s, when unemployment increased to the high levels that persist today, by far the largest group affected were young people under 25. As a result partly of the focus of policy on the young unemployed, partly of a decline in the share of young people in the population and partly of more people staying longer in education, the proportion of the unemployed who are under 25 has fallen from 45% in the mid-1980s to around 25% now. The most pronounced fall has been among those under 20, who in 1986 accounted for over 22% of the total unemployed but for only 7% in 1997. By contrast, the share of 20 to 24 year olds in total unemployment has remained high at 18% in 1997 as against 22% in 1986, double their share in the working-age population. The highest rates are in Spain and Finland, where they are still over 30%, with the lowest in Luxembourg and Austria, both under 7%.

### More prime-aged unemployed

Unemployment has become a more widespread problem among other age groups over the past decade. Prime-age workers, between 25 and 49, now account for almost 60% of the unemployed in the Union (more than their share in working-age population) as opposed to 45% 11 years ago.

### More older unemployed: the case of Germany

The relative number of those of 50 and over who are unemployed has also increased, from 10% to over 15%. This predominantly reflects the rise in one country, Germany, where the relative proportions of old and young unemployed are the precise opposite to those elsewhere — 30% are 50 or over and only 12% under 25 and this gap has widened over the past decade. Although the relative number of the unemployed who are 50 or over in the new Länder is higher than in the West, the difference is relatively small (33% as against 29%). Nevertheless, the proportion has risen considerably since 1991 and the increase shows no sign of abating.

### Long-term unemployment unchanged

The rate of long-term unemployment remained unchanged in 1997 at just over 5% in the Union, with 49% of the unemployed being out of work for a year or more. The proportion of those unemployed for more than two years also remained unchanged at 30%. Although long term unemployment is highest in Spain, it is rising fastest in Sweden (where it doubled between 1996 and 1997 to 3%) and Italy where it was up to 8% (over two-thirds of the unemployed) from 5% in 1992.

Unemployment of men has fallen more than for women. Since the peak of 10.2% in March 1994, male unemployment fell to 8.7% in July 1998, while that of women declined by less than 1 percentage point from 12.8% in March 1994 to 12.0% in July 1998. The gender gap has, therefore, widened slightly.

Unemployment rates for young people under 25 are still over twice those of adults, as has been the case for many years, with overall youth unemployment at 19.9% in July 1998 as against a rate of 8.7% for those aged 25 and over (see Box). Nevertheless, much of the fall in male unemployment is due to lower unemployment among young men, for whom the rate has fallen by 3 percentage points since 1994 in contrast to a decline of only 1 percentage point for young women.

## **New jobs for women**

Women accounted for 62% of the net additional jobs created in the Union in 1997, a slight decline compared to previous years. Male employment rose by 0.3%, the first rise since 1995, while female employment growth slowed to 0.8% compared with 1% in each of the previous two years. Overall, female employment has grown 4 times faster than male employment since 1994. By 1997, the employment rate for women had risen to almost 51%, and the gender gap was down to 20 percentage points from 26 percentage points in 1990.

## **Wages and labour costs**

Pay rises in excess of the growth in labour productivity are liable to lead to increased inflation or to depressed employment growth or

both. With economic policy across the Union aimed at keeping inflation low and with monetary authorities refusing to validate excessive wage increases, pay rises above productivity growth are likely to hit jobs and give rise to higher levels of unemployment.

It is difficult, however, to blame present low rates of net job creation in the Union on excessive wage rises in general. Since the 1980s, real labour costs per employee in the Union have increased by much less than the growth of GDP per person employed (1.8% a year) and by only slightly more than in the US. Between 1994 and 1997, real labour costs per employee in the Union rose by half the rate of growth in labour productivity. The wage share in most Member States has, therefore, fallen to an average of only just over 60% in the Union, well below the level in the US (66%) and Japan (67%).

This reduction in the share of wages in GDP, and the counterpart increase in profitability, does not yet seem to have had a major effect on employment. 1998 is expected to be a turning point, however, as there seems to have been a shift towards investment and stock-building, contributing an estimated 1% to GDP growth. This seems to confirm that investment may finally be responding to the increase in levels of profitability.

## **Globalisation and employment**

Imports of goods from the rest of the world, excluding energy, amounted to just over 8% of GDP in the Union in 1997, only 60% of the level of internal trade between Member States, but they have been growing in recent years in relation to both

GDP and internal trade. This has been accompanied by an even larger expansion of exports of goods to the rest of the world (from 7% of Union GDP in 1991 to 10% in 1997) which, in practice, has led to a growing trade surplus and has served to offset the implications for employment of increasing imports.

At the same time, imports of services from the rest of the world have changed very little over the past 10 years (at just under 3% of Union GDP, meaning that imports of goods and services amount to some 11% of Union GDP) while trade in services between Member States has expanded (from 3% of GDP in 1985 to 3.7% in 1995). This may reflect the later liberalisation of trade in services than trade in goods inside the Community and the continuing barriers to service trade which exist in the global market, although these are gradually being reduced.

While the Union share of world markets (excluding the EU) has tended to decline (from 36% in 1990 to 31% in 1996), the effect of this on exports has been compensated by the growth of these markets. This is particularly true of the East Asian economies, including China, which have become an increasingly important market for European producers (accounting for 13% of Union exports of goods to the rest of the world in 1996 as against only 9% in 1990). Although the prospects are for a continuing decline in the Union share of world trade in future years as developing countries industrialise and close the gap in income per head with developed countries, there is no reason why this should be detrimental to income and employment in Europe. What matters for European producers and jobs is that export growth is maintained in relation to

the growth in demand for imports from outside the Union, as it has been in the past.

This is not to say that there are no employment implications of the growth in import penetration of the European market over recent years. The specific industries in which it has occurred have suffered job losses and the increasing demand for exports has not always led directly to compensating job growth elsewhere because of gains in labour productivity (partly stimulated by increased competition from outside). Nevertheless, indirectly, export growth has been important in generating income to support job creation in other sectors of the economy, especially services.

In practice, the broad industries affected by rising imports, on the one hand, and expanding exports, on the other, have been much the same. The composition of EU exports to third countries is not significantly different from the composition of imports from them and has not tended to change a great deal in the recent past. In 1996, some 30% of Union exports of goods to the rest of the world consisted of basic manufactured products, only slightly lower than in 1990, and much the same as the share of basic products in Union imports. Similarly, engineering and high-tech products accounted for around 50% of Union exports of manufactures to third countries, only a little higher than the share of these products in imports from outside (47%).

These figures lead to a number of conclusions: first, that exports of basic products, like manufactured food, clothing or furniture, are still an important source of foreign exchange earnings of most highly developed economies like

Union Member States; and, secondly, that developed countries tend to export and import similar types of product. Equally, however, they tend to conceal a third general point, that the nature of the goods exported and imported in terms of their unit value and design could well differ considerably, even though they might be classified to the same industry, designer clothing (exported) and mass-produced, low priced garments (imported) being examples.

Fourthly, trade in services, unlike output and employment in services, has shown little tendency to expand relative to trade in goods. This reflects the inherent nature of services which itself poses an obstacle to trade, though one which stands to be diminished in importance by information technology and advances in telecommunications. Competition in the service sector, however, has taken the form not so much of trade flows but of direct investment, in facilities to deliver services to consumers in markets around the world, but especially in developed economies, in part to provide support for exports of manufactures.

Fifthly, because of globalisation, there is a potential threat to growth in Europe from the Asian crisis. Although the East Asian region accounts for only 19% of total Union exports to third countries, the spread of recession to other parts of the world, partly caused in developing countries by large falls in energy and primary product prices, could reduce global demand for Union products significantly. Europe, however, has the potential to offset the depressing effects of the crisis by internal expansion, benefiting not only Member States but also the world economy as a whole.

## **Employment Guidelines 1999 — deepening the strategy**

The Employment Guidelines are based on four pillars that represent the main lines of action of the employment strategy:

- improving employability
- encouraging entrepreneurship
- increasing adaptability
- promoting equal opportunities for women and men

The fundamental objective of the strategy is to raise the employment rate of the Union to a level closer to that of our main trade competitors, thus exploiting the employment potential of Europe's under-used work force. Estimates prepared by the Commission show that raising the employment rate is feasible under the right conditions and if the right policies are pursued.

Each of the four pillars is designed to contribute to this outcome, but none of them is sufficient on its own. They provide the framework of an integrated strategy which requires sustained action. The analysis underlying the four parts of the strategy is set out below.

### **Improving employability**

Previous *Employment in Europe* reports have stressed the role of the skills gap as an obstacle to the efficient functioning of the labour market in Europe. Employment is increasingly concentrated in the higher-skilled occupations and the

## ‘Prevention is better than cure’

A person who becomes unemployed today in the European Union stands a significant chance of remaining so and becoming long-term unemployed. There is considerable evidence, however, that tackling the problem of the unemployed at an early stage has the greatest outcome in terms of preventing the drift into long-term unemployment.

Experience over the past years or more, supported by a model-based analysis of flows into and out of long-term unemployment, demonstrates that preventing inflows into long-term unemployment is the most effective way of alleviating the problem. In several Member States, the decline in employability over the 6–12 month period of unemployment is striking and has not improved in recent years. In 1997, over two-thirds (69%) of men and almost three-quarters of women (74%) unemployed a year before had not found a job in the intervening 12 months.

The preventive approach as encapsulated in the first two guidelines is a combination of two things: early identification and early action. Early identification to target those unemployed most likely to become long-term unemployed, and early action to combat the characteristics which make them so.

The new start referred to in the guidelines is not a job guarantee. It means providing the individual with capabilities and opportunities to give them a real chance to gain access to jobs in the open labour market. This must be done before skills start to deteriorate and the drifting into exclusion sets in. A new start covers a wide range of measures tailored to individual needs. These may include job offers, training opportunities, work practice, voluntary service, individual action plans coupled with guidance, job search assistance and rehabilitation. This requires a new approach from public services not to let individuals ‘qualify’ for long-term unemployment, but early identification and early action.

LTU is a major risk for those young people who have left education and training without reaching a minimum level of qualification. Without specific measures to correct this there will still be a significant share of young people who have difficulty in entering the labour market. Access to work experience is a crucial first step.

The chance of returning to the labour market declines significantly as unemployment lengthens. By adopting active measures and breaking very long unemployment spells the employability of the unemployed can be maintained, enabling them to qualify for newly created jobs and filling vacancies swiftly. There is evidence from several Member States which shows that, to be effective, activation should take place at an early stage.

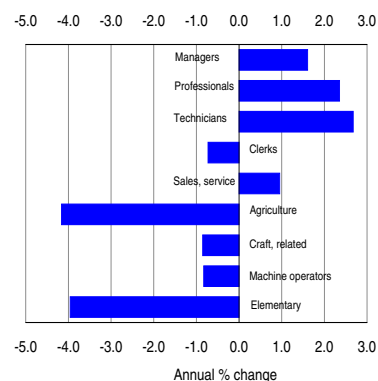
*Conclusion: By adopting early action through early identification the employability of the whole labour force will be secured and the overall functioning of the labour market improved. Just matching the performance of the three best Member States would reduce long-term unemployment from 5% to 2%. A zero-tolerance strategy would eliminate it all together.*

biggest declines are in unskilled elementary occupations (Graph VI). Evidence from a number of Member States suggests that vacancies are also concentrated in the former type of occupation.

This need for more as well as more relevant and flexible qualifications is being met by increased numbers participating in education and vocational training beyond basic schooling. Nevertheless a disproportionate number of the unemployed, particularly the long-term unemployed, lack the appropriate skills to compete effectively in the labour market and a worryingly large proportion of young people leave school with no formal educational or vocational qualifications at all. In 1997, around 47% of both unemployed men and women over 25 had no educational qualifications beyond basic schooling.

As a result, the Commission proposed a three pronged approach: improving the initial education and training of young people to help them into the labour force and to enable them to adapt to new challenges later in life; upgrading the skills of existing members of the

**VI Change in employment by occupation, 1992-97**



work force throughout their working life and implementing an active programme of training for the unemployed, particularly the long-term unemployed.

Ensuring that young people are able to make a smooth transition from school or college into work depends on a combination of factors. Improving initial education and training systems to provide a solid foundation in basic skills is a key factor. Preventing early school drop-out and providing support for those with learning difficulties are priorities. Young people also need to acquire skills and capabilities relevant to the workplace, and apprenticeships and work-linked training measures can be beneficial in providing these.

The unemployed and especially the long-term unemployed must be able to maintain and maximise their employability by having access to the means of upgrading their skills. Early identification and early action are key ways in which policy can better target the reintegration of the unemployed and prevent them becoming long-term unemployed. The first pillar of the guidelines is concerned with this preventive approach (see Box).

The first three guidelines are fundamental to reducing unemployment and the skills mismatch on the labour market. Under these guidelines, the onus is on Member States to provide the unemployed, especially young people and long-term unemployed, with the skills they need to get them into, or back into, work. But the unemployed have also a responsibility to respond to the opportunity and incentives provided. In this context, skills refer not just to training, but more broadly to the aptitude for and experience of work, skills which are

essential if the unemployed are to maintain an attachment to the labour market and the lack of which is a major deterrent to prospective employers.

## Encouraging entrepreneurship

There is no shortage of potential entrepreneurs in Europe, nor do our new businesses, though many fail, fare any worse on average than those of our competitors. Yet there is a need to improve the climate in which businesses can be easily created and in which lessons can be learnt from failure to provide for success in the future. Too often in Europe, the first business failure is also the last. Such a stigmatisation must be overcome.

Employers and self employed accounted for 15% of the total in employment in 1997, although around one fifth of these were in agriculture, where the smallholder (with perhaps some family members) is usually the only person in paid work. Most of the Member States where self-employment is most important are also those that still have a high proportion of their employment in agriculture although other factors also affect the relative number of self-employed, including the tax system and the structure of economic activity.

Self-employment as such has little to do with entrepreneurship in the sense of creating an enterprise and employing workers. The majority of self-employed are one-person businesses with no employees, and in many cases the entrepreneurs are themselves employees of the companies they have created. The role of SMEs is therefore crucial to an understanding of the process of entrepreneurship in the Union.

In the Union as a whole, firms with more than the owner but less than 250 employees accounted for 46% of total non-agricultural employment in 1994 and firms with at least one employee but less than 10 for almost 20%. The importance of SMEs in employment varies widely between sectors, with 77% of employment in catering (hotels and restaurants) in firms of less than 50 employees. There is a similar proportion (78%) in personal services and construction (74%) and a slightly lower proportion (69%) in retailing, but with more variation between Member States. In Italy, for example, firms with less than 50 employees accounted for over 90% of the total in this sector, while in the UK large firms (of 250 or more) accounted for 40%.

Large organisations, on the other hand, are the major providers of jobs in transport, financial services and water and energy, as well as in health care and education. In the remaining two broad sectors — manufacturing and business services — there is a much more even distribution of employment across the different sizes of enterprise.

The potential contribution of SMEs to employment growth depends to a large extent on the sectors in which they are located. Three of the sectors which have shown the highest growth in the recent past (business services, personal services, hotels and restaurants) are characterised by a large share of employment in SMEs, and future job growth is likely to be associated with the growth of SMEs.

The guidelines set out under this pillar address a number of the issues relating to the growth and the prosperity of SMEs and the self-employed, recognising that entre-

preneurship leading to job creation depends on a complex set of factors, including the sectoral structure of economic activity in each Member State as well as the administrative and regulatory framework. The objective must be to remove the obstacles, perceived or genuine, to the creation of enterprises, particularly small and medium-sized ones, which are a major source of new jobs.

## **Increasing adaptability of enterprises and their employees**

Work organisation and working time are increasingly being examined for their potential contribution to greater flexibility in enterprises and to a better functioning of the labour market in order to create more job opportunities.

As noted above, the majority of jobs created in Europe in the 1990s have been part-time. In the three years 1994 to 1997, the number of part-time jobs in the Union went up by almost 2.4 million, a rise of just over 10% (over 3% a year), while the number of full-time jobs fell by 125 000. The shift to part-time working was true for both men and women, especially for men, the number of whom working part-time increased by 20% over these three years. Sweden was the only country in the Union where the number of men and women in part-time jobs declined.

The shift to part-time working among both men and women was particularly marked in the Member States where the recovery of output has been sluggish and unemployment has either continued to rise or has fallen by very little (Germany,

France, Italy, Austria and Portugal). This is matched by the fact that a disproportionate number of the jobs found by men and women who were previously unemployed are part-time, 14% in the case of men, over double the proportion of men working part-time in the Union, and 40% in the case of women, almost a third higher than the proportion of women in part-time work.

The net additional jobs created during the present recovery have not only been part-time, they have also been predominantly temporary rather than permanent ones. Although the proportion of people working on fixed-term rather than on standard contracts of employment remains relatively low (at only some 12% or 15 million jobs in the Union as a whole), it has been increasing steadily. All of the net additional jobs for men created between 1994 and 1997 were temporary ones and 40% of those for women. For those unemployed looking for a job, it is increasingly likely that the only positions available will be fixed-term ones. In 1997, 56% of both men and women in the Union entering employment after being unemployed moved into a temporary job — up from 50% in 1994. While some of these jobs might have become permanent ones after a probationary period, the high figure and the increase, both of which are common features across the Union, emphasise the changing nature of labour markets.

Increasing adaptability in labour markets depends heavily on one of the other principles underlying the guidelines: partnership. For all of the guidelines under this pillar, there is a need for partnership between the social partners and between them and government.

The new kind of adaptability in enterprises should be paralleled by continuing structural reform in markets for both goods and services and labour. Deregulation in goods and services markets can give rise to greater productivity and job creation, responding to the needs of consumers who require increased flexibility from business. At the same time, this needs to be accompanied by more flexible working arrangements to match the needs of enterprises and their workers. Such a process is already underway: the only category of less-skilled jobs which has expanded in recent years has been that of sales and service workers, many of them in retailing, with around two-thirds of the net additional employment going to women, and a significant number also being part-time, as the opening hours of shops lengthen well beyond the normal working day. Indeed, supermarkets opening 24 hours a day and/or 7 days a week are becoming more prevalent in a number of Member States.

The guidelines respect the principles on which the Commission has always based its proposals in this area. The introduction of new patterns of working should be specific to the individual place of work and should be negotiated between the social partners. Similarly, governments must create the conditions in which the flexible firm can exist and thrive: Member States should reform, where necessary, the rules governing contractual relationships. This does not mean deregulating labour markets but permitting the existence of various types of work contract, all on an equal footing, with none offering particular advantages over any other. This may go beyond the legal recognition of the existence of such types of contract and involve a review of tax and social protection

regulations, since these may create more of a barrier to the adoption of flexible forms of working than the regulatory framework.

## Promoting equal opportunities

Despite the rapid growth in both female employment and participation of women in the labour market over recent years, as well as the continuing fall in participation of men in all age groups, there is still a significant gender gap in various aspects of employment: in the employment rate, in unemployment, in terms of sectoral and occupational segregation.

Overall the employment rate for women (51%) is some 20% lower than for men in the Union, equivalent to some 24 million people. This gap has fallen sharply from 40 million in 1975 and 32 million in 1985, despite a marked rise in total employment since 1985, and if continued, could fall to around 18 million by 2005.

While the gap between the employment rates of young men and women is only 6 percentage points, for women over 25 the gap is over 22 percentage points. Raising employment rates of women to reduce this gender gap is a long-term task involving raising the employment rate of women in the younger age groups — particularly those of prime working age — and encouraging them to stay in employment for a longer period of their working lives.

A series of factors appear to influence the participation of women in the labour market. High levels of educational attainment are particularly associated with high levels of participation, while family circum-

stances — marriage or the birth of the first child — exert a strong negative effect. The tax and benefit system may also play a role. On the demand side, the availability of part-time work is significant, but the major factor is the development of certain service sectors. A combination of greater flexibility in working arrangements in such sectors (retailing and care services, for example) which make it possible for women to reconcile family responsibilities with pursuing a working career, and the expansion of jobs in other sectors (health care, education and business services) which offer greater opportunities to women is important for achieving higher employment rates.

As noted above, unemployment of women has barely fallen in recent years despite the growth of women in work. To a large extent this is the result of greater participation of women in the labour market. Nevertheless, the removal of the obstacles that prevent women from accessing as wide a range of jobs as men would help reduce this gap.

Sectoral and occupational segregation is one of the obstacles which limit the choice of women entering or wishing to enter the labour market. 59% of women are employed in just 6 of 60 (NACE 2-digit) sectors, all of which are in services (in the US this figure is over 62% and the sectors are identical) as against a figure of 41% for men, the sectors being in both industry and services.

So far as occupations are concerned, the segregation is less clear-cut, but there is some evidence that the so-called 'glass ceiling' exists. The top level occupational group, that of managers, employs 10% of men compared with only 6% of women, which is indicative of the greater

difficulty women have in accessing the top jobs.

The guidelines are designed to meet the objective of reducing the gender gap, taking these structural changes into account, while recognising that cultural and historical influences are also a major factor in determining the participation of women in the labour market. But changes can occur rapidly: in 1986, in many Member States, marriage was a major factor determining when women gave up work. In 1997, marriage was still the main factor in four Member States (Belgium, Greece, Spain and Italy), but the average difference in the employment rates of single and married women in their 30s without children had fallen from 18 percentage points to 7 percentage points. The birth of the first child remains the main factor in most Member States, the average difference in employment rates between married women with and without children still being well over 20 percentage points, although this ranges from only half a percentage point in Belgium to over 30 percentage points in Germany. The focus must, therefore, be on the obstacles that need to be removed in order to allow the underlying trends to develop, by integrating the gender perspective to a greater extent into labour market policies.

## Supporting employment in other Community policies

The Amsterdam Treaty rightly recognises that almost every policy action influences employment in some way or other. A full analysis of the impact of all these various actions

is a long-term task and will focus initially on those areas which have already been identified as being of critical importance, either in the White Paper, *Growth Competitiveness, Employment* or by the European Council.

## Restructuring public expenditure

Public expenditure is one of the main influences on employment, directly and indirectly affecting economic activity, as well as the operation of labour markets through active policies aimed at improving employability and getting people into work and through passive policies of income support.

Over the past 15 years or so, direct government expenditure on goods and services has tended to decline in relation to transfers, largely reflecting the growth of social protection, which, including health care, accounts for almost 60% of total public sector outlays. Indeed, direct expenditure was, on average, some 1% of GDP lower in 1997 than in 1980. All of this reduction occurred after 1990 and all of it was in spending on fixed investment, which declined from 3% of GDP in 1980 to 2% in 1997.

The State's contribution to investment is not limited to infrastructure projects. Investment in education, which is the basis of a skilled and flexible work force, is one of the most important ways in which governments can contribute to the long-term competitiveness of European economies and, hence, to their future potential for growth and job creation. Education is also a prime direct source of new jobs. Employment in education expanded by almost 2% a year in the Union over the 10 years 1986 to

1996, though the increase has slowed a little during the present upturn, and now accounts for almost 7% of the total in work.

While the number of young people in the Union is falling, the number of older people is increasing. Moreover, within the population of 65 and over, there is a strong upward trend in the proportion of those aged 75 and over. As a consequence, the upward pressure on pension payments is being accompanied by a growing demand for health and long-term care. On average, spending on health services per head of population aged 65 and over is over twice as high as the average for people below 65 and for those aged 75 and over, 4–5 times higher. Over the next 10–15 years, the number of people of 65 and over in the Union is forecast to increase by over 1% a year, the number of 75 and over by 2% a year.

Health care and social services, like education, are a major source of net job creation. Between 1986 and 1996 employment in this area rose by over 2% a year in the Union. Further growth depends on the policies followed in Member States and on reconciling the demand for high quality health care with constraints on public spending.

Overall, expenditure on social protection, including health care, amounted to 28% of GDP in the Union in 1995, 70% of this being transfer payments, and around 60% of the total (equivalent to some 17% of Union GDP) probably going to those in retirement. Given the prospective growth in the number of people of 65 and over in the Union over the next 20–25 years, the focus of policy is not only on pension schemes but also on early retirement, which, especially among men, has risen markedly since high

levels of unemployment and job scarcity became major problems in the 1970s.

In 1995, unemployment benefits accounted for only 8% of total spending on social protection in the Union, under 2% of GDP, though a similar amount also goes on disability benefits, which in many cases are effectively paid to support people who cannot find jobs. With social exclusion and housing benefits, transfers to those of working-age but without a job amounted to around 6% of GDP. At the Florence European Council, Member States agreed to give increasing priority to the 'activation' of policy, to move people who are capable of working into employment rather than merely providing income support while they are out of work. The aim is to shift from such passive measures, defined in the broadest sense, to active labour market measures of providing training, or retraining, career guidance and help in finding a job.

So far there is only limited sign of any shift in expenditure in this direction in Member States. Overall, public spending on labour market measures accounted for just over 3% of GDP in the Union in 1997. Of this, some 65% went on paying unemployment compensation and 35% (just over 1% of GDP) on active measures to increase employability or to assist in finding a job. This is slightly higher than in 1994 at the end of the recession, when active measures accounted for 33% of the total, but less than in 1990, when they accounted for 37%.

## Environment and employment

A strengthening of measures to protect the environment is now a



necessary condition for sustained economic development. At the same time, environmental and employment policies should be made mutually beneficial. This was the message of the Commission Communication on Environment and Employment adopted in November 1997 (COM(97)592). It involves significant structural changes and shifts of employment between activities, which present both problems and challenges to the European Union.

EU economies are still characterised by underuse of labour resources and overuse of environmental resources, such that patterns of production and consumption are unsustainable. The way goods and services are produced is based on investment and price relations of the past when environmental concerns were less important.

Governments in Europe have a vital role to play in creating a legislative and fiscal framework which ensures that prices in the economy fully reflect the social costs of pollution, environmental damage and the depletion of exhaustible resources and which, accordingly, give appropriate signals to producers and consumers alike to adapt their behaviour in line with environmental needs. They also have a responsibility to adopt a long-term perspective to make sure that investment decisions about infrastructure are made with the sustainability of development in mind. Such a strategy depends on a shift from old, polluting technologies and 'end-of-pipe measures' to new clean technologies. This shift can best be done when new investment decisions are being taken, so that new environmental standards can be incorporated right from the beginning of the production process.

The benefits of such a strategy will be greatest in those sectors where environmental concerns are most pressing and where new investment, accompanied by appropriate labour market policies, can have the greatest impact. Manufacturing industry continues to be responsible for pollution through the use of energy and raw materials and the generation of hazardous waste. In the transport sector, the negative impact on the environment has continued as a result of traffic growth despite improvements in engines and fuels. In the energy sector, the fossil fuel cycle has a significant negative impact.

The motor car impacts in all of these areas: half of the energy consumption of a motor car during its lifetime takes place during its manufacture, as much as during its use.

The need to deal with the environmental effects of the energy sector was recognised by the agreement at Kyoto to reduce CO<sub>2</sub> emissions by 8% by 2010 compared with 1990. Achieving this target will demand a considerable increase in the use of energy efficient and renewable technologies which in turn has the potential for creating employment.

## **Enlarging the Union**

The prospect of the enlargement of the Union to the 11 candidate countries has significant implications for employment, both for developments in the candidate countries themselves and in the existing Member States. The integration of Central and Eastern European countries into EU markets for goods, capital and labour, together with their progressive move towards market economies,

has already led to structural changes in labour markets and employment, although much remains to be done.

Labour market conditions and structures, ranging from the mobility and physical movement of work forces, wages, social contributions, conditions of employment and distribution of income, differ sharply both within the CEECs and between these and EU Member States. At the same time, the average rate of unemployment, at around 10%, is very similar to that in the Union, though as in the Union, it varies considerably between countries, from around 15% in Bulgaria, Latvia and Lithuania to around 6% in Romania and 5% in the Czech Republic.

Closer trade and commercial relations with the Union are likely to give rise to greater opportunities for growth of jobs and income, which should reduce unemployment and disparities in income per head between the applicant countries and existing Member States. Given that the significant differences in prosperity which already exist have not given rise to massive migration flows, there is even less reason to expect such flows to occur in the future.

The expansion of the Union presents opportunities for existing Member States as well as the candidate countries. Trade between the applicant countries and the EU has grown substantially since the transition began. In 1996, total EU imports from these countries were 4 times their value in 1985, while EU exports to them were 6 times their 1985 value, and already the EU exports one-third more to them than it imports. Growth in trade is likely to continue in future years.

One of the major challenges facing these countries is to put in place the appropriate structures for managing the transition to a modern labour market. This includes the ability to adopt and apply the Employment Guidelines for pursuing the employment strategy, a process which is being supported by the Union through employment policy reviews designed to identify the changes in policy design and delivery which will be necessary.

ffects of the Single Market and monetary union, it can begin to bear fruit by increasing employment and reducing unemployment.

## **The way ahead**

The European employment strategy has already begun to influence employment policies in Europe. The National Action Plans submitted by Member States in advance of the Cardiff European Council are evidence of their commitment to the strategy.

The Commission has now submitted its proposals for the Employment Guidelines for 1999. Under the circumstances, it sees no justification for any major revision of the Guidelines, maintaining the four-pillar approach contained in the 1998 Guidelines. The strategy is designed to be implemented over a number of years, and any revisions each year should be minor ones that build on the experience of Member States and on the analysis of the Commission of the effects of implementing the Guidelines.

The underlying justification both for the initial strategy and the modest revisions envisaged for 1999 are set out above. The outcome of the strategy depends critically on it being sustained in Member States over the medium term, so that in combination with the macroeconomic strategy and the beneficial ef-

## Part I Section 1 Recent developments in employment and unemployment

Employment in the Union increased in 1997 for the third year in succession, by around  $\frac{1}{2}\%$  (a rise of around 800 thousand), the same as the average rate of growth in the two previous years. Nevertheless, the number in work was still over  $1\frac{1}{2}\%$ , or just over 2 million, below the peak level of employment reached in 1991, at the start of the recession. The recovery in jobs, therefore (a net addition of 2.3 million in three years), remains modest, matching the growth in output, which was just over  $2\frac{1}{2}\%$  in 1997, only slightly higher than the average rate since the recession came to an end. (The employment figures above and elsewhere in this Report are based on the Eurostat benchmark series — see Box)

In consequence, because of the continued growth in working-age popu-

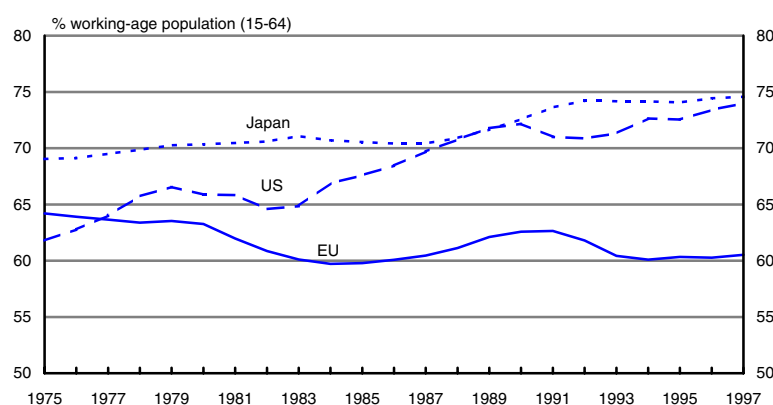
lation even though at a very slow rate, the employment rate (the number in work relative to population of working age — see Box) has risen only a little. For the same reasons, unemployment has fallen only slightly and the average is still 10% of the labour force. Indeed, at the last count the average rate in the Union was only just over 1 percentage point below its peak four years earlier.

Both the growth in employment and the fall in unemployment, however, have varied markedly across the Union since 1994. In five Member States — Spain, Ireland, Finland, Luxembourg and the Netherlands — the number in work has increased at an historically high rate and unemployment has come down significantly, though in the first three countries, it remains high.

In three other Member States — Germany, Austria and Sweden — employment has fallen since 1994, and in a fourth, Italy, it has remained unchanged. Unemployment has risen over this period in three of these countries, though in Sweden, it has fallen markedly over the past year despite slow growth of employment.

Labour market conditions, in consequence, are very different at present across the Union. Nevertheless, in most countries, employment — and unemployment — remains a major problem. As described below in more detail, in 7 Member States, the employment rate in 1997 was significantly below the level in 1990, before the onset of recession, while in three others, it was much the same. Moreover, in most countries, including some of the other

**1 Employment rates in the Union, US and Japan, 1975-97**



The employment rate in the Union in 1997 was 60.5%, much the same as in the 15 years before except during and immediately after the high job growth in the late 1980s. The rate in the US was 74% and in Japan, 74.6%, both higher than at any time in the past, though in Japan, there was little rise after 1991. *Source: For the Union, employment data from the Eurostat benchmark series, extended backwards on a consistent basis, and population data from the Community LFS; for the US and Japan, from labour force statistics.*

## The benchmark employment series

The employment figures cited in this Report and used in the analysis are taken from the Eurostat benchmark series. This is considered to be the best available measure of changes in the total employed in individual Member States and, therefore, the most reliable indicator of changes in employment in the Union at present. The series do not come from a common source in each country. In most, they come from labour force surveys, either quarterly (in 6 cases) or annual (in 3), in 3 from national accounts, in one from registration data, one from labour accounts and one from a microcensus (the source in each case is given in the notes to the tables at the back of this Report).

Despite these differences, in the absence of a single ideal series for all the countries, the benchmark series is the best available compromise. However, the difference in sources gives rise to problems in using the series to compare levels of employment across Member States. For this, the Community Labour Force Survey represents, in principle, the best source to use, especially since it is based on a common methodology and, as compared with the national accounts, is likely to be a better indicator of self-employed and people working short hours.

The relatively small sample size of the LFS, however, means that there can be some variability in the results from year to year, and the fact that it relates (in most cases) to a single point of time means that the number recorded as employed may diverge from the average over the year. Neither source of difficulty is usually of major importance, though they imply that the results should not be interpreted overly precisely, especially for comparisons between adjacent years or those close to each other.

The main source of difficulty in using two different series for indicating changes in employment over time and comparing levels between Member States is the inconsistency this may create between the results obtained. To avoid this problem, the LFS employment data presented in this Report are constrained to equal the benchmark totals for each year. For 10 countries, where the LFS, annual or quarterly, is used as the benchmark series, the adjustment is very small or not required at all. Leaving aside Luxembourg (where the LFS measures employment of residents and the benchmark series, which is one third higher, total employment in the country), the major differences between the two series are for Germany, where the benchmark total, based on the national accounts, was 4% lower than the LFS total in 1997, and Austria, where the microcensus, used as the benchmark series, recorded employment as being 3% higher than the LFS total in the same year. The issue of data comparability is, therefore, most acute for these two countries and the use of the benchmark series for analysing differences in employment between countries most open to question. (In Denmark, the benchmark total was almost 2% higher than the LFS in 1997, in the Netherlands, 2% lower; in France,  $\frac{1}{2}$ % higher.)

Until a quarterly LFS, of sufficient sample size and with a high proportion of respondents common to consecutive surveys to give a more reliable time series, is established in all Member States, problems of comparability and consistency will remain, as will the need, in cases such as the present, to make awkward choices between two unsatisfactory options.

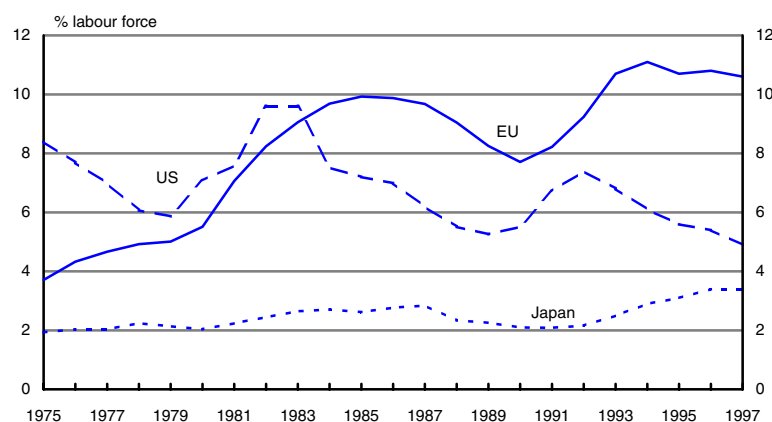
five where the number in work is now higher than 7 years earlier, the level of employment at the beginning of the 1990s, and the counterpart level of unemployment, were far from satisfactory. The relatively brief period of high job growth in the second half of the 1980s only partly compensated for the 12 years of slow growth or decline which preceded that. For most countries in the Union, therefore, getting back to 1990 levels is only the first step in achieving ultimate employment objectives.

## Employment performance in international terms

The modest employment growth in the Union during the present recovery has so far only just outpaced the (low) growth in working-age population. In 1997, the employment rate (a basic indicator of an economy's success in providing work for its population of working-age (here taken as 15 to 64), at 60 $\frac{1}{2}$ %, was only  $\frac{1}{2}$  percentage point higher than at the end of the recession in 1994 and still 2 percentage points lower than at the beginning of the 1990s before it started (Graph 1). Since the rate in 1990 was just 3 percentage points above the level in the mid-1980s, when it was lower than at any time since the immediate post-war years (in 1965, for example, the rate was around 66 $\frac{1}{2}$ %), there is still some way to go before the rate reaches an acceptable level.

The slow rise in the employment rate in the Union in the three years 1994 to 1997 was about half the rise experienced in the US over the period, where working-age population increased much more than in Europe, but where the growth of

**2 Unemployment rates in the Union, US and Japan, 1975-97**



Unemployment in the Union averaged 10.6% of the labour force in 1997, only slightly lower than the peak rate in 1994 and over twice the rate in the US (4.9%) and three times the rate in Japan (3.4%). Whereas the rate in the US has fallen steadily since the early 1980s, apart from during the recession of 1990-92, the rate in the Union has shown an upward trend since the mid-1970s.

*Source: Eurostat comparable unemployment rates.*

employment averaged over 1½%. Since the rate in the US was already over 12 percentage points higher than in the Union, the gap, therefore, widened further to around 13 percentage points.

On the other hand, the gap in the employment rate between Europe and Japan, where population is also rising slowly and where growth in output over the three years was slightly lower than in the Union, has remained much the same. This means, however, that the number

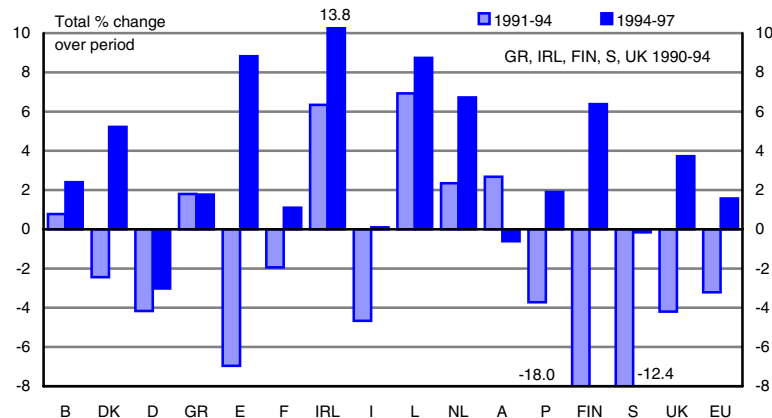
in work in Japan is still some 14% of working-age population higher than in the Union.

The relatively high rate of employment growth in the US has led to unemployment falling to below 5% of the labour force, its lowest level for 30 years (at the last count, the rate stood at around 4½%). By contrast, unemployment in the Union has declined only slowly since its peak in 1994 and, in 1997, was above the highest rate reached during the recession of the mid-1980s,

the previous high point before 1994 (Graph 2).

In Japan, on the other hand, where employment rose at much the same rate as in the Union between 1994 and 1997 and where the growth of working-age population was similar, unemployment increased to around 3½% of the labour force in 1997 (and to over 4% during 1998), ½% higher than in 1994. In Japan, therefore, labour force participation has continued to increase and has added to unemployment, whereas

**3 Changes in employment in Member States, 1991-94 (or 1990-94) and 1994-97**



Employment rose in all Member States bar Germany, Austria and Sweden over the three years 1994-97 following the widespread decline over the recession years before then, which began in 1990 in 5 countries (see note) and 1991 in the others. Of the 9 countries in which employment fell during the recession years, only in Denmark and Spain has the increase since then been sufficient to compensate for the jobs lost over that period.

*Source: Eurostat benchmark employment series.*

in the Union, it was much the same in 1997 as in 1994 which helped to reduce unemployment.

## **Employment developments in Member States**

Although there has been a widespread tendency for employment to increase since 1994 following its fall over the preceding 3–4 years of recession, this is by no means true of all Member States. In Germany, employment declined by 3% over the three years 1994 to 1997 following a fall of 4% over the preceding three years, so that the number in work in 1997 was 7% lower than before the start of the recession in 1991, a reduction of over 2½ million jobs (Graph 3, which shows the change over the recession in Member States, the starting year of which was either 1990 or 1991). This alone is sufficient to account for nearly all of the loss of jobs in the Union as a whole over the period.

Although a large part of the job losses in Germany occurred in the new Länder, which made up the former East Germany, where the decline in employment over the period amounted to some 17%, there was still a decline of over 4½% in the former West Germany, which meant that there were 1.3 million fewer people with jobs in 1997 than 6 years earlier.

Employment also declined in Sweden, though by much less and in this case it followed a substantial decline in the four years 1990 to 1994. Moreover in Italy, there has been very little change in the number in work since 1994 and here the fall over the preceding three years was over 4½%, a loss of around 1 million jobs. In addition, in Aus-

### **The employment rate**

The employment rate, measured as the total number of people in paid work relative to working-age population, defined as those aged 15 to 64, is intended to be an indicator of a country's success in providing jobs for the people living there, which can be used both for comparisons across countries and to track performance over time. Like most simple aggregate measures, it has its defects, which means that it is essentially the starting-point for analysis rather than the end-point. If, therefore, there are significant differences in employment rates between countries or changes over time, these need to be examined in more detail before policy conclusions can be drawn, but then the same applies to any indicator.

Its merit is that it encompasses all employment and uses a simple, readily available magnitude, population 15 to 64, as a benchmark against which the total can be compared. Since relatively few outside this age group are likely to be in employment, the employment rate so calculated tends to be very close to the relative number of 15 to 64 year olds who are employed.

It is important, however, not to interpret the employment rate calculated in this way as indicating the proportion of working-age population in work, which is a relevant concept for some purposes. Since it includes in total employment those of 65 and over still working, the changes in the measure will differ from the share of those aged 15 to 64 in work if there is a change in the employment of older people. Similarly, comparisons between countries are affected if there is a significant difference in the relative number of those of 65 and over in work, such as, for example, between Union Member States and Japan. A major reason for the much higher employment rate in the latter is the large number of elderly people still working. The jobs these people do clearly ought not to be discounted since they are part of the total number maintained in the economy, but it may, nevertheless, be important when comparing employment levels in Europe and Japan to take this feature into account, especially when drawing policy conclusions.

tria, though employment rose a little in 1997, it was still lower than in 1994.

Apart from in these four countries as well as in France, where employment has risen only slowly since 1994 and hardly at all since 1995 (though there are signs of a rise in 1998), the growth in the number employed in all the other 10 Member States over the period has exceeded the Union average, even if only slightly in both Greece and Portugal. Indeed, in 6 Member States — Denmark, Spain, Ireland, Luxembourg, the Netherlands and Finland — the growth of employment was over 1½% a year, in Spain and Ireland considerably so, more than the average growth rate experienced in the Union in the late 1980s.

Nevertheless, despite the widespread nature of the recovery, it remains the case that in 7 Member States, the number in work in 1997 was less than at the start of the recession and in another four, it was under 3½% higher (ie growth over the period averaged less than ½% a year). In only three Member States, Ireland, Luxembourg and the

Netherlands, was employment significantly above the level at the beginning of the 1990s, though in all three cases, the recession had only a moderate effect on jobs

### Employment-intensity of growth

The growth of employment in the Union in 1997, as over the period 1994 to 1997, was precisely as expected given the growth of output and the underlying trend rate of increase in GDP per person employed (which approximates to labour productivity). The latter has risen consistently at just below 2% a year (1.8%) over the past 20 years and the number in work has closely tracked the rise in GDP, with a lag of around 6 months or so (Graph 4).

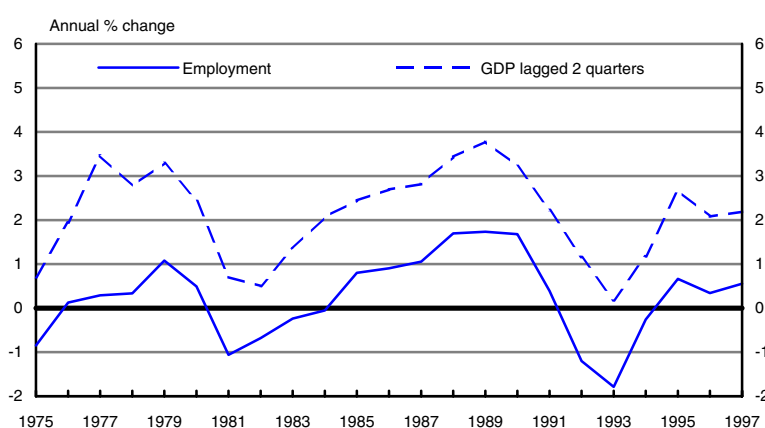
This stability in the relationship between output and employment, however, is not matched by a similar stability in most individual Member States. Not only does the underlying growth in GDP per person employed vary across the Union, though in most cases it is within ½% of the average, but it has also changed over the past 20 years,

if, except in a few countries, not dramatically.

Nevertheless, as usual, employment has, for the most part, risen most markedly since 1994 in the Member States achieving the highest rate of output growth — in Ireland, where GDP increased by an average of 10% a year between 1994 and 1997, Finland, where the average rise was just under 5%, Luxembourg, where it was 3½% and the Netherlands, where it was 3%.

In the last country, however, the expansion in employment, of over 2% a year, was significantly greater than elsewhere in the Union, given this growth in output, reflecting the low underlying growth of GDP per person employed (only around 1% a year). This was also the case in Spain, where GDP growth of just under 3% a year over this period was associated with a rise in employment of slightly more, implying a slight fall in GDP per person employed. Indeed, whereas in the Netherlands the long-term rate of productivity growth has remained unchanged over the past 20 years or so, in Spain, it has fallen dramatically (from 3% a year over the 10

4 Growth of employment and GDP in the Union, 1975-97



Annual changes in employment in the Union over the past 20 years have closely followed the growth of GDP, with a lag of 6 months reflecting the delayed response of employers to changes in output. The gap between the two, which measures the growth of GDP per person employed, has been consistently just below 2% a year, implying that GDP needs to rise by more than this for employment to increase.

Source: Eurostat benchmark employment series and national accounts for GDP.

years 1976 to 1986 to 1½% a year over the years 1987 to 1997) and appears to be continuing to fall (Graph 5).

The employment-intensity of growth has, therefore, increased significantly in Spain over the 1990s, perhaps as a reaction to the high rate of unemployment and the low, but rising, rate of participation. Increases, though less pronounced, have also occurred in Belgium, France, Italy and the UK, in all of which employment problems have been acute during much of the 1990s (in Belgium, though unemployment has generally been below the Union average, participation, as in Spain, is low but has been rising significantly).

On the other hand, countries which have suffered equally severe employment problems have shown a marked reduction in the employment-intensity of growth. In the three Nordic countries, the underlying growth of GDP per person employed seems to have risen by almost 1 percentage point a year over the 1990s. In Sweden, in particular, this has meant, over the past three years, that output growth which would

have been sufficient before to generate significant job growth has instead been accompanied by a fall in the number in work.

In Germany, the employment-intensity of growth has diminished appreciably since unification. In the 10 years 1987 to 1997, the growth of GDP per person employed averaged over 2½% a year as against only 1½% a year over the decade 1976 to 1986. Part of the rise was a result of unification itself, and the process of rationalisation and reduction in overmanning which took place in the former East Germany (where GDP per person employed increased by 17% a year between 1991 and 1994 and by 4½% a year over the next three years). The long-term rate of productivity growth, however, still rose to over 2% a year in the 10 years 1987 to 1997 in the former West Germany and still seems to be increasing.

The underlying rate of productivity growth has also risen in Austria, to close to 2%, almost double the rate in the 1970s and early 1980s. As in Sweden, the GDP growth which has occurred since 1994, which, at just over 2% a year was much the same

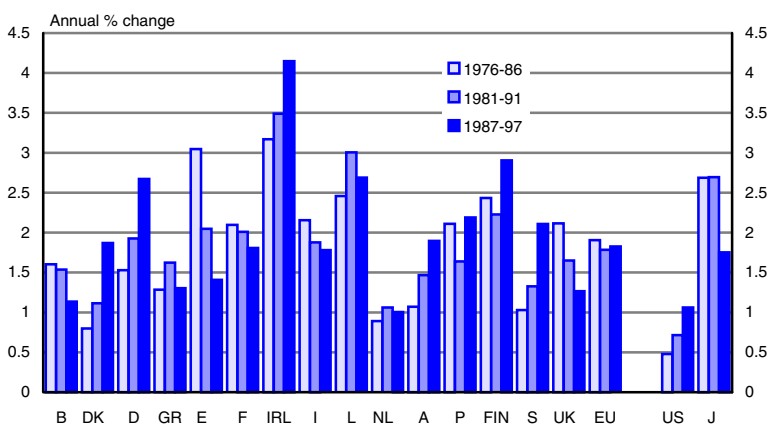
as in the 1980s, has, therefore, led to a fall in employment instead of a rise.

Finally, in Ireland, underlying productivity growth rose by the same amount as in Austria or Sweden, but in this case, it was associated with a substantial increase in the rate of GDP growth, averaging 10% a year since 1994 and generating a large rise in employment despite the increased growth in productivity.

## Unemployment in Member States

Like employment performance, and in large measure mirroring this — though not entirely because of changes in participation — unemployment varies markedly across the Union. In a few Member States — Germany, Italy and Austria (and Greece, though the figure tends to fluctuate alarmingly here) — it was higher at the last count than in 1994 at the end of the recession, though in Germany, as in other Member States except Italy and Austria, there was some fall in (seasonally-adjusted) rates in the first half of 1998.

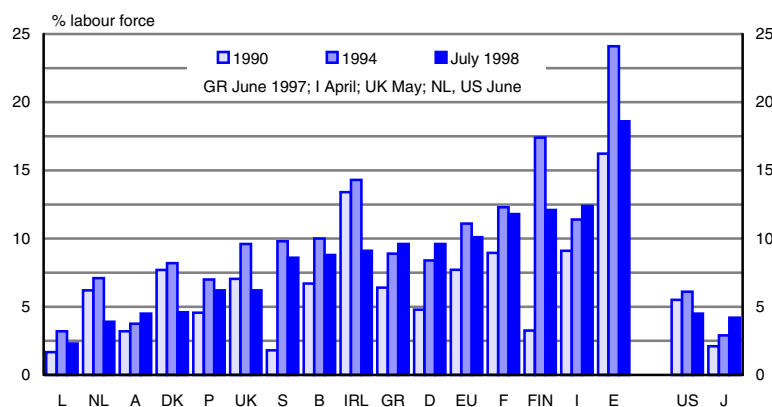
**5 Growth in GDP per person employed in Member States, US and Japan, 1976-86, 1981-91 and 1987-97**



The stability in the Union as a whole of long-term productivity growth (measured over 10-year periods to minimise the effect of cyclical fluctuations) is not matched in Member States. In Spain and the UK, it has declined significantly, implying an increase in the employment-intensity of growth, in Germany, Austria, Denmark and Sweden, it has risen, implying a fall in employment-intensity.  
 Source: Eurostat benchmark employment series and national accounts for GDP.



**6 Unemployment rates in Member States, US and Japan, 1990, 1994 and July 1998**



By July 1998, unemployment had fallen to below the level in 1994 at the end of the recession in all but 4 Member States, Germany, Greece, Italy and Austria, where it was around 1% higher. In only Denmark, Ireland, the Netherlands and the UK, however, was the rate lower than in 1990 and only in Luxembourg and the Netherlands, was it below that in the US and Japan.

*Source: Eurostat comparable unemployment rates.*

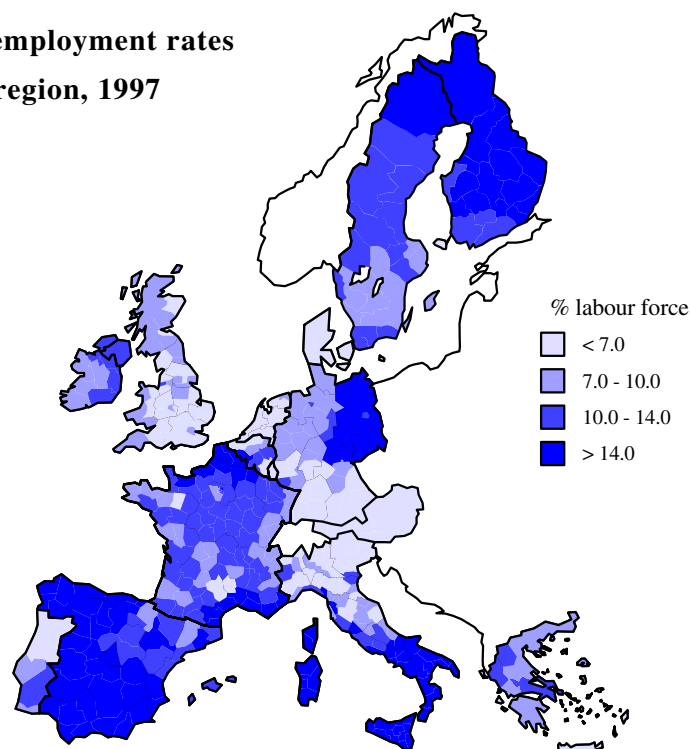
The reduction in unemployment since 1994 has been particularly pronounced in the countries where employment has risen by most — in Spain, Ireland and Finland, where it has fallen by at least 4% of the labour force and in Denmark, the

Netherlands and the UK, where it has declined by 2½% or more (Graph 6). It is noteworthy, however, that despite the appreciably lower rise of employment in the UK than in the other two countries and the similar growth of working-age

population, unemployment has declined by more because of a reduction in participation.

Nevertheless, in all but four Member States — the Netherlands, Denmark, Ireland and the UK (if only

**M1 Unemployment rates by region, 1997**



Les écarts entre taux de chômage sont beaucoup plus forts entre régions au sein de l'Union qu'entre Etats membres. Les taux dépassent 35% dans les régions situées au sud de l'Espagne, plus de 25% dans de nombreuses régions du sud de l'Italie, environ 20% dans une bonne partie des nouveaux Länder ainsi que dans certaines parties de la Finlande. Par contre, ils sont inférieurs à 5% dans de nombreuses régions du Danemark, du sud de l'Allemagne, du nord de l'Italie, des Pays-

slightly) — unemployment remains higher than in 1990, in Sweden, Germany and Finland, substantially so. In Spain, it is still around 20%, though it is coming down, and in Italy, France and Finland, around 12%, while, there are only three countries — Luxembourg, Austria and the Netherlands — where it is under 5%, a rate which would have been regarded as high before the mid-1970s. Moreover, the rate in many regions exceeds the average in Spain in a number of Member States (see Map).

## Population and migration

Population in the Union has grown slowly during the 1990s and is projected to increase by very little over the next few years (by only around 0.2% a year). Within the total, the number of people of working age has risen by slightly more on average, though by only around 0.3% a year and by a progressively lower rate over the decade, so that growth now is below that of the total. From the early years of the next decade, working-age population is projected to decline.

Most of the growth in population over the 1990s has been due to migration. Inflows of migrants into the Union have exceeded outflows and, while the excess has been small — adding around 0.2% a year to Union population in 1995 and 1996 — it, nevertheless, accounts for some two-thirds of the population increase which has occurred (the natural growth being only around 0.1% a year at present) and slightly more of the increase in working-age population.

Whether population of working age continues to grow, even if at a very slow rate, depends predominantly over the next 10–15 years on migration. At present, there is little sign of any increase in inflows of migrants into the Union. Indeed, inflows have slowed down significantly since the early 1990s. Moreover, a high proportion of the people moving into the Union are returning citizens of one or other of the Member States. In 1996, these accounted for around half of the total and only for Germany, Greece, the Netherlands and Sweden, of the countries for which data are available, did nationals of countries outside the Union make up more than

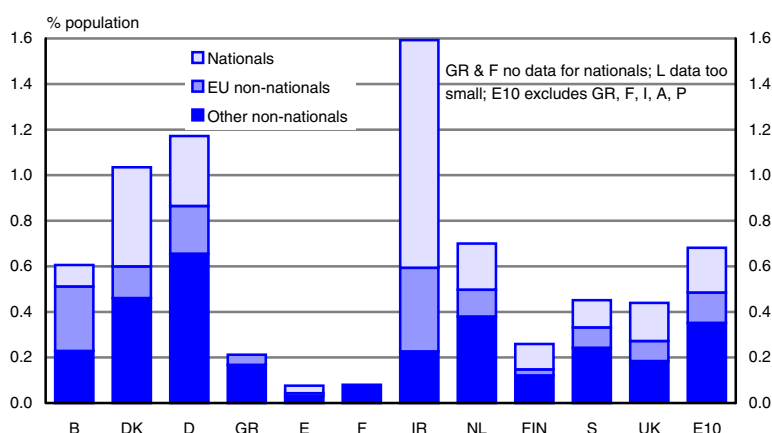
half of immigrants, and then only slightly more (Graph 7).

## Changes in the labour force

As noted above, the failure of participation to rise in the Union over the three years 1994 to 1997 was a major factor underlying the fall in unemployment. Although the labour force expanded by more over this period than over the preceding four years of recession (by around 500 thousand a year as compared with a rise of 300 thousand a year), all of this increase is attributable to a growth in population of working age (Graphs 8 and 9). The long-term upward trend in participation was, therefore, seemingly overridden by the effect of slow employment growth and job shortages which appears to have discouraged people from actively looking for work (which would have meant them being counted as part of the labour force), even if the effect was less pronounced than between 1990 and 1994.

As in previous years, participation of men declined in all age groups, even

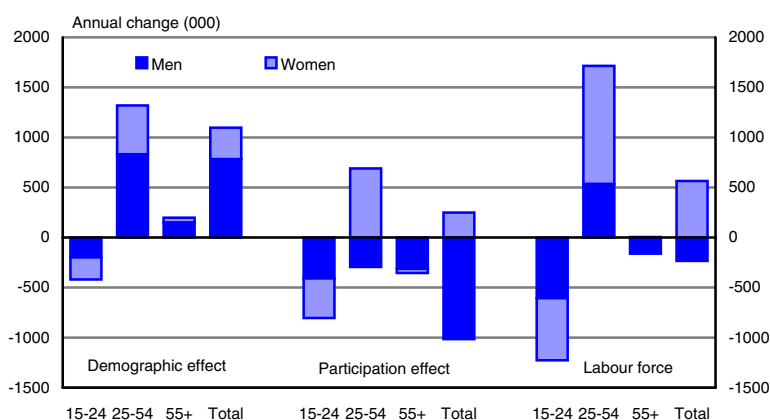
7 Immigration into Member States, 1996



Data on immigration come from national administrative sources and are subject to a wide margin of error. There are no data for 3 Member States and those for Greece and France do not cover nationals. Returning nationals comprise over 60% of inflows in Ireland and around 40% in Denmark, Spain, Finland and the UK.

Source: Eurostat, Migration Statistics.

### 8 Changes in the labour force in the Union, 1990-94



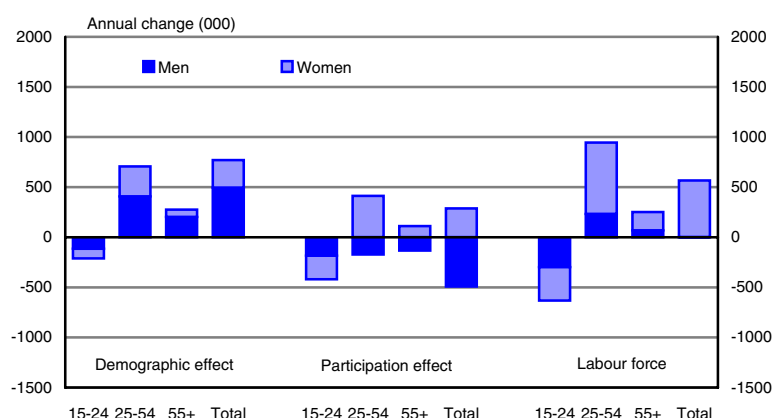
The effect of demographic changes on the labour force is measured by assuming that participation in the different age groups is unchanged, the participation effect by assuming that population remains unchanged. The two together sum to the total change in the labour force, which was positive over the period only because of population growth.  
 Source: Eurostat, Community LFS for population and age division of labour force; total labour force taken as benchmark employment plus comparable unemployment.

among those of prime working age, reducing the labour force by some 200 thousand a year over the period, while the continued tendency for men of 55 and over to retire early before reaching the official age of retirement (65 in most Member States) cut the labour force by another 140 thousand a year. Reduced participation among men in these age groups, however, was more than offset by increased participation of women, continuing the strong long-term upward trend, which added over 500 thousand a year.

The increased tendency for women to pursue working careers, however, was not strong enough to compensate for both the withdrawal of men from the work force and the continuing fall in participation among young people under 25, as more of them remained longer in education. As in the preceding four years, the fall in participation contributed about twice as much to the decline of young people in the labour force as demographic trends (ie the reduced numbers of them in the population).

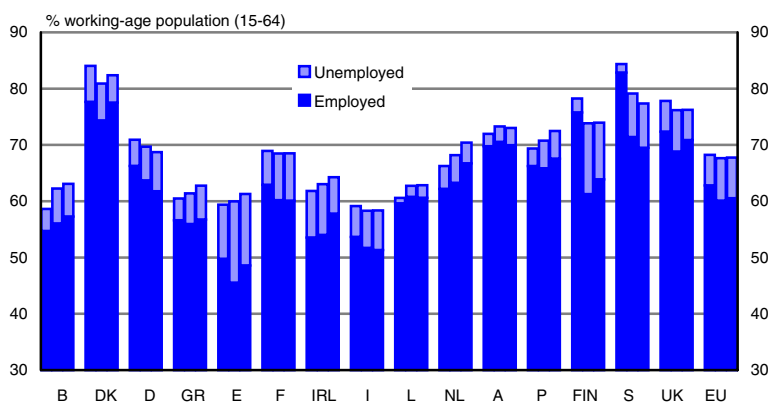
Although labour force participation in the Union of those aged 15 to 64 remained broadly unchanged over the three years 1994 to 1997, participation declined in individual age groups. (The explanation is that the decline, as shown in Graph 9, was offset by a shift in population between age groups which served to increase participation a little and which is part of the demographic effect in the graph.) However, there was a general tendency across the Union for the change in participation to reflect employment conditions.

### 9 Changes in the labour force in the Union, 1994-97



The number of men in the labour force changed little between 1994 and 1997, increases in population in all but the 15-24 age group being offset by a decline in participation. By contrast, the number of women in the labour force grew by over ½ million a year, as a result of higher participation reinforcing population growth.  
 Source: Eurostat, Community LFS for population and the age division of the labour force; total labour force taken as benchmark employment plus comparable unemployment.

**10 Participation rates in Member States, 1990, 1994 and 1997**



The average participation rate of those aged 15-64 in the Union (employed plus unemployed) was much the same in 1994 as in 1997 and slightly lower than in 1990. In 7 Member States, participation was lower in 1997 than in 1990, in all of these, except Denmark, employment was also lower, emphasising the link between participation and the rate of net job creation.

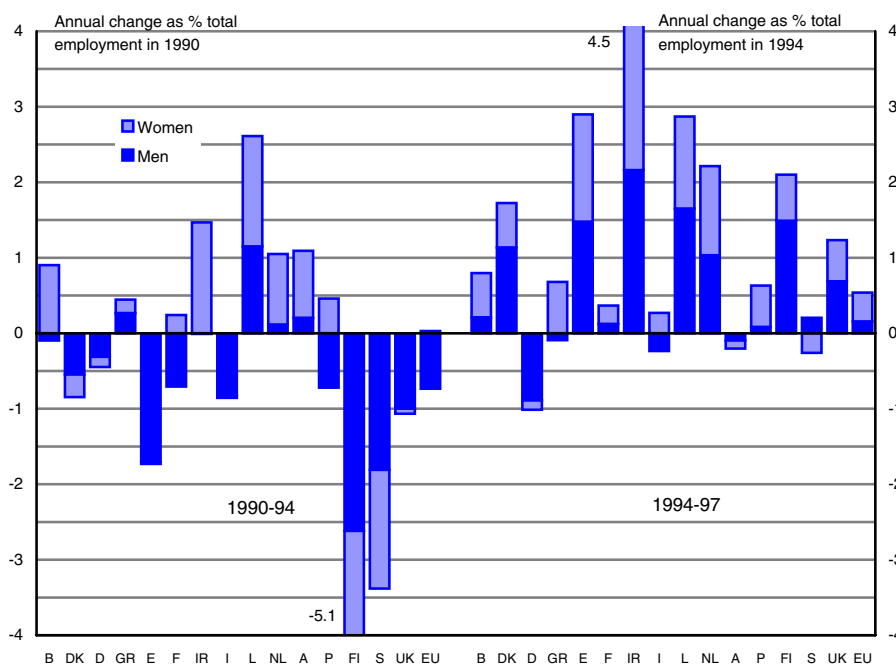
*Source: Eurostat, Community LFS for population 15-64; employment from Eurostat benchmark series. Unemployment from comparable series.*

The rate, therefore, declined in all three Member States — Germany, Austria and Sweden — where employment fell over the period and remained unchanged in those where there was little growth in jobs (France and Italy) (Graph 10).

Equally, participation increased significantly in Denmark, Spain, Ireland and the Netherlands where employment went up strongly. Nevertheless, there are exceptions to the general tendency. Participation rose only slightly in Finland and re-

mained unchanged in the UK, despite the relatively high growth in employment in both cases, though in both cases also participation was already well above the Union average. Moreover, participation rose as strongly as in Spain in Greece and

**11 Relative change in employment of men and women in Member States, 1990-94 and 1994-97**



In the years 1990-94, the fall in employment in the Union was due entirely to a decline in the number of men in work, which was common to most Member States. In the subsequent three years, 1994-97, the number of men employed increased, but much less than the number of women, who accounted for a disproportionate share of the net addition to jobs in all countries except Denmark, Finland and Sweden, or in Germany and Austria, for less of the decline than men.

*Source: Eurostat, Community LFS, adjusted to be consistent with the Eurostat benchmark employment series.*

Portugal, where the growth of employment was much more modest.

## Changes in employment of men and women

The ongoing rise in participation of women is reflected in the increased employment of women relative to men. In 1997, women accounted for almost two-thirds of the net additional jobs created in the Union, slightly less than over the previous two years when they accounted for around 75%. Over the three years 1994 to 1997, therefore, just over 70% of the net additional jobs went to women (Graph 11), and the number of women in work has grown by just under 1% a year as compared with a rise of around 0.2% a year for men.

In most Member States, women accounted for a disproportionate share of the increase in employment over this period — in Greece and Italy, employment of women rising while that of men went down — or, in the case of Germany, less of the job losses. The only exceptions were the

three Nordic countries, in all of which there was a relative decline in women in work, Austria, where women were affected slightly more than men by job losses, and the UK, where men and women gained equally from employment growth.

## Changes in unemployment of men and women

The modest fall in unemployment which has occurred in the Union, with brief periods of interruption, since the Spring of 1994 has affected men more than women. While the rate of unemployment of men has fallen from over 10% to under 9%, the rate for women has declined by only around ½% of the labour force and at the last count was still over 12% (Graph 12). The gap between men's and women's unemployment has, therefore, widened over this period, as it did during the last period of economic recovery from the mid-1980s on.

At first sight, this may seem somewhat of a paradox, since, as noted above, women's employment has

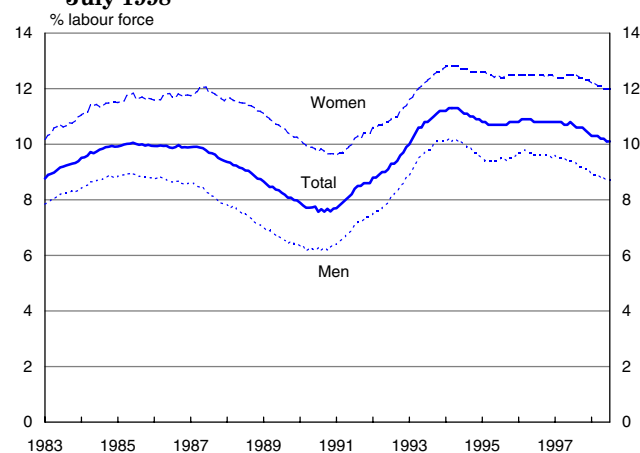
risen by more than men's during this period, which in itself, suggests that women have been more successful in finding jobs. The reason is that the number of women looking to work has risen almost as much as the jobs available have increased, as indicated by the rise in participation, while the number of men in the work force has declined. Changes in participation, therefore, as emphasised earlier, are as much an influence on unemployment as the rate of job creation.

Given the upward trend in participation, unemployment of women is unlikely to come down substantially until the rate of net job creation is much higher than it has been over the past three years.

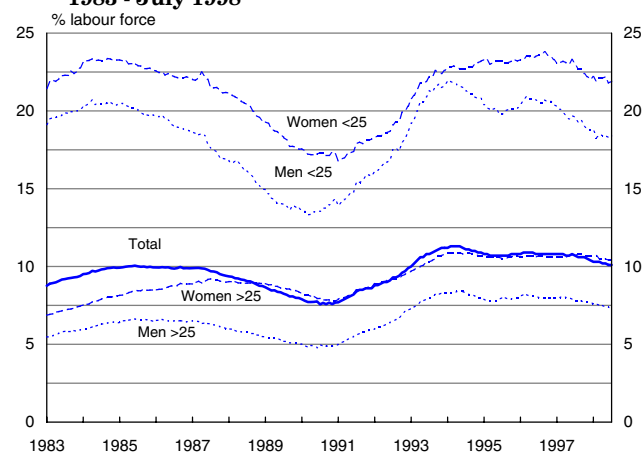
## Unemployment by age group

The failure of women's unemployment to fall since 1994 is particularly the case for women of 25 and over, among whom the increase in participation has been concentrated. For women in this age group, average unemployment in the Union has fallen by only 0.2% of

**12 Unemployment rates by sex in the Union, 1983 - July 1998**



**13 Unemployment rates by sex and age in the Union, 1983 - July 1998**



the labour force since 1994. Although the rate for men of 25 and over has declined by less than for men as a whole, it has still gone down by almost 1 percentage point over the period (Graph 13).

The decline in unemployment has, therefore, been much greater for those under 25 than those over. However, within the younger age group, the difference in experience between men and women is equally pronounced. Since the early months of 1994, the average rate of unemployment of men under 25 has fallen by 3½ percentage points, from almost 22% of the labour force in this age group to just over 18%. For women, by contrast, the rate has come down by only around 1 percentage point, though it has fallen by almost as much as men since mid-1996.

The reason for the more modest fall in unemployment among young women is hard to find, though it is a widespread feature across Member States. Changes in participation do not seem to provide an explanation, since the participation rate of women in the 15 to 24 age group has fallen by slightly more than that of men

(from 45% to 42% between 1994 and 1997 as against 51½% to 49%).

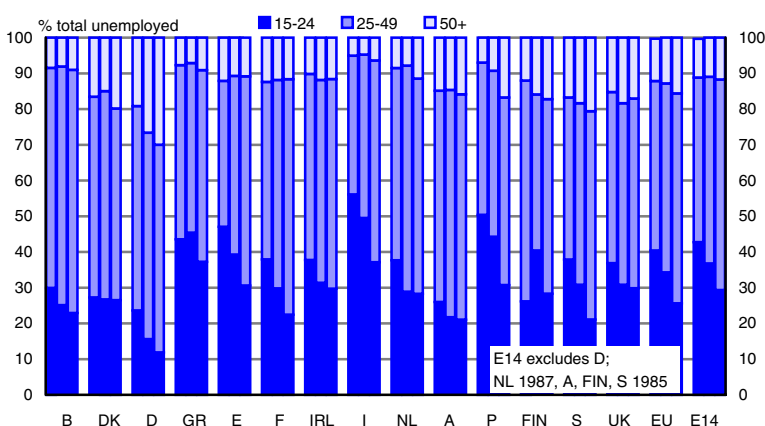
The falls in participation for both men and women, however, which reflect the increased numbers remaining in education and initial vocational training, are part of the explanation for the fall in youth unemployment. Nevertheless, despite this fall, the average rate in the Union is still around twice the rate for those aged 25 and over. This, moreover, is a common feature across Member States. It is particularly pronounced in the South, especially in Greece and Italy, where the youth rate is 3–4 times the rate of those of 25 and over, though the gap is also wide in Belgium, France and Finland (around 2½ times).

The sole exception is Germany, where the incidence of unemployment among different age groups is radically different from that in other Member States. In Germany (both in the old and new Länder), the rate of unemployment among the under 25s is only slightly higher than that among the rest of the work force (10½% as against 9½%, and in the new Länder is significantly lower, 12% as against 17%).

In Germany, moreover, young people under 25 comprise only 12% of the total number of unemployed as opposed to 29% in the rest of the Union. Conversely, older people of 50 and over represent 30% of the unemployed in Germany, 12% in the rest of the Union (Graph 14). Furthermore, whereas in most Member States, the share of older people in total unemployed has not changed much since the mid-1980s, in Germany, it has risen markedly. Most of the change occurred in the late 1980s before unification when unemployment among the work force as a whole was falling (but when the rate for those of 50 and over hardly changed).

This shift in the age composition of unemployment in Germany is a reflection of a sharp increase in unemployment among older members of the labour force. In 1997, the number of people in the 50 to 64 age group in Germany who were unemployed was over 7%, more than in any other Member State, apart from Finland where overall unemployment was over 4 percentage points higher (the number of unemployed is here related to population rather than the labour force). This compares with a

14 Unemployed by age group in Member States, 1986, 1990 and 1997



The age composition of the unemployed in the Union was much different in 1997 than in 1986, with many fewer under 25 and many more aged 25-49. The relative number of those aged 50+ remained much the same, except most notably in Germany, where it rose substantially, so that the average age of the unemployed is now much higher than elsewhere.

Source: Eurostat, Community LFS, the EU total is shown including and excluding Germany to show its effect on the overall composition.

figure of only just over 3% in 1990, and 1986 (Graph 15). Given the relatively low level of participation in the work force of those aged 50 and over — in Germany, as elsewhere — this was associated with a rate of unemployment of almost 13% in this age group.

Much of this increase in unemployment occurred in the former East Germany, where by 1997, the unemployment rate for those of 50 and over was over 24%, some 14% of the people in the age group and more than half as high again as the rate for 25 to 49 year olds. Nevertheless, there was also a marked rise in the former West Germany, where the rate for the 50s and over rose from 5½% in 1990 (and 6% in 1986) to 10½% in 1997, when it was 3 percentage points higher than the rate for those under 50.

Although unemployment among the older members of the work force has risen significantly in a number of other Member States over the 1990s — in Finland and Sweden, in particular — this has been part of a general rise in unemployment which has not hit this age group disproportionately as it has done in

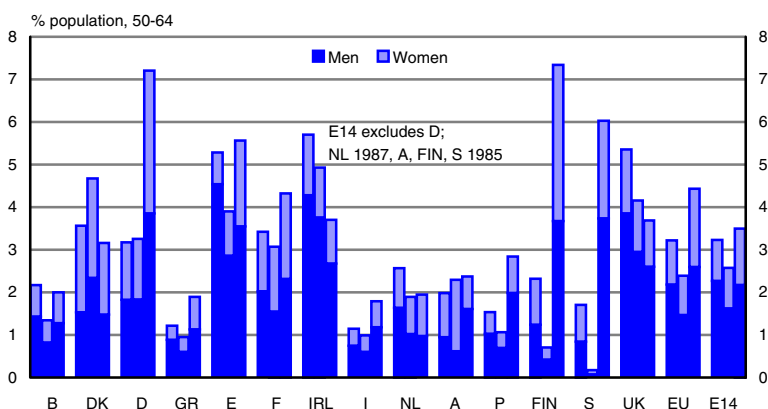
Germany. Nor does it seem to be the case that participation in the labour force of those of 50 and over is any higher in Germany than elsewhere in the Union, which could in principle provide an explanation of the difference, insofar as those counted as unemployed in Germany might be counted as inactive in other countries. While the rate of participation of people in this age group was higher than the average for the rest of the Union, the difference was small (around 5 percentage points) and lower than in five other Member States. As in the rest of the Union, it has also remained broadly unchanged over the 1990s (though the rate for women has risen and that for men has fallen).

In contrast to the disparity for older people, unemployment among young people under 25 in Germany has shown the same kind of change as in the rest of the Union, though it remains significantly lower in relation to the rate for people of 25 and over than in other Member States. With the sole exception of Denmark, where the share of young people in total unemployment has remained unchanged, it has fallen over the past decade in all Member

States. Moreover, although the youth unemployment rate is appreciably higher than in 1990 (21% as opposed to 16½%), because of falling participation and the larger numbers remaining longer in education, the proportion of under 25s who are unemployed, around 10%, is not much higher than 8 years ago and markedly lower than in 1986 (Graph 16).

Since 1994, this proportion has fallen in all Member States, except in Germany, Greece and Italy, in all of which it has risen slightly (though by only around ½ percentage point between 1994 and 1997 in each case — even in Germany, where the proportion of 50s and over who are unemployed went up by almost 2 percentage points). In all three countries, the rise over the years 1994 to 1997 was significantly less than the increase in the rate of youth unemployment (expressed in relation to the labour force), which was 2 percentage points or more in each case, reflecting the continuing fall in participation. For the same reason, while youth unemployment rates increased in Sweden and France over this period, the number of unemployed in the population fell.

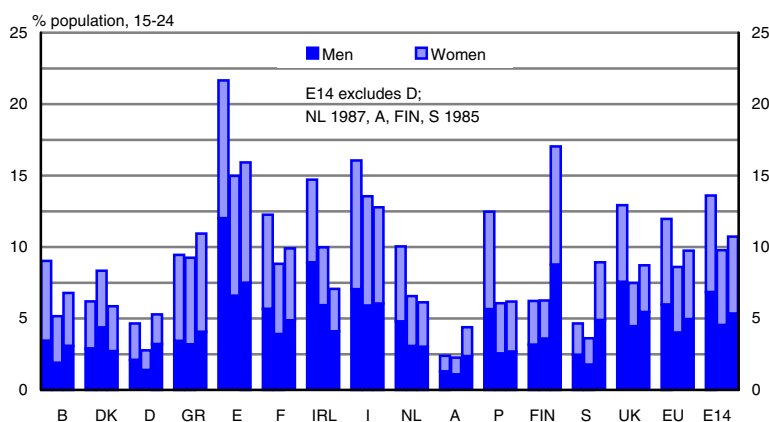
**15 Men and women 50 and over unemployed in Member States, 1986, 1990 and 1997**



Some 4½% of 50-64 year olds in the Union were unemployed in 1997 as against just over 3% in 1986. Nearly all this increase is due to the steep rise in Germany (in both the old and new Länder), where the proportion of this age group unemployed more than doubled. There were also large rises in Finland and Sweden, but these were more in line with the increases for other age groups.

*Source: Eurostat, Community LFS and ILO for Austria, Finland and Sweden for the years before 1997.*

**16 Young men and women under 25 unemployed in Member States, 1986, 1990 and 1997**



The proportion of young people aged 15-24 who were unemployed was much lower in 1997 than in 1986 and only slightly higher than in 1990 before the recession, especially if Germany, where there was a rise, is excluded. This is mainly due to the large fall in participation as more remained longer in education. The fall was common to most Member States and was especially large in Spain, Ireland and Portugal. Source: Eurostat, Community LFS and ILO for Austria, Finland and Sweden for the years before 1997.

### Long-term unemployment

While the overall rate of unemployment has fallen since 1994, even if slowly, there has so far been hardly any reduction in the rate of long-term unemployment in the Union. Those out of work for a year or more totalled 5.3% of the labour force in the Union in 1997, only marginally lower than three years earlier (5.4%) (Graph 17). Around half the unemployed, therefore, had been so

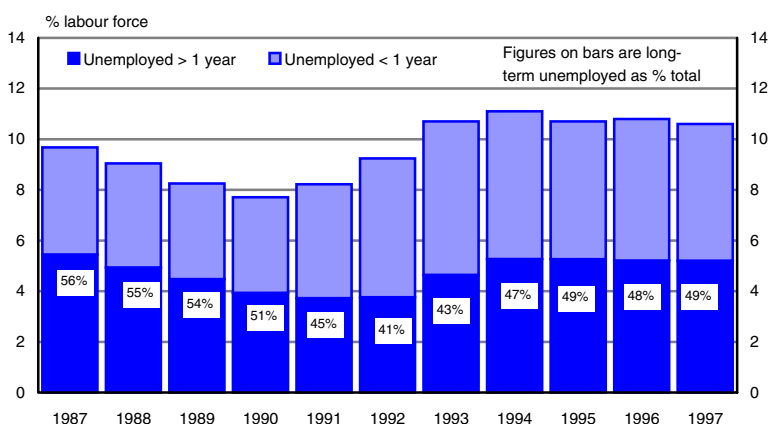
for at least a year, up slightly on 1996 and the same as in 1995 (49%). Moreover, 30% of the unemployed (just over 3% of the labour force), the same as in 1996, had been out of work for two years or more.

In 5 Member States (Germany, France, Italy, Austria and Sweden), in all of which unemployment either went up or remained the same, the rate of long-term unemployment increased in 1997. In three others (Denmark, where it was very low, Greece and Portugal), it fell by only

0.1% of the labour force. By contrast, there were marked falls (1 percentage point or more) in Spain, Ireland and Finland, in all of which overall unemployment declined significantly.

In general, the position in 1997 represents some improvement as compared with the mid-1980s when long-term unemployment reached its peak, though the problem remains serious. In 7 Member States, the rate of long-term unemployment stood at 5% of the labour force or

**17 Total and long-term unemployment rates in the Union, 1987 to 1997**



Long-term unemployment in the Union was just over 5% of the labour force in 1997, only marginally lower than in 1994, implying that 49% of the total unemployed had been out of work for a year or more, slightly more than in 1994. The long-term rate, therefore, has not fallen as much as the overall rate, which suggests that employment is not yet growing fast enough to reduce the former significantly as it did in the late 1980s. Source: Eurostat, Community LFS and comparable unemployment rates.



more in 1997, in Italy, over 8% and in Spain, almost 11% (Graph 18).

In Spain, however, the rate was lower than 10 years previously (12½%), despite the overall rate of unemployment being much the same. In Italy, on the other hand, as in two of the other countries where the rate was around 5% — Germany and Greece — the rate of long-term unemployment was higher in 1997 than in 1987. In all cases, moreover, the proportion of the unemployed out of work for a year or more was either much the same or higher.

Of the three other Member States with rates of around 5%, both Belgium and Ireland have achieved some success in reducing long-term unemployment (from 12% in Ireland and from over 8% in Belgium). Though this has much to do with the reduction in overall unemployment, the proportion of the unemployed affected has been reduced significantly, but is still high in both countries (57% in Ireland, 60½% in Belgium). In the remaining country, France, the small rise in the long-term rate mainly reflects the rise in the overall rate (up by 2 percentage points) and the propor-

tion affected was reduced from 48½% to 39½% over the period.

In the rest of the Union, long-term rates, except in Finland, were below 4% in 1997, and below 2% in Denmark, Austria and Luxembourg. In three countries — the Netherlands, Portugal and Sweden — the proportion of the unemployed out of work for a year or more was higher in 1997 than 10 years earlier, while in Denmark, it was the same.

### The number of the unemployed finding work

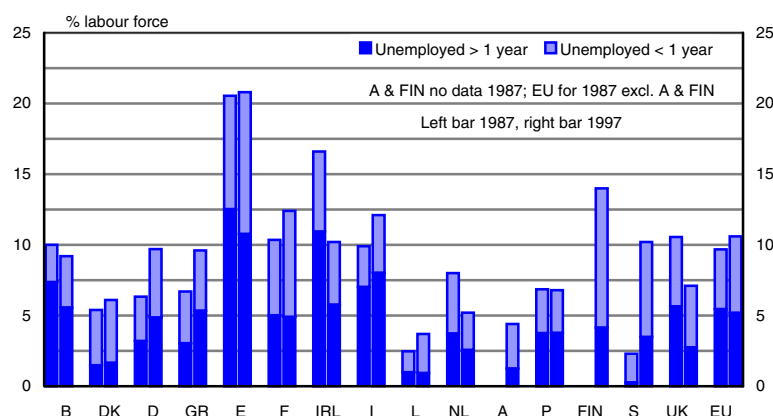
Just under a third of men (31%) of working-age in the Union who had been unemployed one year previously were in work in 1997, when the LFS was conducted (Graph 19). This is much the same as in 1996, and marginally higher than in 1994 (29½%), but still lower than in 1990 (29½%), but still lower than in 1990 before the recession began (35%). Over half (52½%) were still unemployed, much the same as in 1990, and the rest (16½%) had withdrawn from the labour force, more than in 1990.

In general, as would be expected, the proportion of the unemployed finding work within a year tends to vary between Member States according to the growth of employment, but there are exceptions. It was above the Union average in Denmark, Spain, Luxembourg, Portugal and the UK, in all of which employment was rising significantly. On the other hand, it was well below average in Ireland and Finland where growth was highest of all, though in the former, this is consistent with the high rate of long-term unemployment (and the proportion was up on earlier years), and in the Netherlands, where over half of the men unemployed a year before were no longer counted as part of the labour force, considerably more than in any other Member State.

Equally, the proportion was below average in Germany and Austria, where employment was falling, as well as in Belgium, where long-term unemployment is high, though above average in France, where employment increased relatively little.

In the case of women, despite the much faster rise in their employ-

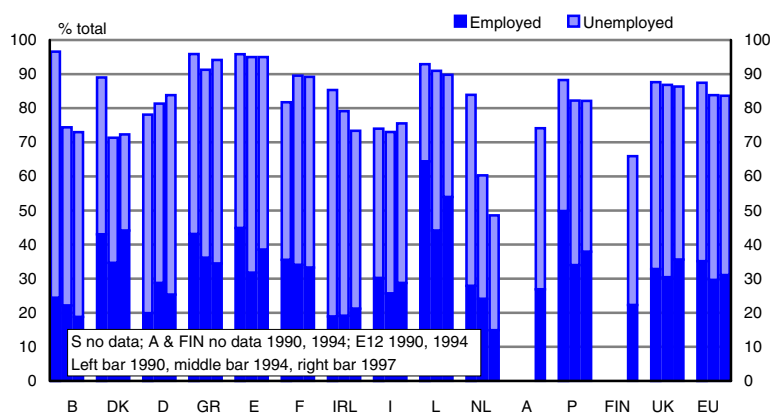
**18 Total and long-term unemployment rates in Member States, 1987 and 1997**



The rate of long-term unemployment was lower in 1997 than in 1987 in all Member States except Germany, Greece, Italy and Sweden, and, almost certainly, Finland, where it rose. In Germany and Italy, the proportion of the unemployed out of work for a year or more fell over the period, as it did in other countries apart from Greece, Sweden, Denmark, the Netherlands and Portugal, but it was still over half in 7 Member States.

Source: Eurostat, Community LFS and comparable unemployment rates.

**19 Current work status of men aged 15-64 unemployed one year previously in Member States, 1990, 1994 and 1997**



Just under a third of men in the Union unemployed one year before the 1997 LFS were in work at the time of the survey, half were still unemployed and the remainder no longer in the labour force. The proportion finding work was generally higher in countries with high employment growth, though Ireland, the Netherlands and Finland are exceptions.

Source: Eurostat, Community LFS; the figures are based on what respondents said they were doing one year previously.

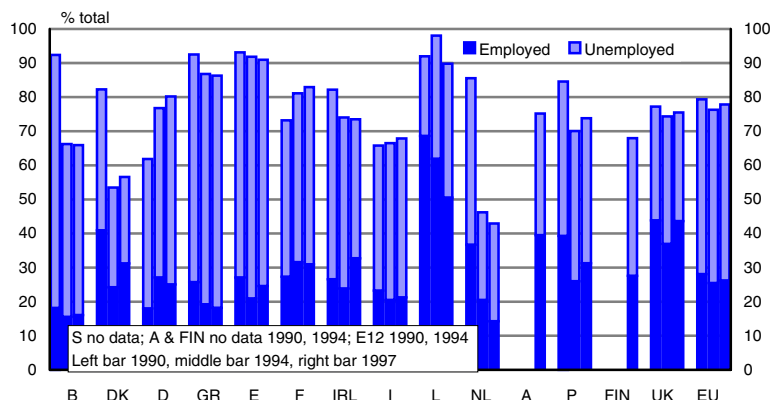
ment, the proportion of the unemployed a year ago who were in work in 1997 was lower than for men (26%) and only marginally higher than in 1994 (Graph 20). The gap was particularly wide in the South of the Union, in Greece and Spain, where the proportion of women finding work was around 15 percentage points less than for men, and in Italy and Portugal, where it was over 7 percentage points lower, though it was also substantial in Denmark (13 points). On the other hand, the proportion of unemployed

women finding work was considerably larger than for men in Ireland, Austria (12 percentage points in both cases), Finland (5 points) and the UK (8 points).

In most countries, women who had been unemployed were far more likely than men to withdraw from the labour force, some 22% having done so during the year before the 1997 LFS. Consequently, about the same proportion of women as men in the Union, just over half, were still unemployed, which is broadly

in line with the figures for long-term unemployment (47½% of men, 50½% of women).

**20 Current work status of women aged 15-64 unemployed one year previously in Member States, 1990, 1994 and 1997**



Only around 26% of women in the Union unemployed a year before the 1997 LFS were in work at the time of the survey, over half were still unemployed and the rest had left the labour force. As for men, the proportion finding work was larger in countries with high net job creation, Ireland and Finland no longer being exceptions, though the figure was still low in the Netherlands, where most had stopped looking for work.

Source: Eurostat, Community LFS; the figures are based on what respondents said they were doing one year previously.

## Part I Section 2 Trends in employment performance and employment rates

The concern of this section is to examine the proximate factors underlying the changes in employment described in the previous section. It considers, in turn:

- the contribution of part-time working to the recent growth in employment;
- the growth of temporary working or fixed-term contracts of employment and the increasing tendency for these to be the main jobs available for people looking for work;
- the changes in self-employment, its role in the job creation process and its link to entrepreneurship;
- the sectoral distribution of job gains and losses;

- the trends in the occupational structure of employment and the growth of higher-skilled jobs relative to lower-skilled ones.

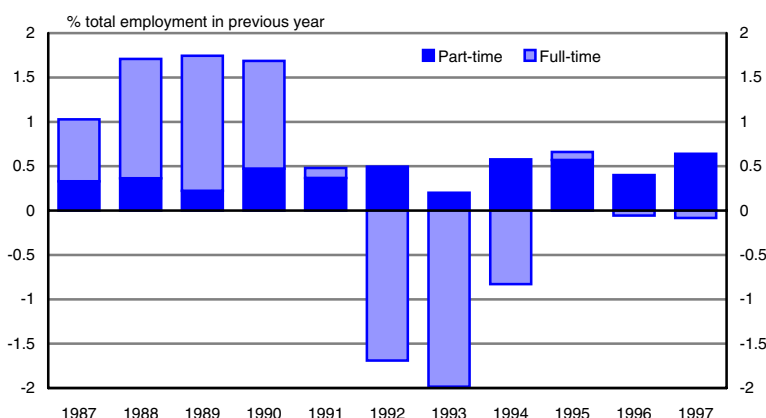
### Part-time employment

For the fifth year in the last six, there was no net addition to full-time jobs in the Union in 1997. Indeed, as in every year since 1991, apart from 1995 when there was a marginal increase (less than 0.1%), there was a decline in the number employed full-time and part-time jobs accounted for more than all of the increase in employment that occurred (Graph 21). So far, therefore, although the economic recovery since 1994 has led to more people finding work, it also been associated with a marked shift from full-time

to part-time jobs. This is in sharp contrast to what happened over the previous recovery in the late 1980s when most of the net addition to employment was accounted for by full-time jobs.

In the three years 1994 and 1997, the number of part-time jobs in the Union went up by almost 2.4 million, a rise of just over 10% (over 3% a year), while the number of full-time jobs fell by 125 thousand. The shift to part-time working was true for both men and women. Between 1994 and 1997, the number of men employed part-time increased by around 830 thousand, or by 20%, and the number employed full-time declined by some 260 thousand. For women, the number working part-time went up by over 1 million, a rise of over 8%, and the number working full-time increased by

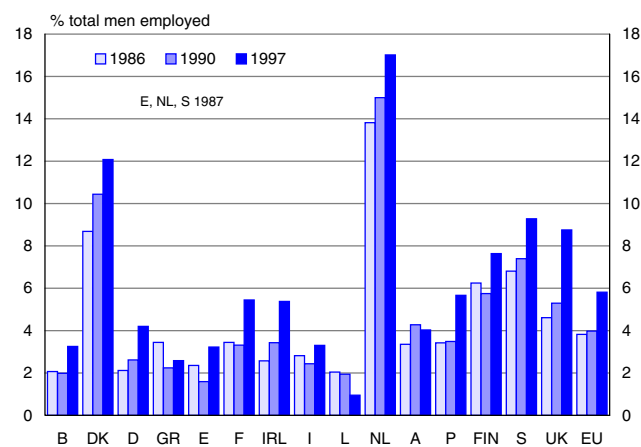
21 Change in part-time and full-time employment, 1987-97



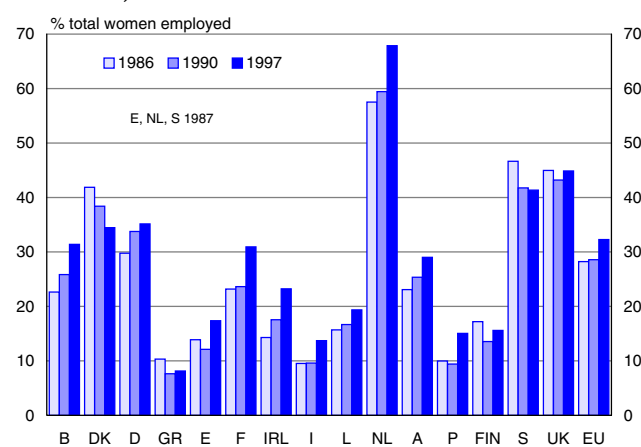
Part-time employment rose every year between 1987 and 1997, including during the years of recession. The growth has been particularly high during the 1990s, when even in the last four years of employment increase, the number in full-time jobs has failed to recover and in 1997 was around 7 million lower than in 1991, a fall of some 5%.

Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.

**22 Men employed part-time in Member States, 1986, 1990 and 1997**



**23 Women employed part-time in Member States, 1986, 1990 and 1997**



under 140 thousand (indeed, in 1997, the number fell slightly).

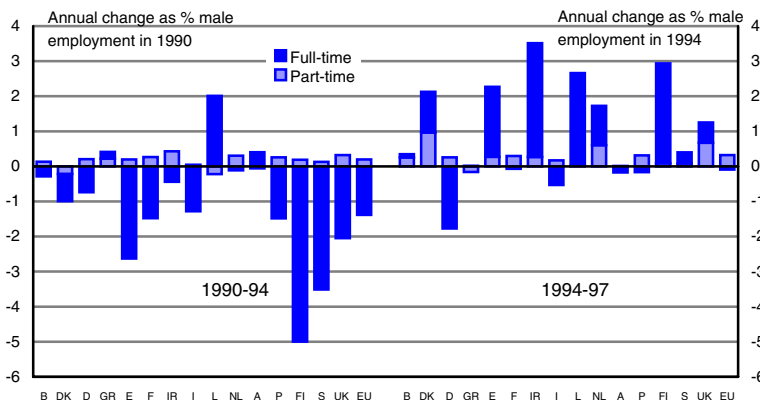
As a result, the proportion of men in employment in the Union working part-time in 1997 rose to 6%. This compares with a figure of only 4% in 1990 and represents a rise of 50% in just 7 years (Graph 22). The proportion of women working part-time went up to 32% in 1997 as against 29% in 1990 (Graph 23). In both cases, the increase over the 1990s in the proportion employed on a part-time basis has been substantially

greater than in previous years (between 1985 and 1990, there was a rise of only around 1 percentage point).

The increased importance of part-time working has been a feature of labour market developments in almost all Member States over the 1990s. In the case of men, in 5 Member States (Germany, France, Italy, Austria and Portugal) part-time jobs increased between 1994 and 1997 while full-time jobs declined (Graph 24). In all of these countries,

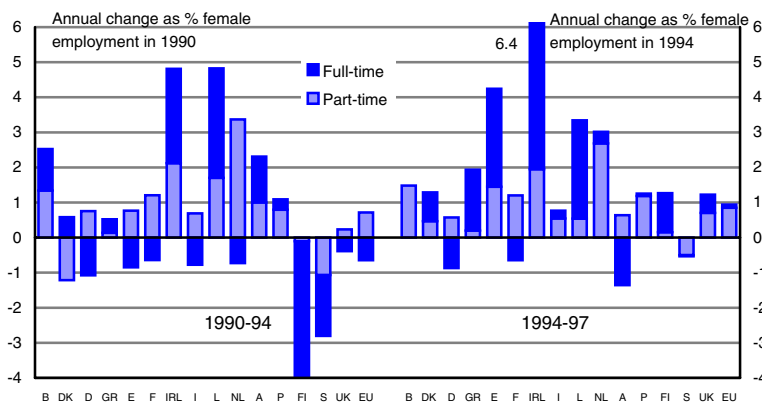
apart from Portugal (where full-time jobs increased in 1997), recovery of output has occurred at a slower pace than in the rest of the Union and unemployment has either continued to rise or has fallen by very little. In another three Member States (Belgium, the Netherlands and the UK), the number of men working part-time increased by much the same or by more than that working full-time. On the other hand, there was a decline in part-time jobs for men in Sweden over the period, the only

**24 Contribution of part-time and full-time jobs to the change in male employment in Member States, 1990-94 and 1994-97**



Part-time employment of men in the Union rose throughout the 1990s, while there was a decline in men working full-time. During the recession years 1990-94, men in full-time jobs fell in 12 Member States, while those in part-time jobs rose in all but two. In 1994-97, the number employed part-time increased in all countries except Greece, even in those where the number working full-time fell.  
 Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.

**25 Contribution of part-time and full-time jobs to the change in female employment in Member States, 1990-94 and 1994-97**



The relative number of women working part-time has risen by consistently more than those employed full-time over the 1990s. Over the recession years, it offset the decline in full-time jobs and was responsible for preventing the employment of women declining in many countries. In 1994-97, the growth in part-time working was the major reason for the increase in women's employment.

*Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.*

country in the Union where this was the case (though, in 1997, as unemployment continued to rise, part-time working increased while full-time employment fell significantly).

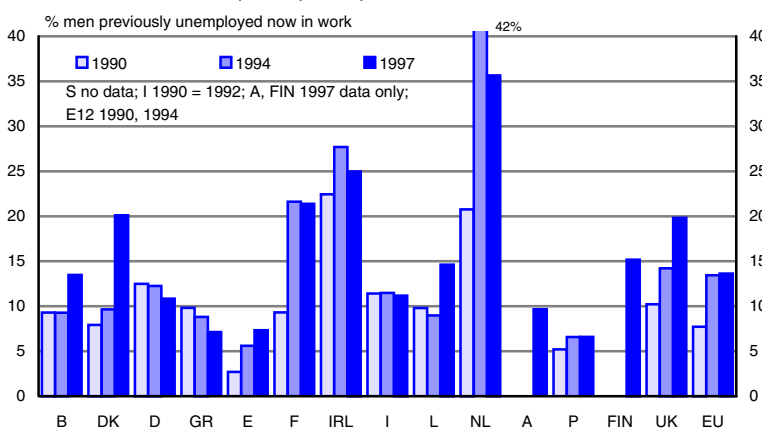
In all Member States, except Luxembourg (where the sample size makes the figures unreliable), the proportion of men in employment working part-time has increased during the 1990s, in most countries, significantly. In Sweden and the UK, the figure had reached 9% by

1997, in Denmark, 12% and in the Netherlands, it was as high as 17%.

In the case of women, there were four Member States in which part-time employment increased between 1994 and 1997 while full-time employment fell, three of which (Germany, France and Austria) were also countries where the same was true for men, while in the fourth (Belgium), the growth in part-time working of men was substantially greater than that of full-time (Graph 25). In four other countries (Italy, the

Netherlands, Portugal and the UK), the rise in part-time employment of women outstripped that of full-time employment, all of these countries being ones in which the same was the case for men (in two, Italy and Portugal, full-time jobs for men declined). The shift towards part-time working in these 8 countries was, therefore, common to both men and women over this period, which suggests that a common force was at work encouraging the development of part-time jobs rather than full-time ones.

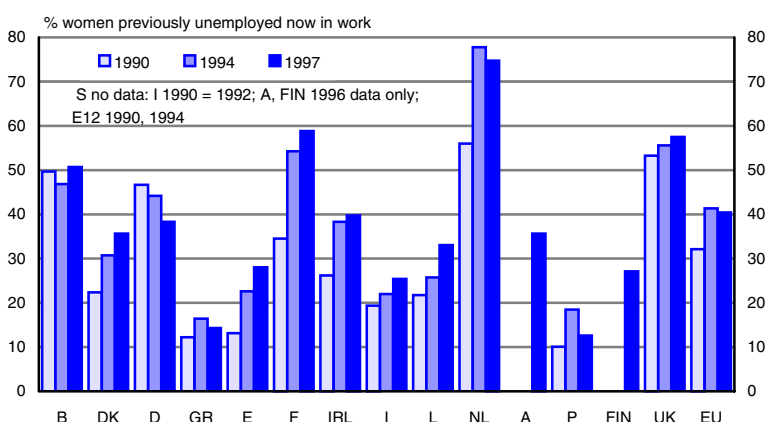
**26 Previously unemployed men in part-time employment in Member States, 1990, 1994, 1997**



In 1997, the number of men in the Union working part-time who had been unemployed one year earlier was around 14% of those who were then in employment, almost three times higher than the overall proportion of men employed part-time. This was much the same in 1994 at the end of the recession and almost twice as high as in 1990.

*Source: Eurostat, Community LFS; figures based on current employment status of men who reported being unemployed one year before.*

**27 Previously unemployed women in part-time employment in Member States, 1990, 1994 and 1997**



Around 40% of women in the Union in employment in 1997 and who had been unemployed a year earlier worked part-time, significantly higher than the overall proportion of women employed part-time (just over 32%). This was similar to the figure in 1994 and much higher than in 1990.

Source: Eurostat, Community LFS; figures based on current employment status of women who reported being unemployed one year before.

In most of the other 7 Member States, moreover, part-time jobs accounted disproportionately for the growth in employment of women between 1994 and 1997. This was even the case in Denmark, which over the 1990s as a whole, was the only country to experience a decline in the importance of part-time working among women (Graph 23). The relative decline in part-time jobs, which was a marked feature of the early 1990s, seems, therefore, to have come to an end over the past few years.

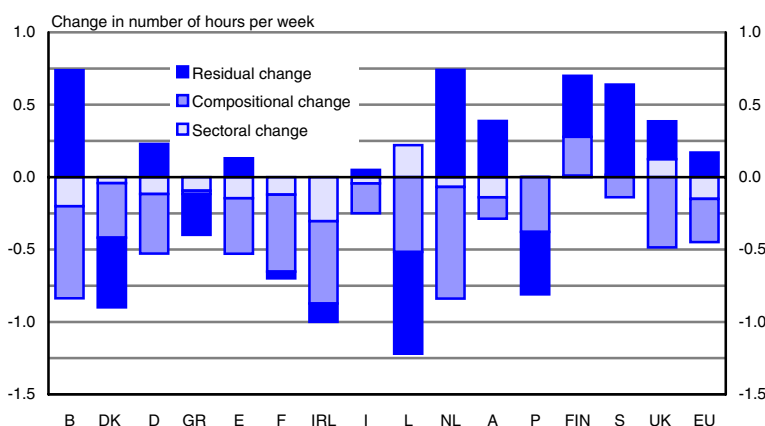
Part-time jobs are a particularly important source of employment for people who are unemployed. In 1997, almost 14% of men in the Union unemployed one year before who had moved into employment were in part-time work, over twice the overall share of men working part-time and slightly more than in 1994 (Graph 26). In most Member States, this was also the case. In 5 countries (Denmark, France, Ireland, the Netherlands and the UK), the proportion was 20% or more and in the Netherlands, over 35%. In the

case of women, 40% of those in the Union who had been unemployed in 1996 and who had found a job in the subsequent year took up part-time work — over 50% in Belgium, almost 60% in France and the UK and 75% in the Netherlands (Graph 27).

### Full-time equivalent employment rates

The growth of part-time working and the effective displacement of full-time jobs by part-time ones

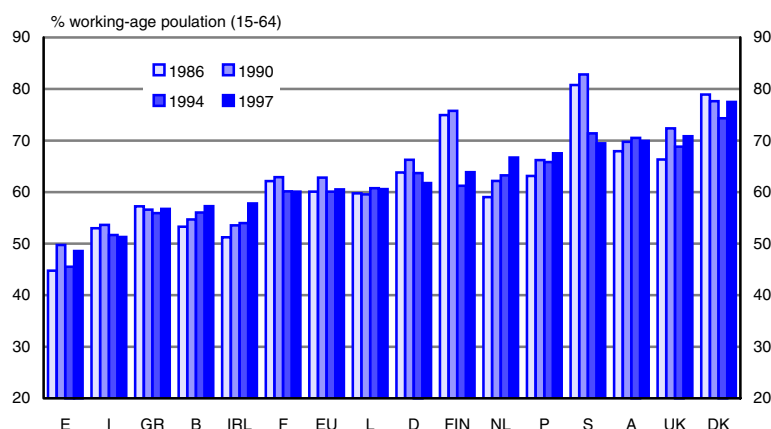
**28 Change in average usual hours worked per week and effect of sectoral and compositional shifts in employment, 1994-97**



Average hours worked in the Union fell by 18 minutes over the 3 years 1994-97, the combined result of a shift in employment between sectors (from agriculture to services) and an increase in part-time relative to full-time working (compositional change), which together reduced working time by half an hour, offset by a rise in hours worked by full-timers and part-timers (residual change).

Eurostat, Community LFS.

**29 Employment rates in Member States, 1986, 1990, 1994 and 1997**



The employment rate in the Union, defined as total employed relative to population 15-64, varies from over 77% in Denmark to 49% in Spain. It was significantly higher in 1997 than in 1986 only in Spain, Belgium, Ireland, the Netherlands, Portugal and the UK. It was lower in Finland and Sweden, especially, but also in Italy, France and Germany.

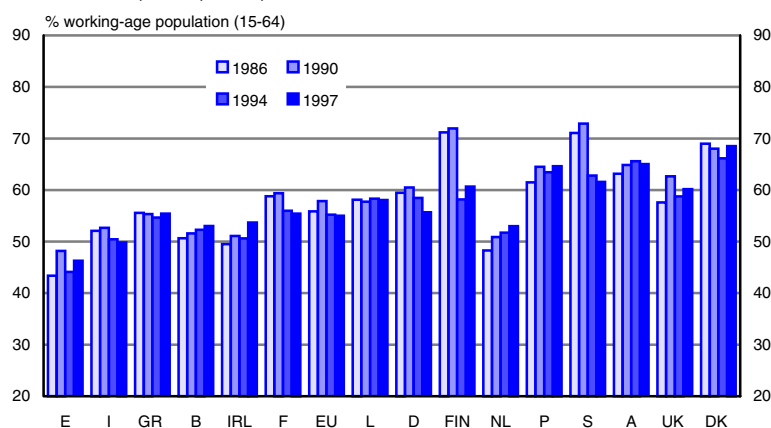
*Source: Eurostat benchmark employment series and Community LFS for working-age population.*

means that the increase in employment in recent years has been less in terms of total hours worked in the economy than in terms of the total number of people in work. Average hours worked declined by just under 1% between 1994 and 1997 across the Union, predominantly because of the shift to part-time working rather than because of any reduction in the average hours worked by people employed full-time or part-time — indeed, this increased slightly rather than fell over the period (Graph 28).

Accordingly, adjusting for hours worked and expressing each person employed in full-time equivalent terms (ie relative to the average hours of full-time workers, which varies between Member States), employment in the Union went up by only 1/2% in the three years 1994 to 1997 whereas the number in work rose by 1 1/2%. This means that, relative to working-age population (which rose a little), full-time equivalent (FTE) employment in the Union was the same in 1997 as in 1994, whereas, as noted above, the

number employed increased slightly (Graphs 29 and 30). It also means that it was not only below the level in 1990 at the end of the period of high net job creation, but also below that in 1986 at the end of the recession of the early 1980s. Only in three countries in the Union (Belgium, Ireland and the Netherlands) was the FTE employment rate in 1997 above that in both 1986 and 1990, though in a fourth (Portugal) it was higher in terms of the number in work. In 5 Member States (Italy, France, Germany,

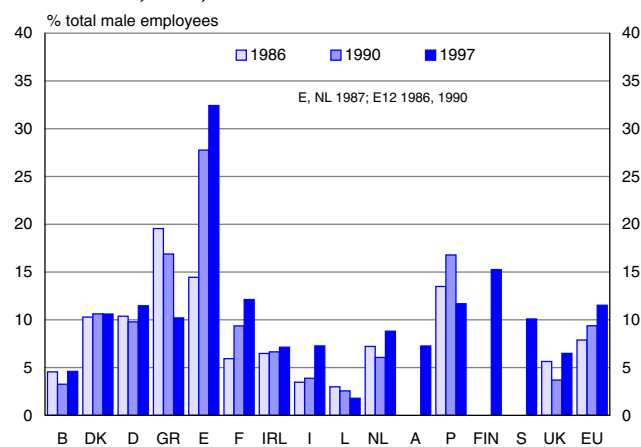
**30 Full-time equivalent employment rates in Member States, 1986, 1990, 1994 and 1997**



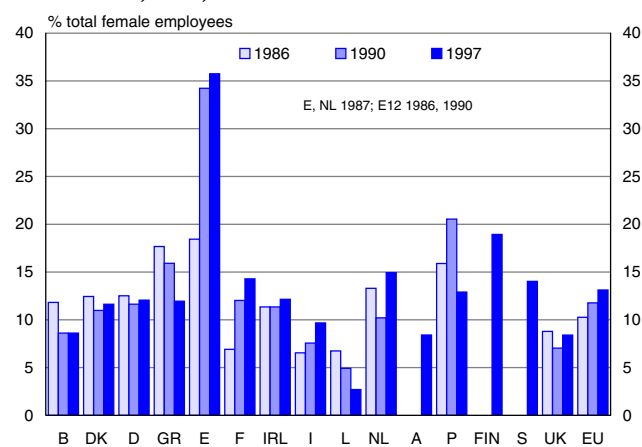
Full-time equivalent employment rates vary less across the Union than the number in work, ranging from 68% in Denmark to 46% in Spain in 1997. The same countries show a rise or a fall between 1986 and 1997, but the rise tends to be less and the fall more.

*Source: Eurostat benchmark employment series and Community LFS for working-age population; full-time equivalents are calculated by weighting persons employed by their weekly working hours relative to average full-time hours worked in each country.*

**31 Men employed in temporary jobs in Member States, 1986, 1990 and 1997**



**32 Women employed in temporary jobs in Member States, 1986, 1990 and 1997**



Finland and Sweden), the FTE rate, as well as the simple rate, was significantly lower in 1997 than in either of the earlier two years.

### The growth of temporary jobs

The additional jobs created in recent years have not only been part-time ones, they have also been disproportionately temporary rather than permanent ones. Although temporary jobs, or those

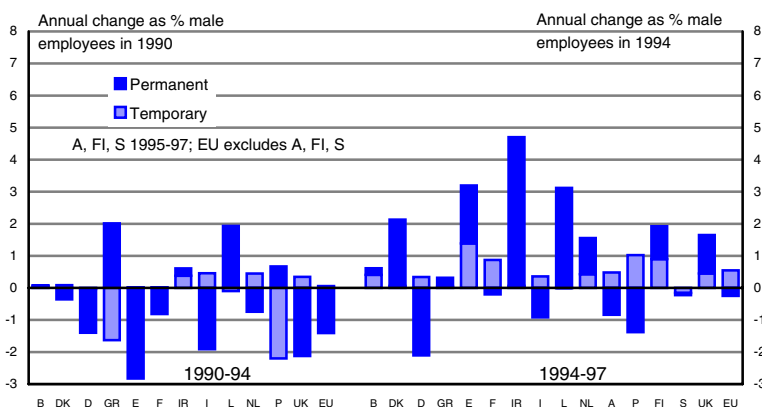
with fixed-term contracts, represent only a small proportion of the total in the Union (11% for men and 13% for women in 1997), the proportion is increasing steadily year after year in virtually all Member States (Graphs 31 and 32).

Temporary jobs accounted for all of the net addition to employment of men in the Union between 1994 and 1997 (in 1997 as in the preceding two years). In four Member States (Germany, France, Italy and Portugal), the number of men working in

such jobs increased while those employed in permanent jobs declined, while in most other countries, the contribution of temporary jobs to the growth in employment of men exceeded their share of the total (Graph 33).

Much the same is true of women, though only two countries (Germany and Portugal) experienced a reduction in those working in jobs with contracts of unlimited duration between 1994 and 1997 (Graph 34). In the Union as a whole, temporary jobs

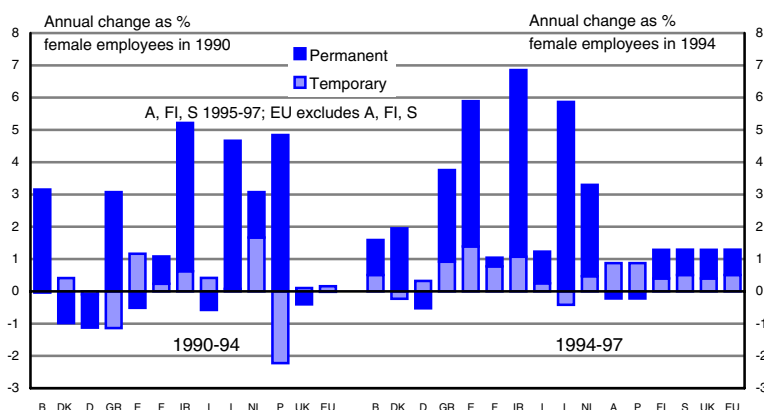
**33 Contribution of temporary jobs to the change in male employees in Member States, 1990-94 and 1994-97**



The number of men employed on fixed-term contracts increased in most Member States during the recession years of the 1990s, partly offsetting the decline in those employed on contracts of unlimited duration. Since 1994, employment on temporary contracts has generally risen more markedly even where those employed in permanent jobs has increased.  
 Source: Eurostat, Community LFS; the figures for total male employees are adjusted to be consistent with the benchmark employment series.



**34 Contribution of temporary jobs to the change in female employees in Member States, 1990-94 and 1994-97**



The growth in the number of women in fixed-term jobs during the 1990s has been similar to that of men in most countries, the larger expansion of women in employment, especially since 1994, being mainly due to a higher growth of women in jobs of unlimited duration or, in Germany and Portugal, to a smaller decline in these.

Source: Eurostat, Community LFS; the figures for total female employees are adjusted to be consistent with the benchmark employment series.

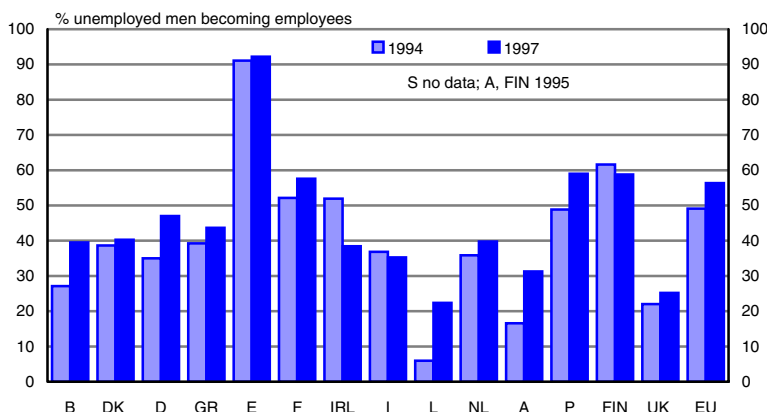
accounted for some 40% of the net addition to the employment of women over this period (and in 1997 alone, more than half), and only in Denmark, Spain and Luxembourg, was their contribution to net job creation less than the overall proportion of women working under fixed-term contracts. In all other Member States, therefore, the importance of temporary working increased over these three years.

ment growth across the Union since the recession of the early 1990s has seen a continuing rise rather than a reduction in the relative numbers working in jobs with fixed-term contracts. Since the importance of temporary working also increased in most Member States during the previous period of upturn in the late 1980s, it would appear that the growth signals an ongoing structural change in the characteristics of European labour markets towards more flexible terms of employment.

It is increasingly likely that people unemployed looking for work will have to settle for a temporary rather than a permanent job, at least initially, though it may be the case that they are offered a permanent position once they have been working in the job for a time. In 1997, just over 56% of both men and women in the Union then in work who had been unemployed a year earlier were employed in jobs with fixed-term contracts, up from under 50% only three years earlier at the start of the recovery period (Graphs 35 and 36).

In consequence, for both men and women, the resumption of employ-

**35 Men previously unemployed in temporary jobs in Member States, 1994 and 1997**



Well over half of the men in the Union who were in employment in 1997 after having been unemployed the year before worked in jobs with fixed-term contracts, significantly more than in 1994. Only in three countries was the proportion lower than three years earlier.

Source: Eurostat, Community LFS; figures based on the employment status of men reporting being unemployed one year before.

In Spain, where temporary jobs are more prevalent than anywhere else in the Union, over 90% of men unemployed in 1996 who had found work by 1997 had moved into temporary employment, while in France, Portugal and Finland, the figure was almost 60%. Only in Italy, Luxembourg, Austria and the UK, was the proportion for men significantly under 40%, though still above 20% in all cases. For women, the figure was just under 90% in both Spain and Finland, while in France and Portugal, as for men, it was around 60%. In only three Member States (Luxembourg, Austria and the UK) was the figure for women much under 40%, but again in all three far higher than the relative number of temporary jobs in the economy.

## Self-employed

In 1997, some 15% of all those in employment in the Union were self-employed. Of these, almost 18% worked in agriculture (three times more than the share of the sector in total employment), in which over half of the work force (53%) were self-employed (and another 15% un-

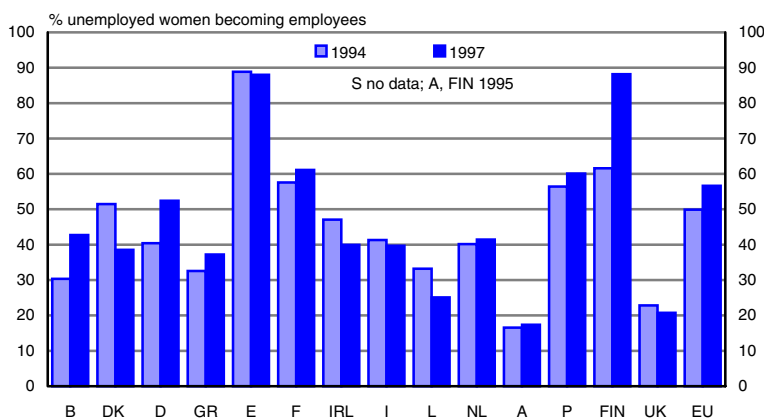
paid family workers). Given that the self-employed constitute the majority of the work force in agriculture in all Member States, except Denmark (43%) and Germany (only 31%), the relative number of self-employed in different parts of the Union is significantly influenced by the weight of agriculture in total employment.

Accordingly, it is only to be expected that the self-employed should account for a relatively high share of employment in the three Southern Member States where agriculture is still important — Greece (33%), Portugal (27%) and Spain (21%) — as well as Ireland (19%). In most of these countries, the self-employed working in agriculture constituted 35% or more of all the self-employed in the economy. The exception is Spain, where the proportion was not much higher than the Union average and where accordingly a relatively large share of the self-employed worked in other sectors. This was also the case in Italy, where the relative number employed in agriculture was only slightly above the Union average (6½% as against 5%) but where around a quarter of the work force was self-employed.

By contrast, in Austria and Finland, where employment in agriculture was also above the Union average and slightly higher than in Italy, the proportion of people working as self-employed was below the average — some way below in Austria, where 40% of the self-employed worked in agriculture.

While agriculture is, therefore, an important explanation for the variation in the scale of self-employment across the Union, which was as low as 8% in Denmark and Luxembourg, it is by no means the only reason. Indeed, even taking account of the relative importance of agriculture, there is a clear North-South divide in the proportion of those in work who are self-employed. In the Union as a whole, around 13% of the work force in industry and services combined in 1997 were self-employed. In all four Southern Member States, the self-employed represented over 18% of the work force in these two sectors — well over in the case of Italy (23%) and Greece (27%) — while in all Northern Member States, except Belgium (14%) and Ireland (13%) the figure was under 12%. Indeed, in Denmark, Luxembourg

**36 Women previously unemployed in temporary jobs in Member States, 1994 and 1997**



As for men, well over half of women in work in 1997 who had been unemployed the year before were in jobs with fixed-term contracts, a far higher proportion than that of women in temporary work overall. In most countries, the change in the proportion between 1994 and 1997 was similar to that for men, the main exceptions being Denmark, Luxembourg and Finland.

Source: Eurostat, Community LFS; figures based on the employment status of women reporting being unemployed one year before.

and Austria, the proportion was only around 7% and in France, 9%.

The variation in self-employment across the Union suggests some relationship with GDP per head, in that the more prosperous Member States tend to have relatively low numbers of self-employed and the poorer Member States, relatively high ones (in the US, the figure was around 7%). This, in turn, reflects the tendency for self-employment to decline as economies become more developed, though this is a long-term feature of development, stretching over decades or even centuries, rather than a short or medium-term one. Indeed, self-employment has a potentially important role to play in the job creation process, as demonstrated by its contribution to employment growth over the 1990s, especially during the years of recession, as noted below.

Self-employment, however, should not be confused with entrepreneurship or the creation of enterprises. Most of the self-employed in the Union (around 60%) do not employ anyone but themselves. Indeed, whether a person is self-employed or not may have more to do with

legislative or fiscal arrangements in different Member States than genuine differences in what they do. This applies both to those working alone and those with employees, who in some cases will be counted as self-employed, in others as employees of the enterprise they own. A better indication of the prevalence of entrepreneurship across the Union is the rate of creation of new enterprises, though as noted later in this Report, there is a severe lack of information about this in most Member States.

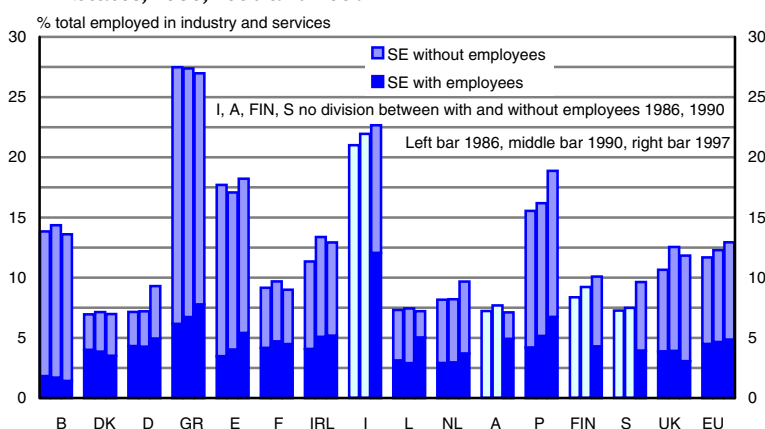
In the Union as a whole, some 5% of all those in employment in non-agricultural activities in 1997 were self-employed with employees. This amounts to just over 7½ million people, though the number of people employing workers could be significantly higher than this (according to the Eurostat *Enterprises in Europe* data, there were around 1 million more enterprises than this with at least one employee in 1994 and in a number of cases there was more than one self-employed in an enterprise). The proportion varies widely across the Union and bears only a tenuous relationship to the overall proportion of self-employed. In Belgium, in par-

ticular, where the overall share of self-employment is relatively high, it was only around 1½% of those in work, while in Luxembourg and Austria, as well as in Germany, where the overall share is low, it was around 5%, only marginally below the figure in Spain.

Nevertheless, self-employed with employees, as for self-employed as a whole, still account for a larger proportion of the work force in the Southern Member States than in the Northern ones, the figure in 1997 being as high as 12% in Italy, more than the figure for total self-employed in most Member States. This reflects the greater prevalence of small enterprises in Italy as compared with other countries (as indicated in Part II, Section 1), but it also may be a consequence of the legislative and/or fiscal features of the Italian economy which encourage self-employment.

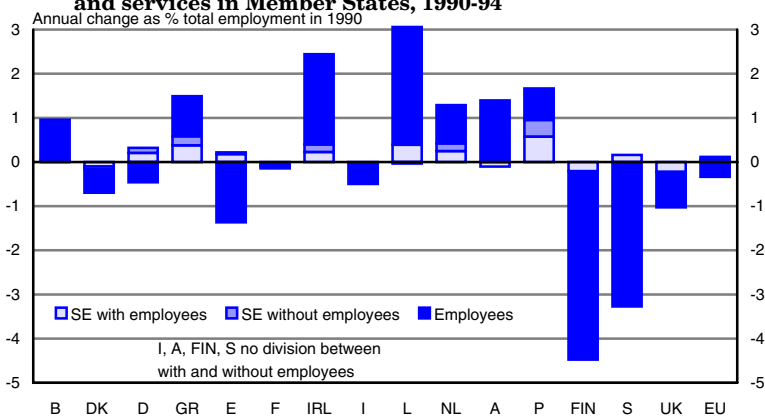
Although self-employed with employees have come to account for a higher share of total employment in the Union over the past 10 years or so, the increase has been marginal (from 4½% to just under 5%) and has been less than the rise in share of

**37 Self-employed in industry and services in Member States, 1986, 1990 and 1997**



Around 13% of those employed in industry and services in the Union in 1997 were self-employed. Of these, around 40% employed other people. This proportion was much the same as in 1986 in most Member States, though the relative number of self-employed increased over this period in most but by no means all cases.  
 Source: Eurostat, Community LFS; agriculture, in which employment is declining and where half of workers are self-employed, is excluded because it dominates trends.

**38 Contribution of self-employed with and without employees to the change in total employment in industry and services in Member States, 1990-94**



Over the recession years, the number of self-employed increased in 8 of the 15 Member States but only in three where the number of employees declined. In those where self-employment grew, this was accompanied by a rise in the number employing other people. Only in the UK, did the number fall.

Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.

self-employed without employees. This, however, is heavily influenced by changes in Germany and the UK, in both of which self-employed with employees were responsible for a smaller share of employment in 1997 than in 1986 (if only slightly so in Germany, where the relative number of self-employed without employees rose appreciably after unification). Indeed, in all other Member States for which data are available, apart from Belgium, the opposite was the case and the share of employment represented by self-

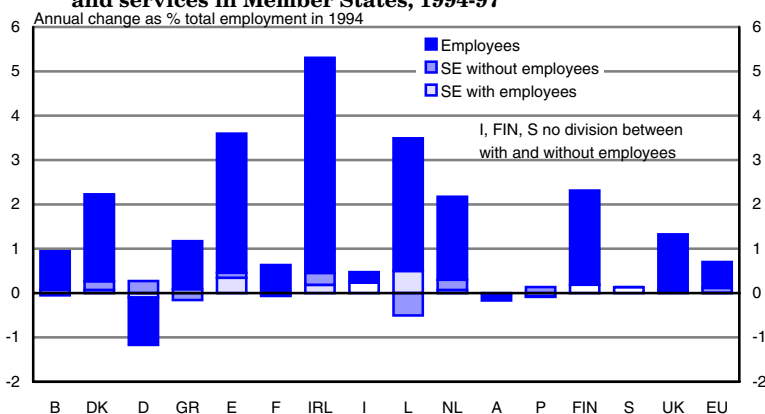
employed with employees increased over the period. In both sets of countries, however, it is difficult to discern whether and to what extent the change was affected by institutional developments.

### Contribution of the self-employed to employment growth

Over the 1990s, growth of self-employment has made a disproportionate contribution to the

numbers in work in the Union. This was particularly the case during the recession in the early part of the decade, when there was an increase in both self-employed with employees and those without employees in industry and services, which offset, though to a small extent, the fall in the number of employees in these two sectors (Graph 38). The growth of self-employment was especially important over this period in Germany, Greece, Spain, the Netherlands, Portugal and Sweden, in all of which (except poss-

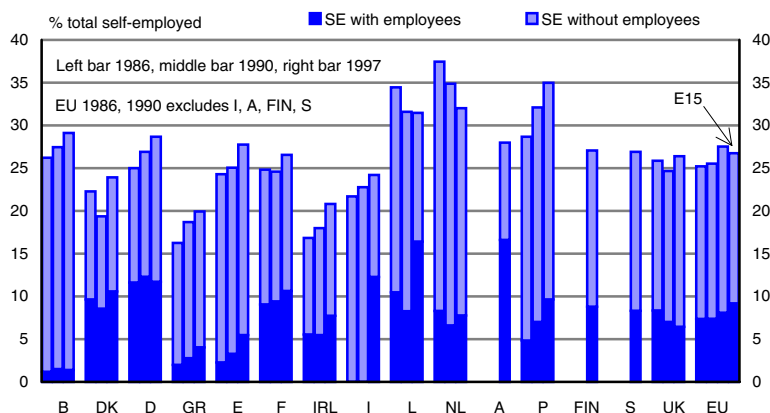
**39 Contribution of self-employed with and without employees to the change in total employment in industry and services in Member States, 1994-97**



In the recovery years 1994-97, except in the Netherlands and Portugal, self-employment increased by more than in the earlier period, though the number with employees expanded in only four countries. The rise in self-employed, however, was in most cases proportionate to their share in total employment, the exceptions being where the latter declined.

Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.

**40 Share of women in self-employment in industry and services, 1986, 1990 and 1997**



Women accounted for 27% of the total number of self-employed in the Union 1997, as compared with 44% of employees, around 2 percentage points more than in 1990. Of these, only around a third have businesses with employees as compared with 44% of men. The proportion with employees was higher in 1997 than in 1986 in all Member States except Germany and the UK.

Source: Eurostat, Community LFS.

ably the last where no data are available), there was a significant rise in the self-employed with employees.

The contribution of self-employment to the recovery during the years 1994 to 1997 was less evident, the rise in the number concerned being about the same as their share in employment (Graph 39). However, it continued to be important in Germany and Sweden, where total employment fell, as well as in Portugal, in all three of which it was the

only element of employment growth, though this time it was concentrated among those without employees.

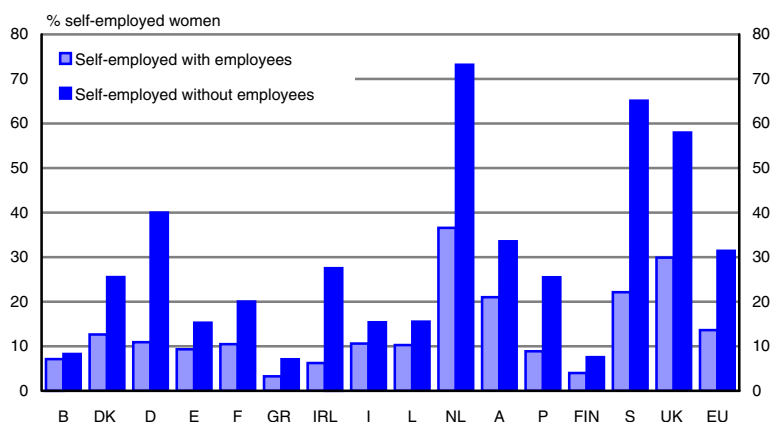
### Women self-employed

Only just over a quarter of the self-employed in the Union are women, much less than the share of women among employees (44% in 1997) (Graph 40). Moreover, women account for an even smaller share of the self-employed with employees

(21%), and of the women self-employed without employees, around a third work part-time, slightly more than the relative number of employees working part-time (just over 15% of women self-employed with employees worked part-time) (Graph 41).

In only three Member States, the Netherlands, Luxembourg and Portugal, did women account for more than 30% of the self-employed in 1997 and in no country in the Union did they account for over 35%, the

**41 Part-time working among self-employed women in industry and services, 1997**



Some 25% of self-employed women in industry and services worked part-time in the Union in 1997 as opposed to 33% of employees who were in part-time jobs. Only just under 14% of those who employed other people worked part-time as against over 31% of those without employees, the proportion being over 70% in the Netherlands, 65% in Sweden and almost 60% in the UK.

Source: Eurostat, Community LFS.

figure being as low as 20% in Greece and Ireland. Furthermore, in only two countries, Austria and Portugal, were more than 25% of the self-employed with employees women, and in 5 countries — Belgium, Greece, Spain, Ireland and Sweden — the proportion was under 20% (under 15% in Belgium and Greece).

The relatively unfavourable treatment of women in the labour market, which is evident in the wages they receive as compared with men and their apparent underrepresentation among the highest levels of their chosen occupations (as indicated in Section 4 below), is, therefore, mirrored in their underrepresentation among the self-employed and, in particular, among entrepreneurs. This seems to be as true in the three Nordic countries — where the gap between men’s and women’s wages was less marked than elsewhere, but in all three of which women accounted for a slightly lower share of the self-employed with employees than in the Union as a whole — as in the rest of the Union.

Nevertheless, the share of women in self-employment has risen over

the past decade, even if slowly, in the case of both those with and without employees. The increase has been common to all Member States, except the Netherlands, where the proportion remained much the same, and it was especially pronounced among the self-employed with employees in Spain and Portugal.

### Sectoral changes in employment

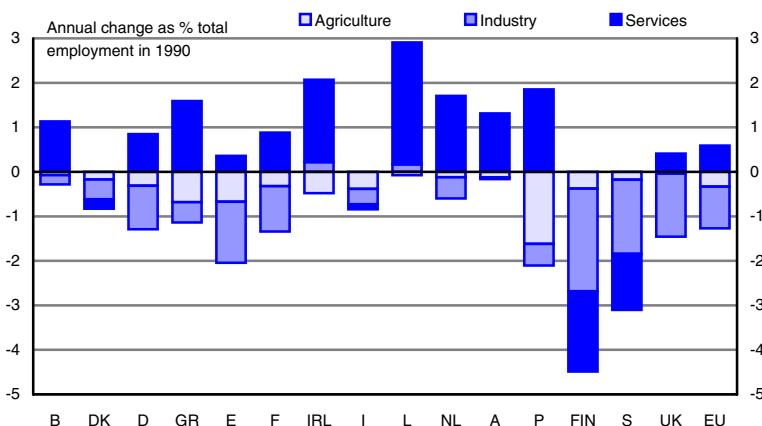
In 1997, as in previous years of modest growth, services accounted for all of the net addition to jobs in the Union and employment in agriculture and industry declined slightly. Over the three years of slow recovery, 1994 to 1997, services contributed almost 1% a year to job growth, somewhat more than during the preceding four years of recession, when service employment also went up (Graphs 42 and 43). The main difference, however, between the two periods was the change in employment in agriculture and industry. Although the number in work continued to decline, the fall was very much less after 1994 than in the earlier period, when it served to re-

duce total employment by almost 1½% a year.

Jobs in services increased in all Member States between 1994 and 1997, even in those where there was an overall decline in employment, though there was a slight fall in Germany and Sweden in 1997. The biggest rises were in the countries where net job creation as a whole was highest, in Spain, Ireland and Luxembourg, in all of which services added over 2½% a year to total employment. The former two, moreover, were among only 5 countries in which jobs in industry expanded over the period, the others being Denmark, the Netherlands and Finland, all of which experienced a strong growth in the total number in work.

By contrast, employment in industry fell markedly in Germany and Austria, where the total number in work declined, and was responsible for most of the fall. There were also job losses in agriculture, as there were in all Member States, apart from Portugal (which experienced a substantial increase over the period), though because of the small size of the sector in most countries,

42 Contribution of broad sectors to the change in employment in Member States, 1990-94



Services provided the only source of net job creation during the recession years of the early 1990s, employment declining in both industry and agriculture virtually throughout the Union. Even in services, employment declined in the three Nordic countries and Italy, though by much less than the fall in the other two sectors.

Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.

they had a relatively small effect on total employment. The exceptions are Denmark, Italy and Luxembourg, where they accounted for a reduction in the overall number in work of close to 1/2% a year.

The typical pattern of employment development, therefore, is one of job gains in services more than outweighing losses in agriculture and in industry in countries where overall employment growth is modest. At the same time, in countries where growth is more marked, increases in jobs in industry tend to add to those created in services.

### Employment growth by detailed sector

Although the revision to the standard classification of economic activities (NACE) in 1993 makes it difficult to go back very far in history to trace the pattern of job creation by detailed sector (though see *Employment in Europe, 1997*, Part I, Section 3 for an attempt), it is possible on the basis of LFS data to examine the pattern of growth over the three years of recovery, 1994 to 1997. (For all countries, the division of employ-

ment between NACE 2-digit sectors has been applied to the benchmark series for total employment to derive the estimates for individual sectors. For Germany, Austria, Finland and Sweden, no detailed data exist on the revised classification before 1995; to include these in the analysis, the sectoral composition of employment in 1995 has been applied to the 1994 benchmark figure for total employment.)

Over these three years, total employment growth averaged 1/2% a year, as noted earlier. Of the 60 (NACE 2-digit) sectors, 22, accounting for 42% of total employment in the Union, had a rate of growth of more than this, 38 a growth of less. In 6 sectors, employment increased by more than 3% a year, though these accounted for only 10% of employment, the highest growth occurring in computer software (7% a year), recreational activities and business services (just over 4% a year in both), with business services being by far the largest source of jobs in terms of numbers (Graph 44).

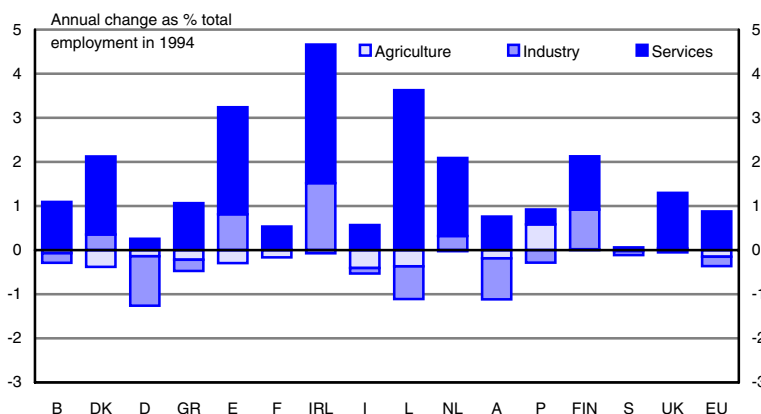
Although almost all of the high growth sectors were in services, there were three industrial sectors,

office machinery, motor vehicles and furniture where employment increased by 2% a year or more (one perhaps surprising feature was the low growth of employment in construction which usually tends to expand significantly in periods of recovery). On the other hand, all of the sectors in which employment declined significantly were either primary or industrial ones. Nevertheless, there were net job losses over the period in other services (mainly personal services, such as hairdressing), telecommunications (reflecting the substantial gains in productivity), land and water transport, banking (which had been a growth sector in the 1980s), retailing (which had also been a growth sector in the 1980s, but which declined in the early 1990s) and public administration (reflecting the constraints on public budgets).

### Employment growth by sector

Once the number of people employed is taken into account, the main growth sectors in terms of the net addition to jobs, were business

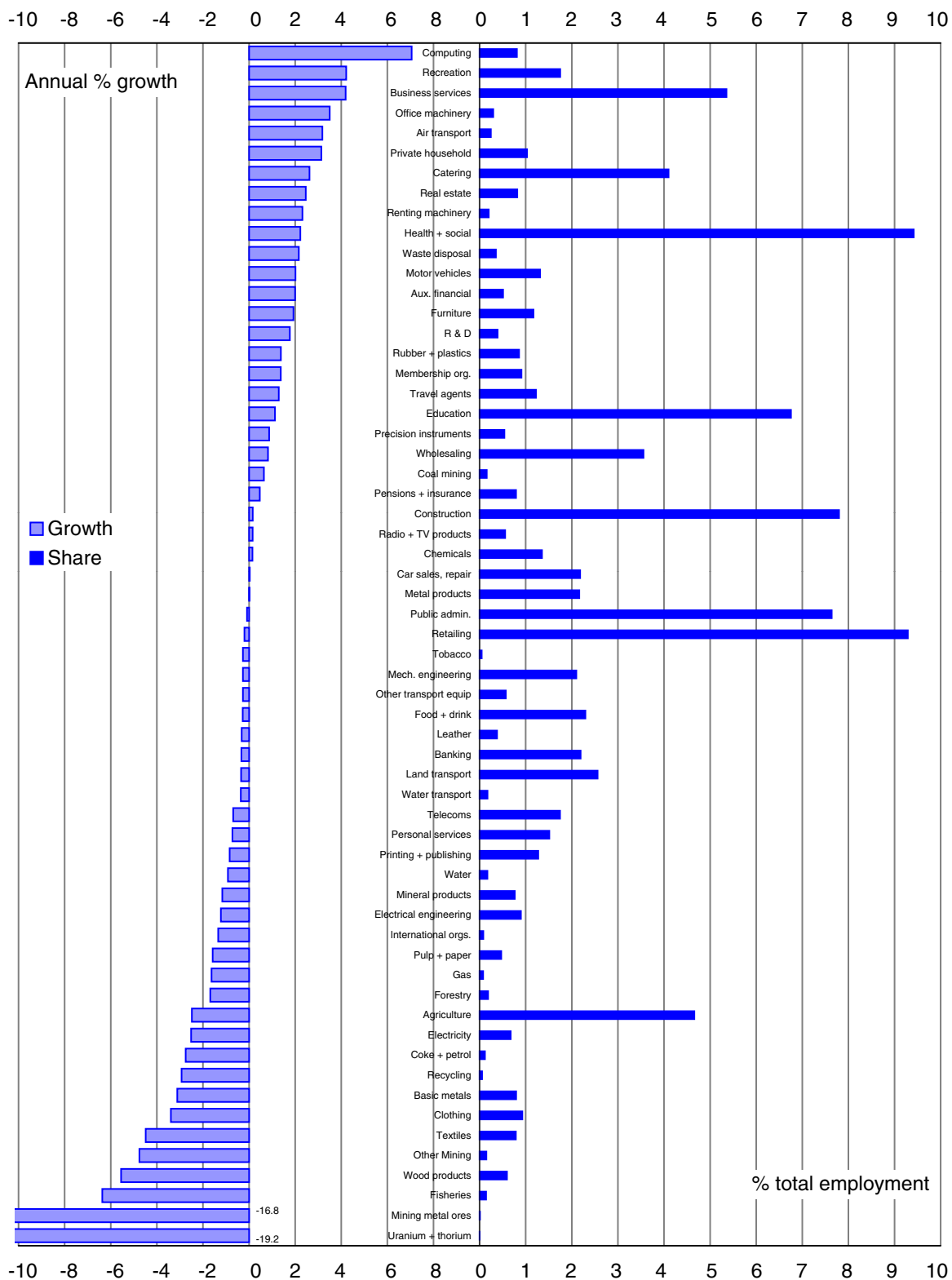
**43 Contribution of broad sectors to the change in employment in Member States, 1994-97**



Since 1994, jobs have continued to expand in services, though overall by not much more than during the recession years. The main difference has been the turnaround in industry and, to a lesser extent, agriculture, where employment has risen instead of falling or has fallen by less than in the earlier period.

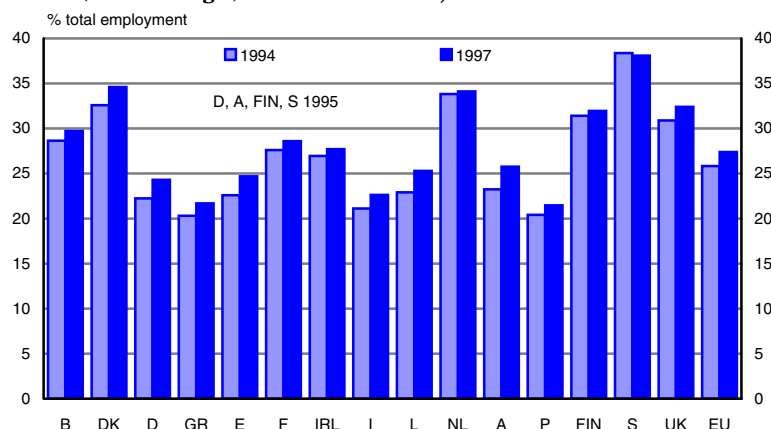
Source: Eurostat, *Community LFS*, adjusted to be consistent with the benchmark employment series.

### 44 Growth rates 1994-97 and employment by NACE 2-digit sector in the Union, 1997





**45 Employment in the Union's 5 largest growth sectors (NACE 2-digit) in Member States, 1994 and 1997**



Over 27% of employment in the Union in 1997 was in the 5 sectors in which most jobs were gained in the years 1994-97: business services, health care, education, recreational activities and hotels and restaurants. The share was lowest in Portugal and Greece and highest in Denmark, the Netherlands and Sweden, the latter two being among the few where the share remained much the same over the period.

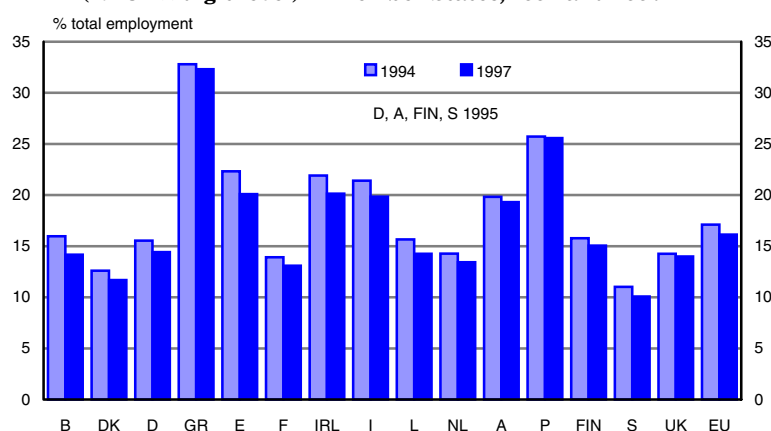
*Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.*

services, health and social services, hotels and restaurants, education and recreational activities. These five sectors, which account for just over a quarter of the total number of jobs in the Union, were responsible for just over 70% of the increase in employment in the three years 1994 to 1997. The main sectors which contributed to job losses were agriculture, textiles, the wood industry, iron and steel and retailing — in the last, because of the large size of the sector which meant that a relatively small percentage

decline in employment led to large job losses. These together account for some 15% of employment in the Union and were responsible for 52% of the reduction in employment, taking those activities in which the number in work declined. An important question which arises is how far the same sectors were responsible for job gains and losses in different Member States. In other words, is it possible to identify closely which sectors create jobs and which are the main source of losses?

First, however, it should be noted that the share of employment in both sets of sectors varies considerably across the Union. While the five growth sectors accounted for around 27% of total employment in the Union as a whole in 1997, in Sweden, they were responsible for 38% and in Denmark, 35%, in both cases primarily because of the large numbers employed in health and social services (Graph 45). Conversely, the sectors accounted for only around 22% of total employment in Greece and Portugal and only

**46 Employment in the Union's 5 largest declining sectors (NACE 2-digit level) in Member States, 1994 and 1997**



Some 16% of the Union's work force were employed in the 5 sectors where most jobs were lost over the years 1994-97 - agriculture, textiles, the wood industry, iron and steel and retailing. They were most important in Greece and Portugal where their share declined only a little over the period, most other countries showing a significant decline.

*Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.*

slightly more in Italy and Spain — as well as Germany — reflecting the relatively small number of jobs in this sector as well as in business services and recreational activities. In all countries apart from Sweden, the share of employment in the growth sectors, not surprisingly, increased between 1994 and 1997.

The pattern of variation of employment across the Union in declining sectors is in large measure a mirror image of that for growth sectors, though it also reflects the relative importance of agriculture which is the main source of job losses (Graph 46). Again not surprisingly, the share of employment in these sectors fell in all Member States, though only marginally in Portugal as a result of the growth of jobs in agriculture over the period.

The contribution of the five growth sectors to employment growth also varies markedly between Member States. In Germany and Austria, the two countries where total employment fell between 1994 and 1997, the sectors accounted for 65% of the growth in jobs which occurred in the sectors where the number

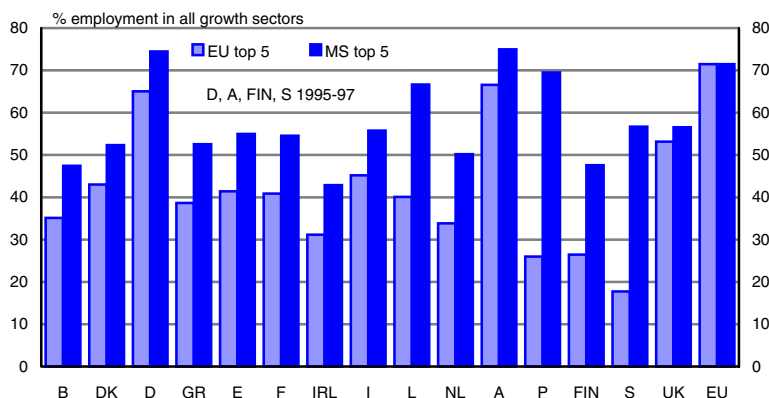
employed rose (Graph 47). These sectors in these two countries were also broadly the ones showing the highest growth at the national level. In the UK, they accounted for just over half the growth which occurred, and in this case, they were almost precisely the same sectors as the ones contributing most to net job creation in the country.

In all other Member States, they accounted for 45% or less of the growth which occurred and in most cases there was a significant difference between the contribution to jobs of these five sectors and the fastest growing ones in each country — especially in Luxembourg (largely because of the continued growth of banking), Portugal and Sweden (in the latter, reflecting the constraints on growth in health and social services and education). This indicates that there was a good deal of divergence across the Union in the identity of the growth sectors. It also indicates that, as in the case of Sweden, the existence of a large share of employment in what are growth sectors elsewhere is no guarantee of a high rate of net job creation, even in the sectors concerned.

Moreover, it appears that there is to some extent an inverse association between the contribution to net job creation of the fastest growing sectors and the overall rate of employment growth. In Ireland, the Netherlands and Finland, where employment increased by most of the period — though not so much in Spain and Luxembourg — the contribution of the five sectors showing the biggest expansion in jobs was comparatively small, whereas in Germany and Austria, as noted above, it was relatively large. In other words, the higher the growth in employment, the more does growth tend to be spread across the economy.

The difference in the identity of the sectors suffering the largest job losses across the Union is even greater. Only in Germany, and to a lesser extent in Belgium and France, is there a close association between the losses occurring in the five main declining sectors in the Union as a whole and the five main ones in the country itself (Graph 48). This reflects the large differences in employment in agriculture, textiles and iron and steel between Member States, as well as

**47 Contribution of highest growth sectors to employment growth in Member States, 1994-1997**



The 5 sectors in which the number employed expanded by most in the Union accounted for over 70% of employment growth over the years 1994-97 (measured in relation to the increase in the sectors in which employment rose over the period). This figure varied greatly between countries, indicating the non-uniformity of sources of net job creation across the Union.

*Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.*

significant variations in the performance of each of these sectors over the period (agriculture, for example, was a source of job gains rather than losses in Portugal).

The conclusion to be drawn, therefore, is that although there is some similarity in the sources of job creation and loss across the Union, there are also important differences, which makes it difficult to push generalisations too far.

### Sectoral concentration of men and women

A feature of the sectoral pattern of employment in the Union which has provoked some concern is the tendency for women's employment to be much more concentrated in a comparatively few sectors of activity than that of men, on the grounds that this may imply that women have a more limited range of jobs open to them. Indeed, one of the aims in the 1998 Employment Guidelines agreed by Member States at the Luxembourg Council meeting was *'to act to reverse the under-representation of women in certain economic sectors and occupations*

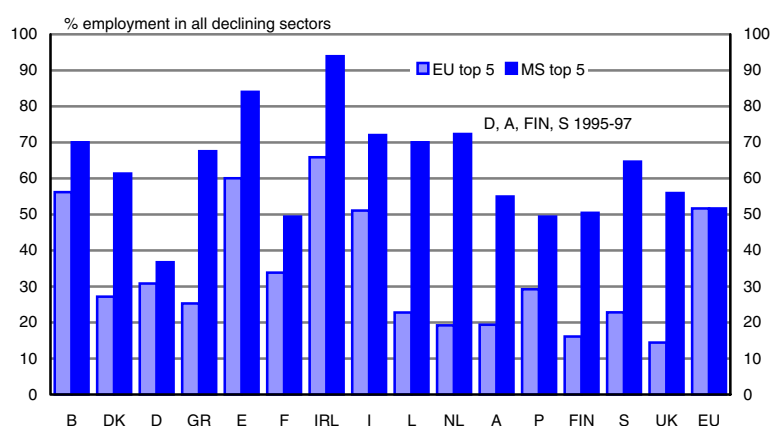
*and their over-representation in others'*.

The more concentrated nature of women's employment is very evident from the LFS data. In 1997, almost 60% of women in employment in the Union worked in just 6 out of the 60 NACE 2-digit sectors and over 40% in just three — health and social services, education and retailing (the other three being public administration, business services and hotels and restaurants, Graph 49). This contrasts with the comparable figure for men, just over 40% of whom worked in 6 sectors (in order, construction, public administration, retailing, agriculture, business services and wholesaling, Graph 50).

The extent of concentration of women's employment in Europe, however, is less than in the US, where just over 62% of women worked in the largest 6 sectors. Moreover, though their relative size varied a little, the 6 sectors concerned were precisely the same in the US as in Europe, and, as in Europe, over 40% of women were employed in just three sectors — health, education and retailing, again the same three as in Europe.

Much the same is true for men. Concentration of employment is slightly greater in the US than in Europe (42% working in the largest 6 sectors as against 41%) and 5 of the 6 sectors are the same. The difference is that agriculture is the fourth largest employer of men in Europe and only the eighth largest in the US, while hotels and restaurants is the fourth largest employer of men in the US but the tenth largest in Europe. There is also some difference, however — more than for women — in the relative size of individual sectors within the largest 6. While construction employs a similar share of the work force in the two countries, retailing is a much larger employer of men in the US than in Europe, employing almost the same number of men as women (whereas in Europe, women account for over 57% of the jobs). This was also true of business services, though in this case it has more to do with the sector being larger than in Europe than with the relative number of men and women employed. On the other hand, public administration was a larger source of jobs for both men and women in Europe than in the US.

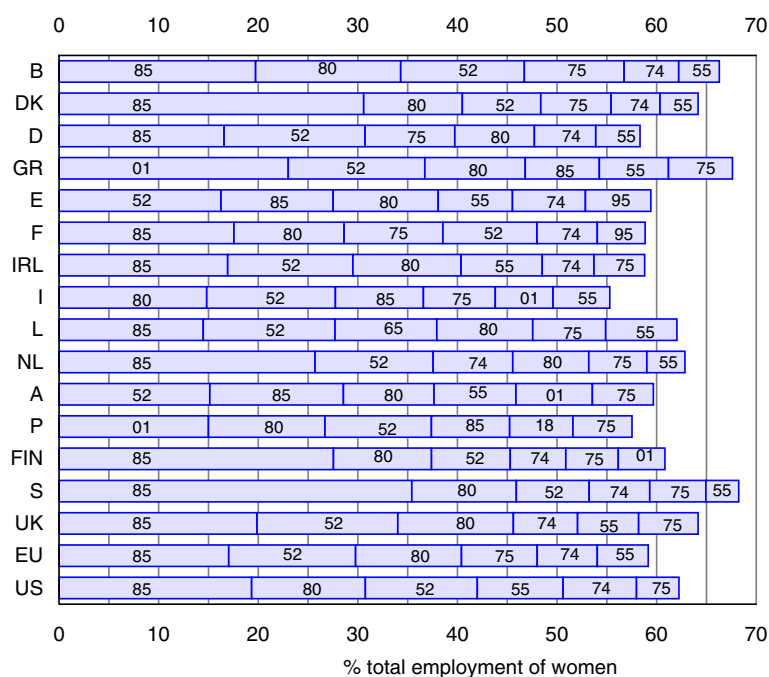
**48 Contribution of declining sectors to employment reduction in Member States, 1994-1997**



The 5 sectors showing the largest decline in the number employed in the Union over the years 1994-97 accounted for just over half of the loss of jobs in declining sectors. In most Member States, these sectors were not the main ones responsible for job losses, indicating a greater diversity in the sectoral location of these than in that of job gains.

Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.

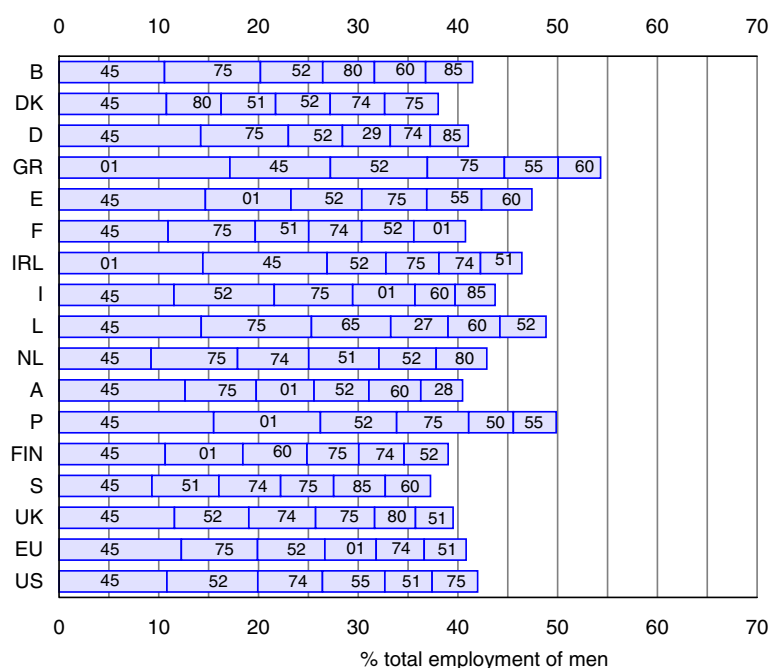
**49 Distribution of employment of women in top 6 NACE 2-digit sectors in Member States, 1997**



**Key to NACE 2-digit sectors**

- 01 Agriculture, forestry, fishing
- 18 Clothing
- 27 Manufacture of basic metals
- 28 Manufacture of metal products
- 29 Mechanical engineering
- 45 Construction
- 50 Sale and repair of motor vehicles
- 51 Wholesale trade
- 52 Retail trade
- 55 Hotels and restaurants
- 60 Road and rail transport
- 65 Banking
- 74 Business activities, other than computing, R&D, real estate and leasing
- 75 Public administration
- 80 Education
- 85 Health and social services

**50 Distribution of employment of men in top 6 NACE 2-digit sectors in Member States, 1997**



The main difference between the sectoral division of men's and women's employment in both Europe and the US is the much higher employment of women in health and social services and education, which together accounted for around 30% of jobs in 1997 (slightly less in Europe). In both countries, two-thirds of those employed in education were women, while in the health sector, the proportion was even larger at over three-quarters (slightly more in both cases in the US than in Europe). Since these have been major growth sectors in the past, as indicated above (the same is the case in the US), their expansion has tended to benefit women more than men. Moreover,

their likely continued growth in the future could well lead to even greater concentration of women's employment in both economies, though this might be offset in some degree by a contraction of jobs in retailing if this continues, as well as in public administration.

For men, on the other hand, the four largest sectors providing employment have all declined in recent years, at least in Europe, and, accordingly, it is possible that concentration may diminish in future years.

Although the extent of concentration of employment varies across the Union, in all Member States, women's jobs are significantly more concentrated than men's and the sectors involved are for the most part the same. In 7 Member States, the sectors which are the largest employers of women are the same as across the Union as a whole. In another 7, 5 of the 6 sectors are the same, agriculture being the odd sector in four of the countries (Greece, Italy, Austria and Finland), household work (mainly cleaning) in two (France and Spain) and banking in Luxembourg. In the remaining

country, Portugal, both agriculture and the textile industry are important sources of women's jobs.

Concentration for women is highest in Sweden, where the 68% of those employed worked in the 6 largest sectors and over 35% in health and social services alone, a figure which is almost matched by Denmark, where 30% of women were employed in this sector. The high employment rates of women in both these countries, therefore, are associated with high employment in just one sector.

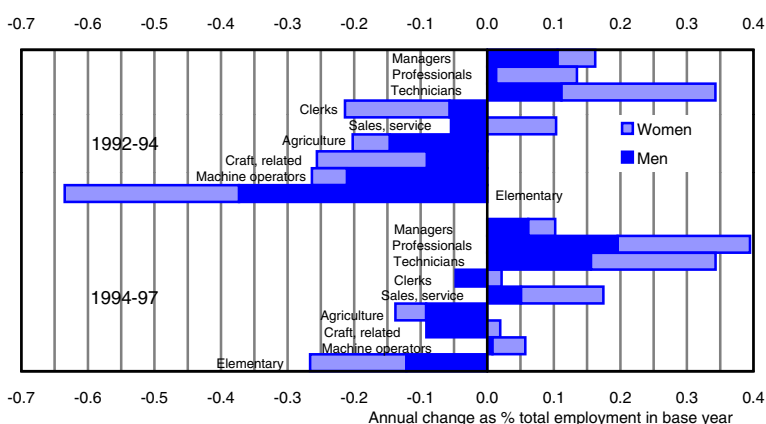
Concentration of women is also high in Greece, Belgium and the UK, in the first, largely because of the large number employed in agriculture, which accounts for 23% of women's jobs, in the second, partly because of the relatively large size of public administration, and in the third, partly because of the large number of women working in retailing (who account for over 60% of the jobs in the sector). Concentration is relatively low in Italy — though it is still the case that 55% of women work in the largest 6 sectors — and Portugal, in both of which health and social services accounts for

comparatively few jobs, reflecting the tendency for care to take place within the family.

For men, there is more variation between Member States in the extent of concentration than for women and more differences in the identity of the largest sectors. In general, there appears to be little association between the degree of concentration of men and women. Concentration of men's employment is highest in Greece, with almost 55% working in the largest 6 sectors, predominantly because of the large number employed in agriculture, and second highest in Portugal, for the same reason. It is lowest in Denmark and Sweden, where women's employment is most concentrated, with only 37–38% working in the largest 6 sectors.

While construction (which is the largest employer of men in 13 Member States and the second largest in the other two — Greece and Ireland — behind agriculture) and public administration feature in the largest 6 sectors in all Member States and retailing features in all but one (Sweden), there are 15 different sectors which comprise the largest 6 in

**51 Change in employment of men and women by occupation, 1992-94 and 1994-97**



During the recession years, 1992-94, almost all the increase in employment in the Union occurred in the higher skilled occupations. Though there was an increase of sales and service workers, but only among women, manual jobs declined. This pattern continued in the subsequent 3 years, with women increasing their share of the higher skilled jobs as well as that of other occupations.  
 Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.

the various countries. In sharp contrast to their importance for women's employment, health and social services and education are each included in the largest 6 sectors providing jobs for men in only four Member States. Although education at the Union level is the seventh largest employer of men, it is only marginally larger than road and rail transport (itself slightly larger than the health sector), which features among the top 6 in 8 Member States.

### Employment growth by occupation

The growth of employment during the three years 1994 to 1997 was heavily concentrated on the more skilled occupations, while for the most part, there were job losses among the lower skilled. In the Union as a whole, the expansion of jobs for managers, professionals and technicians added almost 1% a year to total employment over this period, while job losses among agricultural, craft and related and elementary workers served to reduce employment by 1/2% a year (Graph 51). At the same time, there

was also an increase in sales and service workers (which added almost 0.2% a year to employment) and a much smaller increase in machine operators.

Almost all of the increase in these latter two sectors was accounted for by women. The number of women employed in craft and related trade and in clerical and office work also rose during the period, while the number of men in both occupations declined, in craft activities, significantly. Moreover, while more managerial jobs went to men, women increased their share of such jobs over the period (though they still account for only 30% of these) and in both professional and technical occupations, proportionately more jobs went to women than men.

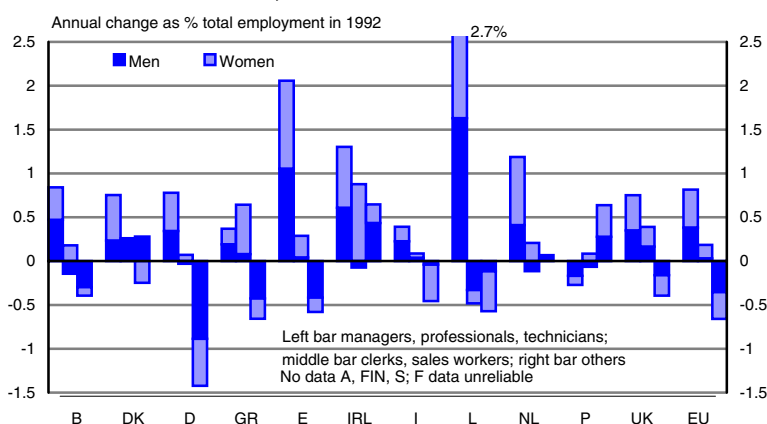
The net result is that women are increasing their share of high-skilled jobs and, in 1997, accounted for a slightly higher proportion of these (the managerial, professional and technical jobs taken together) than other jobs in the Union. Moreover, their share of office and sales and service jobs (64% of which were performed by women in 1997) and of more skilled manual jobs is also

increasing, while their share of elementary jobs is declining.

At the same time, even though women increased their share of higher skilled jobs, there was a greater shift in men's employment towards these occupations over the period than in that of women, but this was only because of the substantial job losses for men in manual occupations.

The shift of employment of both men and women towards higher skilled jobs since 1994 continues a marked long-term trend. This was particularly evident in the earlier years of recession when less skilled jobs declined markedly while employment in more skilled occupations continued to rise significantly. The shift, moreover, is occurring in all Member States, with the apparent exception of Portugal. Between 1992 and 1997, all countries in the Union, except Portugal, experienced a growth of higher skilled jobs, the rise being especially large in Spain, Ireland, Luxembourg and the Netherlands, where the overall increase in employment was substantial, but it was also significant in Germany and Italy,

**52 Change in employment of men and women by occupation in Member States, 1992-97**



The expansion of jobs in higher skilled occupations and the decline of manual jobs was common to nearly all Member States over the 5 years 1992-97. Only in the Ireland, the Netherlands and Portugal did manual jobs not decline and only in the last country did the higher skilled jobs not increase.

Source: Eurostat, Community LFS, adjusted to be consistent with the benchmark employment series.

where total employment fell or remained unchanged (Graph 52 — there are no data available for the period for Austria, Finland and Sweden).

In all Member States without exception, women accounted for a disproportionate share of the rise in employment in these occupations, and in Portugal, where there was a decline in employment, women accounted for much less of the fall than men.

In all Member States apart from Luxembourg, employment also increased in office work and sales and service activities, though by much less than in more skilled occupations, except in Greece, with again women accounting for most of the net addition to jobs in all countries, except Denmark.

In all Member States apart from Ireland and the Netherlands, where total employment rose markedly, and Portugal, where there was an apparent shift from higher skilled jobs, employment in manual occupations declined. In this case, women accounted for a disproportionately larger share of the fall

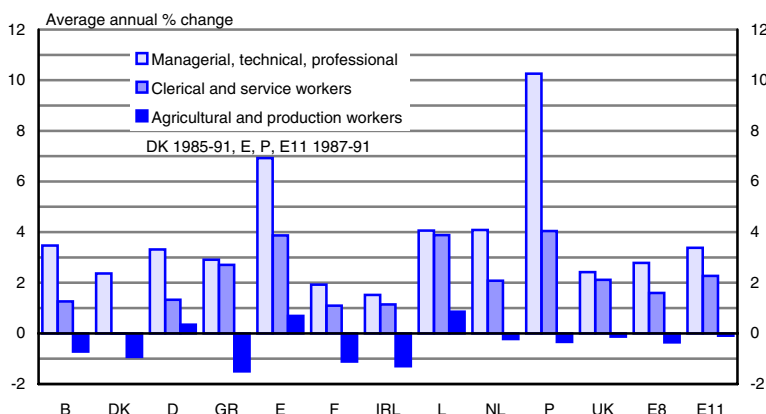
than men throughout the Union, though in Ireland and Portugal, a disproportionate share of the additional jobs went to women.

Finally, the shift towards higher skilled occupations can also be traced back before 1992. Although the occupational data from the LFS for these years are even less comparable between Member States than the data for later years and should, therefore, be treated with a good deal of caution, they, nevertheless, indicate that within individual countries, growth of employment in managerial, professional and technical occupations (though on a different classification than in later years) grew, on average, by around 3% a year between 1983 and 1991 (Graph 53). All countries, moreover, experienced growth of at least 2% a year, except Ireland. Growth in Spain and Portugal (in contrast to the later years) was especially marked over the period 1987 to 1991 (no data exist before then), though the number employed in these occupations in both countries was comparatively small.

Employment in clerical and service jobs also rose in all Member States,

though at a lower rate (at an average of 2% a year), while manual jobs declined throughout the Union, except in Germany, Spain and Luxembourg, in all of which total employment grew markedly.

**53 Growth in employment by occupation in Member States, 1983-91**



Between 1983 and 1991 higher skilled jobs grew by about 3% a year in the Union and by at least 2% in most Member States. The majority of Member States experienced job losses among agricultural and production workers over the period.

*Source: Eurostat, Community LFS. The occupational classification differs from that used from 1992 onwards.*





## Part I Section 3 Employment trends in Central and Eastern Europe

Central and Eastern Europe represents both an opportunity and a challenge for the European Union. With a combined population of well over 100 million, almost 30% of the number of people at present living in the Union, the countries concerned, from an economic perspective, constitute an important market for Union producers which has already expanded significantly since their transition to market economies began. Low levels of income per head, however, mean that this market is still well below its potential size. Although income is now growing throughout the region after an initial period of decline, in most countries, it remains considerably below the level in the least prosperous of the present Union Member States.

The challenge is to help the countries concerned achieve their full economic potential, which with the close trade links which have already been established, is only likely to benefit Union Member States, irrespective of when Union enlargement takes place. The problems in doing this, however, are substantial. While considerable progress has been made, the transition process remains to be completed, which means further rationalisation and major shifts in the structure of economic activity. In most of the countries, agriculture accounts for 10% or more of employment and in some, 20% or more, a high proportion of jobs are in traditional industries and the service

sector remains underdeveloped. Unemployment is high in most parts of the region and employment growth, like GDP growth, is still only modest in relation to the need for jobs and higher real income levels. Poverty and deprivation have become more widespread as unemployment has risen and people have withdrawn from, or have been forced out of, the labour market.

The concern here is, first, to indicate the extent of the expansion of the Union which would result from Central and Eastern European countries becoming members, in terms of the labour force and GDP as well as population; secondly, to examine the growing trade links between the two regions; and, thirdly, to review recent labour market developments. The analysis is confined to the 10 Central and Eastern European countries which are in the accession process with the Union and for which reasonably reliable data are available. These are Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia and the three Baltic States — Estonia, Latvia and Lithuania. Accession negotiations have been opened with five of these — the Czech Republic, Hungary, Poland, Slovenia and Estonia — which are termed 'the first group' in the following analysis.

### The relative scale of the Central and Eastern European economies

The 10 countries listed above have a combined population of 105 million and a working-age population (15 to 64) of just over 70 million, both figures around 28½% of those of the Union as currently constituted (the five countries in the first group have a combined population of 62½ million, just under 17% of the Union's population). Within the region, Poland with a population of just under 39 million, slightly smaller than Spain's, is by far the largest country, while Romania, with a population of almost 23 million, is twice the size of the next largest countries, the Czech Republic and Hungary (which have 10 million). Together, therefore, Poland and Romania make up around half the population in the region.

In terms of GDP, however, they are very much smaller in relation to the Union. This is particularly so when measured in terms of ECU, which is the relevant basis when considering the addition they potentially make to Union output and expenditure. In these terms, they have a combined GDP which is only just under 4% of Union GDP. (The GDP of the five in the first group is just 3% of Union GDP, less than half the GDP of the three most recent countries joining the Union — Austria, Fin-

land and Sweden — which together have under a third of the population of these five countries.) This illustrates very forcibly the low level of income per head, measured in ECU terms, in the countries concerned.

In terms of purchasing power standards (PPS), which take account of the much lower level of prices in the Central and Eastern European countries as compared with those in the Union (and which are not reflected in their exchange rates), income per head is significantly higher (on average around 2½ times as high), though it remains well below that in the existing Union Member States. In 1996, according to the latest estimates, only the Czech Republic and Slovenia had a level of GDP per head measured in these terms which was over half the Union average (58% in both cases, around 13% below the level in Portugal, the Member State with the lowest level at present), while in Hungary and Poland, it was only around a third as high (around half the level in Portugal). In the rest of the region, apart from Slovakia (41% of the Union average), it was under a quarter of the Union average (a third or less of Portuguese GDP per head) (Graph 54).

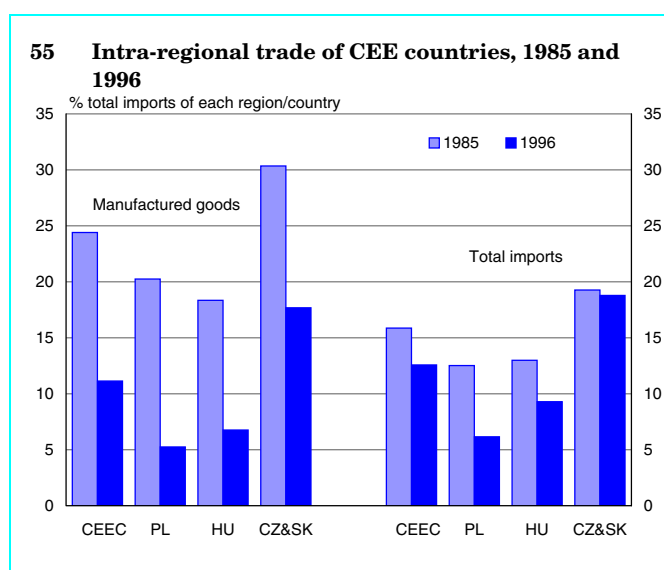
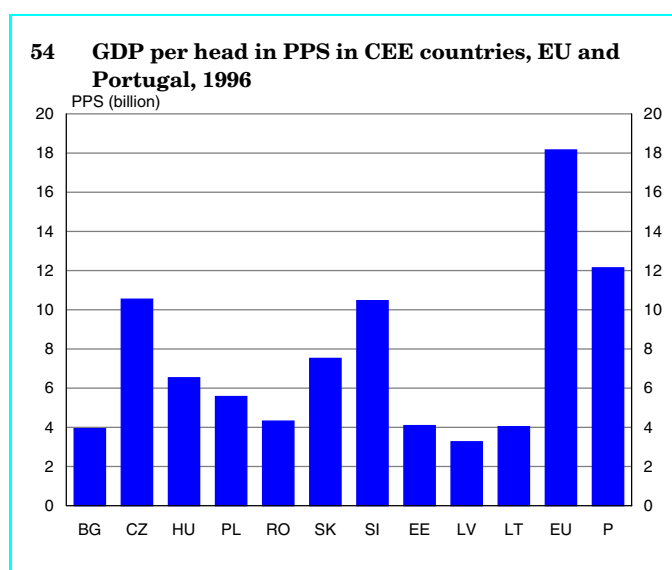
There is, therefore, a substantial gap to be closed if GDP in these countries is to converge towards levels in existing Member States, which has to be a long-term objective. For most of the countries, this is likely to take many decades if it were achieved simply by growing faster than other countries in the Union. In practice, however, it is to be hoped that a major part of the convergence would come about through improvements in competitiveness and increases in the value of goods and services produced. At present, exchange rates in all of the countries are very low (as reflected in the gap between PPS and ECU measures of income), simply because their exports cannot command higher prices. Indeed, the demand in other countries for what they can produce, even at existing exchange rates, is well below their own demand for imports and most of the countries have sizeable trade deficits and mounting foreign debt.

### Trade links with the Union

Since the transition began, there has been a marked shift in the trade of

all the countries in the region away from other Central and Eastern European countries and those in the former Soviet Union (FSU) towards the European Union. In 1985 (which gives a reasonable indication of the pre-transition position), the exports of Central and Eastern European countries to each other represented some 15% of their total exports, while exports to the FSU accounted for a further 35% (Graphs 55 and 56). Exports to Union Member States amounted to under 20% of the total (Graph 57). The sources of imports were very similar, with almost 40% coming from the FSU — mostly food, raw material and energy, whereas most of their exports to the FSU were manufactures — and under 20% from the Union.

By 1996, the Union had come to displace the FSU as the predominant trade partner. Almost 60% of their total exports went to Union Member States (over 65% in the case of Poland) and a similar proportion of their imports came from them. However, since total imports, were over a third greater than total exports, this was associated with a substantial trade deficit with the Union.



Conversely, exports to the FSU had declined to under 10% of the total (in the case of manufactures, under 5% of the total) and imports from them to just 10% of the total, these consisting almost entirely of non-manufactured products. At the same time, trade between themselves had also declined to only around 12½% of total imports, though exports to other countries in the region still accounted for almost 20% of the total (reflecting the widening trade gap of the region with the rest of the world).

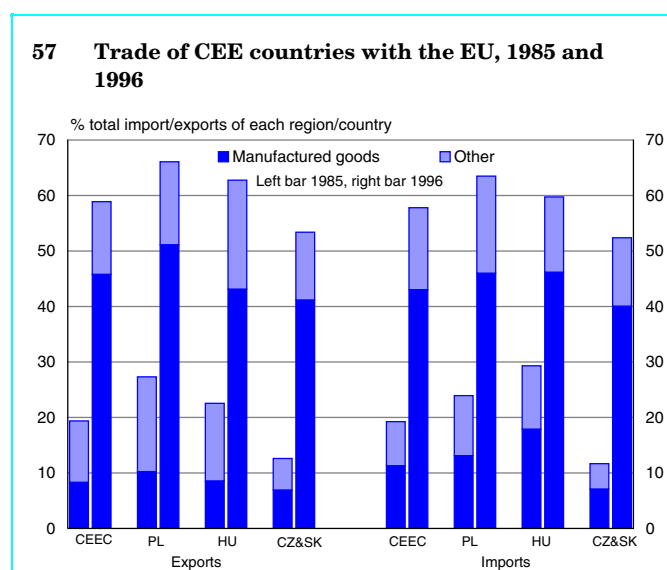
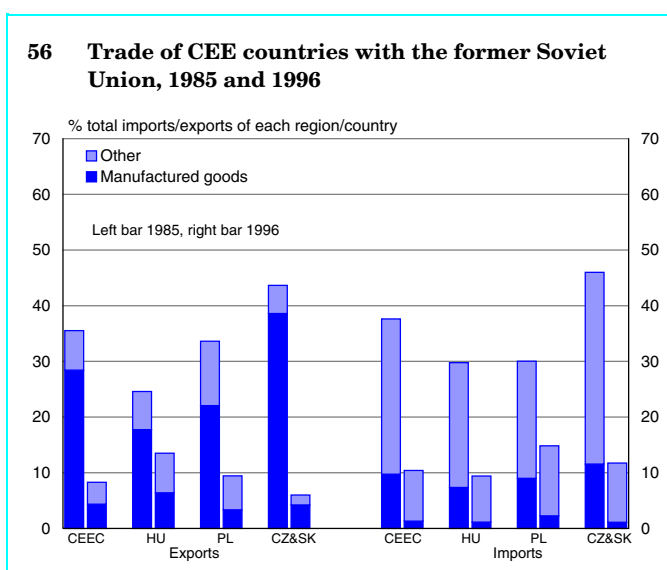
The decline in intra-regional trade in manufactures over this period has been most dramatic, countries together buying only around 10% of their total manufactured imports from other countries in the region in 1996 as opposed to almost 25% in 1985. This reflects a major shift in demand towards the more advanced, more efficient, better designed and better quality goods available from outside the region, especially from Union Member States, which were not accessible before the transition began. Almost 45% of the imports from the Union, therefore, consist of high-tech products, transport equipment and machinery, though basic

manufactures still make up some 35% of the total (see Part II, Section 2 for a description of what is included) (Graph 58). These, however, constitute over 53% of exports of Central and Eastern European countries to the Union, while high-tech products, transport equipment and machinery make up only 30%, a significant proportion representing the products of Union companies which have located branches in the region.

Despite the fact that Union Member States in combination have a substantial trade surplus with Central and Eastern European countries and the growth in trade which has occurred (in ECU terms, the value of Union exports to the region increased by 6-fold between 1985 and 1996, while the value of exports of manufactures went up by 8 fold), Union exports to the region still amount to only around 10½% of total exports to third countries, or only around 1% of Union GDP. Imports from the region are significantly less than 1% of Union GDP, which puts the potential threat to Union producers — and Union jobs — from competition from manufacturers in the countries concerned

into perspective. Indeed, given the scale of the trade surplus which has arisen, Union businesses have gained much more from the opening up of the Central and Eastern European market than they have lost as a result of growing imports from the region. In stark contrast, exports of Central and Eastern European countries to the Union amount to almost 17% of their GDP and their imports from the Union to over 22% of GDP.

These comparative figures, however, are liable to give a misleading impression of the benefit to the Union of developments in Central and Eastern Europe over the 1990s. The opening up the market in the region was, in fact, as important to Union exporters as the growth of the East Asian economies and, in 1996, the value of the manufactures sold to them was only slightly lower than that of exports to East Asia (excluding China) (see Part II, Section 2). Moreover, as emphasised at the outset, the potential for market growth in the region is enormous and, given the dominance of Union exporters in the markets concerned, reflecting the natural trade links inherent in proximity, the region is



far more significant to the long-term prospects for the Union economy — and employment — than one on the other side of the world.

## Employment growth

After falling precipitously in the early years of the 1990s as the transition process begun, as trade relations broke down with the FSU and with other countries in the region and as Western Europe went into recession, employment has risen in recent years in a number of Central and Eastern European countries, though by no means all and in most cases only modestly (Graph 59). In none of the countries have the gains made compensated for the losses during the earlier period and in most, the number employed in 1997 was substantially less than before the transition began.

Only in Slovenia and Slovakia did the growth of employment average more than 1% a year in the four years 1993 to 1997, though in Latvia, employment was some 3% higher in 1997 than in 1995 (the earliest year for which data are available). In Hungary, it declined

by over 1% a year during this period, though the level in 1997 was much the same as in 1996, while in Estonia and Lithuania, it fell by over 2% a year, with the fall in 1997 being slightly greater than in the previous year. In the Czech Republic, the number in work fell slightly over these four years, including in 1997.

In the other three countries, Bulgaria, Poland and Romania, employment growth averaged around 1/2% a year between 1993 and 1997, though in Bulgaria, it fell significantly in 1997 (by 1 1/2%). There is little sign in any of the countries, therefore, with the possible exception of Slovenia and Slovakia, of the rate of net job creation required to regain the levels of employment, in relation to working-age population, achieved in the past.

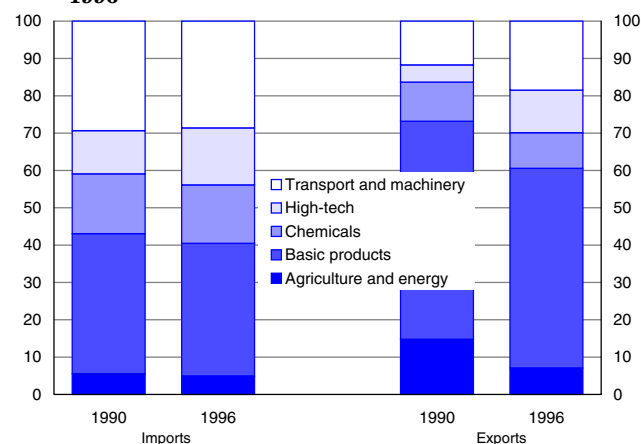
Nevertheless, a number of the countries have achieved significant growth in GDP in the recent past, which offers the possible prospect of increased growth of employment, though since the process of rationalisation is still continuing, it is uncertain how far growth will be translated into additional jobs. In 6

### Key to CEEC abbreviations in graphs

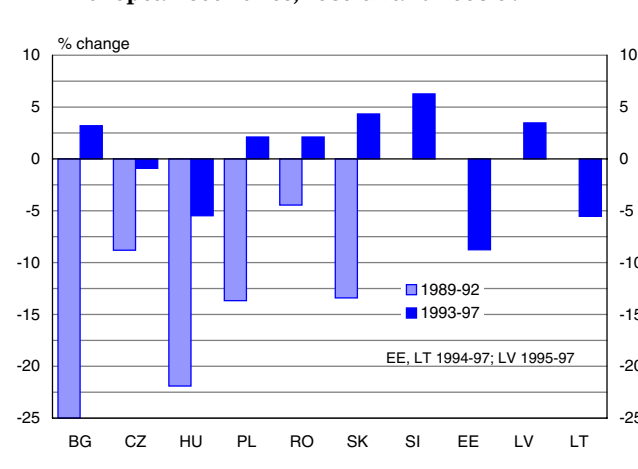
BG	Bulgaria
CZ	Czech Republic
HU	Hungary
PL	Poland
RO	Romania
SK	Slovakia
SI	Slovenia
EE	Estonia
LV	Latvia
LT	Lithuania

of the 10 countries in the region, GDP increased by 4% or more in 1996, in Slovakia and Poland by over 6%, in both cases following growth of 7% in 1995 and 5% in 1994 (Graph 60). Growth was also over 6% in Latvia and over 11% in Estonia, in the latter following growth of around 4% in the preceding two years. In the third Baltic State, Lithuania, GDP grew by just under 6%, following growth of just under 5% in 1996. In

**58 Composition of trade of Central and Eastern European countries with the Union, 1990 and 1996**



**59 Changes in employment in Central and Eastern European countries, 1989-92 and 1993-97**



Hungary, GDP rose by just over 4% after being below 1½ in both of the preceding two years.

Elsewhere in the regions, growth was only just below 4% in Slovenia, after averaging around 4% over the previous three years, but in the Czech Republic, it was only around 1% following only modest growth in 1996. In the remaining two countries, Bulgaria and Romania, GDP fell substantially in 1997, by just under 7% in both cases. Whereas in Romania, this followed reasonable growth rates over the period from 1993, in Bulgaria, it came after an even larger fall in 1996 (10%). Since very large reductions in output were also experienced in the early 1990s, GDP in 1997 was considerably lower than before the transition began (though given the different basis of measurement, comparisons of this kind are difficult to make).

## Employment and participation rates

The employment rate — the number employed relative to working-age population (here taken as 15 to 64 as elsewhere in the Report even

though official retirement ages are lower in most of the countries than in the Union) — has stabilised in most Central and Eastern European countries since 1993, at around 70% in the Czech Republic and Romania, 65% in Slovenia, Estonia and Lithuania, 60% in Poland and Slovakia, 55% in Bulgaria and Latvia and only just over 50% in Hungary (Graph 61). In all 6 countries where data are available before 1993, however, the rates are significantly lower than before the transition began, when they were 80% in the Czech Republic and over 70% in the other 5 countries.

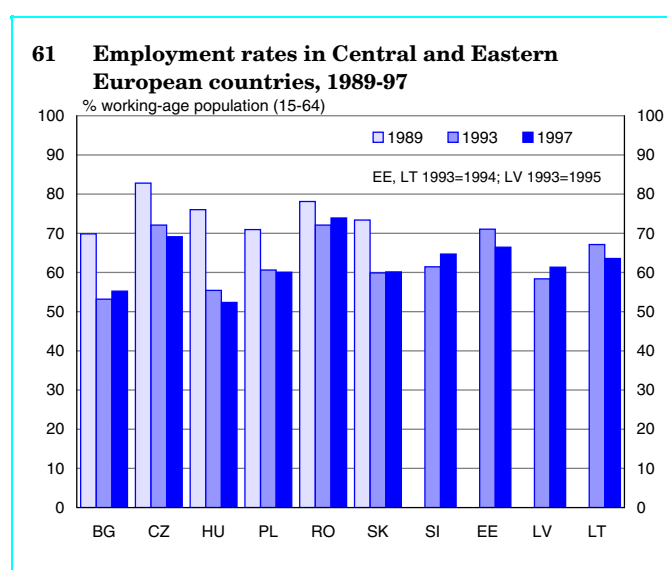
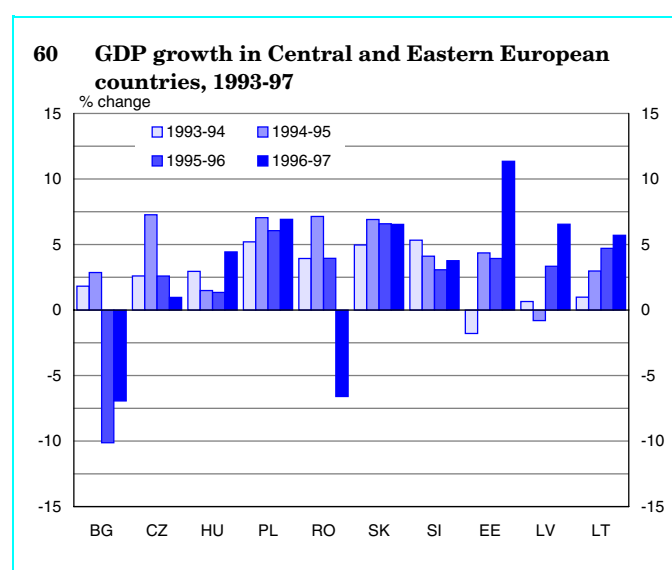
The employment rates in 1997 show a similar variation to that in the Union, where 4 Member States have a rate of around 70% or more, 3 a rate of around 65%, 4 a rate of around the Union average of 60% (including Germany and France), 3 a rate slightly above 55% and 2 a rate of around 50%.

The fall in employment rates over the transition period is the result in most cases of both the emergence of unemployment and, with a few exceptions, its significant rise and a decline in participation in the labour

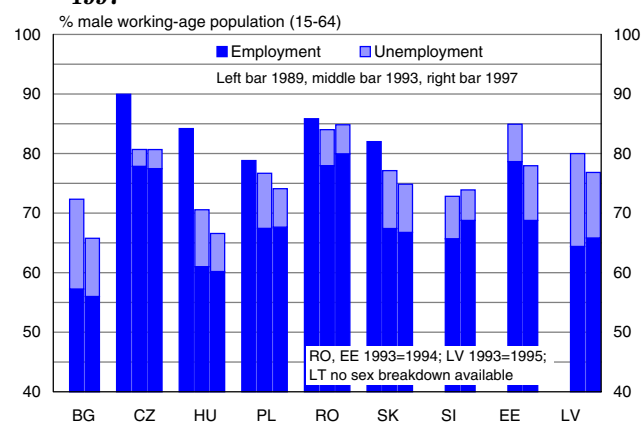
force of people of working-age. The fall in participation has been especially marked in Hungary, where for men it fell from 84% to just under 67% and for women, even more markedly, from 68% to just under 49%, the decline continuing in both cases into the most recent period (Graphs 62 and 63).

In all countries for which data are available, apart from Romania, participation fell in the early years of the transition. In many countries, it has continued to fall over the period since 1993, especially for men, helping to stabilise or even reduce unemployment. For men, this is the case in all countries apart from the Czech Republic, where participation has remained much the same after falling substantially over the early 1990s, and in Romania and Slovenia, where it has risen slightly.

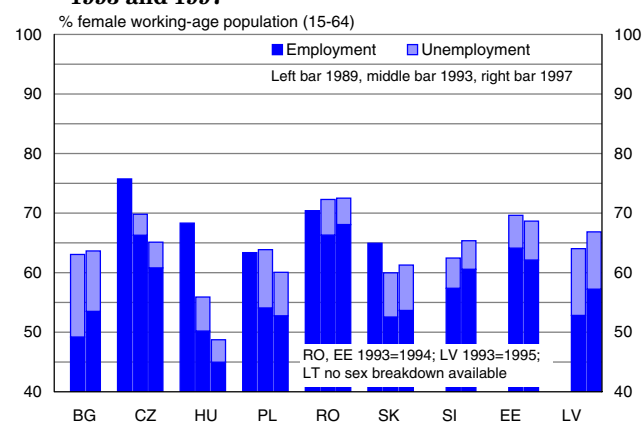
For women, participation has increased in recent years in Estonia and Latvia as well as Slovenia and has remained much the same in Romania and Bulgaria as well as in the Czech Republic since 1995. Indeed, in general, contrary to what might have been expected given the high rate of participation of women



**62 Participation and employment of men in Central and Eastern European countries, 1989, 1993 and 1997**



**63 Participation and employment of women in Central and Eastern European countries, 1989, 1993 and 1997**



in Central and Eastern Europe in the pre-transition period as compared with rates in the Union (where the average rate was only around 55%), the number of women in the work force has not fallen relative to men, except in Hungary, and in a number of cases has risen (in Romania and Slovakia, in particular).

### Unemployment rates

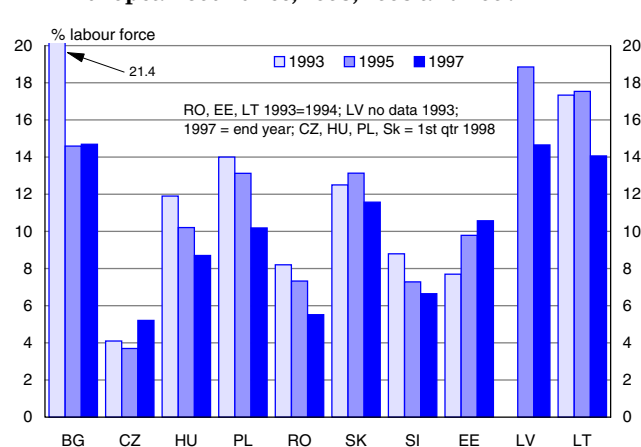
The steep decline in employment in the early years of transition led in

most countries to a rapid rise in unemployment, which before then had not been allowed to exist — at least openly. By 1993 or so (for some countries data are not available before 1994), unemployment had risen to around 12% or more in 6 of the 10 countries covered here (if Latvia is included) and was around 8% or more in three of the other four countries (Graph 64). The only exception was the Czech Republic, where, partly because of the steep fall in participation noted above combined with a seemingly slow

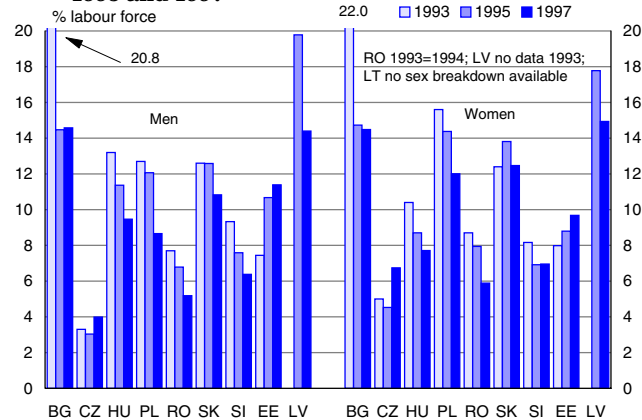
growth of productivity, unemployment increased to only 4%.

Since then, it has come down in most of the countries, helped in many by a fall in participation, especially in Hungary, the only two exceptions being the Czech Republic, where it has risen to 6% in the first quarter of 1998 and Estonia, where it has increased to over 10%, though in Slovakia, the fall has been marginal. At the end of 1997, however, unemployment still stood at over 10% in

**64 Unemployment rates in Central and Eastern European countries, 1993, 1995 and 1997**



**65 Unemployment rates of men and women in Central and Eastern European countries, 1993, 1995 and 1997**



6 of the 10 countries and at around 14% in Bulgaria, Latvia and Lithuania.

While the rate of unemployment of women in most countries has followed much the same path as that for men since 1993, except in Slovenia and Slovakia, where the rate for women has not fallen by as much as for men, and Estonia, where it has risen by less, it remains higher than for men in 6 of the 9 countries (there is no split available for Lithuania) and much the same in Bulgaria (Graph 65). Only in Hungary and Estonia is the rate for women less than that for men. Nevertheless, except for the Czech Republic and Poland, the unemployment rate of women is less than 3 percentage points higher than for men, which is the average gap in the Union.

As in the Union, unemployment rates among young people under 25 are substantially higher than for those of 25 and over. In all countries in the region, except the three Baltic States, where they are slightly below, the rates are at least twice as high as the overall rate, and in Romania, three times as high. Rates

are higher than the Union average of around 21% in 1997 in 5 of the 10 countries, and higher in Bulgaria than in all Member States apart from Spain (Graph 66). Although like overall rates, unemployment among young people has tended to fall since 1993, the gap between the youth unemployment rate and the rate for older people has narrowed only in Slovakia and has widened in most other countries.

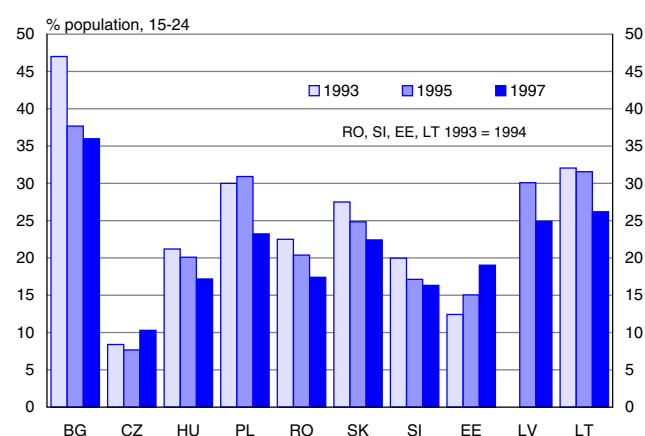
As in the Union also, long-term unemployment has become a serious problem. While the rate in relation to the labour force in 1997 was above the Union rate of just over 5% only in three of the countries — Bulgaria, Slovakia and Latvia (where it reached 10½%) — in 6 of them, over half of the unemployed had been out of work for a year or more (the Union average) and in 5 of these, the proportion was over 55% (Graph 67). These countries include, moreover, Hungary and Slovenia, where the overall rate of unemployment was well below the Union average. Indeed, only in Poland has the share of the unemployed who have been out of work for at least a year declined significantly since 1993.

## The sectoral division of employment

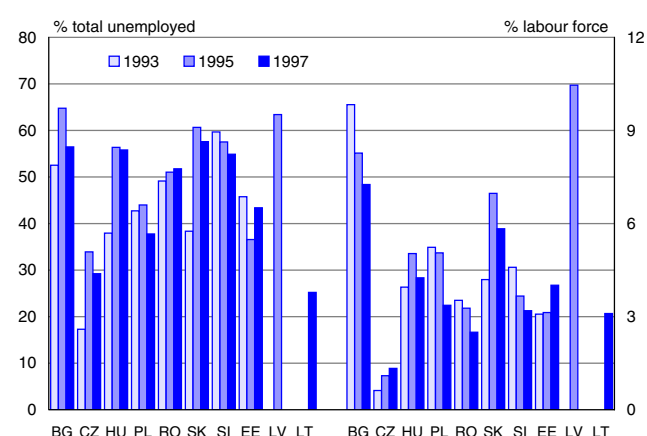
The distribution of employment between sectors in Central and Eastern Europe still differs markedly from that in the Union. In all of the countries in the region, the share of employment in agriculture is above the Union average (5%) and only in the Czech Republic, Hungary and Slovakia is it below 10%. In four of the countries (Poland, Latvia, Lithuania and Romania), it is higher than in Greece, the Member State with the highest share in the Union (just under 20%). In three of these countries, the share is only slightly above that of Greece, but in Romania, it is as high as 39%, twice the Greek level. Moreover, in Romania, the share has remained much the same since 1994, as it has in Slovenia, while in Latvia and Bulgaria, it has increased (Graph 68). In all the other countries, it has fallen.

The relative number employed in industry is also above the Union average (29½%) in all the countries apart from Latvia and Lithuania, in both of which the employment

**66 Youth unemployment rates in Central and Eastern European countries, 1993, 1995 and 1997**



**67 Long-term unemployment in Central and Eastern European countries, 1993, 1995 and 1997**



structure is similar to that in Greece with a comparatively large number of those not employed in agriculture working in services rather than industry. (The share of non-agricultural employment in services in Greece is similar to that in France or the UK and well above that in other Southern Member States or Ireland, just as the share in Latvia and Lithuania is considerably above that in other parts of the region.) In four of the countries — Bulgaria, the Czech Republic, Slovakia and Slovenia — the share of total employment in industry is much higher than in Germany, which has the highest share in the Union (34½%), and in the latter three around 40%, while in another two, Hungary and Estonia, it is higher than in any Member State apart from Germany.

This is reflection of the pre-transition economic system which put the onus on industrial production. While the share of employment in industry is likely to decline in the future as the transition process continues and as rationalisation of production takes place and over-manning is reduced, in few of the countries has there been any signi-

ficant fall in the share since 1994. At the same time, some caution is required when interpreting these figures. It should be recognised that significant numbers of those employed in industry, and indeed agriculture, might well be performing service activities, because the diversification and specialisation of jobs which is a feature of advanced Western economies has not yet taken place to any large extent.

The share of employment in services is, therefore, considerably below the Union average (65½%) in all the countries in the region and below that in Portugal, the Member State with the lowest share in the Union (55½%), in all but Hungary, Estonia and Latvia. Although in most countries the relative number employed in services has risen since 1994, in Bulgaria and Latvia, it has fallen.

The scope for growth of employment in services throughout the region in future years is considerable, which is important since there are almost certain to be substantial shifts out of agriculture and industry, not only as the transition process is completed but also as economic development takes place. Within the service sector, almost all activities are underdeveloped as compared with the Union.

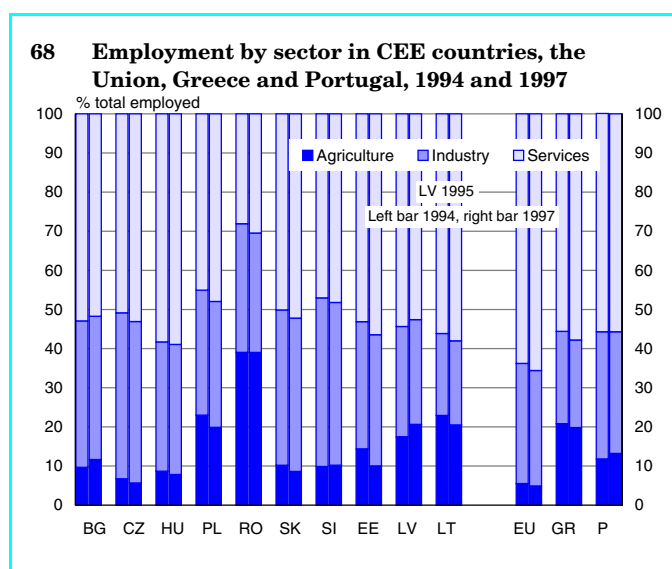
between the countries), only in the Czech Republic is the relative number employed in distribution, hotels and restaurants similar to that in the Union (11½%), while in all but in this country and Slovenia, it is below that in all Member States. Similarly, employment in business and financial services is below the Union average (6%) everywhere and again in all but the Czech Republic and Slovenia, below that in Greece, which has the lowest figure in the Union (3½%). The number working in health and education is also less than in most Union Member States, though here, apart from Romania, there is less of a difference between countries (the proportion varying from 7% of working-age population in Slovenia to 8½% in Slovakia). Moreover, apart from Romania, the relative number is higher than in Greece, Spain or Italy.

In the other parts of the service sector, the relative numbers are more similar to those in the Union, though in transport and communications, slightly above the Union average and, perhaps surprisingly, in public administration slightly below.

## Concluding remarks

Considerable problems still face Central and Eastern European countries in restructuring their economies and achieving a high enough rate of net creation to absorb those at present employed in agriculture and declining industries. Union Member States have a key role to play in helping the countries in the region overcome these problems as painlessly as possible, not only by providing financial support and technical assistance, but more importantly by ensuring high rates of growth on a sustained basis in the Union economy itself. In this way, producers in the countries con-

Relating employment to working-age population (ie the people potentially looking to work, which is the relevant basis of measurement since it takes account of differing employment rates





cerned will have access to an expanding market in which to earn the foreign exchange which is vital to finance the imports essential to economic development (though it is important that access is as open as possible).

Moreover, high growth in the Union should give rise to increased direct investment in the region and to the diffusion of advanced technology and best-practice techniques which this provides a vehicle for. At the same time, however, there is likely to be more balanced development in the region if investment were more evenly spread between the countries and to be less concentrated in Hungary, the Czech Republic and Poland. At the end of 1995, these three accounted between them for 88% of the stock of direct investment in the region by Union Member States, whereas just 1½% went to Bulgaria and Romania.

The close trade links that have already been established, together with the closer economic integration which will almost certainly take place, should ensure that there is mutual benefit from the economic development of the region in terms of both higher income levels and increased rates of employment right across Europe. Conversely, if economic development is stalled, either by internal or external events, then it will be more difficult for Union Member States to achieve their own growth and employment objectives.



## Part I Section 4 Wage dispersion and employment

The extent to which wages vary in an economy has a potentially important bearing on employment. There are, however, conflicting arguments as to the nature of the effect. From one perspective, a high degree of wage dispersion can be regarded as beneficial to both economic growth and employment. Insofar as it is associated, towards the top of the earnings scale, with strong incentives for people who are responsible for job creation to work harder, take on more responsibility and have less reason to move abroad and, at the bottom end, with wages being low enough to justify the hiring of unskilled workers with low levels of productivity, then it stands to increase the rate of net job creation.

From another perspective, however, it can be seen as adversely affecting economic performance by promoting popular unrest about the size of wage differentials, which are, in most cases, the main determinant of the distribution of income, and so making it more difficult to maintain economic and social cohesion, which is not only an end itself but also potentially important for sustaining a high level of competitiveness. A low degree of wage dispersion might, therefore, encourage greater solidarity, increased motivation within the work force and more willingness to cooperate with management, so giving rise to higher productivity, a higher rate of economic growth and ultimately more jobs. Moreover, higher wages at the bottom end of the scale might reinforce the effect

by stimulating employers to seek more productive ways of using the people they hire.

The wage dispersion which exists in any country will tend to reflect the relative importance attached to these two opposing considerations in society in general as well as, more directly, in the wage determination process. In terms of the functioning of the labour market, the issue is the balance which is struck between equity considerations, on the one hand, and efficiency considerations, on the other. In other words, wage differentials, both between workers with different skills and between different local or regional labour markets, need to be large enough to ensure that imbalances between supply and demand are rectified without giving rise to unacceptably low wages at the bottom end of the scale or unacceptably high wages at the top (though for some skills, salaries are increasingly determined in an international market).

How far the balance is appropriate in different countries can only be assessed by examining evidence on wage dispersion and how this is changing over time and relating this to their performance in maintaining satisfactory rates of economic growth and levels of employment. The main purpose here is to present the new evidence on wage dispersion which has recently become available, to relate this to employment rates in particular sectors and to consider differentials in earnings between men and women.

### Evidence on the structure of earnings

The evidence on wage dispersion in Union Member States has, in the past, been extremely piecemeal and unsatisfactory. The Structure of Earnings Survey (SES) conducted in 1995 in all Member States (1994 for France) enables the extent of wage differences to be compared across the Union on a reasonably common basis (though at the time of writing data are not yet available for Ireland, Austria (for which the data are for 1996) and Portugal).

It is important to note at the outset, however, that the results of the analysis proposed are affected by two major limitations of the SES data. In the first place, they are confined to production units (or establishments) with 10 or more employees, so that they exclude a very large number of small units — such as, for example, small shops — which tend on average to pay relatively low wages (as confirmed by data from the European Community Household Panel). Secondly, they exclude the public sector, communal services and most personal services (in which just under a third of all wage earners in the Union were employed in 1995). This is particularly important as regards the comparison of men's and women's earnings, since a large proportion of women employees work in these sectors (46% in 1995), a much larger proportion than in the case of men (22%).

Moreover, as described elsewhere (Part I, Section 5), a disproportionate number of the women who work in these sectors have high levels of education and, accordingly, are likely, on average, to be in receipt of relatively high rates of pay as compared with women in other sectors. Comparisons of men's and women's average earnings based on the SES, therefore, will tend to be affected by this.

The SES also excludes agriculture, which in most countries is much less of a limitation since it employs very few people, particularly as employees (under 2% of all employees in the Union in 1995 and only around 4% in Spain and Italy, the countries with the highest figures). Given the low rates of agricultural pay, however, its exclusion is likely to narrow the measured dispersion slightly in relation to the actual dispersion. In addition, for Greece, the data are confined to industry, which employs only around 30% of all employees, while in both parts of Germany (the old and the new Länder), which are separately distinguished, the data for services cover only distribution and banking and insurance, which together accounted for only 30% of wage earners working in services.

An additional limitation is that the data relate to gross earnings rather than total labour costs and so exclude non-wage labour costs, especially employers' social contributions, which in most Member States are a significant element in the cost of employment. On the other hand, the potential effect of their exclusion is reduced by the fact that contributions are proportional to earnings for most employees in nearly all countries (though there is, in most cases, an upper limit to contributions, so that for higher wage earners contribu-

tions decline as pay increases, the great majority of employees have earnings below this level).

The main exception is the UK, where contributions are low or zero on low rates of pay and, up to around 1½ times average earnings, increase more than in proportion to earnings as these rise. This means that labour costs tend to be lower at the bottom end of the scale relative to gross earnings than in other Member States and the dispersion of labour costs is accordingly wider than that of gross earnings.

Since the concern here is primarily with rates of pay for a given amount of work, the focus is on hourly earnings. People receiving higher rates for working overtime are excluded from the analysis, which is, accordingly, confined to differences in normal hourly rates. In addition, the analysis is limited to the pay of employees working full-time in order to avoid the results being affected by possible differences in hourly rates between full-time and part-time workers. This has the effect, unfortunately, of further reducing the number of women covered relative to men.

## **Wage dispersion across the Union**

The extent of dispersion of wages can be measured in a number of ways. Since the dispersion at both the higher and lower ends of the wage distribution is relevant, the focus here is on the 9th decile of hourly earnings and the bottom decile, both expressed in relation to the average. (The deciles are calculated by ranking employees by their hourly wage and then dividing the resulting distribution into bands each containing 10% of employees. The 9th decile is the level of earn-

ings of the employee who comes 90% of the way up the wage distribution, the first — or bottom — decile — the earnings of the person who comes 10% up.) The meaning of the two figures can be simply conveyed: 90% of employees have earnings below the 9th decile, only 10% earnings above this level, while 10% of employees have earnings below the bottom decile, 90% above.

The dispersion of normal hourly rates of pay varies markedly across the Union. Broadly, Member States can be divided into three groups: the three Nordic countries plus Belgium and Germany (both the old Länder and the new Länder, where the dispersion is narrower than in the rest of the country), where the dispersion is narrowest — ie wages are more equal; the UK, Spain and France, which have the widest wage dispersion in the Union; and the Netherlands, Italy, Luxembourg and Greece (ordered from the narrowest to the widest), where the dispersion is somewhere between the two extremes (Graph 69, where the data for Greece relate only to industry).

It is interesting to note that this pattern of wage dispersion broadly conforms to that of household income across the Union (see *Social Protection in Europe*, 1997, Chapter 3 which is based on data from the European Community Household Panel), which demonstrates the key influence of wages and salaries on household income. The most notable exception is France, where the dispersion of household income seems to be much narrower than that of rates of pay, which suggests a compensating distribution of other sources of income (such as social transfers which are relatively high) and, possibly, that the distribution of wage earners themselves between households offsets

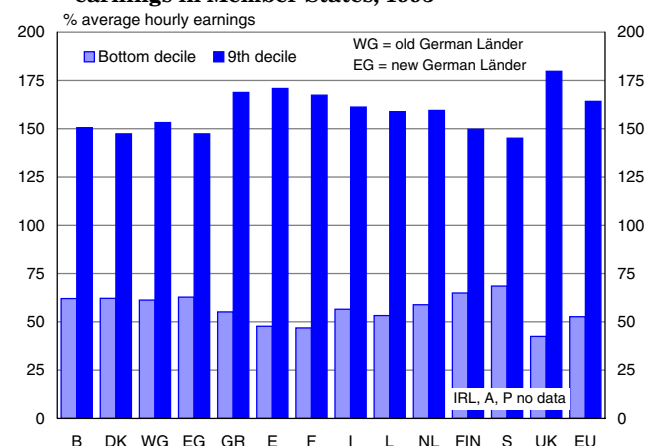
the relatively large pay differentials. (A further general factor serving to narrow the dispersion of income relative to rates of pay, as indicated by the Household Panel data, is that workers with low rates tend to work longer hours than those with higher rates.)

There are some differences between Member States in the comparative extent of dispersion at the top and bottom end of the earnings distribution. At the top end of the scale, the UK has the widest dispersion, with the highest paid 10% of wage earners having a level of pay which was more than 80% above average, followed by Spain and Greece. Denmark, the former East Germany, Finland and Sweden, have the narrowest dispersion, with the 9th decile of earnings being less than 50% above average.

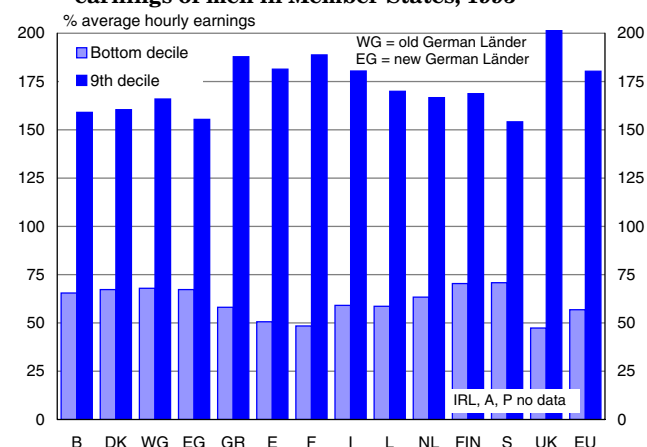
At the bottom end of the scale, the widest dispersion was again in the UK, where the bottom 10% of wage earners had rates of pay which were under 42% of the average, while the second widest dispersion was in France (which might seem surprising in view of its minimum wage legislation), where the lowest paid 10% earned under 47% of the average, closely followed by Spain, where they earned under 48% of average. In Sweden, on the other hand, the pay of the bottom 10% was 68½% of the average, in Finland, 65% and in the former East Germany, 63%.

The extent of the difference in wage dispersion across the Union is indicated by the fact that the difference between the pay of the lowest paid member of the top 10% of wage earners and that of the highest paid member of the bottom 10% (ie between the 9th and 1st decile) was twice as wide in the UK (the former being over four times higher than

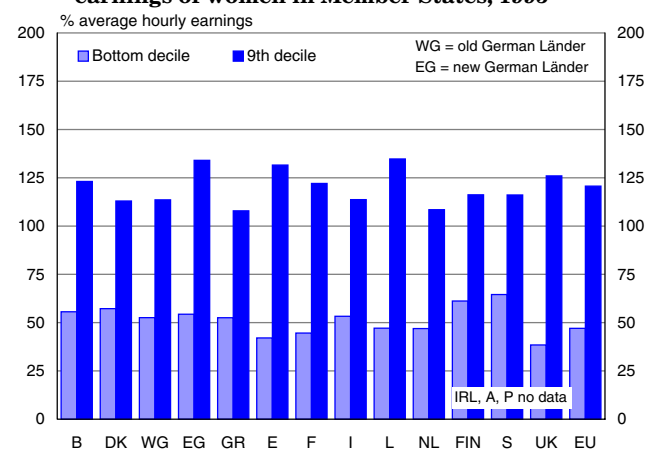
**69 Bottom and 9th deciles as % average hourly earnings in Member States, 1995**



**70 Bottom and 9th deciles as % average hourly earnings of men in Member States, 1995**



**71 Bottom and 9th deciles as % average hourly earnings of women in Member States, 1995**



the latter) as in Sweden (where it was only twice as high).

### **Dispersion of men's and women's earnings**

Women tend to earn less than men in all Member States, the difference varying significantly between them as discussed in more detail below. A disproportionate number of those in the lowest paid 10% of wage earners are, therefore, women, while a disproportionate number of those in the highest paid 10% are men.

The dispersion of men's earnings, moreover, is wider than that of women in nearly all Member States. In 1995, according to the SES, only in the former East Germany was the dispersion wider for women than for men (Graphs 70 and 71). Since men represent the great majority of those covered by the survey, especially of those working full-time, who are the focus here, the dispersion of men's earnings is very close to that of all employees examined above (women account for under a third of total wage earners analysed here).

For women, however, the dispersion of earnings is significantly narrower than for all employees (as well as for men) in a number of Member States. This is the case, in particular, in France, Italy and the UK. In France, the lowest paid women in the top 10% of women wage earners had a level of pay in 1995 which was only just over  $2\frac{1}{2}$  times that of the highest paid women in the bottom 10% as against a figure of almost 4 times in the case of men; in Italy, the difference for women was just over twice, whereas for men it was three times, and in the UK, the difference for women was under  $3\frac{1}{2}$  times and for men, almost  $4\frac{1}{2}$  times.

Nevertheless, the wage dispersion for women was still wider in the UK than in other Member States — though only slightly wider than in Spain — and narrower in the three Nordic countries than elsewhere in the Union. In the new German Länder, the dispersion for women was wider than in most other parts of the Union, while for men, it was narrower than anywhere else apart from Sweden.

The extent of low pay among women is indicated by the fact that in most countries, there were at least 10% of women wage earners with wage rates of, at most, only around half of the average rate of pay in the economy (ie men and women together). In the UK, the bottom 10% of women employees earned less than  $38\frac{1}{2}\%$  of the average, in Spain, under 42% of average and in France, under 45%. Moreover, at the top end of the scale, in Denmark, the former German Federal Republic, Italy and the Netherlands, the lowest paid member of the top 10% of women wage earners had a rate of pay which was under 15% higher than the average for all employees, in the Netherlands, under 10% higher. Whereas in Denmark this partly reflects the relatively narrow overall dispersion of wages, in the other three countries, it is largely a consequence of the big gap between men's and women's pay.

### **Wage dispersion and employment rates**

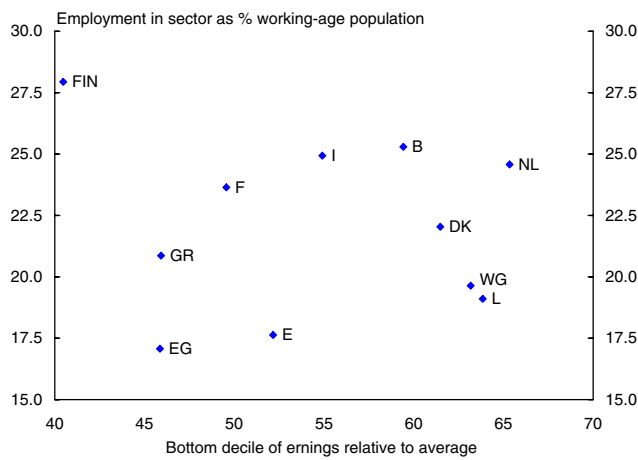
As noted at the outset, there are grounds for supposing that a wide dispersion of earnings would tend to favour net job creation and other grounds for supposing that it might adversely affect employment. This issue is examined here by relating the employment rate in particular

service sectors (as measured by the number employed in the sector relative to working-age population in the country in question) to rates of pay of the lowest 10% of wage earners in the sector in relation to the average in the economy as a whole. The analysis is, therefore, focused mainly on the effect of low rates of pay on employment — ie on the extent to which these serve to price less skilled people into jobs. However, because the bottom decile of earnings in relation to the average wage tends to be closely associated with the extent of the overall dispersion of wages, the analysis should also pick up the effect of the latter on employment. The focus is on services where the scope for employing more people is likely to be greater than in manufacturing, in which employment policy tends to be more constrained by competitive pressures, from producers outside as well as inside the Union.

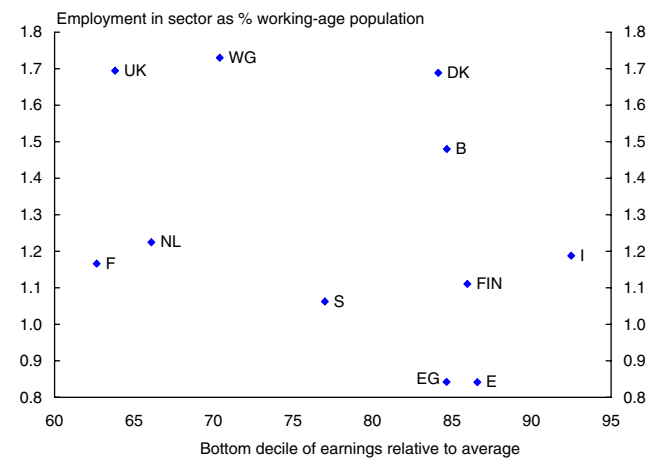
It should be stressed that this is only a preliminary exercise which does not take account of other factors which affect employment rates, such as economic performance, relative levels of productivity and so on. Moreover, it is confined, partly by the nature of the data, to examining the relationship between wage dispersion and employment at one point in time.

In practice, for the service sectors covered by the SES (ie excluding communal and personal services) taken as a whole, there is little sign of any systematic relationship between the relative wage level of the bottom 10% of employees and the employment rate. The employment rate in services, restricted in this way, is higher in the UK than in any other Member State (at 28% of working-age population) and the wage dispersion in services is also wider in the UK, especially at the

**72 Bottom decile of earnings relative to average and employment rates in services, 1995**



**73 Bottom decile of earnings relative to average and employment rates in banking, 1995**



bottom end of the scale, than anywhere else. The employment rate, however, is also above average in Denmark and Sweden where wage dispersion is at its narrowest. Moreover, the employment rate in services in Spain is the lowest in the Union, but Spain has a wider dispersion of earnings than any other Member State apart from the UK (Graph 72).

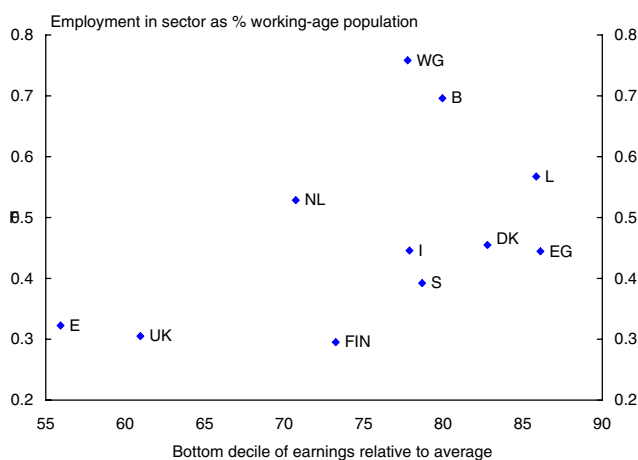
A similar lack of association between the relative level of the bottom decile of earnings (relative in

each case to the average wage in the economy rather than in the individual sector concerned) and employment is also evident for sectors within services, with very few exceptions. This is the case in the more advanced service sectors of banking, insurance and business services, where in each case, high employment rates are associated with both relatively high levels of low pay and low levels (ie the bottom decile of earnings relative to the average in the economy as a whole) (Graphs 73, 74 and 75 —

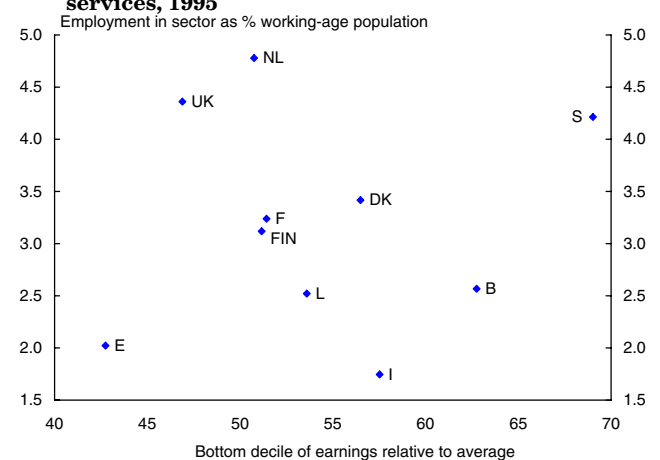
it is interesting to note that in business services, the bottom 10% of wage earners have levels of pay which are half or less of the average wage in the economy in half the countries and only slightly above those of the bottom 10% in retailing).

It is also the case, however, in the more basic services, where there is perhaps more scope for employing less skilled people — in retailing and road and rail transport (Graphs 76 and 77).

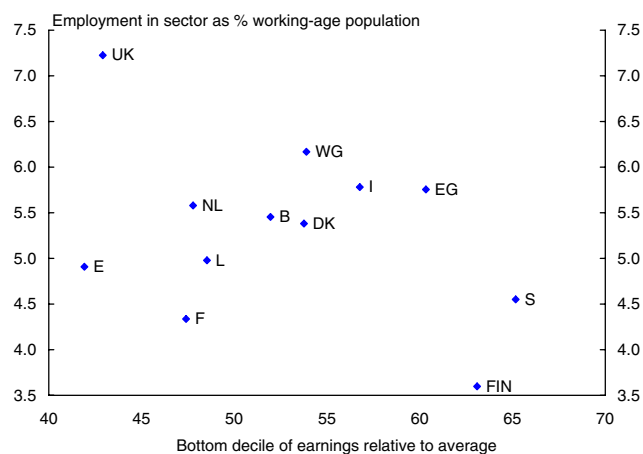
**74 Bottom decile of earnings relative to average and employment rates in insurance, 1995**



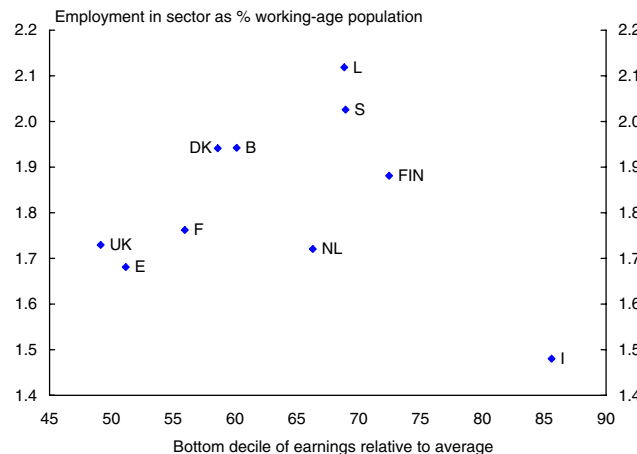
**75 Bottom decile of earnings relative to average and employment rates in mainstream business services, 1995**



**76 Bottom decile of earnings relative to average and employment rates in retailing, 1995**



**77 Bottom decile of earnings relative to average and employment rates in land transport, 1995**



The only sector where some relationship is apparent is hotels and restaurants, where, with the exception of France (which has relatively low rates of low pay but a low employment rate), countries with the widest dispersion at the bottom end of the pay scale (the UK, Luxembourg and Spain) also tend to have the highest employment rate (Graph 78).

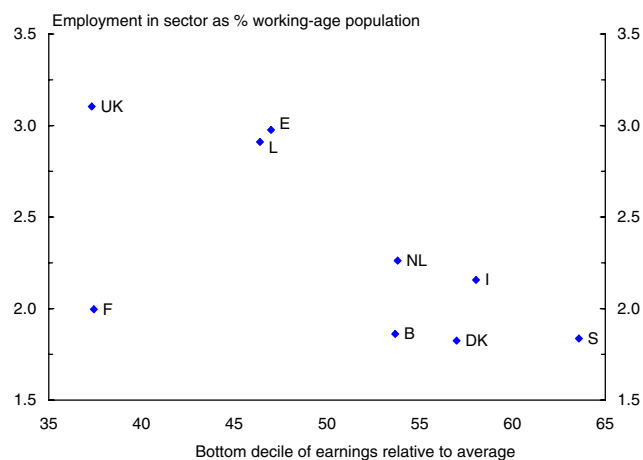
Nevertheless, the possible existence of an inverse relationship in a single sector is hardly conclu-

sive evidence of any general association. The conclusion has to be, therefore, that low rates of pay, and wide dispersions of wages, are not generally associated with high (or low) rates of employment in the Union. If the relationship does exist, it is concealed by other influences — such as relative levels of productivity which ought to be taken into account in any assessment of wage levels on employment — which in combination are stronger than the effect of wage dispersion.

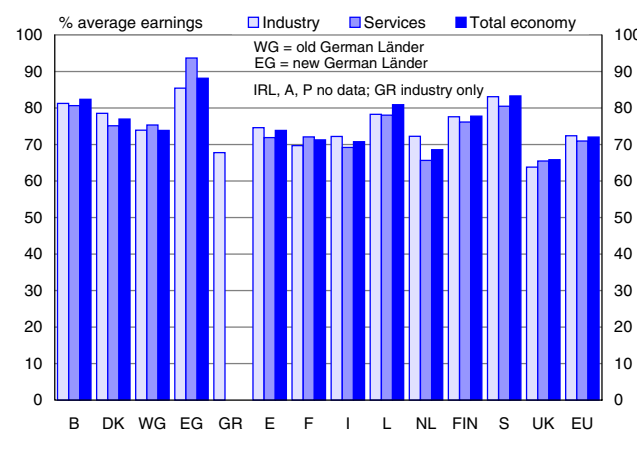
## Pay differences between men and women

On average, hourly rates of pay for women in the Union working full-time were around 30% less than men in 1995 in the sectors of activity covered by the SES (and excluding those working overtime hours). The gap between men and women was narrowest, by some way, in the former East Germany,

**78 Bottom decile of earnings relative to average and employment rates in hotels and restaurants, 1995**



**79 Average hourly earnings of women relative to men in total and by sector in Member States, 1995**





where women's wage rates were around 12% lower than those of men, and it was also narrower than average in Sweden (where women's wages were 17% lower than those of men), Luxembourg (19% lower), Finland (22% lower) and Denmark (23% lower) (Graph 79).

At the other extreme, the gap was widest in the UK, where women's rates of pay were, on average, some 34% lower than those of men, Greece (32% lower, though the data are confined to industry) and the Netherlands (31% lower).

In most Member States, the extent of the difference in pay was much the same in industry and services taken separately as in the economy as a whole. The two exceptions were the Netherlands, where the wage rates for women were closer to those for men in industry than in services — indeed, in services, the gap between men and women was as wide as in the UK — and the former East Germany, where the reverse was the case and where the average rate for women in services was only just over 6% lower than that of men.

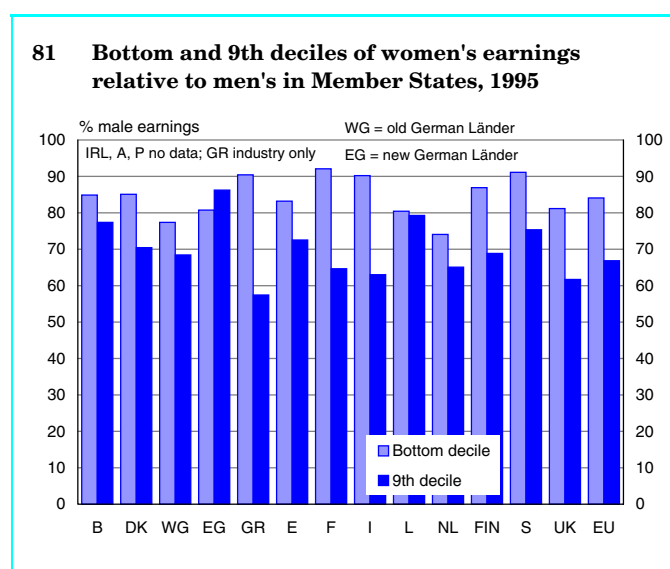
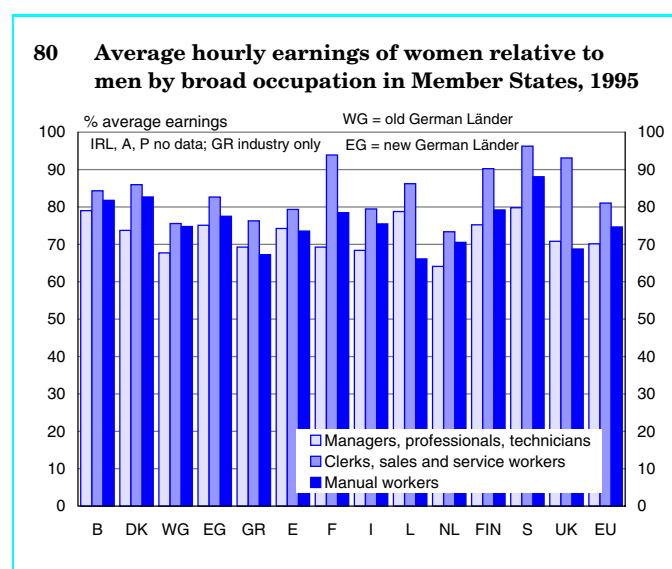
The gap in pay between men and women arises to a significant extent from differences in the kind of jobs performed by men and women. For the sectors covered by the SES, many more men than women are employed in the higher paid occupations, requiring relatively high skill levels and carrying relatively large responsibility. This reflects, as noted above, the disproportionate number of women with high educational attainment and skill-levels employed in communal and personal services which are excluded from the SES. While 36% of all men covered by the SES were employed as managers, professionals or technicians, only 24% of the women covered worked in these occupations.

Nevertheless, the different occupational structure of men's and women's employment explains only part of the gap between men's and women's pay. In all broad occupational groups (ISCO 1-digit level) and in virtually all of the more detailed ones (ISCO 2-digit level), women have lower rates of pay than men in all Member States. The gap was widest in the higher skilled occupational group, managers, pro-

fessionals and technicians, where women's pay rates across the Union were on average only 70% of those of men (much the same as the average for all occupations) and above 75% only in Belgium, Luxembourg and Sweden (Graph 80).

The width of the gap, however, is again partly explained by the disproportionate number of men in the highest paid occupation within this group, managers (where in all Member States except the Netherlands, average wage rates were over 50% higher than in the economy as a whole), which accounted for almost twice the relative number of men in the sectors covered in the SES as women. For managers, women's pay rates were only around two-thirds of those of men in Germany (the old Länder), France, the UK and Luxembourg and only 60% in the Netherlands.

For professionals, the gap was narrower, women's rates of pay, on average, being some 20% lower than those of men, while for technicians, the size of the difference was midway between that for the other two groups, women's rates being around 25% lower than for men on average.



There was less of a difference between men's and women's pay for clerks and office workers and sales and service staff, which together accounted for half of the women covered by the SES but only just over a quarter of men. In these jobs taken together, women's pay was on average 19% lower than for men, but in four Member States — France, Finland, Sweden and the UK, under 10% lower.

For manual workers, women's average rates of pay were around 25% lower than for men, though within this group, the gap was generally wider for the more skilled manual jobs (plant and machinery operators and craft workers) than for the more elementary ones, for which in all Member States except Luxembourg and the Netherlands, the gap was significantly under 20%.

Part of these differences in men's and women's pay is explained by differences in the age structure of those in work, and in particular the larger proportion of women than men in the age group below 25 because of the numbers above this age who leave the work force when they have families. This, however, ex-

plains only a very small part of the difference, except in the Netherlands, where the gap between men and women is narrowed by 7 percentage points (25% of the total gap), and, Spain and Italy, where it is narrowed by 4 percentage points.

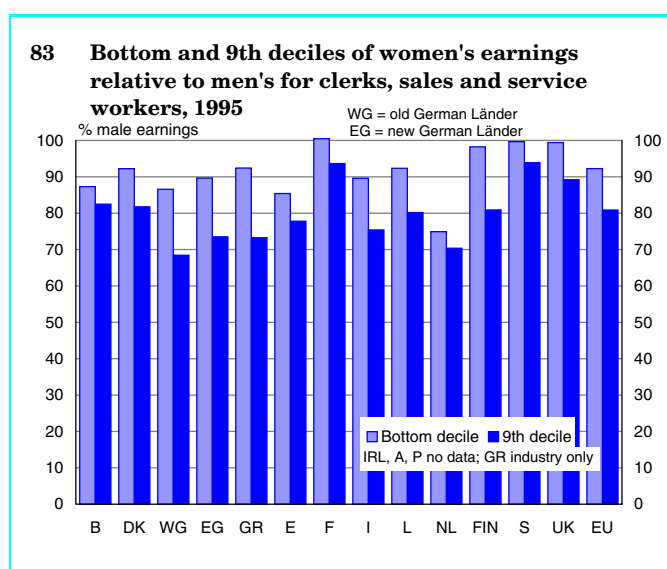
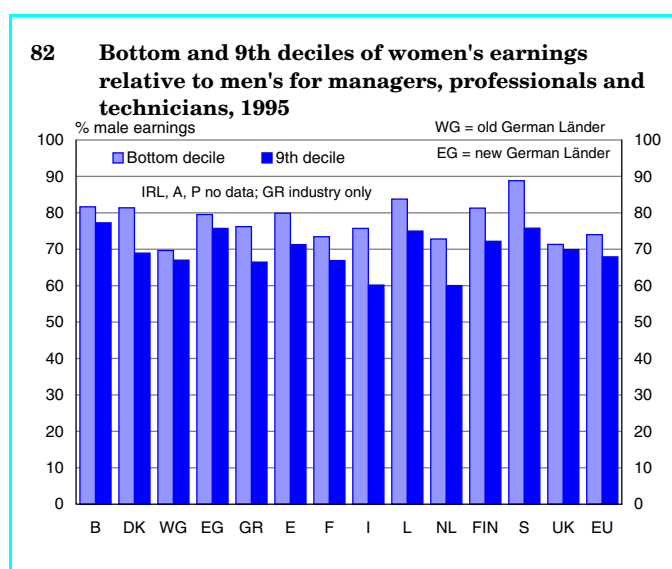
The gap remains in all age groups considered separately and widens significantly with age, so that for women aged 40 to 54 working full-time, average hourly earnings were over 20% lower than men's in all Member States, except in Belgium (19% lower), 30% less in France, Italy and Luxembourg, a third lower in the Netherlands, 40% less in the UK and almost 45% less in Greece.

Moreover, little of the difference within age groups seems to be explained by relative lengths of service, by women being in jobs for a shorter time than men. Indeed, the wage gap tends to be wider for those who have been in a job for a relatively long period of time than for those who have been in a job for only a year or two.

The difference in average wage rates between men and women is evident at all points of the earnings

distribution. However, it tends to be wider at the top end of the distribution among people receiving higher rates of pay than at the bottom end. This is consistent with the above finding that the differential is generally wider in the higher paid occupations than in the lower paid ones. Over the sectors covered by the SES taken as a whole, the lowest paid 10% of women had hourly wages which were on average some 15% lower than men. The highest paid 10% of women (or more accurately the 9th decile) had wages which were around 35% lower (Graph 81). This feature was true throughout the Union, except in the new German Länder, where the highest paid women earned only slightly less than men, and was especially marked in France, Italy and the UK.

In the managers, professionals and technicians group, the lowest paid 10% of women had pay rates that were, on average, 27% below those of men (ie the bottom decile of earnings of women was this much less than that for men) while the highest paid 10% had rates which were 32% lower (Graph 82). The gap for the higher paid was more than that for



the lower paid in all Member States without exception.

It is equally the case in the other occupational groups where the average wage gap tends to be narrower. Indeed, for clerks and office workers and sales and service workers, who encompass half of all women covered, the pay of the lowest paid 10% of women was, on average, only around 10% less than that of men and in four Member States — France, Finland, Sweden and the UK — there was virtually no difference (Graph 83). However, the highest paid 10% of women had rates which were well over 20% less than for men in the Union as a whole and only in France and Sweden was the gap under 10%.

Similarly, for manual workers, the lowest paid 10% of women had pay rates, on average, which were around 20% lower than for men, while for the highest paid 10%, they were almost 30% lower (Graph 84). Again this difference was common to all Member States, with the sole exception of Germany.

The implication of this general finding is that observed differences in

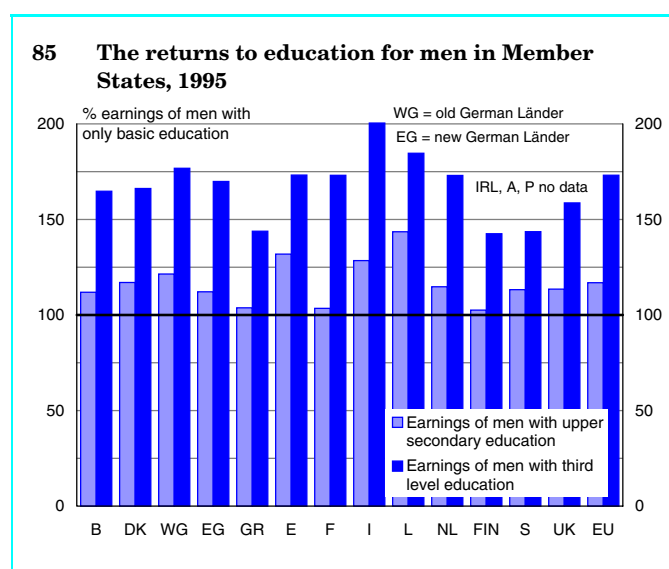
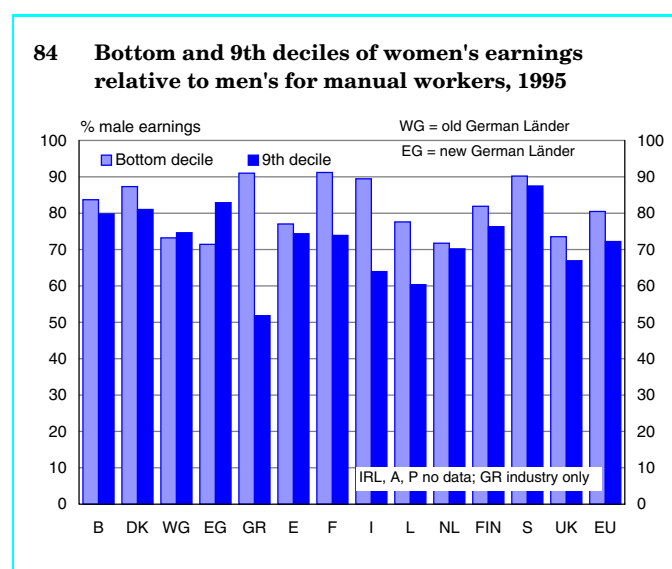
men's and women's average earnings arise more from differentials among higher paid workers than among lower paid and that women are less well represented among the former than the latter. Women, accordingly, would appear to experience more difficulty than men in advancing their careers, at least so far as pay is concerned, no matter what type of job they do. Though the difficulty seems to be more acute among managers, it is also evident for office workers and sales staff as well as manual workers. This serves to reinforce the effect on pay of proportionately fewer women than men being employed in the more highly paid occupations. It is, moreover, consistent with the finding reported above that the wage gap increases with age and with that reported below (in Part I, Section 5) that in all sectors women account for a lower proportion of the more highly-educated people employed than of the less well educated.

### Returns to education

The returns to education for both men and women are significant

throughout the Union, in the sense that in all Member States average earnings of those with educational qualifications beyond basic schooling are higher than of those without. This is especially the case for university graduates or the equivalent, whose earnings on average, according to the SES in 1995, were well over 50% higher than of workers with low education levels. For those not progressing beyond upper secondary level education, however, the returns were much lower, the earnings of men and women in this position averaging around 16–17% more than for those with basic schooling (Graphs 85 and 86). (It should be noted that these comparisons are based on monthly rather than hourly earnings and include the effect of overtime working; these together have only a small effect on the results.)

However, whereas the returns to those with upper secondary level qualifications, in terms of their average earnings, were similar for men and women both at the Union level and, with few exceptions, in individual Member States, the returns to university-level education were significantly higher for men



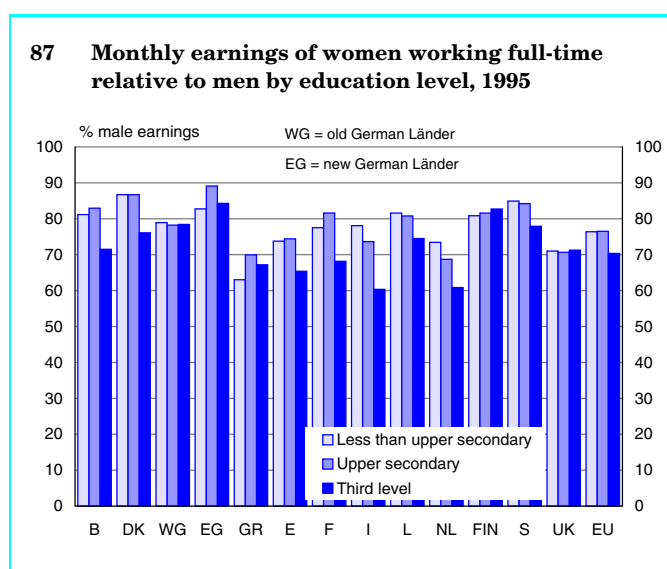
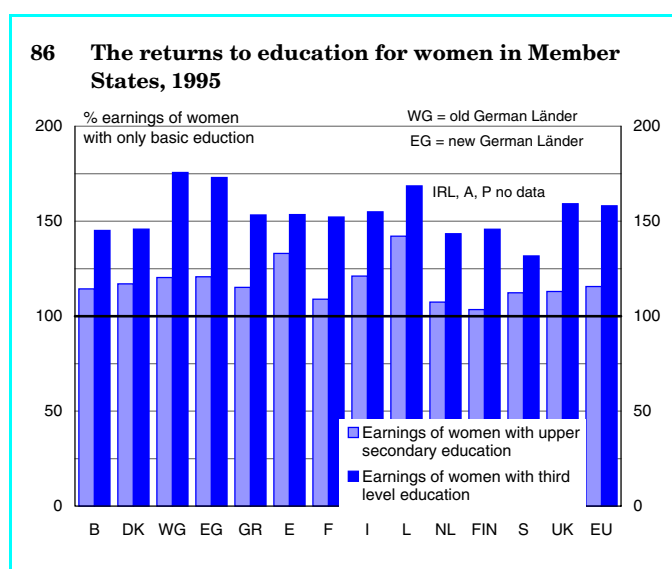
than for women in most parts of the Union. On average, in 1995, men with this level of education earned 73% more than those with only basic schooling as against a figure of 58% for women. The only countries where the relative earnings of men were not much higher than for women were Germany and the UK, where there was little difference between the two, and Greece and Finland, where women earned more than men relative to those with basic schooling (though only slightly so in the latter).

The implication of this is that the gap in pay between men with university degrees or the equivalent and women with the same qualifications is wider than between men and women with only basic schooling. Over the Union as a whole, women with university education earned, on average, 32% less than men with a similar education level, whereas women with no qualifications beyond basic schooling earned 22% less than men (Graph 87). This is consistent with the finding above that the difference in pay rates between men and women is wider in the higher skilled jobs than the lower skilled ones. The only exceptions, as noted

above, are Greece and Finland (as well as the new German Länder), where the pay gap is less for the highly educated than for the less well educated, and Germany (the old Länder) and the UK, where there is little difference between the two.

In all other Member States, the difference in the size of the pay gap is significant and in Belgium, Denmark, France, Italy and the Netherlands, the gap for the highly educated was 10 percentage points or more wider than for those with only basic education.

Since women with higher levels of education are far less likely to interrupt their working careers for family responsibilities than those with lower education levels (see Part I, Section 5), this result is the opposite of what might be expected if experience, an unbroken working career, and the understanding of the latest techniques which comes with it are important determinants of pay levels. We are, therefore, left without a tangible explanation for the apparent failure of women to achieve the highest paid jobs in their occupations in the same numbers as men.



## Part I Section 5 Labour supply and the skills of the labour force

The long-term fall in the employment rate in the Union over the past 20 years has coincided with an increase in the participation of those of working age in the labour force. Since it has also coincided with a reduction in the participation of young men and women under 25, as more of them have remained longer in education, of men in older age groups, as more have taken early retirement, and of men of prime working age, as jobs have become scarcer, the increase is due entirely to a significant growth in participation of women. Growing numbers of women, therefore, have sought to pursue working careers over this period, while substantial numbers of men, especially in older age groups, have suffered job losses and have found it difficult to find new work, as the pattern of demand for particular skills has shifted radically to the detriment of manual workers.

The concern here is, first, to put developments in the Union into perspective by comparing employment and participation levels in the US among people in different age groups. Secondly, it examines the decline in employment and participation rates of younger people and older men over the past 10 years or so and the way that these are related, in the former case, to a tendency to remain longer in education and initial vocational training and, in the latter, to their basic skill levels. Thirdly, it considers the increasing tendency for women to

pursue working careers and the way that it is affected, on the one hand, by family responsibilities, which women, still much more than men, have to find a means of accommodating and, on the other, their level of education attainment, which affects their ability both to reconcile family and career responsibilities and to find employment. Fourthly, it assesses the trend towards a more educated work force in the context of the rising demand for skilled labour. Finally, it examines differences in the sectoral distribution of men and women with differing education levels.

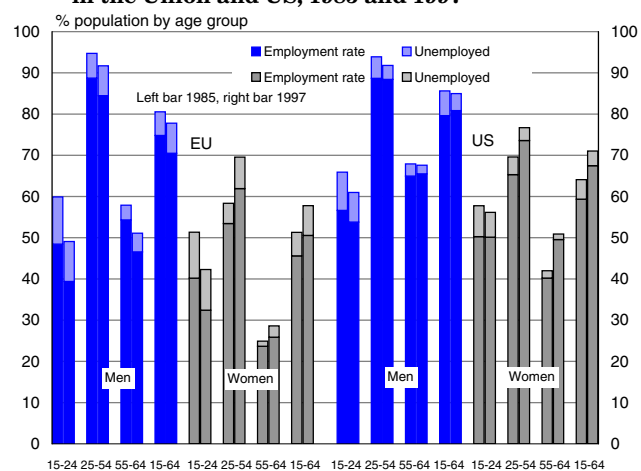
### Employment and participation in Europe and the US

As noted in Section 1 above, the employment rate in the US is close to 75% of working-age population whereas in the Union it is only just over 60%. This gap reflects differences across all age groups, but in three groups in particular: young people under 25, men of 55 and older and

women aged 25 and over (Graph 88). For all three groups, the difference in employment is attributable not only to higher levels of unemployment in Europe than in the US but to lower rates of participation in the labour force, which is responsible for at least half the gap in each case.

Over the past decade, the gap in employment rates between the two economies has widened, both because of a decline in unemployment in the US, which has contrasted with an increase in Europe, and because of a larger rise in participation in the former than the latter. Nevertheless, for men and women within each age group, the changes in the two have been in the same direction. There has been a tendency in both Europe and the US for participation of young people under

88 Employment and participation rates by age group in the Union and US, 1985 and 1997



25 and of men of 55 and over to decline and for that of women of 25 and over to increase. The gap in participation for each group has, therefore, remained wide. Indeed, for men and women under 25 and for men of 55 and over, the gap has widened as participation has fallen by more in Europe than in the US, while for women of 25 and over, it has narrowed slightly.

## Participation of young people under 25 in the labour force

Although there is a tendency when discussing employment, or unemployment, issues to treat young people under 25 as a single group, there are, in fact, significant differences between the characteristics of those under 20 and those aged 20 and over. Most of those in the first group, especially the younger ones among them in nearly all Member States are still in full-time education either at school or college, while in the second group, most have left education and are in work or looking for work. Moreover, the increasing policy concern in the

Union to ensure that everyone entering the labour force has the educational basis and suitable academic qualifications to enable them to get a decent job is aimed predominantly at those aged 15 to 19 rather than at those in the older group.

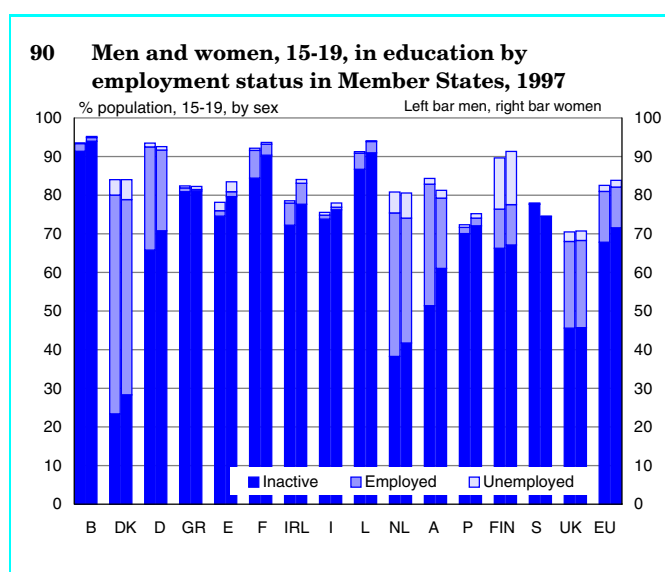
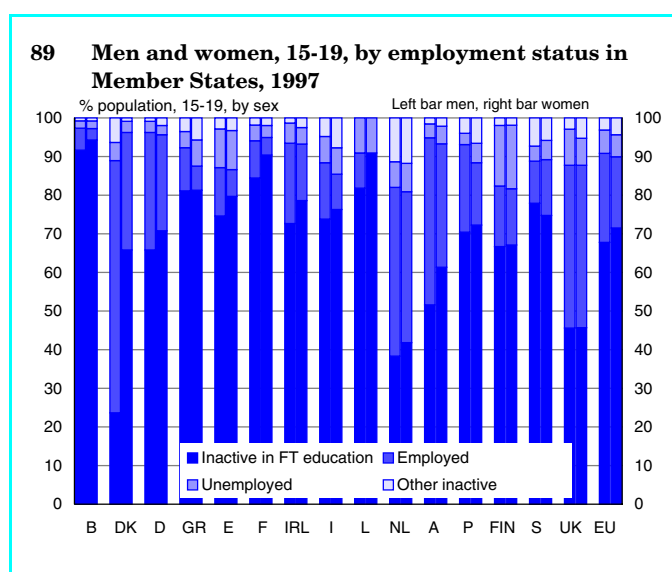
### 15 to 19s

In 1997, around 70% of men and women in the Union aged between 15 and 19 (slightly more women, 71½%, than men, 68%) were in full-time education and, because of this, economically inactive (ie neither in work nor actively looking for a job) (Graph 89; it should be noted that both in the graph and in the text, those counted as being in education or training include only those attending school or a college and not those receiving training only in the work place). Of the remainder, around 20% were in employment (less women, 18½%, than men, 23%) and some 6% of both men and women were unemployed, in the sense of actively seeking work.

This leaves 3% of men and 4½% of women in the age group who were economically inactive and not in education. The proportion of people

who were wholly inactive in this sense varies across the Union from under 1% in 1997 in four Member States (Belgium, Denmark, France and Luxembourg) to over 3% in all four Southern European countries, adding to the acute problem of youth unemployment in three of them, as well as in the Netherlands, Sweden and the UK. (Indeed, in the Netherlands, the proportion, according to the LFS, is as high as 11%, which seems implausible and suggests classification problems).

While only around 20% of those aged 15 to 19 in the Union were in employment in 1997 and just over a quarter were in the labour force, in four Member States, the figures were markedly higher and completely out of line with the rest of the Union. In Denmark, some 63½% of young people in this age group were in employment and another 5½% were unemployed and actively seeking work. In the UK, 42% were in work and another 8% were unemployed. In the Netherlands, the figures were 41½% and 7%, respectively, and in Austria, 37½% and 4%. In all other Member States, except Germany (28%), employment rates were under 20% —



in some countries, substantially so — as were participation rates in most cases.

The large number in the work force in three of these four Member States — the exception being the UK — is not at the expense of low participation in education or initial vocational training. In Denmark, the Netherlands and Austria, over 80% of men and women in this age group in 1997 were in education, much the same as the Union average (Graph 90). A significant proportion of these, however, were also in the labour force, either working or unemployed. In Denmark, around two-thirds fell into this category and in the Netherlands, almost half, leaving in the former only around 25% of people in the age group in education and not economically active and in the latter, under 45%. These three countries, therefore, are able to combine high participation in education among young people with high employment rates, as indeed is the case in Germany where a quarter of those in education were also in employment (though fewer women than men) and over 90% of those in this age were in education. This reflects, in Germany and Austria, at least, the significant number of young people going through the so-called dual system and doing their apprenticeships in various sectors of activity and, it would seem, in the other countries, the importance attached to young people gaining work experience (though in the Netherlands, as noted below, this comes from working part-time rather than full-time hours).

In the UK, on the other hand, where a lower proportion of those in education were also in the labour force (around a third), the relative number in education was only around 70%, the lowest figure in the Union.

Apart from in these 5 countries and Finland (where most of the unemployed were in education or training, in contrast to most other countries — Denmark and the Netherlands being the exceptions — which suggests a different treatment of those participating in active labour market programmes), virtually all of those in education in the other Member States participated on a full-time basis and were not in the labour force at all. In three of these countries — Belgium, France and Luxembourg — 85% or more of both men and women in 1997 (for women, over 90% in the first two), were in full-time education or training and not economically active, while in another three countries — Greece, Spain and Sweden — the figure was over 75%.

Over the past decade or so, rates of participation in the work force of people in this age group have declined in all Member States, except the Netherlands and Denmark (where it rose significantly in the former case and slightly in the latter), in most cases markedly (in Germany, France, Ireland, Luxembourg, Portugal and Sweden, by 1 percentage point a year or more). This includes the two other countries, Austria and the UK, where rates of labour force participation are high (in both of which the rate fell by  $\frac{1}{2}$  percentage point a year). This has been associated with a similar increase in participation in education, which over the 5 years 1992 to 1997 — there are no comparable figures before then — rose by around 4 percentage points in the Union as a whole.

It is difficult to interpret these very different figures in terms of their implications for policy or prospective changes in labour force participation in future years. While the trend towards increased numbers of

15 to 19 year olds remaining longer in education is likely to continue — and, indeed, needs to continue in order to ensure that the European work force has the skills, or the capacity to learn the skills, needed in the future — it is hard to predict whether this implies a further reduction in labour force participation or whether it will be possible, and desirable, to combine education with work.

## 20 to 24s

This is even more true of those in the 20 to 24 age group. Among these, just over a quarter (26% of men, 28% of women) were in full-time education in the Union in 1997 and, accordingly, not part of the labour force, around half were working (56% of men and 46% of women) and almost 14% were unemployed, substantially more than among those under 20 (Graph 91). This means that some 5% of men and 12% of women (together around  $8\frac{1}{2}\%$  of the people in the age group) were neither in education nor in the work force, which again amounts to about half the number of the unemployed (less for men, more for women).

The Member States in which the proportion of men who are wholly inactive is highest are much the same as for the younger age group, namely, Greece, Spain, the Netherlands, Portugal, Sweden and the UK, in all of which  $3\frac{1}{2}\%$  or more of 20 to 24 year olds were neither in education nor the labour force, the figure being as high as 9% in Sweden. For women, the countries with the highest proportions in 1997 were Germany, where the figure was almost 13%, and Greece and the UK, where it was over 17%. In the UK some  $1\frac{1}{2}\%$  of both men and women in this age group are classified as being inactive because

of being permanently disabled, almost twice as much as in any other Member State.

In the case of women, the relatively high figure for inactives clearly reflects the significant numbers who have withdrawn from the labour force for family reasons, either because they have got married (as in Greece, where this is a major determinant of whether a woman pursues a working career or not) or because they have children (as in Germany and the UK, where this has a larger effect on participation than in most other parts of the Union, as is indicated below).

As for the younger age group, the relative number of 20 to 24 year olds in employment and in the labour force varies markedly across the Union, the highest figures being in the same four countries as for those under 20. In the Netherlands, Austria and the UK, around 70% of the age group were in employment and 73½% or more in the labour force (78½% in the UK), and in Denmark, 74% were employed and 80% in the labour force. Elsewhere, employment rates were over 50% only in

ance of the dual system), Ireland and Portugal, while in Spain and Italy, they were under 40%, though this was partly a consequence of high levels of unemployment (21% of this age group were unemployed in Spain, 18% in Italy).

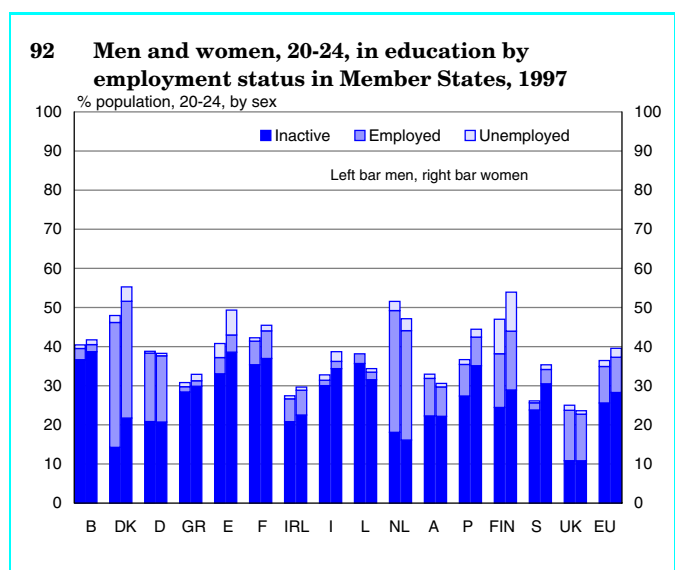
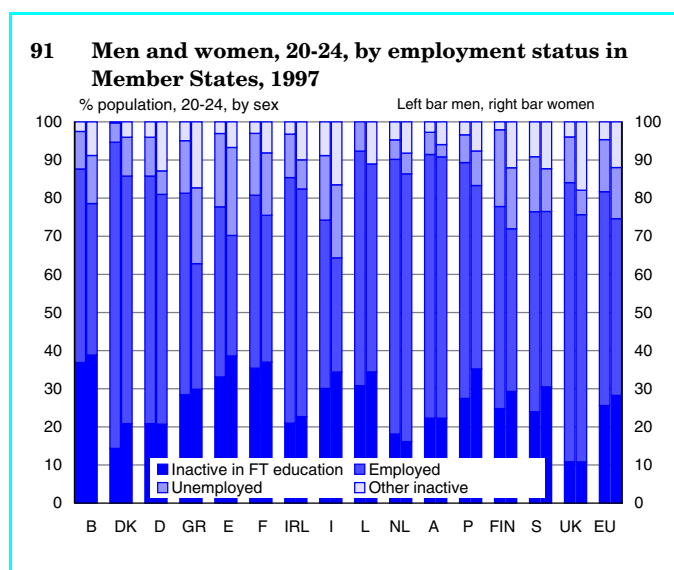
In both Italy and Spain, however, a high proportion of the age group was also in full-time education (around 30% of men and over a third of women in both cases) (Graph 92). This was also true in Belgium and France, where employment rates were also relatively low, in both of which over 35% of men and women were receiving training or tuition and not working at the same time. Nevertheless, the relative number in education was lower in all these countries than in Denmark and the Netherlands, where some two-thirds of those in education or training were also in employment or (to a minor extent in both cases) unemployed.

In the UK, as for the younger age group, while more than half of those receiving tuition were in work, the overall proportion of 20 to 24 years olds in education was less than in other Member States. Similarly, in

Finland, while almost half of those in education were also in the labour force, almost half of these were unemployed, again raising questions about the treatment of people in active labour market programmes.

Over the past decade or so, participation of people in this age group in the Union has declined by slightly less than for 15 to 19 year olds, but, nevertheless, by over ½ percentage point a year between 1985 and 1997, with falls of over 1 percentage point a year in France, Luxembourg, Finland and Sweden. However, the rate increased slightly in the Netherlands and remained much the same in Greece and fell by well below average in Denmark and the UK. Nevertheless, in all of these countries, as elsewhere in the Union, participation in education rose strongly, matching the fall in the relative numbers in the labour force.

There are similar problems of interpreting these results to those for the younger age group. While it may be important for the long-term competitiveness of the Union's work force for men and women in their early 20s to remain in education or initial





vocational training, it is unclear how far it is possible for them to be employed at the same time and whether, therefore, the decline in participation is likely to continue.

One aspect which may throw light on this is the extent to which those in employment while receiving tuition or training work part-time rather than full-time (in the LFS, anyone working at least one hour during the reference week is counted as being employed).

### Part-time working

In practice, very few of the people under 25 in the Union who combine employment and education work part-time. Only some 12% of men aged 15 to 19 and 23% of women falling into this category worked less than 20 hours a week in 1997, just over half of them in each case working less than 10 hours. For those aged 20 to 24, the figures are higher with 21% of men and 28% of women working under 20 hours a week and around 11% and 13½% working under 10 hours. The large majority of such people worked full-time in both age groups.

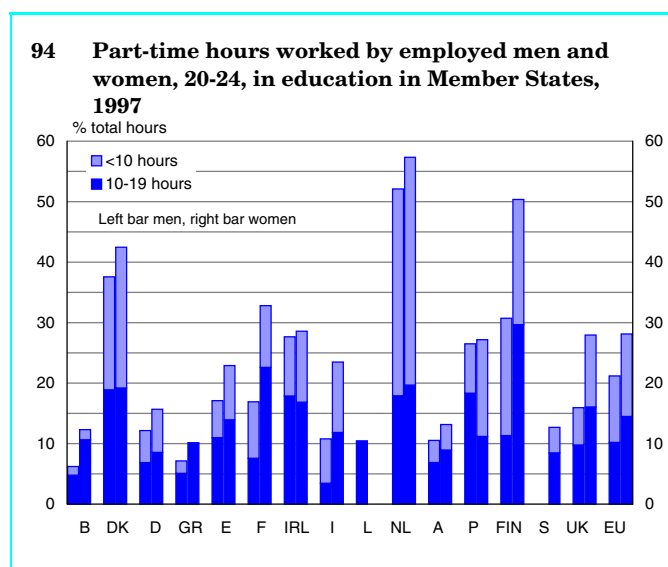
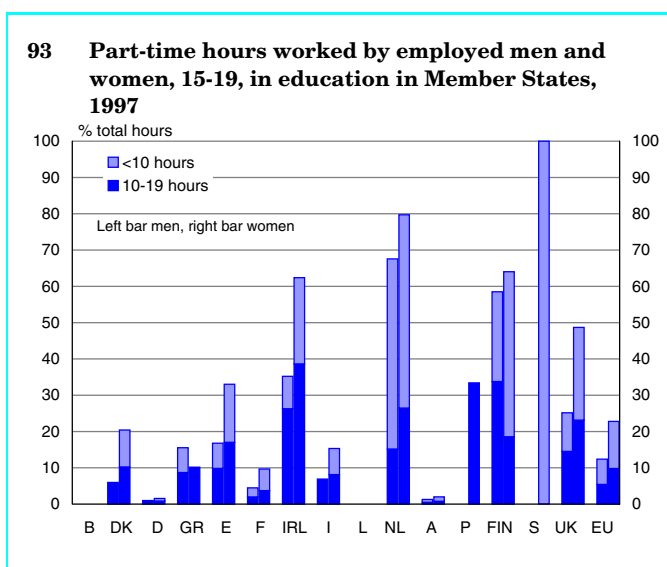
These aggregate figures, however, are somewhat misleading since the people concerned are concentrated in a small number of countries. In those where a relatively large number combine employment with education, the proportion tends to be higher. This is particularly the case in the Netherlands, where around two-thirds of men and 80% of women aged 15 to 19 both with a job and in education usually worked under 20 hours a week and over half in each case worked less than 10 hours a week (Graph 93). Similarly in Finland, 60% of men and 64% of women worked under 20 hours, 25% and 45%, respectively working under 10 hours. Although the proportions are less in the UK, they are still significant, a quarter of men and half of women working under 20 hours, 11% and 25%, respectively, working under 10 hours.

In these three countries, therefore, particularly the former two, relatively few people in this situation work full-time hours and the jobs undertaken may well be to provide income support during the period of education. In Denmark, on the other hand, where the proportion of young people combining education

and employment is highest, only 6% of men aged 15 to 19 worked under 20 hours a week in 1997 and 20% of women, while in Austria and Germany, where the figure is also above average, the proportions were negligible. In these countries, therefore, almost everyone in this situation works full-time.

For the 20 to 24 age group, the relative number working part-time is less in the Netherlands and Finland, but still relatively high. Over half of men and women in the former worked under 20 hours a week in 1997 and over a third under 10 hours, and 30% of men and half of women worked under 20 hours in the latter, with 20% in both cases working under 10 hours (Graph 94). Similarly in the UK, only 16% of men in this age group and 28% of women worked under 20 hours a week, much less than for the younger age group.

In Denmark, on the other hand, a much higher proportion than in the younger group work part-time — almost 40% of men and 45% of women being employed for less than 20 hours a week, half of these in each case working for under 10



hours. Similarly, in Austria and Germany, over 10% of both men and women worked under 20 hours, which still means that the vast majority had full-time jobs. This is also the case in the rest of the Union where comparatively few combine employment and education.

## Unemployment of young people by education level

As noted above, unemployment among 20 to 24 year olds is substantial in the Union, amounting to around 14% of the people in the age group in 1997. While it is difficult to assess the effect of a low level of education on the chances of finding a job for those under 20 because it is hard to know whether or not they have completed their education, this is less of a problem for those in the older age group. In this group, the rate of unemployment in the Union of those in the work force with no educational qualifications beyond basic schooling was 25% for men and 27% for women (Graphs 95 and 96). These are significantly higher than for those with univer-

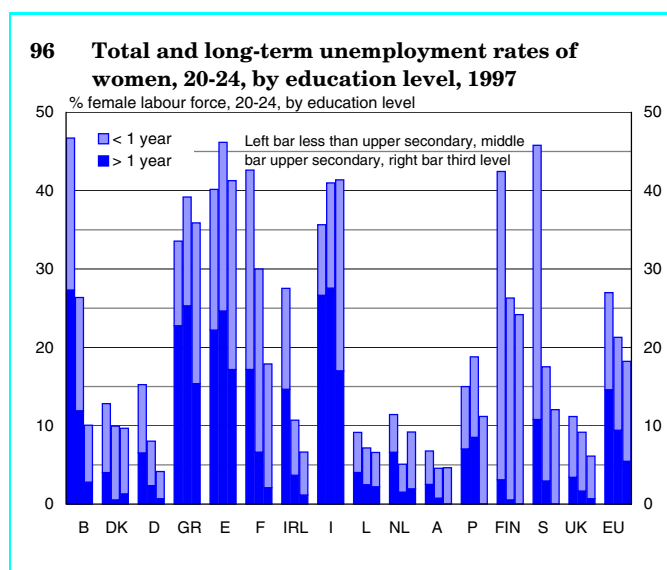
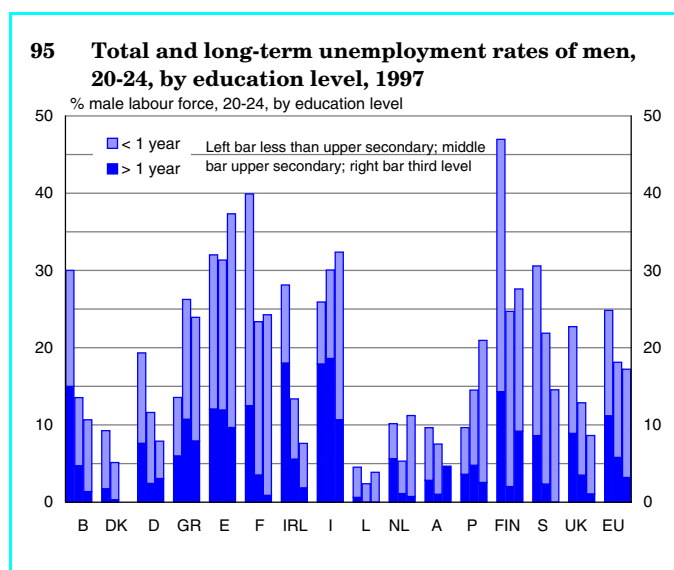
sity education or the equivalent, which were 17% for men and 18% for women.

These rates may still seem high, but they need to be put into perspective, in the sense that many people in this age group are still pursuing a higher educational qualification and correspondingly not in the work force, especially in countries where people graduate from university at a relatively advanced age. In the Union as a whole, only 10½% of the unemployed aged 20 to 24 had university degrees or the equivalent, 8½% of men, 13½% of women. By contrast, 40% of the unemployed, 46% of men, 34% of women, had only a basic level of education. However, in Italy and Austria, only 1% of the unemployed had higher educational qualifications — despite the relatively high unemployment rate of such people in the former — and in Denmark and Germany, only around 2%. By contrast, the figure was 23% in Spain, 19% in the Netherlands, 15% in Ireland and 12% in both France and Belgium.

In the latter countries, therefore, a university degree or equivalent

qualification does not seem to be protection against unemployment. In Spain, moreover, those with such qualifications made up 19% of the long-term unemployed (with a long-term unemployment rate for the people concerned of 10% for men and 17% for women), while in Belgium, Greece (where the long-term unemployment rate for men graduates of this age was 8% and for women 15%), Ireland, the Netherlands and Finland, they made up 6 to 8%.

More relevant perhaps is the comparison between those with upper secondary level qualifications beyond basic schooling and those without. Not only were unemployment rates high among the 20–24 year olds with upper secondary level qualifications — 18% for men, 21% for women — but in terms of numbers they made up more of the unemployed in this age group than those with only basic schooling (49% as compared with 40%, though for women, the figures were 53% as against 34%, while for men there was little difference). This was particularly the case in Greece, Austria, Finland and Sweden, where they made up over 70% and in Ger-



many and Denmark, where they accounted for around 65%. Moreover, in Germany, Greece, Austria and Sweden, they made up half or more of the long-term unemployed in this age group.

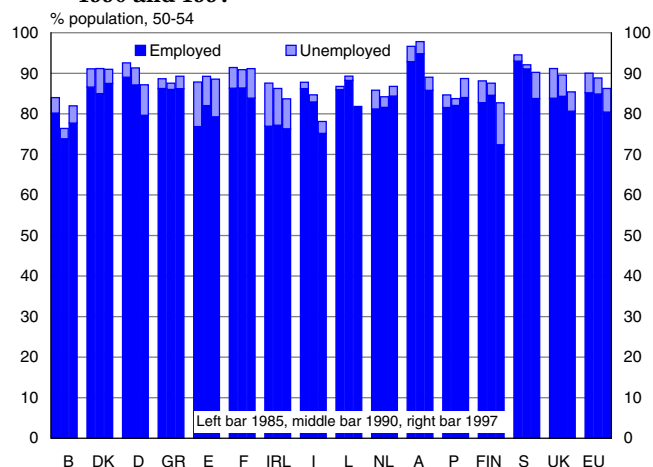
The unemployment problem of young people in these countries in particular, therefore, is not only to do with inadequate levels of education or initial training, a point which policies aimed at increasing the employment of young people need to take into account.

## Participation among older men

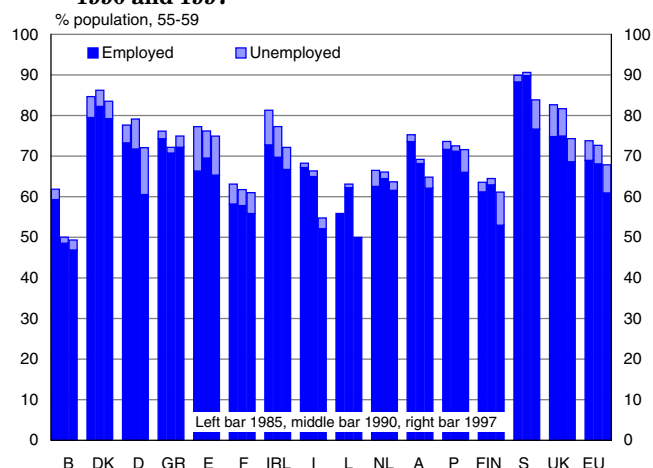
Although there is some sign of a trend towards earlier retirement among men during the 1980s, this has become more pronounced since 1990, seemingly as a result of low employment growth. Participation of men aged 50 and over declined in most Member States between 1990 and 1997, the only exceptions being Belgium and Greece, the fall being particularly marked for those of 55 and over (Graphs 97, 98 and 99).

Over these 7 years, the participation rate of men aged 50 to 54 in the Union fell by 2½ percentage points, the employment rate by 4½ percentage points, the extent of both falls being similar to those for men aged 25 to 49. There were, however, significant differences between Member States, with Germany, Italy and Austria showing a much larger fall in the employment rate for men aged 50 to 54 than for those in the younger age group, France and Sweden showing smaller falls and Belgium, Greece and Portugal showing an increase in the rate for men in the older age group and a fall for those in the younger one. Participation of men aged 55 to 59 declined by over 4½ percentage points

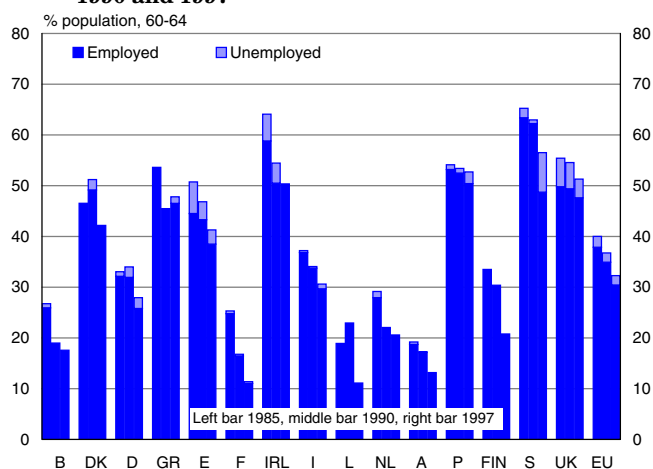
**97 Participation of men, 50-54, in Member States, 1985, 1990 and 1997**



**98 Participation of men, 55-59, in Member States, 1985, 1990 and 1997**



**99 Participation of men, 60-64 in Member States, 1985, 1990 and 1997**



in the Union between 1990 and 1997, employment by over 7 percentage points. In Germany, Sweden and the UK, the fall in participation was around 7 percentage points, while in Italy it was as much as 11½ points. In Germany, Sweden and Italy, this was associated with an even bigger fall in the employment rate (11 percentage points in Germany, 13 points in the other two countries) as unemployment increased among this age group. In the UK, it was associated with a smaller fall (just over 6 points) as unemployment declined, the decline in this case seemingly being the result of men without work withdrawing from the labour force. Although the reduction in participation in the Union among men aged 60 to 64 — still below the official age of retirement in most Member States — was marginally less than among the 55 to 59 year olds, it followed a significant decline over the preceding 5 years (by almost 3½ percentage points as compared with a fall of 1 percentage point for those aged 55 to 59). In this case, the fall in employment was much the same as the fall in participation both at the Union level and in most Member States, because of the relatively low rates of unemployment for men of this age (ie once past 60, relatively few men actively seek work if they lose their job). Sweden, however, is an exception with almost 6% of men in this age group being recorded as unemployed in 1997, as opposed to 2% or less in 10 of the other 14 Member States.

## The influence of education levels

While it is not possible to verify with certainty because of the lack of consistent data on education attainment levels over time, it seems likely from the evidence for 1997

that much of the decline in participation — and employment — of older men has occurred among those with only basic levels of schooling and relatively low skills. Average rates of participation and employment of men with high education levels are significantly higher than for those with low levels virtually throughout the Union, the difference widening markedly with age.

Even for men of prime working age (25 to 49), the rate of participation in the Union in 1997 for university graduates or those with equivalent qualifications was 5 percentage points higher than for those with no qualifications beyond basic schooling (96% as against 91%), while the rate of employment was 10 percentage points higher (90% as against 80%) reflecting the much higher unemployment rate among the latter group. This difference, though varying in extent, is evident in all Member States, except for Greece where rates are similar for all education groups. It is particularly large in terms of employment in Germany and Ireland (in each of which the difference in the rate was around 20 percentage points) and in terms of both employment and participation in Finland (14 percentage point difference in participation, 24 point difference in employment).

For men aged 50 to 54, the difference between education groups is significantly wider throughout the Union, except in Finland for both participation and employment and in Germany and Ireland for employment, where rates were similar to those for the prime-age group (though the difference in participation in both the latter two countries was twice as wide for men in the older group as for those in the younger one). In 1997, 95% of men with university degrees or the equi-

valent were either in work or looking for work (only marginally less than the figure for those of prime working age), while for those with only basic education, the proportion was only 82%. Moreover, whereas some 92% of the more highly educated group were in employment (more than for those of prime working age), only 74% of the less educated group had a job (the figures for those with upper secondary level qualifications being in between the two — Graph 100).

In all Member States with the sole exception of Finland, the participation rate for university graduates was over 92% (in Finland, it was just over 90%) and the employment rate over 90%, apart from in Finland (86%) and the UK (89%). In all Member States with the exception of Greece, the participation rate for those with only basic schooling was under 88% — in Belgium, Italy and Luxembourg, under 75% — and the employment rate under 78% — in 6 Member States, under 70%.

In the case of men aged 55 to 59, in the Union as a whole, only just over 60% of those with basic schooling were still economically active in 1997 and only some 55% were in work. In Italy, the participation rate was around 50%, in Luxembourg, 40% and in Belgium, under 40% and the employment rate in Italy and Belgium, even lower (Graph 101). Moreover, the numbers involved were substantial in all three countries — in Belgium, some 56% of men in this age group fell into this education group, in Luxembourg, almost half and in Italy, over 75% (in the Union as a whole, the figure was just under half).

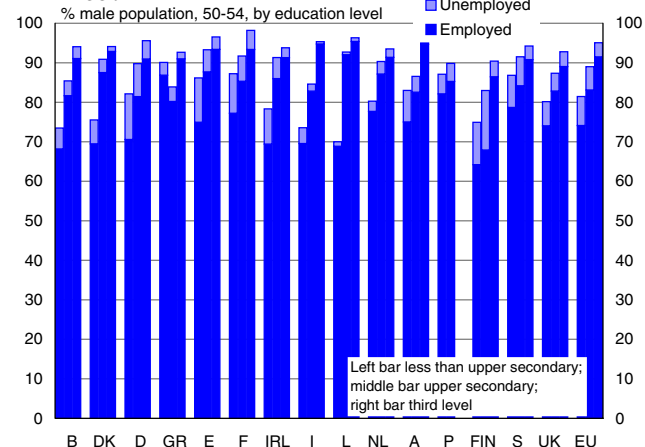
By contrast, around 83% of men aged 55 to 59 with university-level qualifications were still economi-

cally active in the Union in 1997 and just under 77% were in work. Only in Belgium, Greece, Portugal and Finland, was the rate of participation of this group significantly below 80% — only around 70% in the first two countries — while in Denmark, Austria and Sweden, it was around 90%.

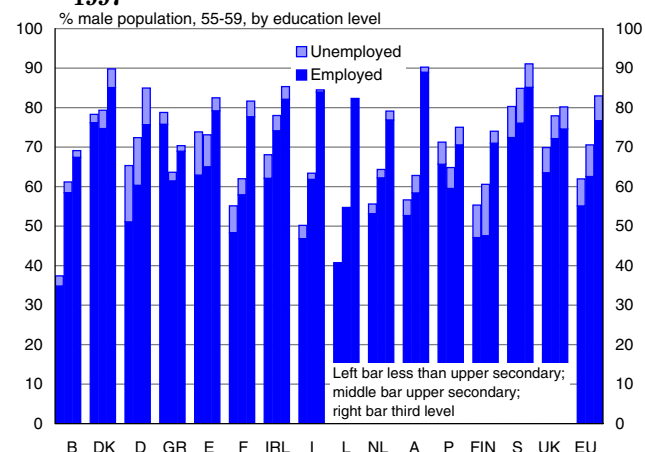
The chances of men still being economically active as they approach 60, therefore, are considerably lower for the less skilled with low educational attainment levels than for the better educated, and the chances of being in employment lower still. The only exception seems to be for those in Greece, where a high proportion of men over 50 are self-employed with small agricultural holdings. This has important policy implications. While there is a case for those who do heavy manual work, who start working at a relatively young age, to retire earlier than others, relatively few now fall into this category. It may more often be the case that they are less able to support themselves in retirement than those in more skilled occupations. Accordingly, it is questionable how far most of those concerned chose to retire early rather than being unable to find a job, though it is true that in a number of Member States, early retirement schemes, especially for those out of work, are relatively generous.

Secondly, it implies that any policy for reducing the extent of early retirement, which has become an objective in most Member States, primarily because of the budgetary cost involved in income support, has to address not only the incentive to retire early given by the benefit system but also the skills problem. It is possible, in other words, that a significant proportion of those losing their job in their 50s may not have

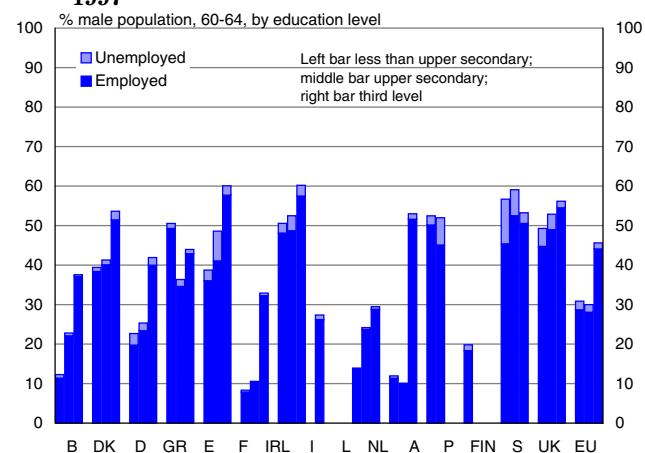
**100 Participation of men, 50-54, by education level, 1997**



**101 Participation of men, 55-59, by education level, 1997**



**102 Participation of men, 60-64, by education level, 1997**



the skills required to find an alternative one, which raises awkward questions about the extent to which they should have access to retraining programmes and, more generally, how far life-long learning should extend.

For men aged 60 and over, the chances of still being in employment are also very much influenced by educational attainment, though under 45% of 60 to 64 year olds even with university-level qualifications were in work in the Union in 1997 and only in 5 Member States (Spain, Ireland, Italy, Portugal and the UK), was the figure significantly above 50% (Graph 102). For men in this age group with only basic schooling — or, indeed, upper secondary level qualifications — the proportion in employment in the Union was only around 28% and in four countries (Belgium, France, Luxembourg and Austria), under 15%.

To the extent that there are substantially more men with higher level educational qualifications who have effectively withdrawn from the labour force in this age group than the younger one, policy for re-

ducing early retirement may have more success among the 60 to 64 year olds.

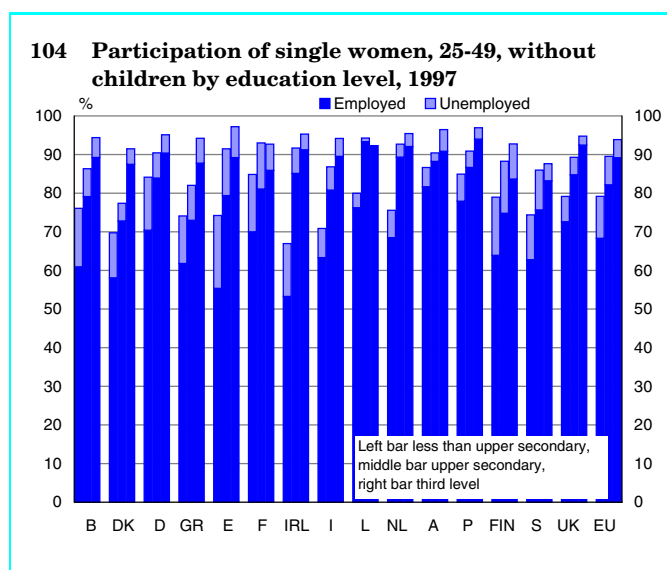
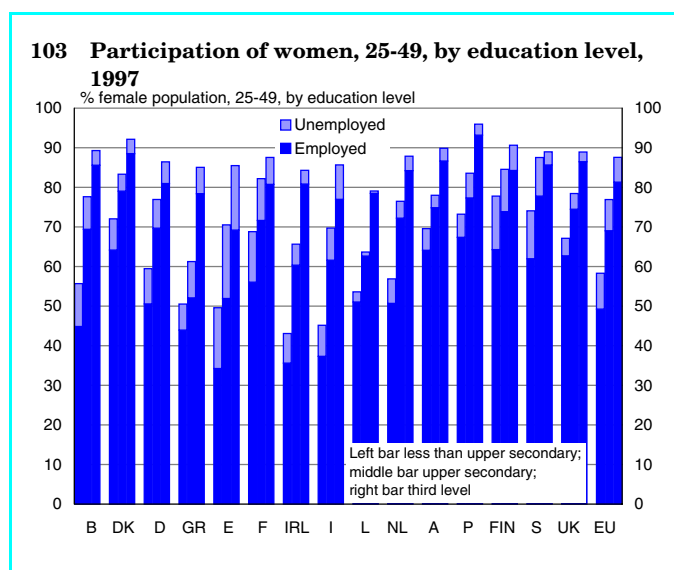
### Women in work and family circumstances

Increasingly more women are pursuing working careers in the Union and the rate of participation in the labour force has increased markedly in most Member States over the past 10 years or more, most especially in those where it was relatively low. Whether women work or not is affected by three factors, in particular: whether they are married or single, whether they have young children and their level of education. The influence of the first two factors is examined in the recently published *Employment performance in Member States (The Employment Rates Report, 1998)*. This indicates that between 1986 and 1997, there were substantial increases in the employment rates of married women both without and, to an even larger extent, with young children. In the Union as a whole, the rate for married women without children increased by 8 percentage points for those aged 30 to

39 and by almost 15 percentage points for those aged 40 to 49, while for those with a child under 10, it rose by around 15 percentage points in the case of 30 to 39 year olds and by over 20 percentage points for 40 to 49 year olds.

It also indicates, however, that, although the gap has narrowed, there are still wide differences across the Union in the effect of both these factors on the proportion of women in paid employment. In Belgium, Greece, Spain, Italy and Luxembourg, employment rates of women who are married, though without a child under 10, remain significantly below those who are single (the difference in each case being more than 16 percentage points for women aged 30 to 39 — over 25 percentage points in Greece and Spain). In Denmark, Germany, Finland, Sweden and the UK, there is no significant difference in the proportion in employment between the two groups of women — indeed, in most of these countries, the employment rate for married women was higher than for single.

For married women of 30 to 39 with a child under 5, the employment



rate in the Union is over 20 percentage points lower than for women without a young child (and over 25 percentage points lower in the case of 40 to 49 year olds). In Germany, Ireland, Luxembourg and the UK, however, the difference is around 30 percentage points or more. In all four Southern Member States, it is under 15 percentage points.

Moreover, in Germany and the UK, a substantial proportion of women with children in employment work part-time (around 60% in Germany and 65% in the UK), as well as in the Netherlands (around 85%), where the difference in the employment rate for women with and without children is also wide (over 25 percentage points for those aged 30 to 39).

## Women in work and education levels

Educational attainment levels have a significant effect on both employment and participation rates for all women irrespective of their family circumstances, as they do for men. The effect, however, is considerably more pronounced than for men in the prime working age group, where even for single women without children, the relative number in work is markedly higher for better educated women than for less well educated.

For women aged 25 to 49 as whole, under half of those with only basic schooling were in employment in the Union in 1997 and under 60% were economically active. This contrasts with those with university degrees or the equivalent, of whom almost 88% were economically active and 81% were in employment — a gap of 32 percentage points in employment rates (Graph 103). The gap in both employment and par-

ticipation rates was substantial in all Member States, even in those with large numbers of women in work, such as Denmark and Sweden. It was particularly marked in countries where relatively few women pursue working careers, such as Belgium, Greece, Spain, Ireland and Italy, where participation rates for women with only basic education levels were some 35 percentage points or more below those for university graduates.

## Family responsibility and education levels

While education level is an important influence on whether women in general pursue working careers or not, its effect on women who are married and those with young children is especially marked. This reflects a number of underlying factors, particularly social background, the ease or difficulty of arranging child care and the extent of the net gain to household income from working, which is likely to be greater in the case of better educated women who can command higher salaries than for those who are less well educated.

For single women of prime working age without young children, around 89% of those with university degrees or the equivalent were in employment in the Union in 1997 as compared with only 68% of those with no qualifications beyond basic schooling (Graph 104). Both figures are less than for men in this age group, that for highly educated women only slightly but that for women with low education levels substantially, some 12% fewer being in employment than men with similar education levels.

The employment rate for single women with only basic schooling, at

around 60% or less in 1997, is especially low in Belgium, Spain and Ireland, where employment of women in general is very low. At the same time, it is much the same level in Denmark (under 60%), where relatively large numbers of women are in work, though under 20% of women of prime working age have only a basic level of education in Denmark as opposed to around a third or more in the other three countries. In each case, there were over 30% fewer women with this level of education in work than for those with university level. Although significant numbers of single women with only basic education are unemployed (11% of 25 to 49 year olds in the Union as a whole, 14% in Ireland, 15% in Belgium and 19% in Spain), the major part of this difference is due to much lower levels of participation among this group. Why such women should not at least be seeking employment is by no means clear, but it may be because of caring responsibilities, if not towards young children then perhaps towards elderly and frail relatives or family members with disabilities.

For married women of prime working age without young children, both the employment and participation rates of those with high levels of education are only slightly less than for single women with similar qualifications in most Member States (around 3 percentage points in the Union as a whole), though in Greece, Spain, Italy and Austria, the difference in participation is 8 percentage points or more. For married women with only basic schooling, however, both employment and participation rates are very much lower than for single women, the difference in the Union as a whole being over 18 percentage points in 1997. In countries where, as noted above, marital status has a major

effect on whether women are in work or not, the difference was over 20 percentage points — in Belgium, just over 21 percentage points, in Greece and Italy, around 25 points and in Spain and Luxembourg, around 30 points.

This implies that in these 6 countries, for married women with only basic schooling it may either not be worthwhile to seek paid employment or that social or cultural factors deter them from pursuing a working career. In all these countries, the participation rate for married women without children with university-level qualifications is over 33 percentage points higher than for those with a basic level of education, in Spain and Italy, as well as in Ireland, over 40 points higher (Graph 105). In most Northern countries, the gap is around 15 percentage points or less.

For married women with young children, the gap in participation and employment rates is even wider between those with high educational attainment and those with a low level. In the Union as a whole, almost 78% of women with a child under 5 and with university educa-

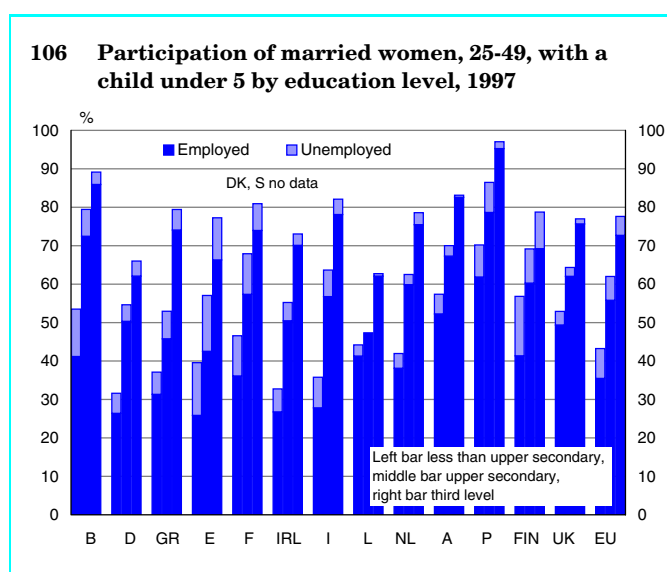
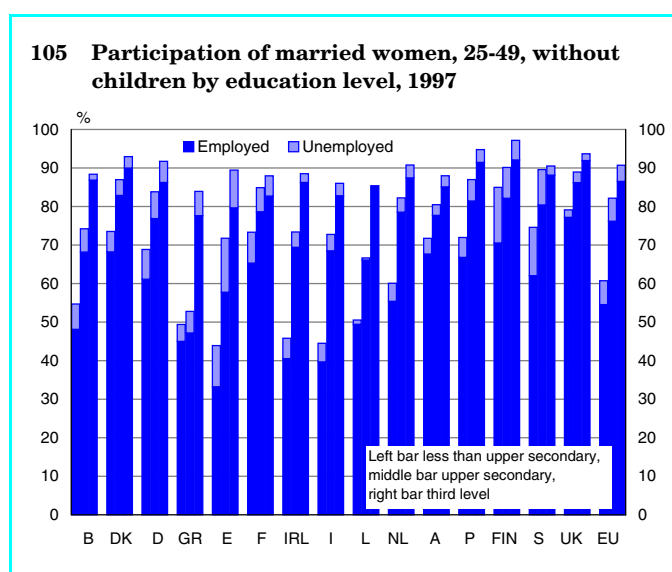
tion or equivalent were either in work or looking for work in 1997 as opposed to only just over 43% of those with basic schooling (Graph 106). The difference was again particularly wide in Spain, Ireland and Italy, though in the former two countries, no wider than for married women without children. For this group of women, however, the difference was substantial in most countries. Only in Finland and Luxembourg was it less than 24 percentage points and in Germany and France, similar to the Union average. Only in 5 countries (Belgium, Austria, Portugal, Finland and the UK) were more than half of married women with only basic education and with a child under 5 economically active.

This suggests that having children has a pronounced effect on the ability of women with relatively low educational attainment levels to pursue a working career in most parts of the Union, either because of a lack of affordable child care facilities or because the net gain to family income from working is not sufficient to justify the effort. (Participation rates are even lower for single women with basic education

and young children — under 40% in Germany, Ireland, Luxembourg and the UK — which points perhaps to a lack of child care facilities.)

The evidence also suggests, however, that having children also affects the ability or willingness of women with high levels of education to work, especially in a number of Northern Member States. In the UK, the participation rate of married women with a university or equivalent qualification and a child under 5 was some 17 percentage points lower than for those without children, in Finland and Luxembourg, around 20 percentage points lower and in Germany, some 25 points lower. On the other hand, in Greece and Italy, the difference is very small (under 4 percentage points), while in Portugal and Belgium, the rate is higher for those with children than for those without. In the first three countries, the extended family is still an important source of child care.

If employment and participation rates among women in the Union are to increase closer to the US level, then the focus of policy attention needs to be on women with





relatively low levels of education, especially those with children.

## Changes in educational attainment levels

The problem of low employment rates among less well educated men and women can in part be addressed by increasing education levels and, in particular, the proportion of young people who acquire upper secondary and university-level qualifications. Although there are no consistent data available to assess changing education levels among the work force directly over time, it is possible to gain some indication by comparing the attainment of successive broad age groups. This suggests that education levels among women have increased significantly over the past 25 years or so, while the improvement for men has been less marked and less widespread.

In 1997, almost 70% of men in the Union aged 25 to 29 had at least upper secondary level qualifications (leaving just over 30% with no

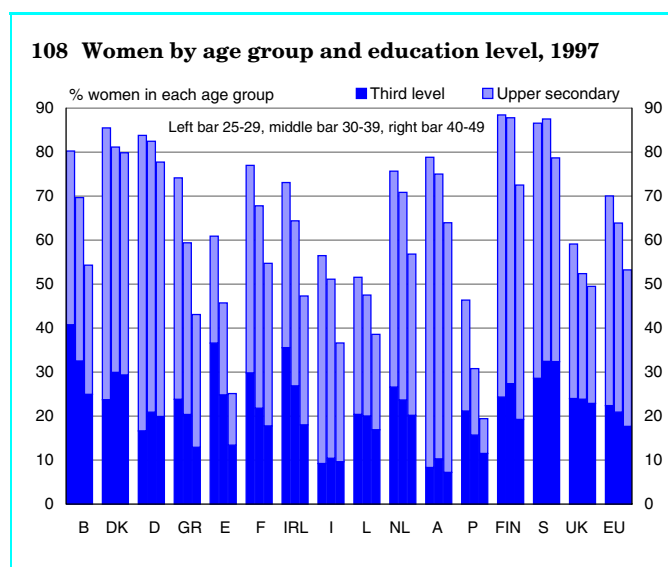
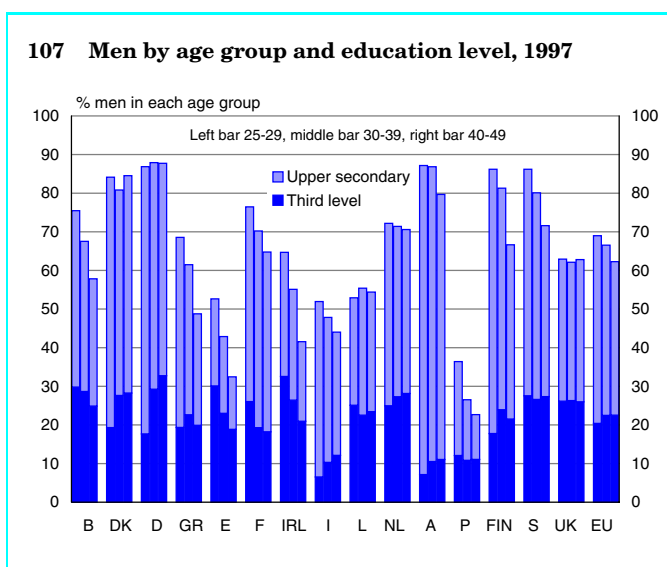
qualifications beyond basic schooling). This is slightly higher than for men aged 30 to 39 and almost 7 percentage points higher than for men in the 40 to 49 age bracket, which suggests an increase of a similar amount in the proportion of men remaining in education to acquire additional qualifications between the early 1970s and the early 1990s (very few people gain additional educational qualifications after they finish their initial education or training). The evidence also suggests, however, that there was no increase in the proportion of men acquiring university degrees or the equivalent over this period (even allowing for some in the 25 to 29 age group who had not yet completed their initial education), the proportion of men in each group with this level of qualification being just over 20% (Graph 107).

Nevertheless, there are marked variations across the Union in the apparent change and some sign of convergence in education levels. In Greece, Spain, Ireland and Finland — the first three countries with education attainment levels among men aged 40 to 49 well below the Union average — the proportion of

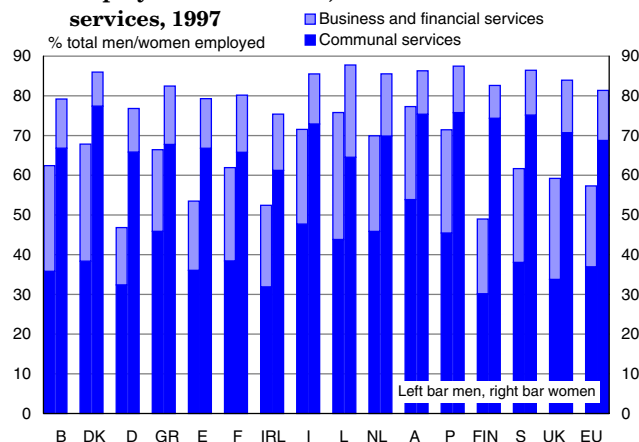
25 to 29 year old men with at least upper secondary level qualifications was some 20 percentage points higher than for those aged 40 to 49. In Denmark, Germany, the Netherlands and the UK — the first three countries with education levels among men aged 40 to 49 well above the Union average — there was little difference. In comparatively few countries (Belgium, Spain, France and Ireland), however, is there much sign of an increase in the proportion of men with a university level of education.

For women, some 70% of 25 to 29 year olds had at least upper secondary level education in 1997 and around 22% had university degrees or the equivalent, both figures higher than for men in this age group (Graph 108). Both figures, moreover, were also significantly higher than for women in the 30 to 39 and 40 to 49 age brackets, which were below those for men, suggesting that women are now beginning to surpass men in terms of their average educational attainment.

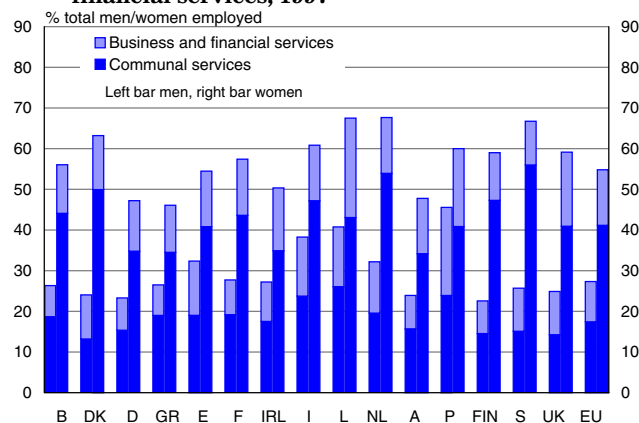
These features are common to most Member States. In all cases, the proportion of women in the 25 to 29



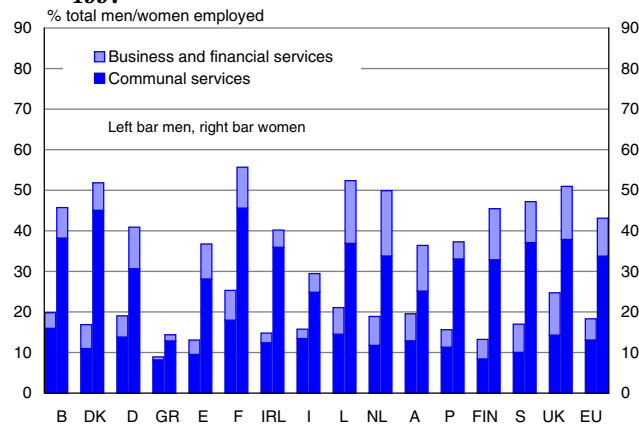
**109 Men and women with third level education employed in communal, business and financial services, 1997**



**110 Men and women with upper secondary level education employed in communal, business and financial services, 1997**



**111 Men and women with basic education employed in communal, business and financial services, 1997**



age group with upper secondary level qualifications was higher than for those aged 40 to 49, as in most countries was the proportion with university-level education. Moreover, in all countries with the exception of Germany, Luxembourg and the UK, the relative number of women aged 25 to 29 with at least upper secondary level education was higher than for men, in some countries, especially those in the South, significantly so. This was also true of the proportion with university-level education with the same three exceptions.

## The sectoral distribution of men and women by education level

The great majority of women with education levels above basic schooling work in two broad sectors of the economy, in communal services and in business and financial services, as do most men with high education levels. The vast majority of men with only basic education and most women work in agriculture, industry and basic services. While the former two sectors contain most of the activities in which employment is expanding, most parts of the latter three sectors are in decline. The demand for both men and women with high educational attainment levels is likely to continue to grow, just as it is likely to go on contracting for those with low levels.

In 1997, almost 69% of women aged 25 to 64 in the Union with university degrees or the equivalent who were in employment worked in communal services (public administration, education, health and social services, cultural and recreational activities and personal services), while another 12½% worked in

business and financial services. Over 81%, therefore, were employed in these two areas of the economy. In all Member States, over 60% of women with this level of education worked in communal services, in Denmark, Austria, Portugal and Sweden, over 75% (Graph 109).

While most men in employment with similar education levels also worked in the same sectors, the proportion was very much lower in the case of communal services, most of the jobs in which are publicly funded either directly or indirectly. In the Union as a whole, some 37% of men with university degrees or the equivalent worked in communal services, only just over half the proportion of women, while just over 20% worked in business and financial services, more than half as high again as the proportion of women. Although there is a slightly greater variation between Member States in these proportions than for women, only in Austria did more than half of men with high education levels in employment work in communal services and only in Germany (the low figure for which pulls the Union average down), Spain and Finland did less than 20% of men work in business and financial services. In most Member States, over 40% of men with this level of education worked in agriculture, industry and basic services (distribution, hotels and restaurants and transport), in Germany and Finland, over half.

Most women with upper secondary level education also work in communal, business and financial services. In 1997, over 40% of those in employment worked in communal services in all Member States apart from Germany, Greece, Ireland and Austria (where the figure in each case was around 35%) and 50% or

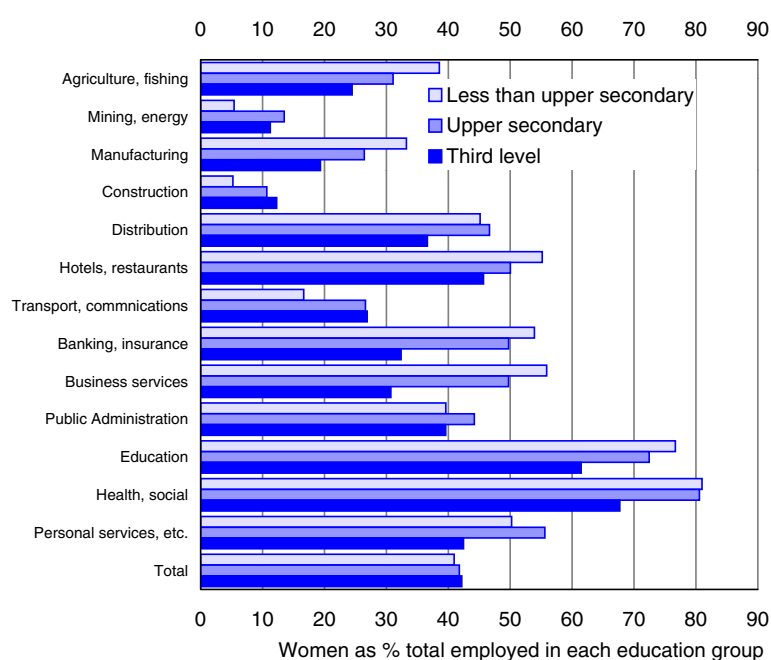
more in Denmark, the Netherlands and Sweden, while an average of around 14% worked in business and financial services (Graph 110). By contrast, under 20% of men with this level of education worked in communal services in all Member States except Italy, Luxembourg and Portugal, while an average of 10% worked in business and financial services. In most Member States, therefore (the only exceptions being the latter three countries), over two-thirds of men in this category worked in agriculture, industry and basic services.

In all Member States, apart from the four Southern countries plus Austria, around 40% or more of women with only basic education who had jobs were also employed in communal, business and financial services, a third on average in communal services (Graph 111). Over 80% of men in the Union with low

education in employment, on the other hand, worked in agriculture, industry and basic services and only in France and the UK was the figure much below 80% (around 75% in each case).

Finally one further feature of the sectoral distribution of men and women is worth noting. Despite the fact that the division between men and women in employment is much the same for each broad level of education (just over 40% of those aged 25 to 64 with university education are women, just as for those with upper secondary education and basic schooling), in virtually all sectors a smaller proportion of those with university-level qualifications are women than in the case of those with lower levels of education. This is true, to a significant extent, even in sectors where most of the work force are women, but where, accordingly, men take up a much larger

**112 Representation of women with different education levels in sectors in the Union, 1997**



share of the jobs filled by those with a high level of education — which are presumably the higher grade jobs — than they do of jobs performed by those with only basic education (Graph 112; this seeming paradox is explained by the very different proportions of men and women with given education levels working in different sectors and, therefore, by the different implicit weights attached to each in the summation of the total).

In the education sector, for example, 77% of the people employed in the Union with low educational attainment are women, but women account for only 61% of the jobs filled by people with university level education. This means that while 73% of men employed in the sector are university graduates or the equivalent, only 60% of women are. In health and social services, women make up 81% of those employed with only basic schooling, but only 68% of those with high education. While many teachers and doctors are women, therefore, an even larger proportion of ancillary workers, cleaners and so on are women.

Similarly, in business services, women comprise 56% of the less well educated people employed, but only 31% of the highly educated staff, and the respective proportions are much the same in banking and insurance. Whereas some 49% of men in business services have a high level of education, therefore, only 28% of women do (the respective figures in banking and insurance are 34% and 19%). The same is true, to differing extents, in all sectors, except those where there are very few women (construction, transport and mining) and in all Member States without exception.

In general, therefore, there are fewer women with high education

levels in most sectors of activity than would be expected given the number of women working in the sector. The implication is that women are less likely to fill higher grade jobs than lower grade ones, and, accordingly, less likely perhaps to be in the top positions than men. This accords with the findings on the difference in earnings between men and women reported in the previous section.

## Part II Section 1 The contribution of SMEs to employment

Small and medium-sized enterprises (SMEs) are a vitally important source of jobs in the Union and, on all estimates, make a major contribution to employment growth. The concern here is to examine the relative number employed in firms of different size across the Union on the basis of the latest data available, focusing in particular on employment in SMEs, and to consider the contribution of the latter to net job creation.

More specifically, the first section below presents estimates of the distribution of total employment between small, medium-sized and larger enterprises and organisations in Member States, based on the Eurostat, *Enterprises in Europe*, data, but supplementing this with data on the number employed in activities not covered by these data. The second section indicates that variations between Member States in the relative number employed in SMEs arise to a large extent from differences in the number of one-person businesses (or self-employed without employees), which might be due to differences in legal and/or fiscal systems, on the one hand, and differences in the relative importance of different sectors, on the other. The third section shows that there are, nevertheless, significant differences across the Union in the relative importance of SMEs in particular sectors.

The final sections attempt to assess the relative contribution of SMEs to employment growth, in the light, first, of their distribution between

sectors, secondly, of data derived from the annual Community LFS on changes in the number employed in establishments in which the self-employed work and, thirdly, of (the very limited) demographic data on the birth and death of firms and changes in their size.

### Employment by size of enterprise

In 1994, the latest year for which reasonably reliable data are available, small firms with under 50 employees accounted for just over 40% of all those in work in the Union, while medium-sized firms with 50 or more employees but less than 250 accounted for a further 10% or so (Graph 113). Since these proportions are unlikely to have altered much since 1994 (the distribution of employment by size of enterprise tends to change only very slowly over time), it is likely that just over half of all those in employment in Member States, therefore, work in SMEs. These figures, it should be emphasised, include all people in employment in the economy and not just those employed in enterprises, which is the usual way the

data on the relative importance of SMEs are presented. They include, in other words, those working in non-market activities and agriculture who are excluded from the enterprise data and who together represent around 25% of the total number in work in the Union — see Box for details of the estimation and the problems of distinguishing market from non-market activities.

If those working in SMEs in agriculture — almost all those employed in the sector — are included, the proportion is increased to around 56%. Of the remainder, those with 250 or more employees, just over 19% are employed in large organisations or enterprises in communal services (covering public administration, education and health and social services) and just over 24% are employed in large enterprises in other sectors. (It is not possible from the data to distinguish private enter-

113 Employment by size of enterprise in Member States, 1994



## The estimation of the division of employment by size of enterprise

The data on which the analysis is based come mainly from the Eurostat, *Enterprises in Europe* database. The statistics used are for 1994, the latest year for which the estimates are reasonably reliable. The data cover all 15 Member States, though involve a greater degree of estimation for some countries than others, especially for Belgium and Spain, for which data for total employment have been estimated from those for employees, and for Greece, Austria and Ireland (particularly the last), where incomplete data are available for individual NACE sectors.

These data, in principle, cover all non-agricultural market activities, except employment in households, and as such exclude public administration and other services classified as non-market. However, because the division between market and non-market activities differs substantially between countries, without seemingly reflecting real differences in supply characteristics, this gives rise to significant problems of comparability between Member States. The difficulty relates, in particular, to education and health care, employment in which is covered to varying extents by the Enterprise data — in the case of education, not at all in around half the countries. In Belgium, over 13% of total employment recorded by the *Enterprises in Europe* data is in these two sectors, while in the Netherlands, the figure is almost 12% (in health care only, education being excluded) and in Germany and the UK, around 7½%. On the other hand, the figure in France is under 4%, in Spain, 3%, in Italy, under 2% and in the three Nordic countries, only around 1% or less.

Partly in order to overcome this problem and partly to give a complete coverage of the number in work and the size of organisation in which they work, these data have been supplemented by data from the Community LFS and the Eurostat benchmark series for total employment. (LFS data for 1995 rather than 1994 are used in the case of Austria, Finland and Sweden, as well as Germany, for which data on the revised NACE classification are not available before 1995; in all four cases the NACE breakdown of employment in 1995 is applied to the 1994 benchmark figure to derive an estimate of employment by NACE 1-digit sector in 1994.) These data were used to obtain estimates of employment in the sectors not covered at all or only partly by the Enterprise data — mainly agriculture, public administration, education and health care. For the sectors where Enterprise data are available, these rather than the LFS data are used to obtain estimates of sectoral employment. For some sectors in some Member States, this involved making additional estimates to those made by Eurostat for missing values for individual size classes, though the effect on the overall results is very small.

The resulting figures for total employment differ only slightly from the benchmark series for the Union as a whole (for which the difference is less than 1%) and for most Member States. For Belgium and Spain, however, the Enterprise data are significantly higher than the benchmark figures, perhaps because of the estimation of self-employed and family workers, while for Finland and Sweden, they are much lower, in both cases because the Enterprise data are adjusted to a full-time basis. (For the latter two countries, LFS data used to estimate employment in public administration and communal services are adjusted approximately to a full-time basis.) These differences may well affect the percentage division of employment between enterprises of different sizes which is the focus here. To the extent that the self-employed are overestimated in Belgium, in particular, this may lead to an overestimation of the share of employment in very small firms and to the extent that part-time working is more prevalent in small firms than larger ones, the share of employment in these may be underestimated in Finland and Sweden.

Finally, it should be noted that the definition of an enterprise varies between countries. From an economic perspective, the most meaningful definition is in terms of an entity which has a high degree of autonomy over key policy decisions, which, in practice, might represent a number of legal units, each having a range of activities with establishments in a number of different locations. The data supplied by Member States relate in many cases to enterprises as organisational units comprising perhaps a number of legal units — but not to enterprise groups with centralised decision-making on certain aspects of policy — in some cases, to individual legal units or separate VAT units and, in some cases, to units in a single area of activity or even a single location. This variation inevitably affects the results obtained and comparisons between countries.

prises from those in the public sector and the division between market and non-market activities is fraught with difficulties.)

Of those employed in small enterprises of under 50 employees, almost 65% (26% of the total in employment) worked in firms with less than 10 people employed and, of these, some 30% were self-employed working on their own. Including agriculture (and using Community LFS estimates of employment by size class of unit in the sector), this implies that almost 30% of the total in employment in the Union worked in very small firms of under 10 and a third of these (just under 10% of total employment) were one-person businesses. These people were employed in over 20 million separate enterprises (4 million in agriculture), while there were also over 1 million firms with between 10 and 49 people employed.

Given these massive numbers, it is not too surprising that it should be difficult to monitor employment trends in small enterprises and, most especially, in very small businesses. This difficulty is compounded by the high rates of creation of new businesses each year — even in years of economic recession — almost all of which employ very few people, and the high rates of closure among small firms, as indicated below.

The relative number employed in SMEs varies significantly between Member States. In general, it is higher in Southern parts of the Union than in the North, even excluding the many very small businesses in agriculture. Correspondingly, large enterprises and organisations, ie including the public sector, are a less important source of jobs in Southern Member

States than in Northern ones. The single exception seems to be Belgium (though there is a question-mark over the Enterprise data which record many more people in work, especially in sectors characterised by small firms, than the LFS), which has the third highest proportion of employment in small enterprises in the Union behind Spain and Italy.

In Spain, small firms of less than 50 employees accounted for 55% of total employment in 1994 and very small firms of under 10 for almost 40% (these figures may be over-estimates, since, as in Belgium, the Enterprise data record many more people in work in sectors with a lot of small businesses, than the LFS). At the same time, around 10% of employment was in agriculture, the vast majority in very small businesses. In Italy, some 51% of employment was in small enterprises and 35% in firms of under 10, with an additional 8% being in agriculture, while in both Greece and Portugal, small firms were responsible for around 43% of employment and agriculture for some 20% and 12% of employment, respectively. In all four countries, therefore, considerably more than half of all those in work were employed in small businesses in the economy as a whole, in Spain and Greece, over 60%.

Given that between 8% (Italy) and 12% (Portugal) of employment was in medium-sized firms of 50 to 249 employees, large enterprises, including large non-market organisations, were responsible for only around a third of employment in Italy and Portugal and not much more than a quarter in Greece and Spain. Excluding communal services, only 15% or less of employment in all four countries was in large enterprises of 250 or more and well under 10% in Greece.

The position in the South of the Union contrasts markedly with that in Finland and Sweden, where under 30% of employment was in small firms and under 20% in very small ones. Even including agriculture, the relative number working in small businesses in the two countries was still under a third in 1994. (These figures, however, are based on full-time equivalent data and, accordingly, may well underestimate the relative number employed in small firms.) The counterpart is that around 55% of those employed worked in large enterprises or organisations, well over half of these in Sweden and just under half in Finland in communal services.

In the rest of the Union, small firms, including those in agriculture, accounted for around 40% of employment in Denmark, Germany, Luxembourg, Austria and the UK, for just under 40% in the Netherlands, for just over 40% in France and for slightly over 45% in Ireland (though here too the data are subject to a wider margin of error than in other countries).

## **SMEs and the structure of activity**

While it is widely held that SMEs have a vital role to play in technical advance, innovation and job creation, the evidence presented above at first sight casts doubt on this belief. It suggests that, with a few exceptions, small businesses are more prevalent in the parts of the Union which are lagging behind in economic development (Belgium and Italy are the main exceptions, though in the case of the latter, there is a wide disparity in economic performance between the North and South of the country) rather than in the more prosperous and economically stronger areas. A

closer examination both of the thesis and the evidence, however, reveals ways in which the two can be reconciled.

In particular, it indicates that differences in the overall share of employment in SMEs between Member States can in large measure be explained by two factors: first, variations in the prevalence of one-person businesses, or self-employed without employees, which may have as much to do with fiscal and legal differences as with economic factors; secondly, variations in the structure of economic activity, or the distribution of employment between sectors.

Merely comparing the relative numbers in the work force employed in small enterprises as opposed to larger ones in different Member States is a much too simplistic means of assessing either the relative economic importance of small businesses or their potential contribution to growth. (This is similar to the point made elsewhere in this report that counting the number of self-employed tells us very little about the relative prevalence of entrepreneurship across

the Union.) In the first place, a large proportion of the small businesses in the Southern Member States, in particular, are either in agriculture or are one-person concerns employing no-one but the owner and perhaps their family, often on an unpaid basis (in practice, many are both in agriculture and one-person businesses). In the second place, the small concerns not in agriculture and employing more than the owner tend in the South of the Union to be disproportionately in basic services, such as retailing or hotels and restaurants, or in craft sectors. What matters for the growth potential of the economy is not so much the overall number of small businesses but their technical characteristics and the activities they perform — as well as, of course, their links with other parts of the economy, such as with research institutes and universities as well as other firms, their access to finance and so on.

Excluding businesses which have no employees as such but only proprietors and unpaid members of their families and excluding agriculture gives a somewhat different comparative view of the importance of small enterprises. Over the Union as

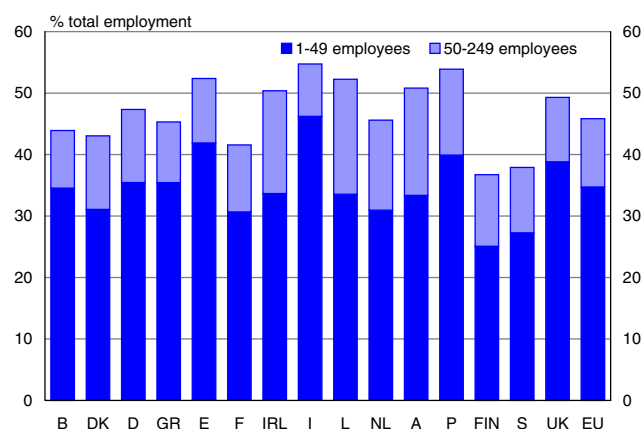
a whole, small firms with more than the owner employed but under 50 employees accounted for some 35% of non-agricultural employment in 1994, while medium-sized firms were responsible for an additional 11% (Graph 114).

Although Italy, Spain and Por-

tugal still show the largest proportion of employment in small firms on this basis, at around 40% in the last two countries and 46% in Italy in 1994, the gap between these countries and Member States in the North of the Union is reduced considerably. In the UK, the proportion of employment in small firms was 39%, while in Germany, it was just under 35%, much the same as in Belgium (where businesses employing no-one but the owner and members of their family account for around 16% of total employment in the economy according to the enterprise data). In Greece, the proportion in small firms on this basis is reduced to a similar level (just over 35%) as it is in Ireland (34%). In the other Member States, except Finland and Sweden, where the relative number of jobs in small firms remains lower than elsewhere in the Union (partly because of the nature of the data), small businesses account for between 31% (Denmark, France and the Netherlands) and 33½% (Austria and Luxembourg) in all cases.

The importance of medium-sized firms with between 50 and 249 employees, in general, varies slightly less between Member States, from just under 19% of employment excluding agriculture in Luxembourg and around 16½% in Ireland and Austria to just under 10% in Belgium, Greece and Sweden and 8½% in Italy. Leaving aside businesses with only the owner employed, the share of non-agricultural employment in SMEs, therefore, ranged from between 50% and 55% in Spain, Ireland, Italy, Luxembourg and Portugal and just below 50% in Austria and the UK to around 42% in France and below 40% in Finland (37%) and Sweden (38%), with the share in the other Member States being between 43% (Denmark) and 46% (Germany).

**114 Employment in SMEs, excluding agriculture and firms with no employees, 1994**





As described below, however, the relative importance of SMEs varies markedly between sectors. Since the share of the workforce employed in different sectors also differs between Member States, this affects the overall contribution of SMEs to employment. In other words, countries with relatively large sectors where SMEs tend to predominate, such as distribution or hotels and restaurants, would tend, other things being equal, to have comparatively high levels of employment in SMEs. On the other hand, those like Finland and Sweden with a high share of employment in sectors typically characterised by large enterprises or organisations, including communal services, would tend to have smaller numbers working in SMEs.

Adjusting for differences in the sectoral division of overall employment in general, further reduces the difference between Member States in the proportion of the work force employed in SMEs. While Italy still emerges as the country with the largest proportion of employment in SMEs (54%, calculated by assuming that it has the same division of employment between sectors as in

the Union as a whole), it is not so different from most other countries in the Union (Graph 115). On a sector-adjusted basis, SMEs, excluding those with no employees, accounted for between 48% and 52% of non-agricultural employment in 9 Member States, including Sweden, Germany and the UK as well as Spain, Portugal and Ireland. Only in Belgium, France, Luxembourg, the Netherlands and Finland was the proportion less than this.

Accordingly, there is much less variation in the typical size of enterprise within sectors across the Union than the simple comparison of employment shares would suggest.

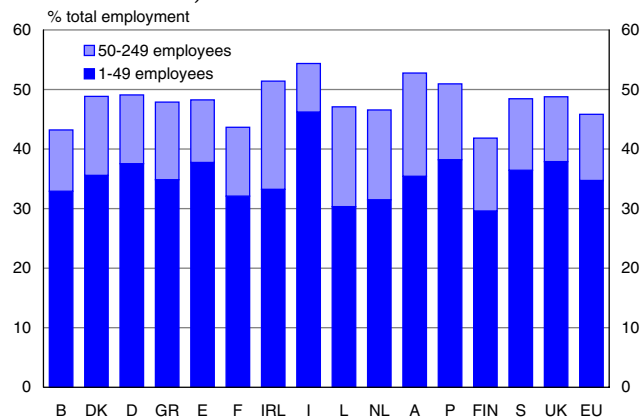
There is also a difference in the distribution of those employed in small firms between sectors in the Southern Member States and the Northern ones, with proportionately more working in manufacturing and basic services and fewer in business and more advanced services. In the Union as a whole, around 65% of those employed in small firms worked in manufacturing, construction, distribution (mainly retailing) and catering (hotels and restaur-

ants), while 13% were employed in business services (Graph 116). In Greece and Portugal, around 80% worked in the former group of sectors, only 5% and 7% in business services, while in Italy, the figures were 76% and 9%, respectively.

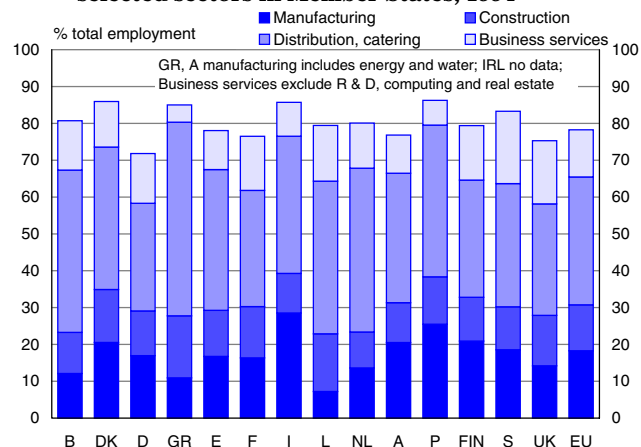
### SMEs by sector

The share of employment in SMEs varies markedly between sectors of activity. Small businesses are particularly important in catering, where, in the Union as a whole, some 55% of employment was in concerns with less than 10 employees in 1994 and a further 22% in ones with between 10 and 49 employees (Graph 117). They are equally predominant in other services (including mainly personal services and recreational and cultural activities), where a similar proportion of employment (almost 78%) was in concerns of less than 50, and only slightly less important in construction, where small firms accounted for 74% of the work force in the sector. In all three cases, SMEs, including medium-sized enterprises of under 250 employees, were responsible for over 85% of total employment. This was true in most Member States and in all three sec-

**115 Employment in SMEs excluding agriculture and firms with no employees, adjusted for sectoral differences, 1994**



**116 Employment in small firms (< 50 employees) in selected sectors in Member States, 1994**



tors, with the partial exception of catering in the UK and Finland (where they accounted for around 30% of jobs), large concerns were of minor importance for employment.

Small businesses also represent a major source of jobs in distribution, though here there is more variation in their relative importance across the Union. Overall, firms with under 50 employees were responsible for 69% of employment in the sector in 1994, with 70% of this being in businesses with under 10 employees, and SMEs for 78% (Graph 118). In the Southern Member States, small businesses accounted for an even larger share of employment, for over 90% of the total in Italy (with concerns of under 10 employees alone accounting for 76%) and for over 80% in Greece, Spain and Portugal, with a further 5–10% being employed in medium-sized enterprises. In most of the Northern Member States, on the other hand, though SMEs are the biggest provider of jobs, large enterprises are much more significant than in the South. In Germany, they were responsible for almost a third of total employment and in the UK, for just under 40%. This re-

flects the progressive growth of large retail chains and the gradual demise of small shops in these countries, in contrast so far with the South of the Union.

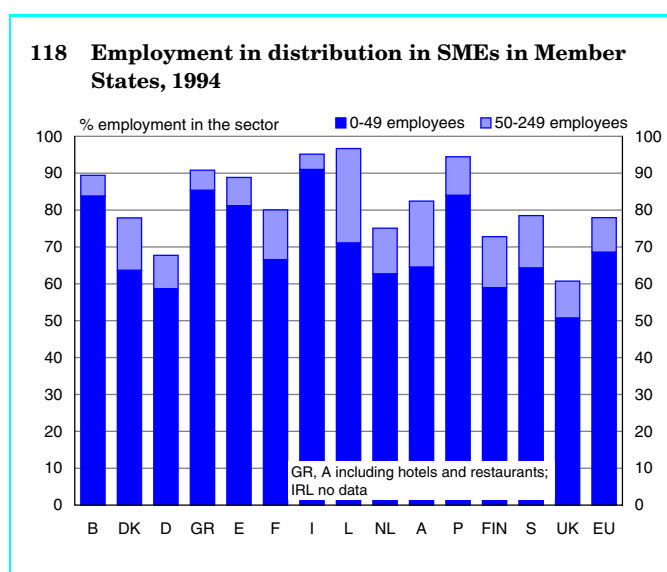
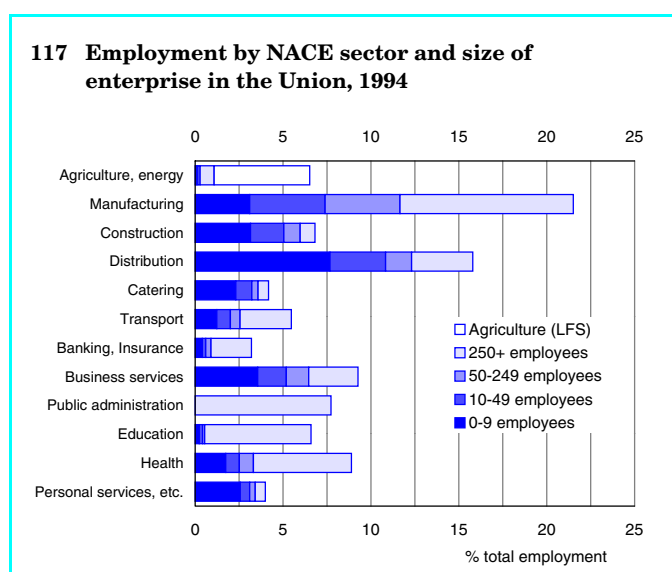
Large enterprises or organisations, by contrast, are major providers of jobs in transport and financial services, as well as, of course, in health care and education and gas, electricity and water. In transport (by road, rail, air and sea), some 53% of employment in the Union in 1994 was in large firms with 250 or more employees as against 37% in small enterprises, while in banking and insurance, large firms accounted for 72% of jobs in the sector and small firms for only 19%. In none of the Member States, including those in the South of the Union, were the proportions significantly different from these.

In the remaining two broad sectors, manufacturing and business and related services, large firms are less important and, in most countries, small businesses are equally, if not more, significant for employment. Especially in manufacturing, however, there are marked differences

in the prevailing structure of enterprises across the Union.

In this sector, large enterprises accounted for 46% of employment in the Union as a whole in 1994, while small firms with under 50 employees were responsible for 34% of jobs and medium-sized firms for 19%, much more than in any other broad sector (Graph 119). Once again, the importance of small firms relative to large ones differs markedly between the North and South of the Union. In all four Southern Member States, only around a quarter of employment was in large firms with 250 or more employees and around a half in small firms of under 50 (as much as 58% in Italy, with between 20% (Italy and Spain) and 30% (Greece and Portugal) being in medium-sized firms).

In all Northern Member States, except Austria (where the figure was only slightly below), at least 40% of employment in manufacturing was in large enterprises and in most around half or more. In Germany and Luxembourg, the proportion was over 60%. In all countries, apart from Belgium (where the figure was



36%), under a third of employment was in small firms of under 50.

In business and related services, there is less of a difference, in general, in the structure of enterprises between Member States. In 1994, 30% of employment in the Union was in large firms and 56% in small ones (Graph 120). Apart from in Germany (where the figure was 45%, much higher than anywhere else), in no Member State did large concerns account for significantly more than 30% of employment and in many (including the three Nordic countries and Belgium as well as Spain and Portugal), the proportion was only around 20%. In Greece and Italy, large firms were even less important, accounting for only some 10% of employment in the sector (probably less in Greece, though the data do not allow the precise figure to be estimated).

In most Member States, small concerns with under 50 employees were responsible for 60% or more of employment in business services and for 80% in Italy (and probably more in Greece). The main exceptions were Germany and the

Netherlands, where the figure was only around 45%.

## SMEs and employment growth

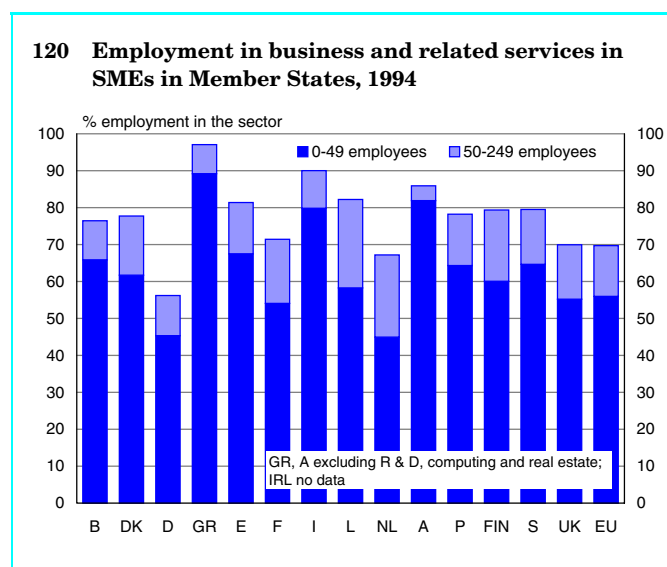
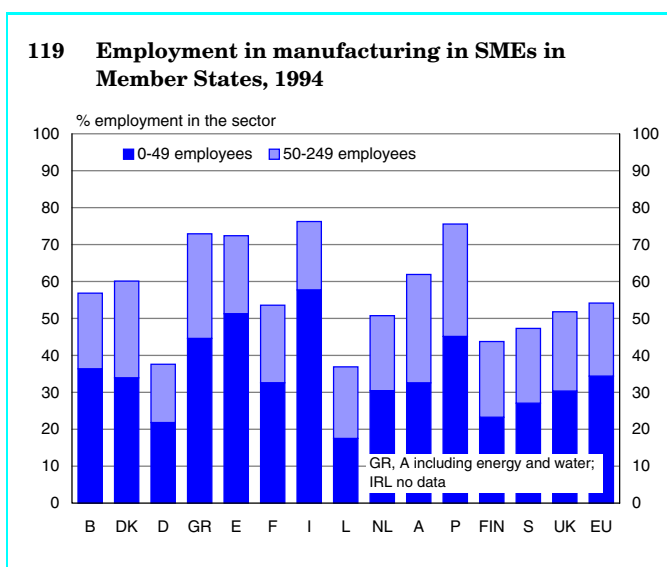
The above analysis indicates that there are differences both in the relative importance of SMEs in different sectors across the Union and in the sectoral division of economic activity, which affects the overall share of employment in enterprises of different sizes. The larger share of employment in small businesses in the South of the Union is due, to a significant extent, to the structure of activity in the countries concerned, though in Italy, in particular, it is also true that small concerns are larger providers of jobs than elsewhere. This is just as much the case in manufacturing and business services as in retailing or other basic services.

In terms of the potential contribution of SMEs to employment growth in future years, much depends on the sectors in which they are located. The sectors which are likely to show the largest rise in employment are those which have shown

the largest increase in the recent past, namely, business services, personal and recreational services, hotels and restaurants, and health care and education. As indicated above, the first three sectors are all characterised by a large share of employment in SMEs in all countries and, to a major extent, continuing net job creation in these activities is likely to be associated with the growth of SMEs.

In health care and education, on the other hand, continuing employment growth depends in large measure on national government policy across the Union on public expenditure as a whole and, within this, on the priority attached to these services (see the section on restructuring public expenditure elsewhere in this Report). This may or may not be associated with a growth of SMEs depending on the way the service is organised, which differs between Member States, as well as on the extent of private provision and the controls imposed on this.

In education, almost all employment is in large public sector organisations and SMEs account for very few jobs (under 10% in all Member States,



except Spain, where the figure recorded is 23%). In health care, on the other hand, the relative number employed in SMEs ranges from under 5% in Denmark, Finland and Sweden, where health and social workers are predominantly employed by the State, to around a third in Belgium, Spain, France, the Netherlands and the UK and as many as 79% in Germany. In all of the latter group of countries, a significant number of those employed work in private sector concerns which are effectively under some form of State management and whose income, in large measure, is either directly or indirectly controlled by government. The potential for job creation in health and social services, therefore, is unlikely to be affected by the structure of the sector, the size of enterprise in which people work and whether they are formally employed in the private sector or directly by government — except insofar as the private market for health care expands (which, in most Member States, it has shown little sign of doing in the past).

Whether, these sectors apart, employment stands to increase by more in particular activities in different Member States the larger the share of employment in SMEs is an open question. What is clear from the limited data available on changes in employment by size of enterprise over time is that the employment growth which results from the creation of new enterprises, almost all of which tend to be small, is as important as that which results from the expansion of existing firms. This is often a response to a recognition of new market possibilities and/or a result of the development of new products or new processes. There is no necessary reason to expect the rate at which this happens to be related to the prevailing structure of enterprises in the sector in question,

though the typical size of firms in different activities may reflect existing technology and the extent of wider benefits, or the lack of them, from firm size. While technical advances, particularly in information technology, are tending to reduce the advantages of large-scale production in most sectors, it remains the case in a number of areas that small firm size is a formidable barrier to being able to compete effectively.

At the same time, niche markets and areas of specialisation are opening up in many parts of the economy, associated with the growth of real income and the demand for a wider variety of goods and services. New technology is a major factor underlying this. At the same time, it enables small businesses to compete on more favourable terms with larger concerns and, in some cases, to gain a competitive advantage, precisely because of their small size and greater adaptability. This is especially the case in high-tech sectors, such as computer software development and biotechnology, where clusters of SMEs in particular locations, often linked to local universities, have proved a potent source of growth as well as innovation (especially in the US, but also parts of Europe). Indeed, it is becoming increasingly common for large enterprises to divide their activities into smaller units with varying degrees of autonomy in order to exploit the advantages of small size, whilst retaining financial control over them. (A marked feature of business development in recent years has been the growth of financial holding companies with activities spread over a wide range of activities.)

Equally, there is a growing tendency for large firms to contract out particular activities to smaller ones, so taking advantage of their specialised know-how, flexibility and lower costs

as well as shifting some of the risks involved in innovation away from themselves. At present, there are no data available on the contribution of such outsourcing to the growth of SMEs, though indications are that it is significant.

The data presented above do not reveal the extent to which small firms, or rather what are distinguished as individual enterprises, are linked to large ones either through financial ties or agreements of varying degrees of formality. This is potentially a serious limitation of the data which needs to be borne in mind when interpreting the results of the above analysis and when assessing the contribution of SMEs to job growth.

### **Estimates of changes in employment in small firms**

As noted earlier and as implied by the analysis of firm size above, there are an enormous number of individual enterprises in the European Union, the vast majority of which employ very few people. At the same time, as indicated below, the evidence suggests that a significant number are either created or closed down each year, so adding to the difficulty of monitoring how many people are employed in small enterprises and how this is changing over time. It also makes for problems in assessing the contribution of small firms to net job creation, which is not entirely the same issue. The fact that the employment size of firms changes over time, and that small concerns at a given time can become larger ones at a later date, just as large firms can shrink in size, means that their contribution to job growth cannot be measured simply by comparing the relative number employed in them at two points in time (see Box p.107).

Estimates of the number employed in small businesses derived from the Community LFS (see Box p.108) suggest that their share of employment has tended to change relatively little over the 1990s, though it may have increased slightly. In the Union as a whole, the estimated share of employment in services of businesses with under 10 people employed was the same in 1997 as five years earlier (it should be noted that like the analysis above, all employment in services, including in non-market activities, is covered here; no data, however, are available for Italy). The share of firms with under 50 people employed, however, seems to have risen slightly between the three years 1992 to 1994 and the three years 1995 to 1997 (from 32% to 32½%, though no significance should be attached to the absolute figures themselves because of incomplete coverage of employment in small businesses) (Graph 121).

This represents an increase of around 1½ million employed in small firms in the service sector over this period in comparison with an increase of around 3½ million in total service employment. Despite the statistical difficulties noted above, it is reasonable to conclude from this that small firms contributed disproportionately to employment growth in services over this period (for this not to be the case would require all of the increase in the small firm share of employment to result from large firms shrinking in size, which is not very plausible).

The increase in the share of small firms in service employment during these years was fairly widespread across the Union, rising in 7 of the 11 Member States for which data are available. Moreover, in three of the four countries in which the share fell — Greece, Ireland and

### **The problem of measuring the contribution of SMEs to employment growth**

There are three main aspects of quantifying the contribution made by firms of different size to net job creation, each involving significant problems which need to be overcome to give reliable estimates.

First, the large number of firms operating at any time need to be satisfactorily surveyed in order to obtain reliable data on the number they employ, which means overcoming the problem of a very large and continuously changing population of very small enterprises which makes selecting a representative sample difficult.

Secondly, since very small firms being created or closed down can have a major effect on changes in employment, it is essential that business start-ups and failures are accurately recorded on a timely basis. This requires reliable and up-to-date businesses registers which record new enterprises as soon as they begin to trade (which may be sometime after they are set up) and failing ones as they cease trading (which may be sometime before they formally close down).

Thirdly, the movement of existing firms between employment size classes and the change in the average number of people they employ needs to be monitored in order to complete the picture, otherwise misleading conclusions are liable to be made about the contribution of firms of different size to job growth. In particular, the observation that the proportion of employment in small as opposed to larger firms tends to remain relatively constant over time in itself says nothing about their respective contributions to net job creation, since it might be the result of the increase in employment from small firms expanding being offset by the reduction in employment from larger firms contracting. An unchanged share of employment in small firms is, therefore, perfectly compatible with small firms being responsible for most if not all of the job growth which has occurred. (Evidence from the US indicates that the share of employment in different sized firms has indeed tended to remain stable over time, but detailed investigation suggests that small firms have been disproportionately responsible for employment growth in recent years.)

To overcome this problem requires that individual firms are monitored over time so that any change between employment size classes can be tracked. In practice, this means being able to identify firms and the number they employ in separate surveys, an exercise which the enterprise demography project being undertaken in Eurostat is designed to perform. At present, however, demographic data are available for only a small number of Member States and then only for a few years.

Portugal — it is significantly higher than in the rest of the Union, implying that there was some tendency for shares to converge. In the other country, the UK, the reduction in share was relatively small and concentrated among the very small businesses with under 10 people employed.

The share of small firms seems to have risen more significantly in industry over the 1990s. In the Union as a whole (though again excluding Italy), the average share of small firms of under 50 in employment rose by just over 1 percentage point between the three years 1992 to 1994 and 1995 to 1997, with all of the increase concentrated in businesses with less than 10 people employed (Graph 122). In consequence, the number working in small industrial concerns rose between the two halves of the period while the number employed in the sector as a whole declined.

As in services, the share of employment in small firms in industry rose in 7 of the 11 Member States over the period. Moreover, three of the four countries in which it fell — Greece, Portugal and the UK — also

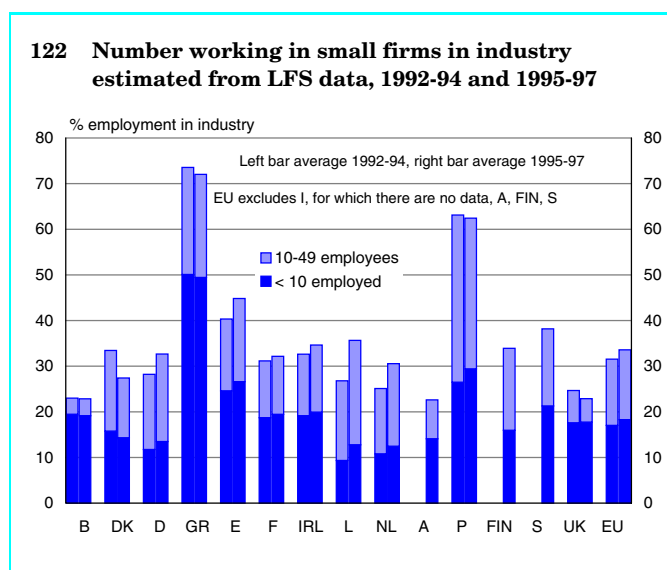
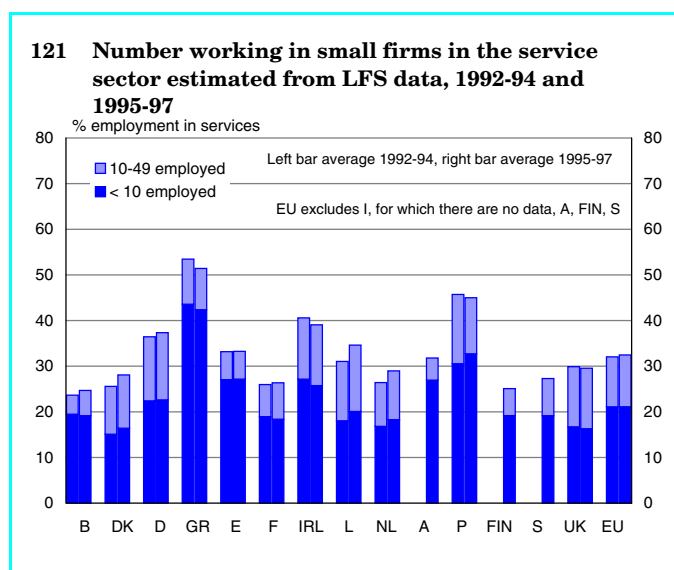
experienced a decline in the small firm share in services, the first two again having a much larger proportion of jobs in small businesses than other Member States.

### The contribution of small firms to job creation

Changes in employment from one year to the next are always the result of very much larger gross changes in jobs, with around 1 in 6 people moving between jobs or into, and out of, work each year (see *Employment in Europe, 1997, Analysis of key issues*). This process is associated, in turn, with a great many new firms coming into being, virtually all of them very small in terms of the number they employ, and a similar number of existing ones, again mostly very small, closing down, as well as with firms expanding or contracting jobs. Data on the relative scale of the different aspects of the process and of the contribution of small firms to net job creation as compared with larger ones are, however, extremely limited.

An ongoing programme of work in Eurostat on enterprise demography is designed to rectify the lack of hard information, without adding unacceptably to the costs of data collection or the administrative burden imposed on small firms, which are least able to bear it. The work has already produced some data and, while these relate only to a few countries for a few years, they provide an indication, albeit tentative, of the quantitative importance of small enterprises, both those starting up and those expanding, in the job creation process. The results of analysing the data, moreover, seem to be consistent with recent research studies carried out in the US which indicate the major role played by small firms in employment growth.

The results can be summarised as follows (see Box p.110 for details). First, a significant proportion of new jobs created tend to be in very small firms which start trading. At the same time, very small firms are far more likely to go out of business than larger ones and, correspondingly, people working in them are far more vulnerable to job losses as a result.



### **Estimation of changes in employment in small firms from LFS data**

Data collected as part of the annual Community Labour Force Survey (LFS) provides a potential insight into changes in the numbers employed in small firms over time (though not necessarily into their contribution to job growth — see Box). In themselves, data on self-employment are liable to be a misleading guide to the relative importance of small businesses since, in the first place, 60% of the self-employed in the Union have no employees and the 40% which do may employ a variable number. Secondly, owners or managers of small firms may not necessarily be self-employed but may instead be employees of the company. Nevertheless, an indication can be gained of the relative number employed in small businesses from additional information provided in the LFS.

Specifically, details are requested from respondents to the survey of the number of people working in the local unit in which they are employed. Crossing these data with those on self-employed gives an estimate of the number working in the units which the self-employed are responsible for and their distribution in terms of employment. These estimates can then be related to the data on the total number in work to give the share of employment in units of different size. (LFS data for Italy on employment in units are very incomplete and the country has been excluded from the analysis.)

There are a number of potential problems with this approach which do not, however, nullify its usefulness, particularly as an indicator of the changing importance of SMEs over time. In the first place, the LFS data relate to units or establishments rather than enterprises, though this ought not to affect the results too much since the incidence of self-employed with more than one business establishment ought not to be too high and may not greatly affect comparisons over time. Secondly, as noted above, not all firms are necessarily operated by someone who is self-employed. Thirdly, people who are self-employed may work in the same unit — perhaps in partnership — with someone else who is self-employed, and, as a result, the number of employees imputed to them will be double-counted. This in some degree might offset the effect of the first problem.

Fourthly, the data on the number employed in local units are subject to some uncertainty since respondents (who may be a member of the household other than the person whose details are being recorded) may not know precisely how many work in their establishments. This problem, however, is likely to be less serious for the self-employed who, after all, ought to have a good idea of the number they employ, than for respondents in general. Moreover, the uncertainty is likely to be greater for large enterprises than small ones which are the concern here.

In practice, the results of the exercise are very encouraging. The estimates of the share of employment in small concerns tend to be very stable over the 6 years, 1992 to 1997, for which it is possible to carry out the analysis, suggesting that the problems listed above may not be too serious. They are also reasonably similar to the *Enterprises in Europe* data, especially in terms of relative levels, though in general lower, implying that some firms are being missed because no-one working in them is self-employed and/or that some of the self-employed operate more than one unit.

Nevertheless, while the estimates constructed may be indicative of changes over time, because of the small sample nature of the LFS data, not too much should be read into changes between adjacent years. Although the fluctuations between years tend to be very small, averages of the first three years of the period and the second three years are used in the analysis to minimise the effect of this factor.

## The results of studies of enterprise demography

At present, data are available for only five countries for a limited number of recent years — Finland for the years 1992–95, Sweden for 1993–95, Spain for 1994–95, Portugal for 1993–94 and France, for the years 1987 to 1994, but only for employment in the firms created or closed down. It should be emphasised that these data are derived from different sources in the countries in question and, therefore, may not be fully comparable between them, though they are probably indicative of the role played by SMEs in the job creation process. Analysis of these data reveals the following features.

People affected by firms setting up in business or closing down predominantly worked in very small enterprises. In Finland, an average of over 15% of people working in firms with less than 5 employees were employed in companies which were either created or closed down over the period 1992 to 1995, while in Spain, the figure was over 20% in 1995 (and this only for employees) and in Portugal, 25% in 1994 (Graph 123). Similarly, in France, over the period 1987 to 1994 (for which more detailed data are available), an average of 17% of those working in firms of less than 6 employees were affected by the opening or closure of businesses, as compared with 11% in firms with 6 to 19 employees, 7% in those with 20 to 99 and only 2% in firms larger than this.

The relative number affected by the opening or closure of small companies seems to be fairly stable over time. In France, for example, the number of jobs created by firms of less than 5 employees setting up in business varied only from 7% of total employment in firms of this size (in the recession years of 1992 and 1993) to just under 9% (in the growth year of 1989), while the number of jobs lost through closure varied from just over 8% to just over 9% (in 1994) (Graph 124). Much the same was true of slightly larger, but still small, firms of 6 to 19 employees, though the rates of creation and closure were much smaller.

Small firms which moved up a size-class tended to add more to employment than larger firms. In Finland, Sweden and Portugal (the only countries for which data are available), small firms with 20 to 49 employees which moved up in size-class from one year to the next accounted for a larger share of employment than either very small firms of under 20 employees or medium-sized firms with 50 or more employees (Graphs 125 to 129). This was true of all broad sectors and for all years for which data exist. However, these were also the firms which tended to move down in size-class. Again in all three countries and for all broad sectors, employment in small firms with 20 to 49 employees which moved down in size class declined by more than in either medium-sized or larger firms, but, in most cases, the

loss of employment was no greater, relative to the number they employed, than larger firms.

At the same time, it is important to note that dividing the firms between the specific size-classes chosen tends to bias the results, simply because for either very small firms with under 20 employees or medium-sized firms with 50 to 249 to move up a size class requires, on average, a bigger proportionate increase in employment than for small firms with 20 to 49 employees. In addition, large firms of 250 or more employees cannot by definition move up in size class, while very small firms cannot move down without going out of business. To take account of this point and to complete the picture of enterprise demography, it is, therefore, also important to examine the change in employment in those firms which did not change size-class.

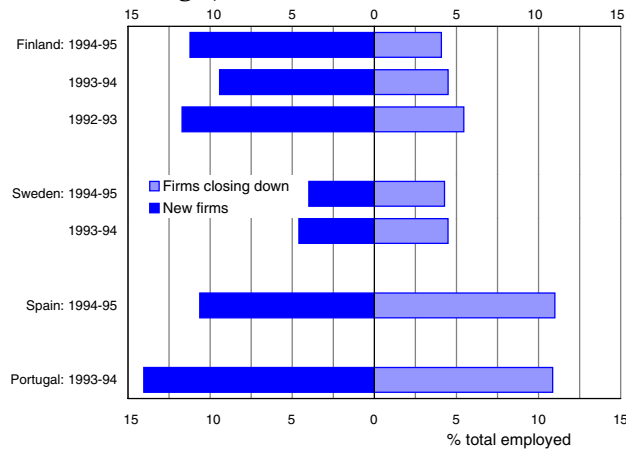
In Finland, there was a fairly uniform tendency for the decline in employment in 1993, a year of large job losses, to be disproportionately concentrated in larger firms, with very small firms of under 20 employees actually showing a gain in jobs in industry and services other than distribution. In 1994, however, very small firms suffered disproportionate jobs losses in these two sectors as well as in distribution, hotels and restaurants, while in both industry and other services, medium-sized firms with 50 to 249 employees increased their employment on average. In construction, job losses were again disproportionately concentrated in larger firms. On the other hand, in 1995, a growth year, job gains were concentrated in smaller firms in all sectors, though in construction and distribution, medium-sized firms showed a similar rise in average employment, and in industry, the increase in average size of firm was much the same for all size classes.

In Sweden, in both 1994 and 1995 and in all broad sectors, the average number of employees rose by more the smaller the size of firm. For example, in both years, very small firms with under 20 employees increased their employment by around 10–11% in industry and in other services, while employment in large firms with 250 employees or more fell.

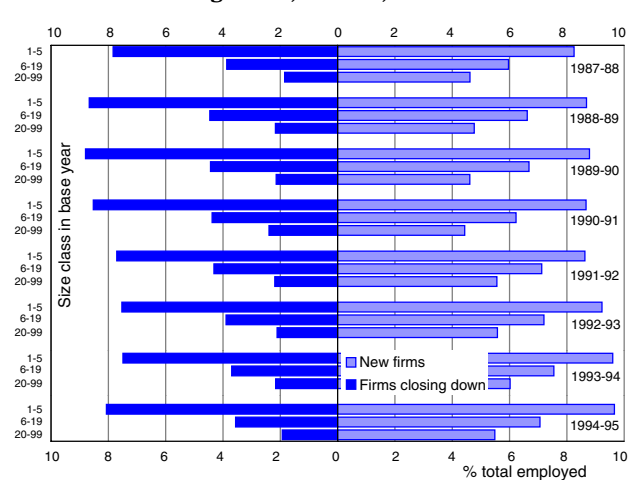
Finally, in Portugal, in 1994, a year of employment decline, small firms increased employment by more than larger firms in industry, while in construction, they experienced a smaller fall. In distribution and hotels and restaurants, however, small firms with 20 to 49 employees and medium-sized firms with 50 to 249 employees suffered a fall in employment and large firms made the biggest gains. In other services, very small firms lost jobs as did large firms, while the gains were concentrated in medium-sized enterprises.



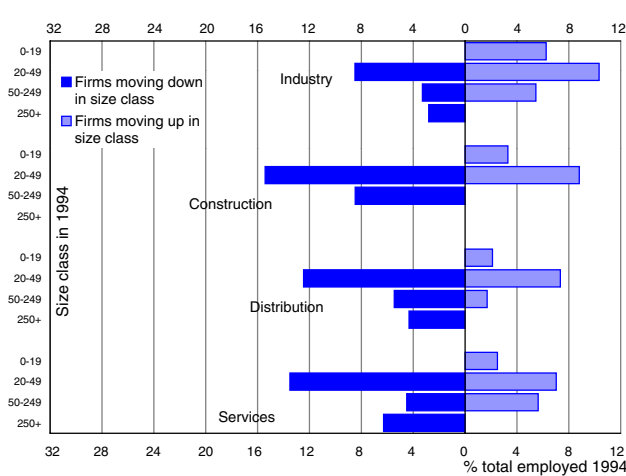
**123 Employment in new firms and firms closing down with 0-4 employees, Finland, Sweden, Spain and Portugal, 1992-95**



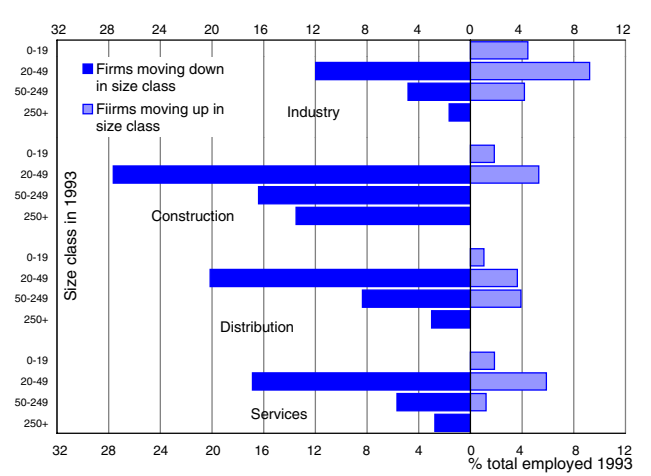
**124 Employment in new firms by size class and in firms closing down, France, 1987-94**



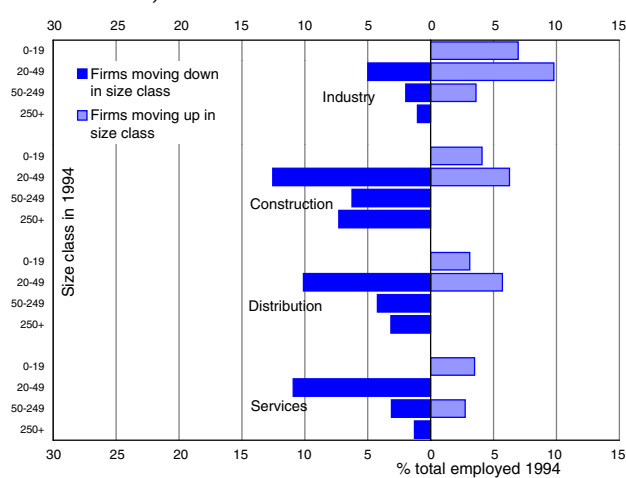
**125 Employment in firms changing size class in Finland, 1994-95**



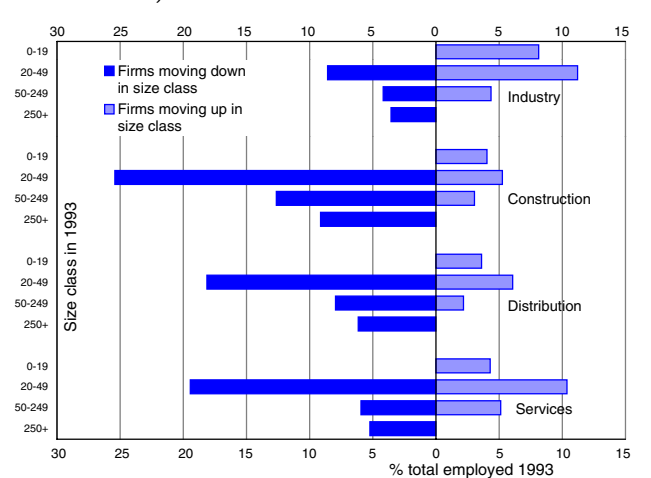
**126 Employment in firms changing size class in Finland, 1993-94**



**127 Employment in firms changing size class in Sweden, 1994-95**



**128 Employment in firms changing size class in Sweden, 1993-94**



Secondly, the relative number affected by the opening or closure of small companies seems to be fairly stable over time. Though the number tends to vary with the economic cycle, the creation of new firms remains significant in recession years as does the closure of firms during upturns (in much the same way as gross job turnover).

Thirdly, the employment changes arising from the birth and death of enterprises of whatever size, though mostly very small, seem to account for about half of total job turnover in any year, with the remaining half resulting from the expansion or contraction of employment in existing firms. In other words, business start-ups play a major role in the growth of employment, as do firm closures in job losses.

Fourthly, among existing companies remaining in business, small firms seem to contribute more to job creation than larger ones. There appears to be a clear tendency for the firms which succeeded in expanding employment by enough to move them up into a larger size-class to have been disproportionately in the

smaller size-classes initially. At the same time, however, these are also the firms which have tended to move down in size-class, though the net loss of jobs appears to have been no greater, relative to the number they employ, than in larger firms. Moreover, the average number employed in firms which have not changed size-class seems, in general, to have risen by more, or declined by less, among small and medium-sized enterprises than larger ones, though this is not universally true for all countries or for all years for which data are available.

### Concluding remarks

Any assessment of the contribution of SMEs to job creation in the Union is affected by the coverage and quality of available information. As the data currently produced by Eurostat are partial and in critical areas confined only to a small number of Member States, care needs to be taken in drawing general conclusions.

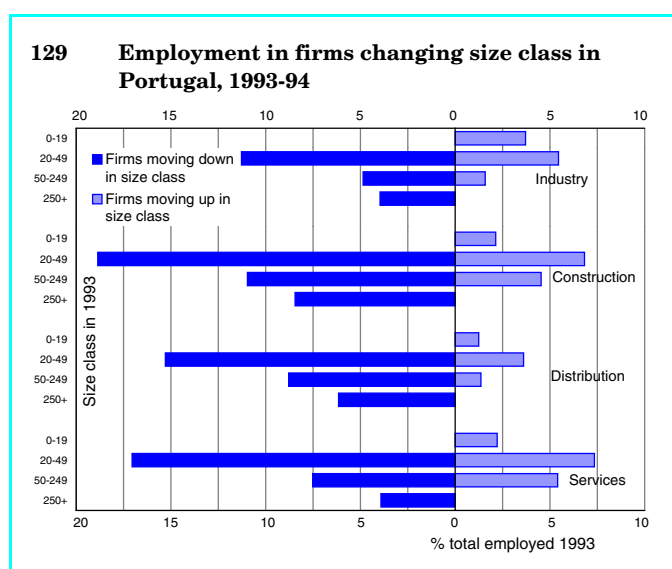
Although the evidence suggests that the process of birth and death of firms has a major effect on the

rate of net job creation, and whether it is positive or negative, as yet we only have the broadest notion of the features of this process and of what determines the success or failure of enterprises. Similarly, while the evidence also suggests that small firms have contributed disproportionately to employment growth over recent years, just as in the US, further work is necessary on their contribution to job creation in different sectors, especially in growing sectors such as business services, personal and recreational services or hotels and restaurants, where they already account for a high proportion of employment.

In this regard, it is possible that the results of policy initiatives, aimed at encouraging the development of SMEs and increasing the employment they provide, might be improved if they were targeted on the more dynamic sectors, in terms not only of net job creation but of innovation and technological advance.

The programme of work on enterprise demography being undertaken by Eurostat, which involves a close examination of successive surveys of firms to trace what happens in individual cases, is crucial to verify the tentative conclusions of the present analysis. The results should increase our understanding of the role of SME in the job creation process without adding significantly to the costs of data collection and, most importantly, without imposing additional costs on the businesses which provide the basic information. This is important in the evaluation and design of policies operated in Member States to encourage their development.

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## Part II Section 2 Globalisation and employment

It is unquestionably the case that the process of globalisation of trade, production and finance has increased in pace during the past 10–15 years and with it European producers have faced growing competition both in internal and external markets. This is a result not only of the removal of various barriers to the flow of goods and services between countries and the opening up of markets in different parts of the world, but equally importantly of advances in technology and communications which have made it easier to organise production on an international scale. The latter has been accompanied by, and in some degree has facilitated, the industrialisation of previously less developed countries, especially in East Asia. These have posed a growing competitive threat to European producers, though equally, they have also provided new market opportunities for European exporters, a fact which is often neglected in the debate about the effect of these developments on the Union economy and, in particular, on employment.

Although the process of globalisation is an evident fact of post-war world economic development and one which has attracted a good deal of attention, it is important to recognise that it has been accompanied by an equally significant process of regionalisation, which has served to shape and structure the pattern of world trade. Indeed, it is very difficult to understand global trade developments without taking account of the regionalisation process. The

most obvious example of the process is in Europe itself, where there have been ever closer trade ties and growing integration of the economies of Member States of the Union. It can also be seen, however, in East Asia, in North and Central America and in countries around the Pacific Basin as a whole. In each of these broad regions as well as elsewhere, the economic fortunes of individual countries are becoming increasingly tied up with what happens within the region in which they are located.

Just as economic developments in individual States of the US are primarily affected by what happens in the rest of the country, so too are developments in different Member States of the European Union closely bound up with what happens elsewhere on the continent. The fact that rates of economic growth in individual Union countries have, with few exceptions, not diverged markedly from each other over the past 20–25 years illustrates this. The completion of the internal market has reinforced ties between Member States, as has the preparation for the imminent formation of monetary union, which is a recognition of the closeness of these ties and of the *de facto* integration of the European economies.

The spread of the crisis in East Asia from one country to another is a topical example of the interdependence caused by the same kind of regionalisation process, which has been an equally prominent feature of economic development in the

area in recent years as the growth of exports to third countries. To illustrate this, exports of economies in the wider East Asian region, ie including Japan and China, to the European Union and the US were 20% larger in value in 1990 than exports to each other. In 1996, only six years later, exports to each other were 25% larger than those to the EU and US despite their growing penetration of these markets. At the same time, trade between Asian countries remains significantly lower than between those in the Union (in 1996, exports of East Asian countries, China and Japan to each other amounted to 45% of their total exports, while internal trade between Union Member States represented around 60% of their total exports).

This process of regionalisation in different parts of the world has occurred in parallel with that of globalisation, which in some ways can be seen as the strengthening of international linkages between global regions, as witnessed, in particular, by direct investment flows which are in large measure aimed at producing and competing for demand within individual regions (as well as at taking advantage of low production costs). Although individual countries are, therefore, primarily affected by what happens in their region, trade and investment linkages at the global level are such that recession in one significant part of the world will ultimately tend to spread to other parts. It is within this perspective that the potential effects of the Asian crisis on the

Union economy and employment in Member States should be considered.

In the European Union, internal trade flows between Member States, reflecting the ever closer degree of economic integration, are still increasing in relation to GDP, but in recent years the growth has been more than matched by trade with the rest of the world. Producers in Europe are increasingly exporting to third countries, while import penetration of the European market is also rising. Employment in the Union, therefore, is ever more dependent on the ability of businesses to compete successfully with those in other countries, if not directly, since manufacturing, which is still predominant in international trade flows, accounts for a declining share of jobs, then indirectly through the income they generate to support job creation elsewhere in the economy.

Successful competition, however, is perfectly compatible with a falling share of world markets. Indeed, it is both necessary and desirable for the Union share of global exports, as of other developed countries, to decline if developing economies are to grow faster and close the immense gap in income per head between rich and poor countries. This inevitably means them gaining a larger share of world trade. It is not sustainable for the European Union, which accounts for around 6% of total world population, to be responsible for almost a third of global exports, even if internal trade is excluded. Accordingly, the Union's competitiveness ought not to be judged in terms of shares of world markets. Instead, it needs to be assessed in relation to the ability of its economies to sustain acceptable rates of growth without incurring

unsustainable balance of payments deficits.

In this regard, it should be emphasised that the actual balance on external account is also no guide to competitiveness, since it is affected to a major extent by the prevailing level of economic activity in the economy concerned. In particular, the Union has had a growing trade surplus with the rest of the world over the past few years, net exports of goods and services reaching unprecedented levels (around 2½% of Union GDP in 1997 — although the surplus on current account including transfers was slightly smaller — and in value terms much larger than Japan's surplus during the 1980s, which was regarded as a major source of instability in the global economy). This, however, largely reflects the fact that the level of demand in the Union has in recent years been significantly below supply potential rather than any sudden increase in trade shares.

Equally, the threat posed by newly industrialising countries to jobs in the Union cannot be assessed in terms of their penetration of the internal market alone, significant though this has been, especially in particular industries. The key consideration is whether European producers have been able to compensate for any loss of home markets by expanding exports to third countries. In the case of the newly industrialising economies of East Asia, this has clearly happened. The expansion of exports to them has significantly outstripped the increase in imports from them, despite little change in Europe's share of the Asian market. In this case, the growth in the Asian share of the internal market has been more than compensated by the growth of the Asian market and the demand this has generated for European

products (as well as for those of other industrialised economies), not only in Asia but elsewhere.

Indeed, the development of the East Asian region which accelerated during the 1990s and which was built on success in exporting to developed countries made a major contribution to the growth of the world economy over this period. This was reinforced by the deficit incurred by Asian economies on external account and the tendency for them as a group to spend more on imports than they earned from exports — which contrasts with the mounting surplus accumulated by Union countries. The Asian crisis has the potential to have a similar effect on world economic growth over the next few years, but this time in reverse. This is all the more likely because of the pressure on them to achieve sizeable surpluses on their external accounts in order to reduce their debts, which, of necessity, has to be offset by countries elsewhere not only expanding demand to fill the gap but being willing to go so far as to incur the counterpart deficits to the Asian surpluses.

The aim here is, first, to examine the changing pattern of European trade in the global, and regional, context, in terms of both trade partners and the composition of exports and imports; focusing, in particular, on the changes during the 1990s; secondly, to consider the effects on employment of the changes which have occurred; and, thirdly, to review direct investment flows and their implications for employment. A final concern is to bring out the danger posed by the Asian crisis for the growth of the world economy and, therefore, for the European Union as a major player in global trade and production, as well as the scope for the Union to offset the effects of recession in the Far East.

## The growth of internal and external trade in the Union

Imports of goods and services from countries outside the Union amount to some 11% of Union GDP, slightly less than for the US (around 13%) but more than for Japan (under 10% — all figures for 1997). While, on average, their value is only around 60% of internal trade between Member States (18% of GDP), they have, nevertheless, grown significantly over the 1990s in relation to GDP (Graph 130 — figures for services for 1996 and 1997 are estimates). All of this growth has been accounted for by imports of goods, predominantly manufactures. These remained constant in relation to GDP over the 20 years 1965 to 1985, if imports of energy (for which the price has fluctuated widely) are excluded, but rose from around 7% of Union GDP at the beginning of the 1990s to 8½% in 1997 (Graph 131). This has matched the growth of internal trade between Member States, which is recovering from the depressing effect of the recession of the earlier 1990s, but which was

still lower in 1997 relative to GDP than in 1990.

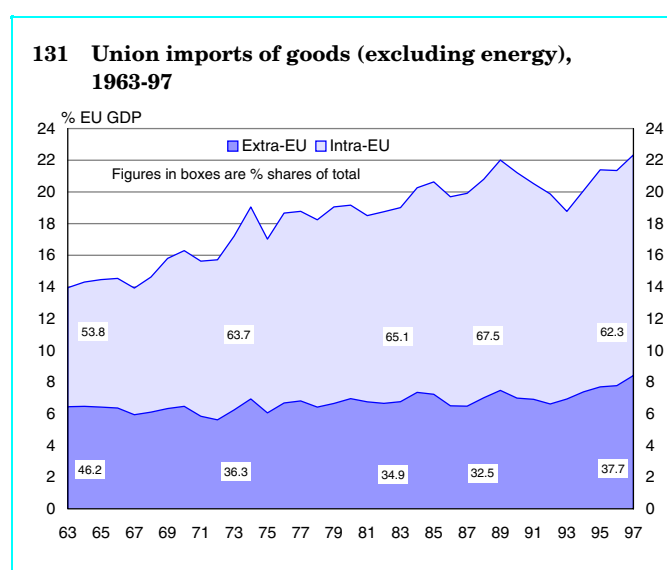
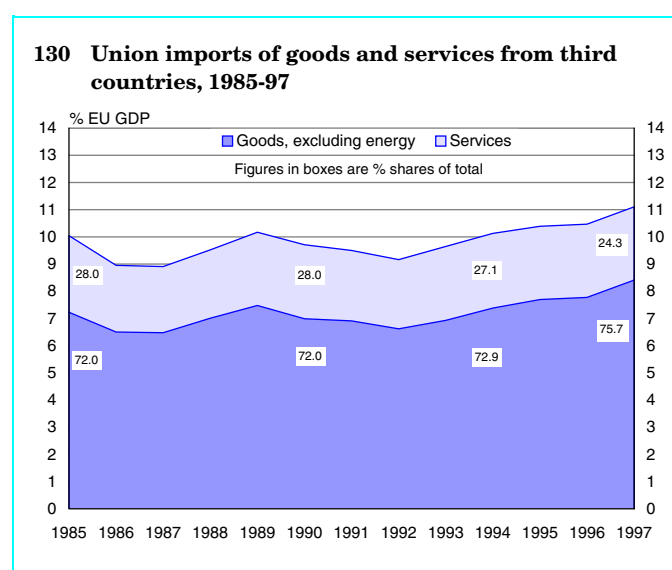
Imports of services from the rest of the world, on the other hand, have remained at just over 2½% of GDP (though data are available only up to 1995). In contrast with trade of goods, internal trade in services between Member States did not fall relative to GDP during the recession and has risen since (Graph 132). The relative buoyancy of trade in services may reflect the more recent liberalisation of flows within the Union as compared with goods, as part of the process of completing the internal market. Conversely, the relative constancy of service imports from outside the Union — which, as noted below, is matched by comparatively little growth in exports of services to third countries — may reflect the obstacles to international trade in services which still exist.

While import penetration of the Union market has risen during the 1990s, it has increased by less than the growth of exports to other countries. As a consequence, as noted above, Union Member States as a group have accumulated a signifi-

cant surplus on trade with the rest of the world. In 1997, exports of goods and services to third countries amounted to around 13% of GDP in the Union (net exports exceed the difference between exports and imports to third countries because of measurement problems). Again, this is much less than internal trade between Member States, but exports of goods, in particular, have risen significantly since 1991 from 7% of Union GDP to almost 10%, if energy is excluded, around twice the rate of increase in internal trade (Graph 133).

This disparity in growth rates, however, is heavily affected by the recession in the Union in the early 1990s and the relatively modest recovery since, which contrasts with the expansion of demand in the rest of the world, especially in East Asia before the onset of the crisis, but also in Central and Eastern Europe. Since their transition to market economies began, though the growth in their market has been very much less, it has been heavily directed towards the Union.

Exports of services to the rest of the world, though larger than imports



from third countries, have, unlike trade in goods, not changed much in relation to GDP over the past 10 years, remaining at around 3% of Union GDP. While services are gradually becoming a more important part of internal trade, though still accounting for only around 20% of total flows, their share of external trade has, therefore, fallen over the 1990s. This contrasts with their ever growing importance for income and employment in the economies of Member States and, as noted below, in large measure reflects the inherent nature of service activities which tends to limit the extent to which they can be traded (though new advances in telecommunications may change this in the future). The modest expansion of trade flows has, therefore, been accompanied by a more significant increase in direct investment to establish supply capabilities in different countries.

In consequence, for services, globalisation has so far meant mainly the spread of supply facilities by multinational companies across the world, and this has been the major channel through which competition has been increased for European

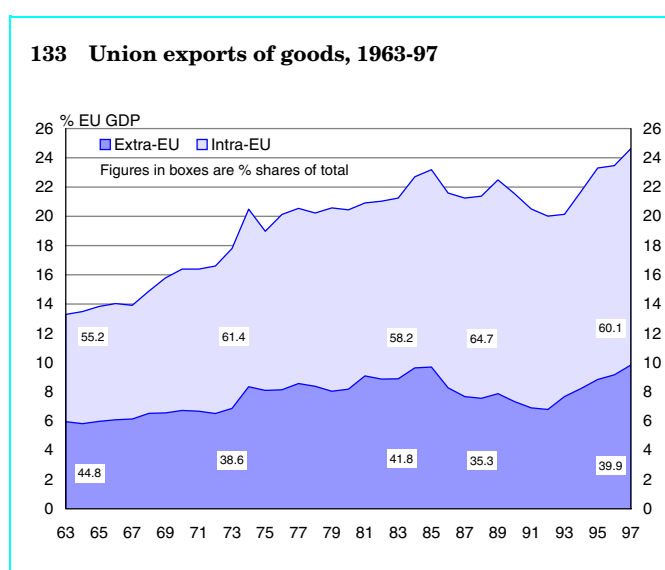
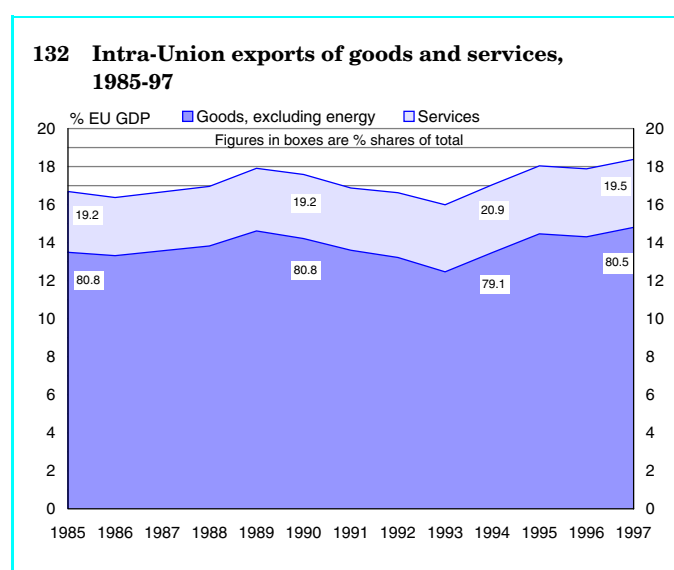
producers. For manufacturers, on the other hand, increased competition has come both from trade and direct investment. In a number of industries, like mechanical engineering, computers, precision instruments and transport equipment other than motor vehicles (such as aircraft), exports to countries outside the Union amount to around a third or more of total production, while imports from outside account for a similar proportion of internal market sales and, at the same time, multinationals have increasingly located plants inside the Union.

In these sectors, jobs are very much dependent on the competitive performance of companies in Europe, whether European or the branches of multinationals. The importance of their competitive success, however, extends well beyond the jobs that are directly affected to employment in the rest of the economy, some of which is involved in supplying services to the industries concerned and much more of which is dependent on the income generated in global markets for support. The relatively modest figures for external trade as a share of GDP, therefore, belie its significance for

growth and employment in the Union.

### Changing trade partners

Although, for obvious reasons, the European economy is often equated with the European Union, in practice, the European region, in terms of trade relations at least, can be seen as extending well beyond the borders of the Union, into other parts of Western Europe, Central and Eastern Europe, a large part of the former Soviet Union and, even, large parts of Africa and the Middle East. The closeness of trade ties with these countries can be seen, first, from the fact that they account for around 40% of total Union imports from outside; secondly, from the high share of European producers in their markets. In 1996, Union exporters accounted for almost 90% of the total imports of other Western European countries, 65% of those of Central and Eastern European economies, 54% of African imports, 40% of the imports of Middle Eastern countries and 34% of those of the former Soviet Union (Graph 134). In the rest of the world, Union exporters accounted for just 16% of total imports.



These figures, moreover, have not changed much in recent years. In 1990, imports into the Union from neighbouring countries as a group accounted for much the same share of the total as in 1996, while the share of Union exporters in their markets increased over the 1990s in other Western European countries and Central and Eastern Europe, remained much the same in the Middle East and fell in Africa and the former Soviet Union. Overall, the Union share of these countries' imports declined from 58% to 57% over the period, while in the rest of the world, it fell from 18½% to 16½%.

Paradoxically, however, the share of the Union in total world trade, excluding the Union, fell from 36% in 1990 to 31% in 1996. The explanation of the paradox lies in the differential rate of growth in the wider European Union and in the rest of the world, especially in East Asia. Over the 1990s, in other words, the markets which grew fastest were those in which European exporters had a relatively small share.

This is exemplified by the growth of the East Asian market, including

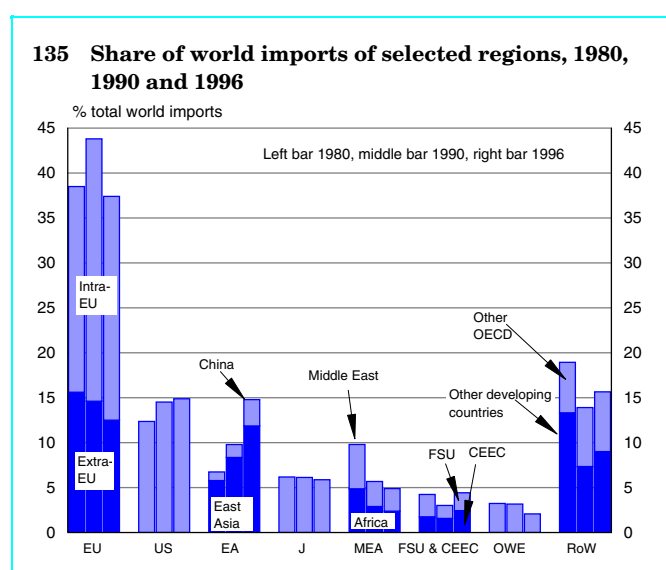
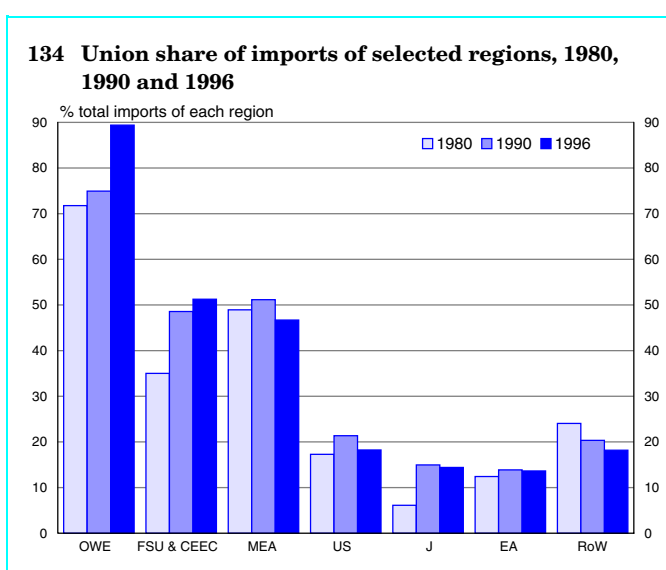
China (though excluding Taiwan), which in 1990 accounted for under 10% of total world imports, in this case including intra-EU trade, and for almost 15% in 1996 — only slightly below US imports in terms of value and significantly higher than EU imports from outside (Graph 135). In this market, however, Union exporters accounted for only around 13½% of total imports in 1996, almost precisely the same as in 1990 and slightly higher than in 1980. Indeed, there were relatively few regions in which the Union share of imports declined over the 1990s, which demonstrates the misleading impression that can be gained by simply looking at the change in the share of world trade as a whole.

It also demonstrates the key importance of the rate of growth of particular markets for overall trade performance and, accordingly, for the growth of the economy and net job creation. European producers, for example, have much more to gain from the growth of neighbouring markets, and in regions with which close trade relations have been developed in the past, than that of more distant markets.

### Key to the codes for global regions in the graphs

EA	East Asia and China (East Asia excludes Taiwan)
FSU & CEC	Former Soviet Union and Central and Eastern Europe (FSU includes Baltic States)
J	Japan
MEA	Middle East and Africa
OWE	Other Western Europe
RoW	Rest of the world
US	United States

Equally, however, the growth of neighbouring markets is significantly affected by growth of the wider region, which in this case means predominantly the European Union. Slow growth in the



Union during the 1990s and earlier years has, therefore, almost certainly reduced the rate of expansion in the wider region and accordingly the rate of increase in demand for Union exports.

The two developments which have been of key importance to Union exporters over the 1990s have been, first, the fundamental changes which have occurred in Central and Eastern Europe and their transition to market economies, which has led to a substantial diversion of trade towards the Union, and, secondly, the growth of East Asian economies as a competitive force in world markets. Both have led to an increase in the share of the two regions in Union imports. In 1990, exporters from Central and Eastern Europe and the former Soviet Union accounted for under 10% of total Union imports from third countries; by 1996, this had risen to over 13%. The share of East Asian and Chinese exporters in the Union market rose even more dramatically from 11% to 16% over these 6 years.

The rise in the latter was largely at the expense of the US, whose share

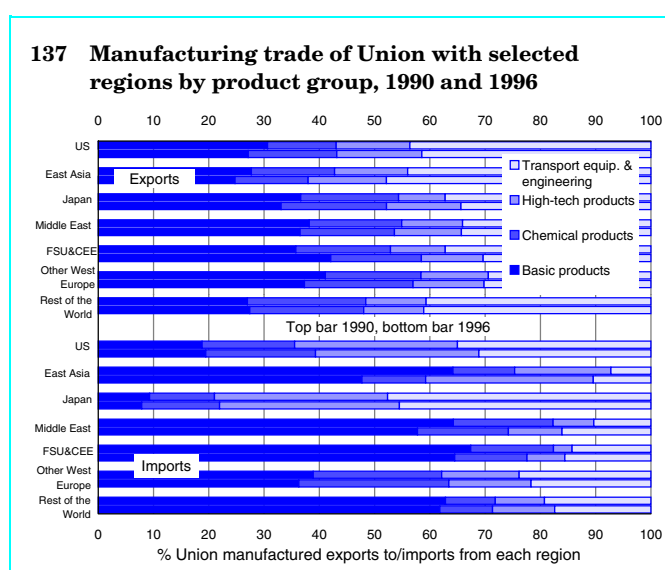
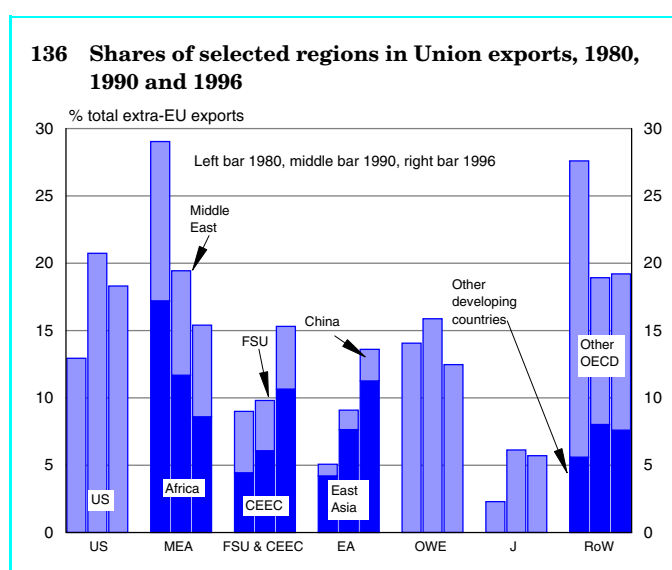
of Union imports from outside fell from 21% to 19% over the period, and Japan, whose share declined from 12% to 9½%. The latter, indeed, is partly a reflection of some relocation of Japanese manufacturing from Japan to other parts of Asia to escape the damaging effect on production costs of a strong Yen and to take advantage of the low costs elsewhere in the region. Japanese companies, therefore, account for part of the increase in East Asian exports to the Union, as is also the case in the US, where East Asian exporters also gained a larger share of the market over the period (rising to almost 23% of US imports) and where the Japanese share declined even more significantly than in Europe (to 17½%, slightly less than the Union share).

The growth in import penetration of the Union market by East Asian and Central and Eastern European producers, however, was more than matched by a growth of Union exports to the two regions. In 1996, East Asia, including China, accounted for almost 14% of total Union exports to third countries as against only 9% in 1990, while Central and Eastern Europe and the

former Soviet Union accounted for over 15% as opposed to under 10% six years earlier (Graph 136). Indeed, the Union's visible trade with East Asia was broadly in balance in 1996 if China is included (a large deficit with China being offset by a similar-sized surplus with East Asia, though the two cannot really be divided in this way because of the large proportion of Chinese trade which goes through Hong Kong, which in the trade statistics appears as trade with East Asia). The Union, however, had a sizeable and increasing surplus on its visible trade to Central and Eastern Europe, as it did on its trade with Africa, another region which can ill-afford to finance this, especially in the context of falling commodity prices.

### Composition of trade

As noted above, growth of Union visible exports to third countries has outstripped the rise in imports from them over the 1990s, and while increasing import penetration of the Union market by newly industrialising countries, especially those in East Asia, has attracted much attention, this has gone along with an





even larger increase in exports to them. The net effect on economic activity in the Union from trade developments over this period has, therefore, been positive and, other things being equal, there should also have been a net gain to jobs.

Other things, however, have not necessarily been equal, and even if the overall effect on jobs has indeed been positive, this does not necessarily mean that there were no detrimental consequences for employment in particular sectors. Some industries are liable to have suffered job losses because of rising import penetration or declining export markets, while others may have been able to generate new jobs as a result of trade success. Moreover, increasing competition in all sectors is likely to have led to mounting pressure to lower costs and increase productivity, and hence a lower level of employment per unit of output.

In practice, and perhaps surprisingly, the broad industries affected by rising imports, on the one hand, and expanding exports, on the other, have been much the same. The composition of exports to third countries, again in broad terms, is not significantly different from the composition of imports from them and has not tended to change a great deal in the recent past.

It is true that manufactured products account for virtually all of the Union's visible exports to third countries (agricultural products, primary commodities and energy accounting for only 5% of the total in 1996) — and, indeed, are not that much more important in intra-Union trade (8% of visible flows) — while non-manufactured products make up around 22% of visible imports from outside. Both figures have tended to fall over time, in part

### Broad groupings of manufacturing industries

- **Basic products:** food and drink, tobacco, textiles, leather, wood and wood products, paper and paper products, other non-metallic mineral products, iron and steel, metal products, other manufactured goods.
- **Chemical products:** chemicals, chemical products and man-made fibres, rubber and plastic products.
- **High-tech products:** office machinery and computers, electrical machinery and equipment, precision instruments, watches and clocks (excluding radio, TV and communications equipment because of no data for 1990).
- **Engineering and transport equipment:** mechanical engineering, motor vehicles, other transport equipment.

reflecting the fall in primary product and energy prices.

Within manufacturing, however, the composition of inward and outward trade flows is very similar, dispelling the simplistic notion that the Union exports predominantly technologically advanced products and imports basic goods. In 1996, just under a third (32%) of Union exports of manufactures to the rest of the world consisted of basic products, only slightly less than in 1990 (34%) and not much lower than the share of basic products in Union imports from outside (40%), which were also down a little from their level in 1990 (41%) (Graph 137). (Basic products here consist of manufactures such as textiles, food and drink, metal products, wood and furniture and so on — see Box for the industries included.) These figures, moreover, are similar to the share of this product group in internal Union trade (37%).

At the same time, chemical products made up 16% of Union manufactured exports to third countries and 13% of imports from them, much the same proportions as in 1990, while the remaining pro-

ducts, engineering, electrical and electronic goods and transport equipment together accounted for just under 52% of Union external exports of manufactures in 1996 and just over 47% of imports from outside. Both the latter figures are slightly higher than in 1990, the share of these products in exports (up 2 percentage points) rising more than their share in imports (up under 1 percentage point). There was, therefore, some shift in the pattern of exports relative to imports between 1990 and 1996, but it was very small.

Within the latter group, however, the changes were more marked. What are usually termed high-tech products (computers, video and sound equipment, precision instruments) increased as a share of Union exports of manufactures to third countries over the period (from 14% to 17% of the total) but this was matched by a similar rise in their share of imports (from 24% to 27%). Accordingly, the gap between imports and exports remained much the same, with Union imports of high-tech products from outside exceeding exports to third countries by a considerable margin.

Some of these imports, however, were intermediate products used in the manufacture of engineering and transport equipment, in which the Union has a substantial surplus on trade. In 1996, these goods accounted for 35% of Union exports of manufactures to third countries, while they made up only just over 20% of imports. Both figures were lower than in 1990, though the figure for imports more than that for exports.

The relative importance of different regions as exporters of particular product groups to the Union and as markets for exports of them from the Union is also revealing. First, the composition of Union exports of manufactures to different parts of the world does not vary too much between destinations, though there is a clear tendency to sell more basic products and chemicals to the wider European region, including the Middle East and Africa, than to other parts of the world, excluding Japan (which is the one industrialised country for which advanced products make up a much larger share of exports than imports). Inside the wider European region, high-tech and engineering products account for around 45% of total manufactured exports (and basic products for over 35%), outside for around 55% (and basic products for around 25%), and to East Asia, including China, for over 60%.

Indeed, the most marked shift in composition of exports over the period was to East Asia, where the share of high-tech and engineering products went up from 57% in 1990 to 62% in 1996, and Central and Eastern Europe and the former Soviet Union, where it fell from 47% to 42% over this period and the share of basic products rose from 36% to 42%. The latter, however, was entirely a result of a big in-

crease in basic exports to the former Soviet Union (from 33% to 47%), while the composition of exports to Central and Eastern Europe changed relatively little. The growth of the East Asian market in the 1990s, therefore, led to a disproportionate increase in demand for relatively advanced manufactured products from Union exporters, whereas the growth of exports to the transition countries to the East of the Union has benefited exporters of basic products as well as more advanced ones.

The variation in the composition of Union imports from different regions is much more marked, as might be expected. In broad terms, the Union imports basic products from the transition economies and developing countries in the wider European region as well as from developing countries in the rest of the world and imports more advanced products from industrialised countries. In 1996, for example, 53% of imports of manufactures from Central and Eastern Europe consisted of basic products and another 12% were chemical products, while for the former Soviet Union, the figures were 76% and 14%, respectively. This characterisation, however, is only approximately true. In 1996, 60% of manufactured imports from OECD countries outside Europe, other than the US and Japan, were basic products (though this was down from 70% in 1990) and 37% of those from other Western European countries, while, in the latter case, another 27% were chemical products (though including pharmaceuticals).

In this regard, the East Asian countries have rapidly developed the trade features of industrialised economies. In 1996, 41% of their exports to Europe (in this case ex-

cluding China) were high-tech products and another 13% were engineering and transport equipment, while only 37% were basic products. This contrasts vividly with the structure of their exports in 1990, only six years previously, when basic products made up 56% of the total. For China, the shift has been almost as dramatic, the share of basic products falling from 72% to 56% over the period.

Although, despite this shift, producers from East Asia maintained their share of Union imports of basic products from third countries over the 1990s, while those from China increased it (from 5% to 8½%), it is, nevertheless, the case that by far the biggest growth in imports from East Asia consisted of more advanced manufactures, especially high-tech electronics goods. Indeed, by 1996, East Asian exporters accounted for a larger share of the Union market in this area than those from Japan (for 18% of the total as against only 9% in 1990).

The above analysis illustrates two general points. First, exports of basic products are still an important source of foreign exchange earnings of Union Member States, though they are by no means the only industrialised economies for which this is the case. Indeed, basic manufactures account for a significant share of most industrialised countries' exports, apart from Japan. Secondly, Union Member States, again like nearly all other major industrialised countries, tend to export and import very similar types of manufactured goods.

Equally, however, they tend to conceal a third general point, that the nature of the goods exported and imported in terms of their unit value and design could well differ considerably, even though they

might be classified to the same broad industry group. Designer fashion wear and mass-produced, low priced garments, for example, are both classified to the clothing industry but have radically different characteristics, in terms of the way that production is organised, the skills required of the work force and the market they are selling in. Similarly, chemical products include both pharmaceuticals, which involve a high level of R&D and high skills among at least some of those employed, and more basic products.

Moreover, as noted above, high-tech products include many intermediate goods, like micro-processors, which go into the production of other manufactures as well as final goods. Since East Asian economies have become the global centre of production of a number of such products, not only because of low costs but also because of the skills they have developed, the most efficient option for Union manufacturers may be to source their inputs from there. Indeed, a number of large Union multinationals may have relocated their production of this kind of product to the region, either

directly or through some form of sub-contracting arrangement, in order to secure a competitive advantage. In this case, such a policy might be a means of supporting jobs in the Union in other parts of the manufacturing or selling process, rather than destroying them.

## The effect on employment

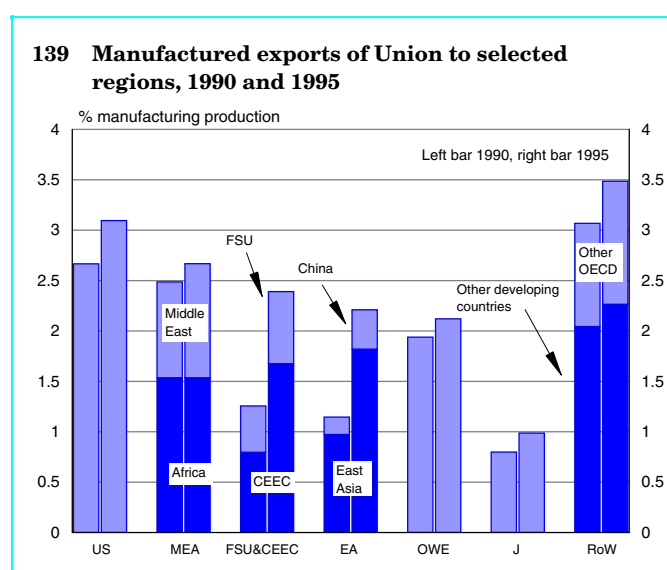
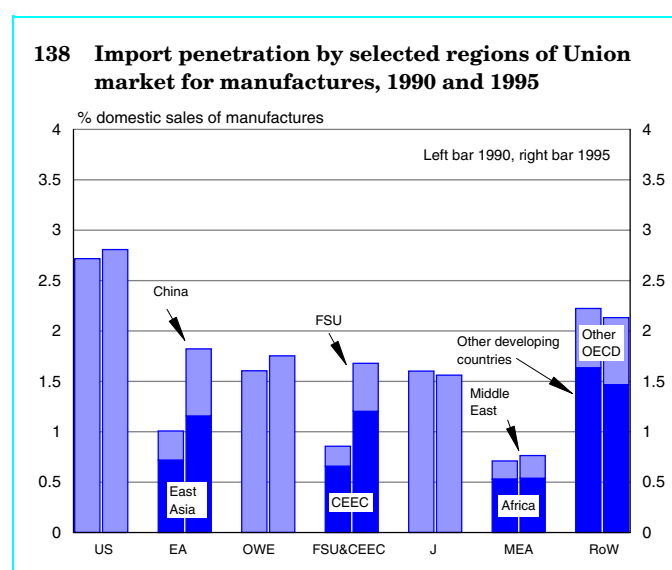
These kinds of consideration make it very difficult to assess the effect of trade developments on employment. Moreover, as noted above, the macroeconomic consequences might well be different from the microeconomic effects on individual industries. Nevertheless, it is instructive to examine, first, the consequences for production in specific sectors of the changes in exports and imports of manufactures over this period and, secondly, the implications for jobs.

Between 1990 and 1995 (the latest year for which data are available for production), the penetration of the Union market by producers in the rest of the world increased from around 10<sup>1</sup>/<sub>2</sub>% of domestic sales of

manufactures to 12<sup>1</sup>/<sub>2</sub>% (defining domestic sales as gross production less exports plus imports, which unlike GDP is a gross rather than a net measure in that it includes sales of intermediate goods). This was mostly due, as noted above, to a marked growth in imports from East Asia and China, on the one hand, and from Central and Eastern Europe and the former Soviet Union, on the other, in both cases to almost 2% of the domestic market (Graph 138).

There was also some increase in import penetration, though very much smaller, by producers in other parts of the wider European region, in other Western European countries and Africa and the Middle East, while there was a small fall in that by producers in other developing countries (mainly Latin America). Exporters in the US and Japan, on the other hand, accounted for much the same proportion of manufacturing sales in 1995 as in 1990.

The rise in the import penetration of the Union market, however, was exceeded by the growth of exports to third countries as a proportion of



domestic gross output of manufacturing (measured as production plus exports minus imports), which increased from 13½% to 17% over the first half of the 1990s. In this case, moreover, there was a rise in the share of output going to all the global regions distinguished here, but most especially to the regions from which imports increased by most, East Asia and Central and Eastern Europe (Graph 139). In both cases, Union exports of manufactures almost doubled relative to production over the period.

Overall, manufacturing production in the Union rose hardly at all between 1990 and 1995, despite the growth of exports. The increase was not nearly enough to compensate for the growth of labour productivity, and employment fell by 2½% (Graph 140). The growth in exports, therefore, more than offset the increase in import penetration but could do no more than lessen the impact on production of the recession in the domestic market over this period.

Much the same was the case in the different broad industries. Production in real terms (in each case, deflated by the price deflator for

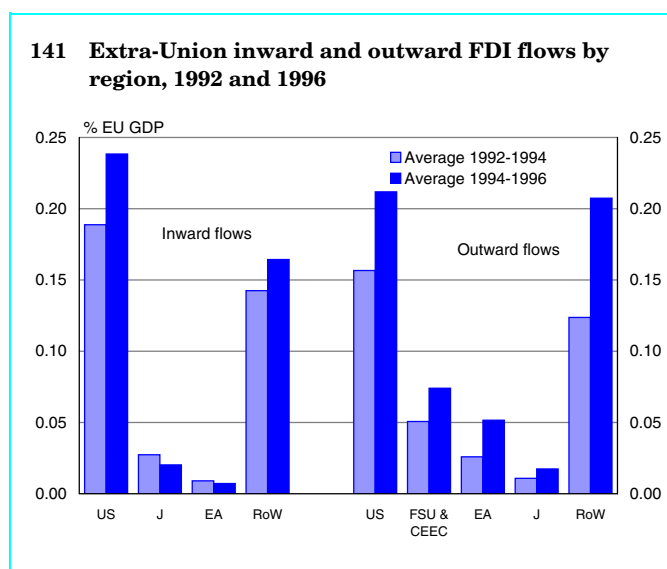
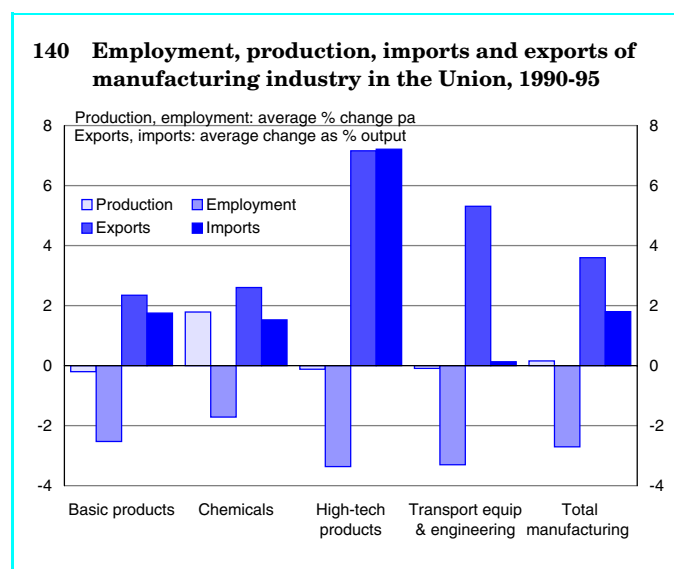
value-added in manufacturing as a whole because of the lack of industry-specific price indices, which almost certainly biases the change in output downwards in high-tech products) fell slightly in high-tech industries and transport equipment and engineering, and employment declined by almost 3½% in both cases. In the former, the rise in import penetration (to 29% of domestic sales) was the same as the growth in exports (which accounted for 23½% of production) so that the effect of trade on output was neutral. In the latter, exports rose by much more than imports (to 25½% of production), but could not offset the impact on output of the domestic recession, which was particularly large for this group of products (as tends to be the case because of their importance as investment goods, which are usually affected disproportionately by cyclical downturns).

Production also fell slightly in basic industries and employment declined as a result, though by less than in high-tech or engineering because of the smaller rise in productivity. In this case, export growth contributed slightly more to output than was lost from rising import penetration but

again failed to offset the fall in the domestic market. Finally, in chemicals, production, measured in these terms, increased by almost 2% a year, boosted in part by the growth in exports ahead of the rise in import penetration, but as in the other sectors, this was not enough to compensate for productivity growth and employment fell, if by less than elsewhere in manufacturing.

The general conclusion, therefore, is that trade developments appear to have made a positive contribution to output and employment during the first half of the 1990s rather than a negative one. Although individual industries within the broad sectors examined here may well have suffered a loss of sales because of import penetration rising by more than exports (though more detailed examination reveals that this was the case to any significant extent only for basic metals and office machinery and computers), this was not true generally.

Nevertheless, the intensification of competition which undoubtedly occurred during this period as a result of the more open nature of the global economy and the emergence of newly



industrialising countries as a competitive force in advanced products, as well as in more basic ones, may well have led to increased productivity growth. This, however, is by no means apparent from the aggregate figures. The growth of productivity in manufacturing appears to have been no higher over these five years than over the preceding five and lower than over the 10 years before that.

At the same time, it is important to take account of the jobs undoubtedly generated in other sectors — business and other services, especially — by the growth in exports ahead of import penetration over the 1990s. To the extent that this growth was itself boosted by the rise in productivity, the employment gained as a result might well have exceeded the jobs lost directly in manufacturing as improvements were made in efficiency.

## Direct investment and trade

The growing importance of external trade in goods is mirrored in increasing foreign direct investment (FDI)

### Data on foreign direct investment

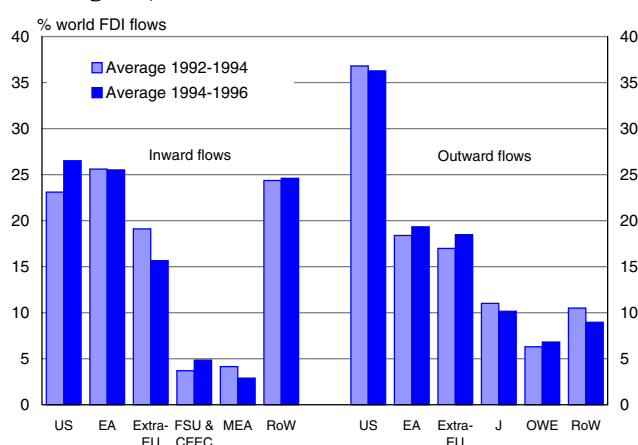
Despite the efforts made by Eurostat and other international statistical agencies, the data on foreign direct investment (FDI) remain subject to a considerable margin of error. This is mainly because of the difficulties of collecting the necessary information, which often concerns changes in the ownership of assets, including company shares especially, rather than tangible capital flows which are invested in the construction of new factories or offices, and of differences in the treatment of unremitted profits, valuation principles, the treatment of capital gains and losses and so on.

These difficulties are exacerbated by differences in the definition of key concepts between countries, such as over the minimum proportion of equity capital in foreign companies held to be sufficient for inclusion in the FDI statistics, which is 10% in most countries, in line with IMF and OECD guidelines, but 20% in Germany and Italy. There are also differences in the treatment of short-term financial operations of foreign affiliates, which some countries only recently started including in FDI statistics.

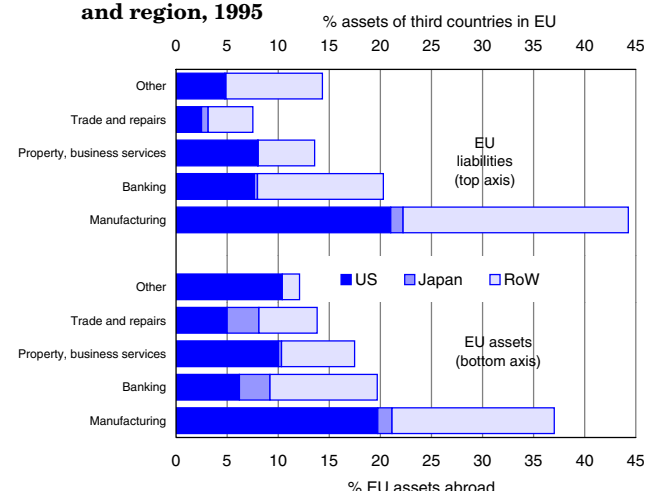
The measurement difficulties are reflected in the considerable asymmetry between the recording of outward and inward FDI flows within the Union. In 1994, aggregate outward direct investment to other Union countries as recorded by the 15 Member States concerned was 30% higher than inward investment recorded by the recipient countries, though this is an improvement on 1992 when it was over 50% higher.

The asymmetry for the world as a whole has declined a little since 1991, when according to data compiled by UNCTAD, commonly accepted as the most reliable source, total outflows exceeded inflows by 25%, but it remains substantial.

**142 Inward and outward FDI flows of selected regions, 1992 and 1996**



**143 FDI assets and liabilities of the Union by sector and region, 1995**



flows from the Union to other parts of the world and some slowdown in the growth of direct investment within the Union. (This rose from 41% to 61% of total direct investment in Member States in the 7 years 1984 to 1991 in the run-up to the completion of the single market, but only to 64% in the five years to 1996, though the recession during this period undoubtedly contributed to the slower relative increase.) A growing part of outflows during the 1990s, moreover, went to Central and Eastern Europe — and, to a lesser extent, to the former Soviet Union — and to East Asia, reflecting the increasing importance of these regions both as markets and, especially in the latter case, as producers of manufactures.

Nevertheless, investment in Central and Eastern Europe still represented only just over 13% of the total Union FDI outflows in the period 1992 to 1996 and investment in East Asia, including China, well under 10% (Graph 141 and Box on FDI statistics). The US remained by far the largest destination of Union FDI, accounting for around 40% of the total over this period, though this was much less than in the second half of the 1980s when the figure was some 70%.

Moreover, despite increasing significantly during the three years 1994 to 1996 as compared with the previous three years of recession, outward flows to third countries still amounted to only just over  $\frac{1}{2}$ % of Union GDP. Indeed, over this period, outflows from the Union to the rest of the world accounted for under 20% of the global total of direct investment (excluding intra-Union flows), only around half that from the US, which remained the major source of FDI, and slightly less than from the East Asian economies, much of which was invested in the Asian region (Graph 142).

Although outflows of investment from the Union exceeded inflows into Member States from third countries over the period 1994 to 1996 — and, therefore, potentially reduced job growth in the Union, though the effects on employment are somewhat more complicated (see Box) — the difference was very small (only around 0.1% of GDP). In addition, the potential effect on jobs in manufacturing arising from the possible relocation of production to lower cost countries is reduced even further by the fact that, as noted below, manufacturing accounts for only around a third of total outflows, less than its share of inflows, and is, therefore, probably matched by an equivalent amount of investment flowing into the Union from other countries.

The US is an even more dominant source of FDI flows into the Union than it is a destination for Union outflows, accounting for over half the total inward investment over the three years 1994 to 1996, while the Japanese share was down to only around 5%, in part reflecting a shift in focus towards East Asia. The emergence of East Asia as an economic power is witnessed by its attraction of inward investment during the 1990s. In the five years, 1992 to 1996 inclusive, it was the destination for a quarter of all direct investment in the world economy, accounting for much the same share of total flows as the US. The European Union, by contrast, was the destination for under 20% of flows. Moreover, its share was lower in the latter part of the period than the first part, despite the recovery in output which occurred.

Finally, as noted at the outset, globalisation in the service sector has taken the form of direct investment to establish facilities to provide services directly more than increased

trade flows. This is especially the case in developed countries, the purpose being in part to provide support for manufacturing exporters as well as to cater for the local market, though in recent years, there has also been a substantial growth in the outsourcing of computer services and back-office tasks (mainly consisting of inputting data) to developing countries to take advantage of the low labour costs. In 1995, only around 37% of the fixed assets of Union Member States in third countries was in manufacturing, the rest being in various services, the most important being banking (almost 20% of the total), real estate and business activities (together accounting for 17 $\frac{1}{2}$ %) (Graph 143).

Although manufacturing accounted for a larger share of the fixed assets of third countries in the Union, it still represented under 45% of the total in 1995, while banking accounted for a similar share as of Union assets abroad and the rest, over a third of the total, was divided between property, business activities and other services.

## **The repercussions of the Asian crisis**

In the light of the above analysis, it should be evident that the crisis which now engulfs East Asia poses a genuine threat to world economic growth which Union Member States may find it difficult to remain immune from. East Asia has, over recent years, developed into both a major force in global competition and an important market for the goods produced in other countries — a larger market, indeed, than the Union itself if internal trade is excluded. Multinational companies based in the region have invested heavily in the rest of the

## Foreign direct investment and employment

Foreign direct investment (FDI) is closely associated with the growth of multinational enterprises and their spread across the global economy. From a few billion US dollars in the 1970s, FDI flows had increased to around \$250 billion in 1990 and to \$350 billion in 1996. This, however, represents only around 20% of the capital of \$1.4 trillion, estimated by the UN, which multinationals mobilised for the needs of their foreign affiliates, which together produced an estimated \$7 trillion of goods and services in 1995, more than the total value of world exports. Indeed, over the past 10 years or so, the growth of global sales by foreign affiliates of multinationals has exceeded that of exports by 20–30%. Although FDI flows are still small, therefore, in relation to exports (only around 5%), the amount of production they support is now larger, resulting in around a third or so of total exports being estimated to be traded between branches of the same firm.

Both trade and direct investment are, therefore, interrelated parts of the same globalisation process. Indeed, most empirical research has underlined the complementary nature of the two rather than direct investment displacing exports. FDI often paves the way for a change in the composition of products being sold in the foreign market and can result in an increase, rather than a reduction, in exports from the home country. Though exports of final goods might decline as these are produced abroad, exports of intermediate goods to service the foreign branch might well increase. Equally, investment might take the form of the establishment of service and marketing facilities to support the growth of exports in the foreign market. Alternatively, foreign subsidiaries may be set up to produce lower-cost inputs for the final stage of production in the home market, which may be the only viable way of the company concerned remaining competitive. In this regard, FDI flows from developed to developing countries, which are still a small part of the total, but on which a good deal of blame for the loss of low skill-skilled jobs is often focused, can also increase exports of machinery, capital goods and services from the home economy to offset further any direct job losses.

Accordingly, the most commonly-levelled criticism of FDI, that it leads to the relocation of production and to job losses, is often the reverse of the truth. Indeed, the establishment of production abroad may be a means of safeguarding, or even expanding, jobs in the home economy. In addition, the investment in developing countries, as well as in the transition economies in Central and Eastern Europe, may well contribute significantly to their economic growth, which, through trade linkages, may ultimately benefit the home country and increase the level of employment that can be sustained.

The misconceptions about the effect of FDI on employment often stem from a lack of understanding about what it involves. A common tendency is to regard all inward FDI as 'greenfield' investment, and an addition to the stock of domestic capital, and outward FDI as a loss of domestic investment, or a leak of domestic savings, leading to the relocation of industry abroad. In fact, most FDI flows (possibly 80%) consist of changes in the ownership of assets from residents to non-residents rather than of additions or subtractions from the stock of domestic capital. Moreover, for the European Union, inward and outward FDI during the 1990s fluctuated between 5% and 9% of gross domestic capital formation and, though there was a net outflow, this amounted at most to 3% of domestic investment in any year.

A final consideration is that FDI increasingly involves the development of service activities which very often can only be exported by establishing a physical presence in the foreign market. Although these are likely to increase employment there, there is no reason why this should be at the expense of jobs at home. Indeed, ultimately, it should favour domestic employment because of the additional income generated by the company concerned.

world, as well as locally, and, at the same time, the region has attracted a significant share of total global flows of direct investment.

Already the history of the crisis has demonstrated the close linkages which have developed between economies in the region and is beginning to illustrate the strength of global links which bind the major regions in the world economy into an interdependent system.

The crisis which initially began in Thailand has already spread to other parts of the region, including Japan, the economic problems of which have been highlighted and reinforced by the downturn in neighbouring countries, which account for well over a third of its total exports, and is now beginning to affect China, over half of the exports of which go to other parts of the region.

The effects outside the region of this downward spiral of recession have also begun to manifest themselves in a collapse of primary commodity prices, which has been a major factor underlying the crisis in the former Soviet Union and which has hit developing countries, reducing their demand for industrial goods. This, in turn, threatens to cause a marked slowdown in US and European Union export growth, already hit directly by the downturn in Asian markets (some 26% of US exports go to the region, 19% of EU exports, as noted above), as well as in that of other developed countries, with repercussions on economic activity and further effects on primary product prices and on the exports of other economies in the global system.

Moreover, the crisis is occurring at a time when the US economy seems to be nearing a cyclical peak, when

sentiment in financial markets is fragile and when, consequently, a downturn could be initiated by a fall in export markets coupled with some withdrawal of inward investment. Any downturn would exacerbate the crisis and have knock-on effects in Europe and elsewhere.

In this situation, the critical question for European Union Member States is whether they will be able to withstand the depressing effects of a marked slow down in growth in the rest of the world through internal expansion, and allied to this, whether the present recovery in the Union will prove strong enough to achieve this without the need for deliberate policy action. For the rest of the world, the crucial question is how far expansion of the European market will offset the downturn elsewhere.

While neither question can be answered with any confidence, it is relevant to note that the underlying conditions for growth in the Union, in terms of low inflation and declining budget deficits and interest rates, are favourable. Most importantly perhaps, the impending creation of a single currency creates a whole new environment for economic policy and one which is potentially favourable to expansion, since it provides both the support for more growth-oriented policies and the basis for coordinating action across the Union.

On the other hand, the Union market for exporters from countries outside is now relatively small, as indicated above, which limits the leverage effect on global economic activity. The wider European market, as defined here to include the Middle East and Africa, adds almost as much again, though most of this goes to Union producers and is, in any event, being adversely af-

ected by the slump in energy and raw material prices.

Moreover, historical precedent is not encouraging. The European Union did not escape the consequence of global recession in the mid-1970s and early 1980s and was hit by the earlier downturn in the US in the early 1990s. Nor did it do much to initiate global recovery, though growth in Europe helped to sustain growth elsewhere in the second part of the 1980s. In the past, however, economic policy in the Union was fragmented, whereas EMU creates the opportunity for a coordinated approach which should be less vulnerable to exchange rate fluctuations and instability in international financial markets.



## Part III Section 1 Restructuring public expenditure

The public sector is an important part of the economy throughout the Union. Directly or indirectly it provides jobs for a significant proportion of the European work force. It also, however, affects employment more remotely, in that its activities need to be financed and the taxes or social charges which are raised to do this inevitably impact on businesses and job creation in the private sector. The increasing focus on the financing aspect sometimes means that the potentially positive effect of public expenditure on employment is neglected or played down.

Because of the implications for tax rates and/or government borrowing, the concern across the Union is to limit the growth of public expenditure. This is in line with the Broad Guidelines of Economic Policies and the Stability and Growth Pact agreed by Member States, under which they have undertaken to continue budgetary consolidation and to achieve this through expenditure restraint rather than through tax increases. Indeed, there is general acceptance that reducing public spending relative to GDP is necessary both to reduce the government debt ratio, especially where this exceeds the Maastricht benchmark level, and to secure a more sustainable reduction in the budget deficit.

Attention has, therefore, shifted to the composition of public expenditure and, more generally, to ways of better achieving the main objectives of policy — sustainable growth, high employment, equality of opportunity

and the avoidance of deprivation and social exclusion — within spending totals which are consistent with macroeconomic policy objectives. The focus has been on ways of restructuring spending and increasing the effectiveness of service provision rather than seeking to reduce government responsibility for ensuring a high level of social protection, efficient infrastructure and good quality education, training and other communal services.

At the Florence Council in 1996, the Heads of State and Government agreed to a selective restructuring of public expenditure, aimed at encouraging investment in human resources, research and development, innovation and the infrastructure essential to competitiveness. They also agreed that priority should be given to active policies for employment.

Since the Florence Summit, there has been a growing recognition of the need to enhance the role of public expenditure in promoting growth and employment, especially through investment in education and training, not only for young people but throughout a person's working life. This is likely to increase the growth potential of the economy by helping workers adapt to structural change and by facilitating the use of new technology, so reducing skill bottlenecks and inflationary pressure and providing more room for economic expansion.

The concern here is to consider public expenditure from an employ-

ment perspective, to examine its composition and the way that this is changing, the jobs generated in the provision of communal services — and the difficulties potentially created by limits on government spending growth — and the shift in emphasis of labour market policies from passive to active measures. In this regard, it draws attention to the substantial demographic changes taking place across the Union and the implications of these for public spending.

### The scale and growth of public expenditure

Over the 1960s and 1970s, public expenditure in Union Member States increased markedly in relation to GDP. Between 1970 and 1980, for example, total general government spending rose from an average of 37% of GDP to just over 46%, though much of the increase occurred in the two years of recession, 1973 to 1975, following the steep rise in world oil prices. The much slower growth of GDP from then on was accompanied by a steady increase in the relative scale of expenditure, though at a lower rate than during the 1970s. In 1990, it averaged just over 48% of GDP, some 2 percentage points higher than in 1980. In the recession of the early 1990s, it rose sharply again to reach 52½% of GDP in 1993.

Most of the growth in public expenditure has been due to an increase in transfer payments (which are not part of GDP as such but a redis-

tribution of the income generated by output), largely, though not entirely, to households in the form of social benefits. These rose from just under 16% of GDP in 1970 to 21% in 1980 and to just over 22% in 1990, around half of all government expenditure excluding interest payments. During the early 1990s, mainly because of recession (both because of the slow growth of GDP and the increased demand for income support as unemployment rose), transfers increased significantly, to 24½% of GDP in 1993. Since then, however, they have fallen markedly to under 23% of GDP in 1997 (Graph 144).

While there are large variations in the scale of transfers between Member States, from 29% of GDP in Sweden to under 15% in Greece, Ireland and Portugal, these need to be interpreted with caution. In part they reflect the differential scale of social protection which is the main item of transfers. They also reflect, however, the institutional arrangements in force. In some countries, services, such as health and social care in particular, are provided through transfers which reimburse people for the

expenditure they incur. In others, they are provided directly by the State (doctors and nurses being employed in the public rather than private sector) and, therefore, show up in direct expenditure on goods and services.

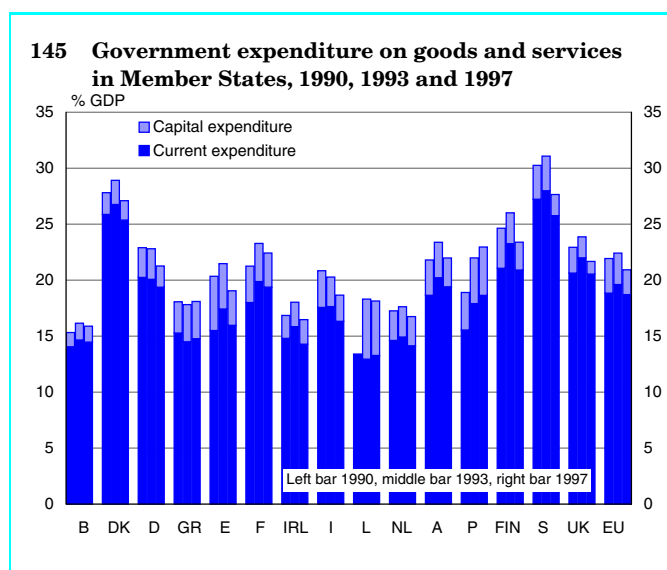
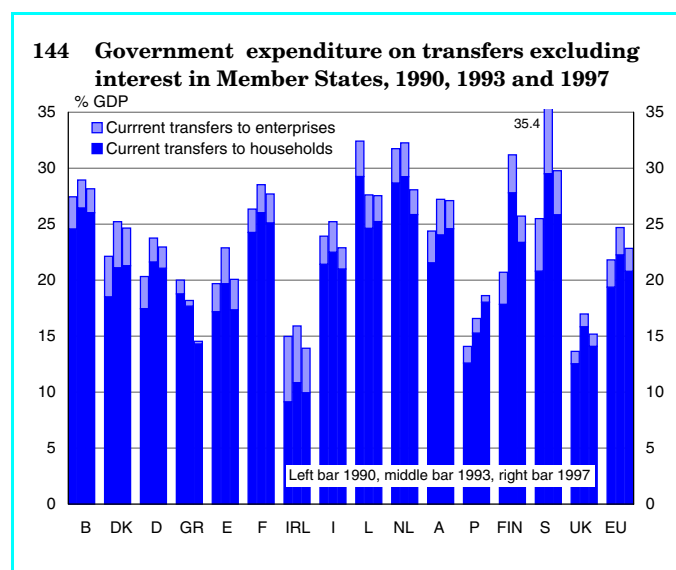
Current expenditure on goods and services (government consumption) is, in fact, the second largest spending item. This rose from just over 15% of GDP in the Union in 1970 to almost 19% in 1980, but then fell slightly to 18½% in 1990. While it rose in the early 1990s as GDP fell, it was at much the same level in 1997 as in 1990 (Graph 145). The fall in expenditure in recent years reflects a common tendency across Member States to seek to restrict the growth of public administration. In consequence, employment in this sector remained virtually constant over the three years 1994 to 1997, whereas it had risen by over 1% a year over the previous 10 years (though it has continued to grow in the three Benelux countries, Spain, Ireland and Sweden) (Graph 146).

During much of the 1970s and 1980s,

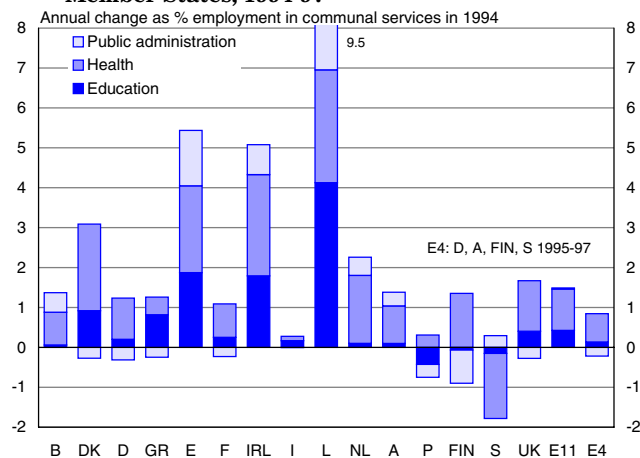
debt were the fastest growing component of government expenditure, rising from under 2% of GDP in 1970 to over 4½% in 1990 and to 5½% in 1993, though falling back to 5% in 1997. In a number of countries — Belgium (where they reached over 10½% of GDP in 1993), Italy (where they rose to over 12% of GDP in the same year) and Greece (where they were almost 13% of GDP) — they have increased even more markedly and have crowded out other kinds of expenditure.

Expenditure on fixed investment, which has often borne the brunt of expenditure restraint because reductions do not immediately affect the supply of services — though over the long-term they are liable to push up current spending on the maintenance and running costs of infrastructure and buildings — declined from over 4% of GDP in 1970 to 3% in 1990 and to just over 2% in 1997.

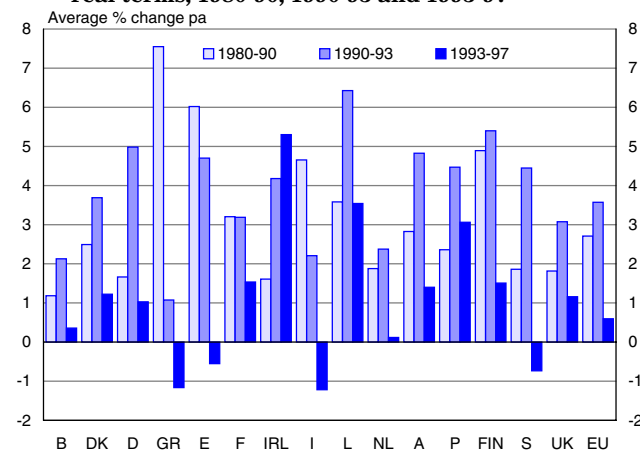
Overall, in the four years 1993 to 1997, the growth of public expenditure in real terms (deflated by the GDP deflator) averaged only around ½% a year, compared with 3% between 1990 and 1993 and just over 2% a year during the 1980s.



**146 Changes in employment in communal services in Member States, 1994-97**



**147 Growth of general government expenditure in real terms, 1980-90, 1990-93 and 1993-97**



Moreover, in the Member States in which it increased most markedly during earlier periods — Greece, Spain and Italy — it declined (as it did in Sweden, where the level is higher than anywhere else in the Union). Only in Ireland and Luxembourg, two of the fastest growing countries in the Union, did the growth in these four years exceed 1% a year in real terms (Graph 147).

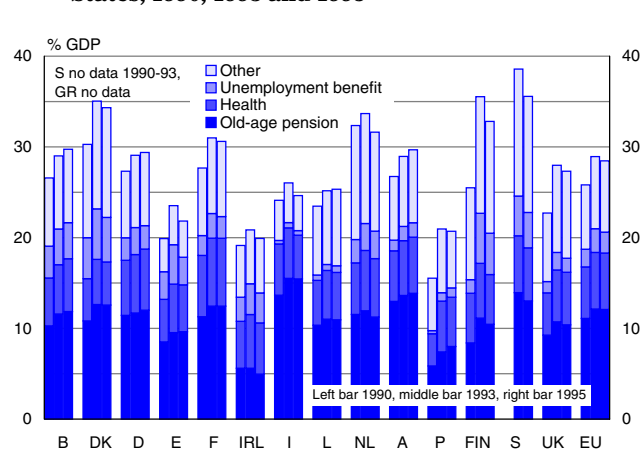
The restraint imposed on public spending throughout the Union is evident from these figures.

### The changing structure of social expenditure

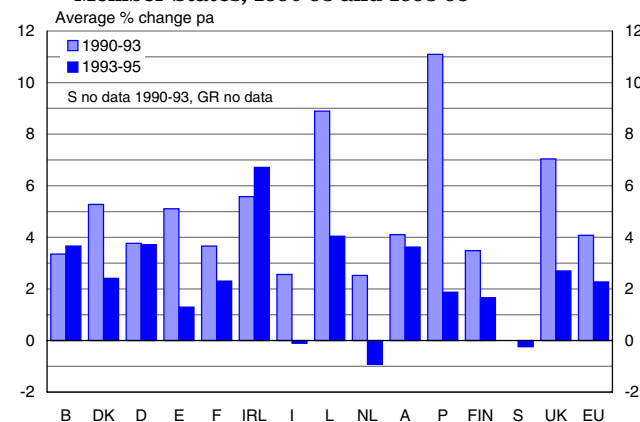
Overall, expenditure on social protection (as defined in the Eurostat, ESSPROS database), most of which is funded by government (not all because of spending incurred directly by companies on occupational pension schemes and other benefits for their employees) amounted to 28% of GDP in the Union in 1995 (the latest year for which data are available), 70% of this being trans-

fer payments. This was higher than in 1990, when it was only 26% of GDP (itself around 1% of GDP higher than in 1980), but slightly lower (around 1/2% of GDP) than in 1993 at the end of the recession (Graph 148). Indeed, between 1993 and 1995, expenditure increased by only around 2% a year in real terms as compared with 4% a year between 1990 and 1993 (Graph 149, which excludes spending on unemployment benefits to adjust in some degree for the cycle). Moreover, the sharp decline was common to most

**148 Total expenditure on social protection in Member States, 1990, 1993 and 1995**



**149 Change in social protection expenditure, excluding on unemployment, in real terms in Member States, 1990-93 and 1993-95**



Member States (see *Social Protection in Europe, 1997*, Chapter 3 for more details).

There is some variation in the composition of expenditure on social protection across the Union, which partly reflects differing needs, such as differences in unemployment or variations in the age structure of the population. There are, however, also broad similarities between most countries. In particular, old-age pensions (including survivors' benefit) are the largest element of spending on social protection throughout the Union (except in Ireland) accounting for more than 42% of the total in 1995, equivalent to 12% of GDP. Health care is the second largest item, accounting for 22% (some 6% of GDP), so that with old-age pensions, it represents almost two-thirds of the social protection budget. Since around half of spending on health care is incurred on older people of 65 and over, this section of the community is responsible for well over half of all expenditure on social protection in the Union.

Unemployment benefits accounted for only 8% of total spending on

social protection in 1995, under 2½% of Union GDP, though a similar amount went on disability benefits, a significant share of which are effectively a substitute for unemployment benefits in many Member States.

## The activation of policy

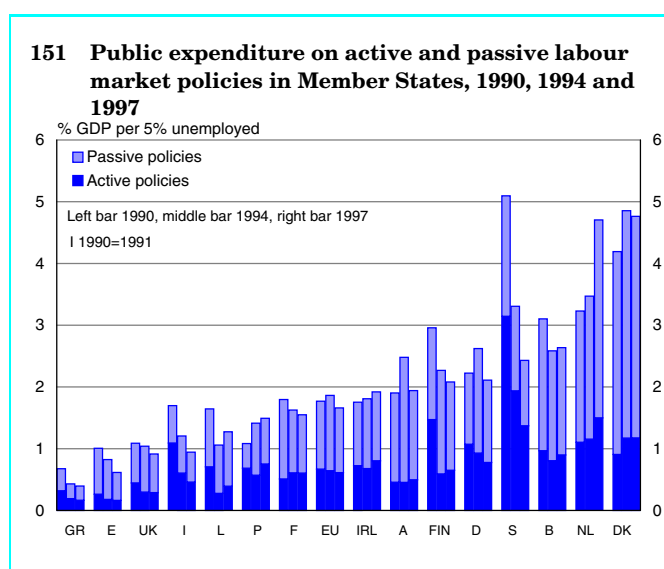
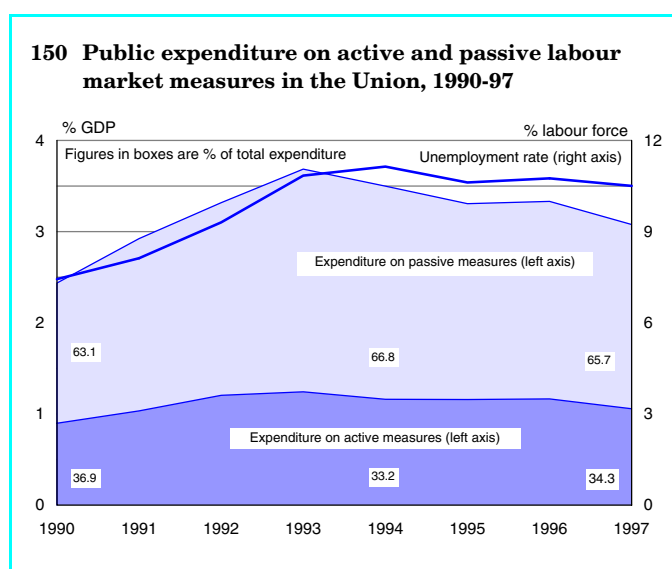
Overall, public spending on labour market measures accounted for just over 3% of GDP in the Union in 1997. Of this, some 65% went on paying unemployment compensation and 35% (just over 1% of GDP) on active measures to increase employability or to assist in finding a job. The latter figure is slightly higher than in 1994, when active measures accounted for 33% of the total, but less than in 1990, when they accounted for 37% (Graph 150). Moreover, expenditure on active measures was marginally lower relative to GDP in 1997 than in 1994 at the end of the recession, though about the same relative to the number of unemployed (which also fell a little over the three years).

In 8 Member States, the share of expenditure on active measures

was higher in 1997 than in 1994. In only four countries, however, Denmark, France, the Netherlands and Portugal, was spending on active measures higher in relation to GDP, when adjusted for the change in unemployment, in 1997 than in 1990 (Graph 151). In 5 other Member States, Greece, Italy, Finland, Sweden and the UK, spending in these terms was markedly lower (only around half as high), reflecting in the two Nordic countries, the substantial rise in unemployment over the period (and in Sweden, an apparent shift of expenditure to the regular education system) and in Italy, a sharp reduction in apprenticeship schemes.

## Education and the shifting age structure of population

Investment in education constitutes the basis of a skilled and flexible work force and, accordingly, one of the most important ways in which governments can contribute to the long-term competitiveness of European economies and to their potential for growth and job creation. (It is also, it should be noted,



## Employment in communal services in Europe and the US

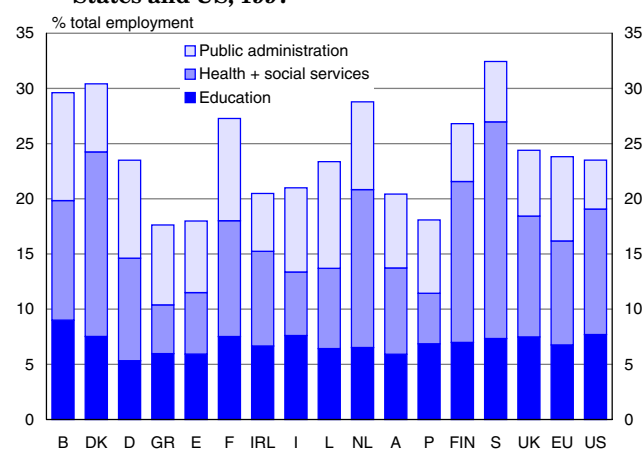
It is often argued that there is a much larger number of jobs in the public sector in the European Union and than in the US and that, as a consequence, the labour market is less dynamic. While the first statement is valid, the second statement is questionable, insofar as the scale of employment in communal services — public administration, education and health — is, in fact, larger in the US than in Europe, but more of this is classified to the private sector.

While employment in public administration is much less in the US than in Europe (4½% of the total in work as against just over 7½%), employment in both education and health is larger. In the US, 7½% of the total employed worked in education in 1997, 1 percentage point more than in Europe, while 11½% worked in health care and social services as opposed to 9½% in Europe (Graph 152). Accordingly, communal services as a whole accounted for about the same proportion of employment in the two economies. Nevertheless, because the employment rate is higher in the US than in Europe, the number of jobs in communal services relative to working-age population is significantly larger. In 1997, over 17% of working-age population worked in this sector in the US — almost 8½% in health and social services, 5½% in education. In Europe, the figure was just under 14½% — slightly over 5½% in health, 4% in education (Graph 153).

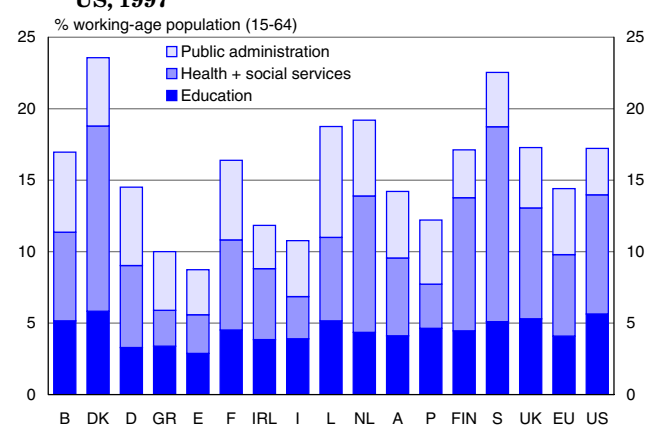
This implies that the scope for additional job creation in Europe in health and education could be significant, especially in the former, where the relative number employed in social services is almost certainly less in the US than in Europe and where, accordingly, the gap in health care alone is even wider than indicated. Because jobs in health care in Europe are predominantly publicly financed, however, the constraints on public expenditure growth mean that the realisation of this potential is problematic.

The potential, moreover, differs markedly between Member States since at present there are large differences in employment in communal services, especially in health and social services. Whereas in education, the difference was just over 2% of working-age population (5½% in Denmark, 3½% in Germany and Greece), in health and social services, it was over 11%. In Sweden, 13½% of working-age population were employed in this sector in 1997 and in Denmark, just over 12½% — significantly more in both cases than in the US because of the large number working in social services — while in Greece and Spain, the figure was only around 2½% and in Italy and Portugal, around 3%. This reflects the undeveloped nature of social services in Southern Europe, where care is largely provided within the family, but also their extensive nature in the two Nordic countries. Except for the Netherlands and Finland (where the figure was around 9% of working-age population), employment in health and social services in the rest of the Union was at least 5% of working-age population below the level in Denmark.

**152 Employment in communal services in Member States and US, 1997**



**153 Employment in communal services relative to working-age population in Member States and US, 1997**



one of the main ways in which individuals can increase their lifetime income.) Education is also a prime direct source of new jobs. Employment in education expanded by almost 2% a year in the Union over the 10 years 1986 to 1996, though the increase has slowed a little during the present upturn (to under 1½% a year between 1994 and 1997 and in a few Member States, Finland, Sweden and Portugal, it has declined), and now accounts for almost 6½% of total employment (less than in the US, see Box).

At the same time, the number of young people needing to be educated is falling in most parts of the Union, though this is being offset by the tendency for young people to remain in education longer. Between 1985 and 1996, the proportion of the Union's population aged under 20 fell from 27½% to just over 23½% and is set to decline further to 22½% in 2005 (and to under 22% in 2010), a fall in the numbers involved of around 0.3% a year (Graph 154). This, however, represents a marked slowdown in the rate of decline which has averaged around 1% a year since 1985 (Graph 155) and which has enabled Member States

both to expand expenditure per person and to extend further education to a growing share of the population without a substantial rise in spending relative to GDP.

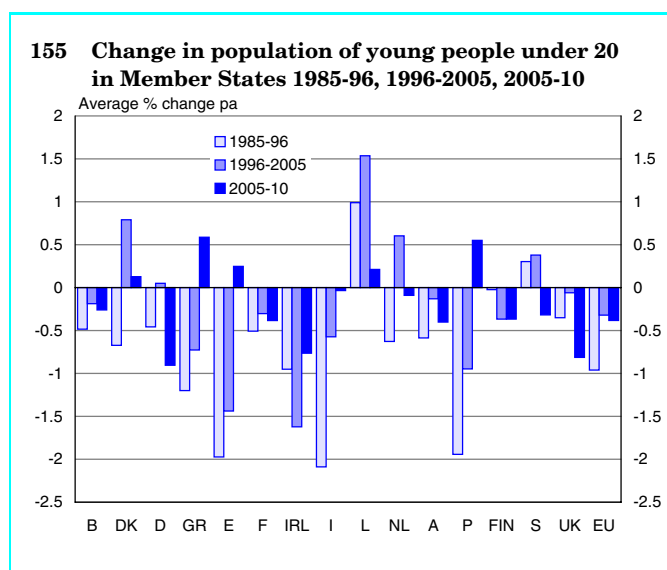
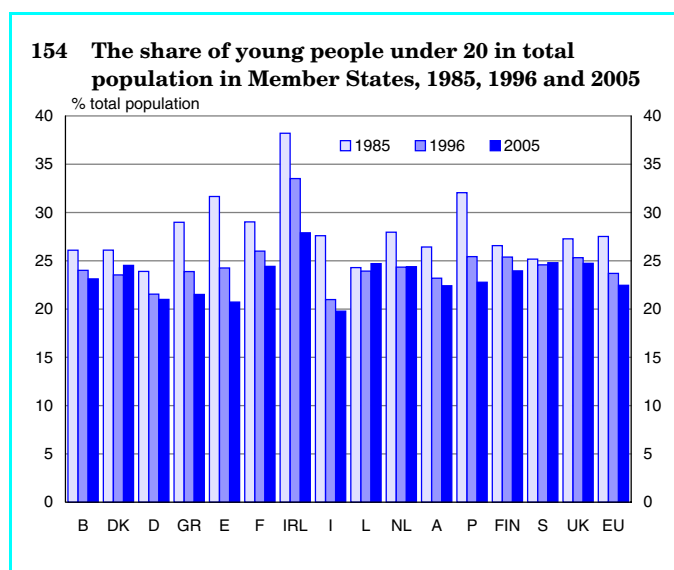
In the future, this may be more difficult to achieve but it is equally important to continue to improve the quality and extent of education to equip young people for the skills they will need in the workplace, and the skills that the European economies will need in order to maintain competitiveness.

### The growth of health care and social services

In contrast to the falling numbers of young people in the Union, the number of older people of 65 and over, the official retirement age in most Member States, is increasing, the effect on the labour force compounded by the growing numbers taking early retirement. The number of people aged 65 and over has grown by 1% a year in the Union since 1980 and is set to continue increasing at a slightly higher rate over the next 10–15 years and beyond (Graph 156). Moreover, within

this age group, there is also a strong upward trend in relative number aged 75 and over (Graph 157). Not only is the number of older people rising, but more of them are living longer. As a consequence, the upward pressure on pension payments is being accompanied by a growing demand for health and long-term care.

Health care and social services, like education, are prime potential sources of net job creation. In the 10 years, 1986 and 1996, employment in this area rose by over 2½% a year in the Union and during the present upturn, growth in nearly all Member States has continued at much the same rate. The only exceptions are Italy, where employment rose by only ½% a year between 1994 and 1997 and Sweden, where it declined considerably in the two years 1995–97 (though where the proportion employed in the sector, at almost 20%, is higher than anywhere else in the Union). In the Union overall, jobs in health care and social services now account for around 9½% of total employment. This, however, is still much less than in the US, where they account for 11½% of the total (see Box).



The continued growth of jobs in this sector depends in large measure on the response of governments across the Union to both the evident need for care implied by an ageing population and the equally apparent growth in demand for high-quality health care and preventative treatment as real incomes rise and medical know-how advances. In the recent past, governments in most countries have imposed tight restrictions on the growth of public health care budgets. This, however, does not seem to have affected employment growth.

In some degree, the expansion of jobs may be a consequence of a shift to private health care as well as increases in co-payments for drugs and treatment (which are negative expenditure items in the public sector accounts). In the US, the private sector accounts for over half of expenditure (public expenditure on health care in the US, at around 6½% of GDP, is higher than in most European countries, contrary to the impression often gained), whereas in Europe, the figure is typically around 20%. However, there are only limited signs of any growth in private health care (over the 1990s, only

in the three Nordic countries and Italy, has there been any significant increase in private expenditure relative to public). Indeed, in most Member States, questions of how far the private provision of health care should be allowed to expand and about the role of the private sector in relation to the public sector remain to be resolved (see *Social Protection in Europe, 1997*, Chapter 6).

### Concluding remarks

Successive Broad Economic Guidelines have identified two general principles for restructuring public expenditure:

- to control public consumption, public pension provision, health care, income support for those out of work (passive labour market measures) and subsidies;
- to favour productive activities, such as investment in infrastructure, education and training and active labour market measures to help people into employment.

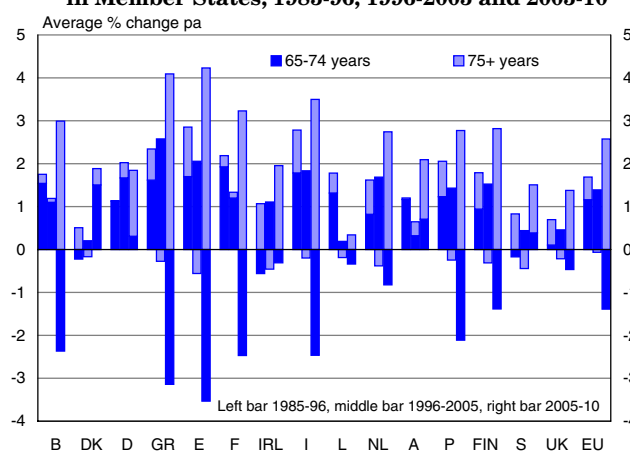
In simplistic terms, restructuring along these lines implies a shift from public consumption and trans-

fers towards public investment. From the evidence presented above, it appears that a number of Member States have had difficulties in achieving such a shift.

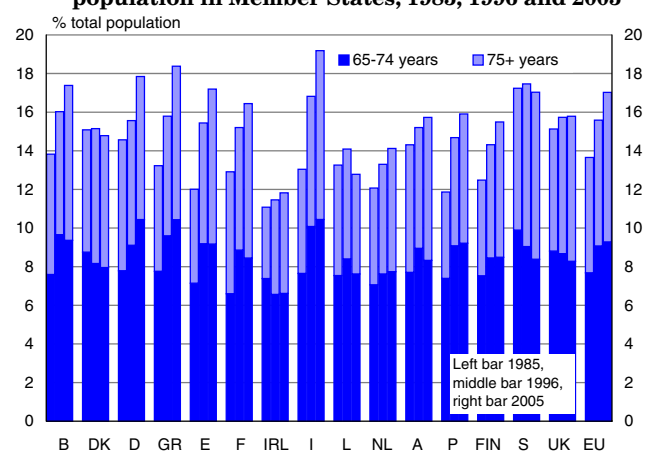
Not only has the relative growth of spending on active labour market measures been modest, but there has been a significant decline in expenditure on fixed investment. Although this may, in some degree, have been compensated by the greater involvement of the private sector in infrastructure projects (though there are no data on this), the fact that it has been common to most Member States (even Germany despite the large-scale investment projects in the new Länder) is a cause for concern given the importance of modern and efficient infrastructure for competitiveness. It contrasts with an increase in the US (to around the same level relative to GDP as in the Union) and, more especially, in Japan (where it is some three times higher relative to GDP than in the Union).

At the same time, it is important to emphasise that the State's contribution to investment is not limited to infrastructure projects.

**156 Change in population of older people 65 and over in Member States, 1985-96, 1996-2005 and 2005-10**



**157 The share of older people 65 and over in total population in Member States, 1985, 1996 and 2005**



As noted above, investment in education, which is at the basis of a skilled and flexible work force, is one of the most important ways in which governments can contribute to raising growth and job creation in the longer-term. A broader concept of investment is, therefore, needed when assessing the division of public expenditure across the Union and its role in employment policy.

As also noted, a large part of expenditure on social protection goes on the support of the elderly, either in the form of pensions or care. The prospective growth in the number of people of 65 and over in the Union not just over the next 10 or 15 years, but even more dramatically over the next 20–25 years, is the reason for the acute concern in Member States to limit transfers to this section of the population. As a result, the focus of policy is not only on pension schemes, but also on early retirement which, especially among men, has risen markedly since high levels of unemployment and job scarcity became major problems in the 1970s. In most Member States, attempts are, therefore, being made to reduce the number retiring early and to find ways of keeping people at work for longer, though this can be difficult if the people concerned do not possess the requisite skills (see Part I, Section 5 above).

Restraints on health care expenditure have been imposed across the Union in order to limit the overall growth of public spending. In practice, however, health care has been a major source of job growth and would certainly be so in the future if it were financed differently. At the same time, changing the form of financing and reducing the extent of public provision has major implications for equality of access to high-quality treatment which is a cornerstone of policy in Member

States. Demand for more extensive and better standards of care is a prominent feature of rising real income, while the need for care will undoubtedly continue to increase because of demographic trends and the growing number of people living into advanced old age. The potential for growth is demonstrated by the fact that expenditure on health care in the US in relation to GDP is over twice the level in Europe.

It is equally important to provide good child-care support facilities for people with young families who want to pursue working careers. The standard of provision varies considerably across the Union, with high levels in the Nordic countries, France and Belgium but low levels elsewhere, including in Germany, the UK and Ireland as well as the Southern Member States, where caring is still largely undertaken within the extended family. As reflected in the evidence presented in Part I, Section 5 above on participation rates, the lack of good child-care services is an important barrier for women, in particular, who want to work, even in Southern countries, where responsibility falls on older women. An expansion in the supply of such services is a key part of the European strategy for increasing employment, both because it creates jobs directly and because it removes a major obstacle to women pursuing working careers. The same question, however, arises over how this expansion is to be funded as for health and social care generally.



## Part III Section 2 Employment and the environment

It is increasingly recognised that environmental problems and the depletion of natural resources represent a major threat to long-term global economic growth, jeopardising the relief of poverty and acceptable standards of living in developing countries, as well as the continuing prosperity and high levels of employment in industrialised ones. To sustain economic development in the future requires that the link, which has been so evident in the past, between growth and rising real income, on the one hand, and the use of exhaustible resources and the degradation of the environment, on the other, is broken. This requires, in turn, changes in the prevailing pattern of consumption in developed countries in particular and in the way that goods and services are produced in both groups of countries.

Since developed countries are responsible to a significant extent for the depletion of natural resources, especially fossil fuels, and for present levels of air, ground and water pollution, it is right that they should take the lead in making the shift to an alternative and sustainable development path. This is recognised explicitly by the European Union in the Amsterdam Treaty, which commits Member States to the pursuit of a pattern of growth which respects the environment as well as achieving high levels of employment. It is also recognised more tangibly in the agreement of Member States to the Kyoto Protocol, which commits them to reducing their combined emissions of green-

house gases by 8% in relation to the level in 1990 by the year 2010.

The key issue is whether the shift to a sustainable development path can be attained without adversely affecting the achievement of higher employment across the Union, necessary to reduce unemployment to more tolerable levels and avoid a break down in social cohesion, which is an equally important objective of policy. It is the supposed conflict between the two, combined with the financial cost involved, which in the past has been the main deterrent to the implementation of tougher measures to protect the environment and which is still widely perceived as a major obstacle.

The concern here it is to support the main message of the Commission's Communication at the end of 1997 on environment and employment (COM(97)592), that the simultaneous pursuit of employment and environmental objectives need not be contradictory and, indeed, that action on both fronts can be mutually supportive. This can most readily be seen in investment in new, cleaner methods of production which, at the same time, consume less energy, reduce emissions and, by improving competitiveness, increase employment, or in the development of renewable, non-polluting, energy sources which directly provide jobs. It can also be seen in local policy initiatives which employ people who would otherwise be out of work, or provide training to them, on projects to protect or improve the environment.

In what follows, the relationship in the Union between GDP growth and energy consumption is examined first, to illustrate the extent of the change which needs to be brought about if growth is not to lead to increased consumption and, potentially, higher emissions. Secondly, the argument that stronger environmental protection is likely to lead to lower growth and employment is critically examined. Thirdly, the key role of government in the pursuit of a sustainable growth path is emphasised. Finally, estimates of employment in environmental activities are presented.

### **Economic growth and energy consumption**

It is unquestionably the case that the main cause of environmental degradation in the past has been economic growth and the process of industrialisation which has been at its centre. This has led to increasing consumption of energy not only in the production process itself but also in the transport of goods and people and in the generation of electricity which have expanded at the same time. It has led, in addition, to the depletion of exhaustible resources and the adoption of increasingly intensive methods of agricultural production to feed a growing population, which, in turn, has been associated with the increasing use of chemical fertilisers and pesticides giving rise to the pollution of rivers, lakes and under-

ground water courses as well as the soil.

The link between GDP growth and total energy consumption in the Union, the main source of toxic emissions and the primary cause of the build-up of greenhouse gases (CO<sub>2</sub>, produced largely by the burning of fossil fuels, is estimated to account for 70% of such gasses), however, has been far less systematic in recent years. Between 1985 and 1990, when economic growth in the Union averaged over 3% a year, overall energy consumption went up by just over 1% a year, an effective saving in the use of energy per unit of output of around 2% a year (Graph 158).

In the following 6 years, when economic growth slowed down and when the new German Länder were absorbed into the Union, GDP increased by under 2% a year (even if the GDP in the former East Germany is added after unification) and energy consumption rose by almost 2½% a year. Much of the latter rise, however, occurred in 1991 in Germany after unification, though even if this year is excluded, growth in energy consumption still aver-

aged almost 1½% a year in the 5 years 1991 to 1996, only slightly less than the growth of GDP. In the latest period, therefore, the efficiency with which energy is used has hardly improved at all in the Union as a whole.

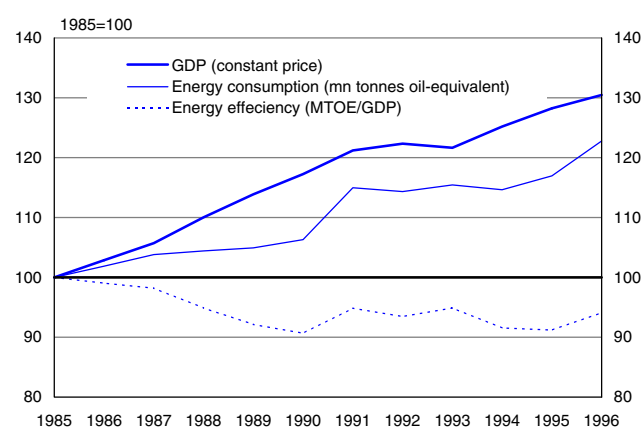
Indeed, after 5 years of energy saving in the late 1980s in all Member States apart from Greece and Italy, energy consumption relative to GDP rose between 1990 and 1996 in all but Denmark, Ireland, Luxembourg, Austria and Italy (where it remained unchanged) (Graph 159). This may well reflect the fall in the world price of oil during this period, which — along with increased competition in energy supply in some countries — has served to reduce energy prices and so the incentive to use energy more efficiently. Although in some countries, the imposition of higher taxes on energy has offset the reduction in some degree, it has so far failed to have a material effect on the rate of energy saving. The rise in consumption was particularly large in Greece, Spain and Portugal, all countries where economic development is lagging behind. In Ireland, on the other hand, which is in a similar position, but

which is catching up rapidly, energy consumption declined substantially in relation to GDP, reflecting perhaps the high-tech nature of industrial growth.

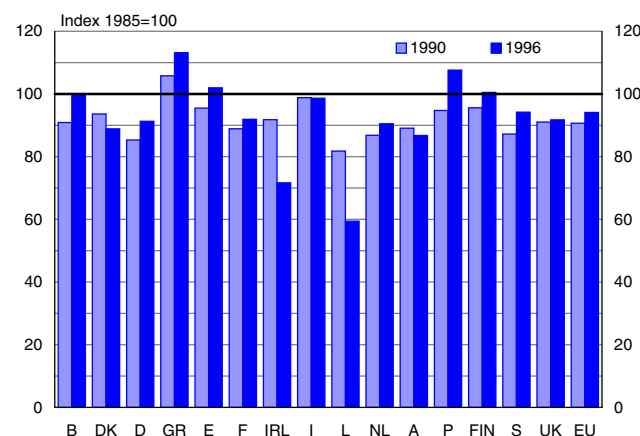
In the Union as whole, there is evidence that the energy consumed by manufacturing, and the emissions generated, continued to decline during the 1990s, partly because of the recession in the early 1990s but partly because of the decline in heavy industries. This was offset, however, by an increase in the energy consumed by the transport sector and by growing emissions of toxic gases despite the major steps taken, through catalytic converters, for example, to reduce these in relation to the journeys made. Car usage has continued to rise relative to the use of public transport.

Growth in GDP of 3% a year or more, which is required in the Union to reduce unemployment substantially and achieve higher levels of employment, would, therefore, require a marked rise in the pace of energy saving in relation to the experience of the past decade if it is not to be accompanied by growing energy consumption. More im-

**158 Changes in GDP, energy consumption and rate of energy saving, 1985 to 1996**



**159 Energy consumption per unit of GDP, 1985, 1990 and 1996**



portantly from the perspective of reducing toxic emissions and meeting the Kyoto commitment, the need is to reduce CO<sub>2</sub> emissions (by a planned 15% by 2010 relative to 1990) and, therefore, the amount of fossil fuel burned within the total energy consumed (see the Commission's Communication, *Energy efficiency in the European Community*, COM(1998)246). This could be achieved in a number of ways, but most notably through a shift in the method of electricity generation (which accounts for 30% of the Union's CO<sub>2</sub> emissions) from fossil fuels to renewable energy sources and through a shift in modes of transport from cars to buses and trains and, more generally, from road to rail. (In the long-run, it is likely to require a fundamental change in both the pattern of spatial development and organisation of production to reduce the number and length of journeys.)

The accelerated development of renewable energy sources, in particular (of wind, solar and biomass, especially), which at present account for under 6% of Union energy consumption, would not only reduce toxic emissions but create jobs. Moreover, since Union industries in many areas are world leaders in the new technologies entailed, the growth of new capacity is likely, at the same time, to open up new opportunities in export markets. Estimates suggest, for example, that doubling the share of energy demand met by renewable sources by the year 2010 to help meet the Kyoto commitment would give rise to a net addition of around 500,000 jobs.

This estimate allows for the jobs lost in other energy sectors, though because the increase in renewable energy production involved would be largely at the expense of imports,

the detrimental effect on employment elsewhere in the European economy is likely to be relatively small. By the same token, although the investment involved would be substantial, the returns in terms of a saving of imports and increased employment as well as the reduction in CO<sub>2</sub> emissions would be equally large (see the Commission's Communication, *Energy for the future: renewable sources of energy*, COM(97)599; see also a recent study conducted by the Climate Change Network which estimated the employment potential of achieving the planned reduction in CO<sub>2</sub> emissions at a possible 1.9 million jobs).

Reducing consumption of energy combined with shifting to renewable sources of supply, however, is only one of the conditions, if a very important one, which need to be met in order to ensure that economic growth is sustainable. Changes are also necessary in other areas to avoid environmental degradation and the depletion of exhaustible resources as output and real incomes increase, which entail counterpart changes in processes of production and patterns of consumption (see the Commission Communication, *Economic growth and the environment*, COM(94)465, for ways in which these can be achieved).

### **The costs and gains of structural change**

The main argument against action to reduce environmental degradation is the cost imposed on sectors which are the main source of the problems and, therefore, the jobs likely to be lost as a result. In practice, however, these will tend to be offset by increased output and employment growth in activities fa-

voured by such action (in, for example, water and waste treatment, recycling, and public transport, as well as in the monitoring of environmental problems and the design of solutions). Moreover, by careful planning and the sensitive, and flexible, implementation of measures, many of the transitional costs can be reduced and, in the longer term, even turned into lower production costs and higher employment.

This is confirmed by the results of a range of macroeconomic models used in various countries to simulate the effects of action to protect the environment. These indicate that so long as any taxes or charges levied on polluting activities are accompanied by reductions elsewhere, or by higher public expenditure, to maintain overall demand in the economy, then at worst there should be no reduction in output as a result of environmental measures, except perhaps for a brief period. Equally, unless the measures lead to an increase in the capital-intensity of production across the economy as a whole, which seems unlikely, the employment generated by a given level of output should be the same after the measures as before, even though its distribution between activities might be different.

They also demonstrate that, rather than having a neutral effect, tougher environmental action has the potential to increase employment in two different ways. First, if polluting activities, such as the burning of fossil fuels, are discouraged through taxation and the revenue generated is used to reduce non-wage labour costs, then the rate of net job creation in the economy can be increased — the more so if the labour cost reductions are targeted on the less productive and

### **The effect on employment of integrated environmental technology**

The Zentrum für Europäische Wirtschaftsforschung in Mannheim has recently undertaken several case-studies of the impact on employment of moving from additive to integrated environmental technology for companies in Germany. The results suggest that the integration of environmental technology has qualitatively similar effects to other technological advances, in the sense that it increases competitiveness, but that the employment impact is more limited. Although employment gains are small, there is a clear benefit to the environment.

The effect on employment, moreover, depends significantly on the prevailing national and international framework of regulation, and, particularly, on whether the country has stronger regulations than elsewhere, as well as on the competitive state of the goods and labour markets. These together determine the extent to which new products replace existing ones rather than being complements to them and whether regulation leads to cost increases relative to international competitors not facing the same constraints. The complexity of these interactions makes for difficulty in making generalisations about the effect on overall employment.

There are potential gains in employment from integration for consultants and firms offering integrated solutions and energy-saving technology. There are possible losses, on the other hand, among the users and suppliers of existing additive technology, particularly in the energy sector, as well as those resulting from the increased productivity associated with integrated technology.

The study distinguishes between: primary measures, such as the introduction of clean technology in a generating plant using coal or the production of solvent-free car paint, where the product or process is fundamentally altered; secondary measures, such as recycling, which have a less fundamental effect; organisational measures, such as audits and pollution measurement; and measures involving the use of renewable resources.

For each of these, the direct employment effect is likely to be positive, with the exception of primary measures of process innovation, where greater efficiency may reduce employment levels. The indirect employment effect of the latter, however, may well be positive, whereas for product innovation it is likely to be negative unless there is strong complementarity between goods or a significant growth in net exports. For the other three types of innovation, the indirect employment effect is likely to be negative, unless there is coordinated action among countries to introduce regulation or major improvements in competitiveness.

The overall conclusion is that gains in employment are limited and in most cases the introduction of the technology has a neutral effect on employment. It does, however, tend to benefit more highly qualified workers relative to those with little or no qualifications, which conforms with the effect of conventional technological advance.

lower paid workers — at the same time as toxic emissions are reduced. By this means, as argued by the Commission for a number of years, the cost of both labour and energy can be brought more into line with the cost to society of their use, so achieving the double dividend of less pollution and higher employment.

Secondly, if the environmental measures introduced improve the efficiency of production and business competitiveness, then both economic growth and employment can be increased in the longer-term. In practice, empirical studies have generally concluded that producers in countries where tough controls have been imposed on polluting activities have shown no tendency to lose market share, even in the sectors affected. On the contrary, they have often been stimulated to change their production techniques, leading to reductions in costs and increases in market share (see the studies cited in *Employment in Europe, 1995*, Part III, Section 2).

These macro-studies have been confirmed by more detailed studies of particular industries, which have shown that the need to comply with environmental regulations can encourage a fundamental reassessment of methods of production and a search for ways of avoiding, or minimising, the generation of emissions, rather than controlling them once they have been produced. The integration of cleaner technologies into the production process in place of end-of-pipe solutions, moreover, while the initial cost is much higher, stands to reduce not only pollution but also operating costs in the longer-term, since it embodies the latest know-how and equipment. In addition, the early implementation of such production

techniques could well give the firms concerned a competitive edge in the long-term struggle for world markets, since ultimately all producers will have to follow their lead if global pollution is to be reduced.

Nevertheless, though sales might increase as result, it is much less certain that more jobs will be created in the sectors concerned. Just as new technology tends to be more environmentally friendly than older technology, it also tends to be less labour intensive. Indeed, saving on labour inputs is often one of the main ways of reducing production costs (see Box on integrated environmental technology).

The direct impact on employment in the businesses introducing the change, however, is not the main issue. It is only to be expected that jobs in manufacturing will tend to decline over time as new technology is introduced and productivity is increased, irrespective of whether this is introduced for environmental reasons or not, just as they have fallen over the past 25 years. Future job creation, as in the past, is likely to be in services rather than in manufacturing. Nevertheless, improvements in competitiveness in manufacturing are critical to achieving sustained rates of economic growth which are necessary to support employment growth in services.

It is equally important to emphasise that structural change will occur in the future irrespective of whether stronger environmental protection measures are implemented or not. Job losses, business closures and shifts of employment between sectors are an inherent feature of economic development, whatever path this takes. The evidence suggests that around one in six people in the Union either

change their job or move into employment each year and that around one in eight move between sectors or into or out of work (see *Employment in Europe, 1997, Analysis of key issues*). As part of this process, a great many new businesses are created every year and similarly large numbers fail (see Part II, Section 1 of this Report).

The extent and speed of structural change, moreover, has tended to increase in recent years with the acceleration of technological advance, improvements in communications, the opening up of world trade and the globalisation of production. Both workers and businesses alike have had to adapt to these changes, to learn new techniques and new ways of working. These changes have swamped any effects on the structure of economic activity and nature of jobs from environmental measures. This is likely to continue to be so in the future. The avoidance of tougher action to protect the environment, in other words, will not prevent structural change and job losses occurring, it will only change their nature and location. Indeed, by maintaining employment in activities which are not sustainable, and, therefore, not viable in the long-term, it is likely to increase the scale and cost of change which will ultimately be necessary.

## **The role of government**

The changes that are necessary to shift the European economies on to a sustainable growth path will not happen of their own volition. Although there are potential gains to competitiveness, and, therefore, profitability over the long-term, of adopting less polluting methods of production, experience demonstrates forcibly that businesses are

very unlikely to implement the changes required and to incur the costs involved without deliberate action by government. Indeed, intense competition and the pressure to pursue short-term profitability may make it difficult for companies to undertake the necessary investment even if they were so inclined. The form which government action takes, however, is likely to have an important bearing on the outcome, on the costs imposed on business and on the scale of problems created as the necessary changes in production techniques, patterns of consumption and shifts in economic activity take place.

Time, transparency and flexibility are the three main criteria which should govern the action taken. In order to minimise the disruption caused, businesses need to be informed of the measures to be introduced well in advance, with as much information and advice as possible on the proposals and potential responses. Equally importantly, the measures themselves should, whenever feasible, be designed in a way which gives producers the flexibility to choose how best to modify their production techniques and behaviour so as to comply with them. This means, in general, that economic instruments, like taxes or charges which allow firms to decide the most effective means of reducing their impact, are preferable to controls which dictate the action to be taken. They are, therefore, consistent with a market-based approach under which prices are adjusted to reflect the social costs of environmental damage and the depletion of exhaustible resources (so serving to internalise externalities) and, accordingly, give appropriate signals to producers and consumers alike to adapt their behaviour in line with environmental imperatives.

The responsibility of government also extends to ensuring that activities are undertaken which yield clear social benefits in terms of environmental improvement but which would not be carried out if left to the market. Examples include the cleaning up of derelict and polluted land, the promotion of cleaner technologies or the provision of advice to SMEs or poor households on ways of increasing energy efficiency. In many cases, such action can be combined with the creation of jobs and/or the provision of training for disadvantaged people in the labour market, so achieving the twin objectives of increasing employment, or employability, and improving the environment (see Box for examples of local action supported by the Union Structural Funds).

Equally, governments have a vital role to play in ensuring that investment takes place in the infrastructure required to protect the environment and safeguard scarce resources over the long-term, irrespective of whether this is carried out by public utilities, private business or some form of public-private partnership. Again, such action tends simultaneously to increase employment, not only in the construction industry but also in the private sector which is likely to gain from a cleaner environment — as, for example, in the case of the tourist industry which can attract more visitors to particular locations if there is clean water to drink and bathe in.

## **The development of services and new needs**

Shifts in the pattern of consumption and production in the direction of a

### **Examples of local environmental-employment projects**

A large number of projects, aimed at both improving the environment or encouraging firms and households to take more account of environmental considerations in the way they operate or behave and increasing employment or employability have been carried out in recent years with financial support from the Community Structural Funds. Examples are:

- the 'Heatwise' project in Glasgow, aimed at encouraging low income households to use energy more efficiently while providing training for the unemployed and helping them find permanent work, with a success rate of around 75%;
- the 'Adapt-Renovable' project in the Canary Islands, aimed at developing renewable energy sources and the desalination and re-use of water, so reducing dependence on imports and exhaustible resources, and at training local people to carry out these tasks;
- the Berlin Environmental Improvement Programme, aimed at creating employment in the provision of information and advice on environmental technology to SMEs and on the financial support available to them, so encouraging them to adopt less polluting techniques, to reduce the amount of waste produced and increase their competitiveness. Under the scheme, 6 companies offering environmental services were created and helped to develop;
- the 'Trialp' project in the Rhone-Alpes region, aimed at providing work experience and training opportunities in waste management (the collection and sorting of non-hazardous household and industrial waste), especially for the long-term unemployed.

more sustainable growth path are already evident across the Union as a result of the normal process of economic development and the expansion in demand for services as real incomes rise. The new Information Society is infinitely more environmentally-friendly than the industrial societies which preceded it. At the same time, increasing demand for improvements in the quality of life and in the surroundings in which people live and work, as well as for more leisure and recreational facilities, itself has environmental implications, as does the growing demand for quality food and the increasing awareness of the ecological costs of particular methods of production.

Although the build-up of pressure on attractive locations from housing, business and tourist development poses a threat to the areas concerned, the same forces can also lead to the regeneration of urban areas, the rehabilitation of derelict sites, the preservation of the natural and physical heritage, the protection of vulnerable landscapes and the better management of forests and recreational areas. All of these kinds of activity create jobs just as they cater for new consumer demands, as does the development of less-intensive farming methods and the increased importance attached to environmental protection in the development of rural areas.

The role of government is critical in these regards, in providing financial support for desirable developments, establishing the necessary planning framework for balancing the competing demands on particular areas and ensuring that sufficient information is available to inform consumers and businesses alike about the environmental consequences of their actions. They can also take the lead in building partnerships between the different parties concerned and encourage private sector involvement, which is equally critical if an environmentally-friendly growth path is to be established.

## Employment in environmental activities

It is inevitable that employment in environmental sectors will increase in future years, just as it has risen in the past as measures have been taken to reduce pollution and rectify the damage inflicted by economic development in earlier times. Estimates of the numbers involved in environmental activities, however, or predictions of their likely

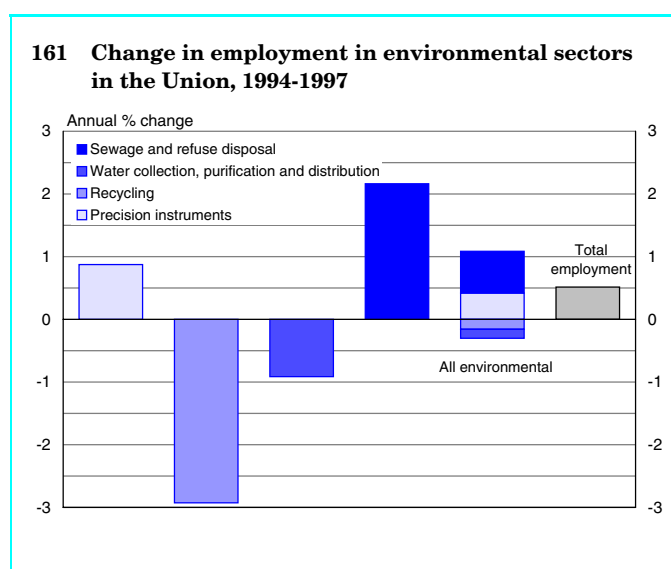
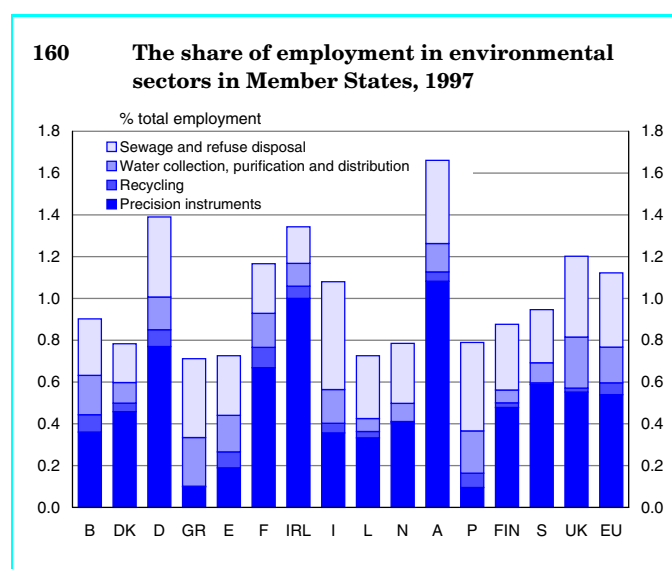
future growth, are extremely difficult to make, not least because the jobs concerned are spread across all sectors of the economy. As environmental concern has increased and as businesses have been forced to give more consideration to environmental issues, a growing number of people are involved in tackling these issues as part of the job that they do. At the same time, whole new sectors of activity, such as environmental research, auditing or engineering, have developed, employing many thousands of people, while existing sectors, such as recycling or waste management, have changed significantly in nature.

Statistical accounts have understandably failed to keep up with these developments. Official classifications of numbers employed to particular sectors do not distinguish environmental activities as such, and it is possible only to a limited extent to identify those that are mainly engaged in these kinds of activity. The Community LFS, for example, indicates that in 1997 just over 1% of people in employment in the Union, around 1.6 million, were employed in sectors which are wholly or partly environmental in

nature (Graph 160). Almost half of these, however, worked in instrument engineering, only some of the output of which consists of devices for measuring emissions or controlling pollution and other products of this kind. (Excluding most of these would leave a figure of around 0.7% of the total employed, which is consistent with that cited in *Employment in Europe, 1997*, p.57 derived from estimates of expenditure.) Of the remainder, most were employed in sewage and refuse disposal.

The proportion of the work force employed in these sectors varies significantly between Member States, ranging from over 1½% in Austria and just under 1½% in both Germany and Ireland — in all cases, largely because of high employment in instrument engineering — to only around half this figure in Greece, Spain and Luxembourg — in the former two cases, largely because of low employment in instrument engineering. Excluding instrument engineering, the proportion varies from 0.5% to 0.7% in most Member States.

In recent years, employment in these sectors in the Union seems to



have grown around twice as fast as in the economy as whole. In the three years, 1994 to 1997, it increased by just under 1% a year, while the total number in work went up by just  $\frac{1}{2}\%$  a year (Graph 161, in which estimates have been made for 1994 for Germany, Austria, Finland and Sweden, where comparable data are available only from 1995). There were, however, marked differences between sectors, with most of the growth occurring in sewage and refuse disposal and apparent reductions in employment occurring in the water industry and recycling (though the very small size of the latter means that the data are of questionable reliability).

Estimates suggest that the number employed in environmental activities as a whole, including nature conservation, national heritage preservation, environmental auditing and research, renewable energy and in-house environmental management, may well be two or three times that in the environmental sectors distinguished in the LFS (or more accurately in the NACE classification on which it is based). The growth in employment, moreover, may also be understated.



## Annex Registered unemployment and harmonised unemployment figures

The ‘headline’ unemployment rate in individual Member States on which popular attention tends to be focused is, in many cases, derived from those registered as unemployed at national labour offices. Although the way these figures are compiled is usually based on the internationally-agreed definition of unemployment established by the ILO — that the person concerned needs to be out of work, to be actively looking for a job and to be available to take it up should they be offered one — there are wide divergences in the way that it is applied between countries.

Because of such differences, registration figures provide no basis for comparing unemployment rates across countries and may even give a misleading impression of the extent of unemployment in particular Member States.

In a number of them, people working only a few hours a week or for a short period of time may be included on the register, even though on the ILO definitions anyone working one hour a week is counted as employed. Similarly, in many countries, those looking for part-time rather than full-time work — typically under 20 hours a week — or only seeking a temporary job, especially if they are students, are excluded from the register. Conversely, in some countries, people who are ill and, therefore, not able to take up a job remain on the register unless the illness is protracted (which is partly a consequence of the way the register is maintained and the frequency with which people are required to register — which ranges from daily to monthly).

More generally, registration figures are inevitably affected by the strength of the incentive to register, which varies markedly between Member States according mainly to the provisions of the benefit system, though also to the extent of assistance given by the employment services to those looking for a job. More of the unemployed naturally tend to register in countries where most of them are entitled to benefit if they do so than in countries where benefit entitlement is comparatively restrictive. This applies particularly to young people

who in many cases are not eligible for benefit, especially if they have never worked. Similarly, the role played by the public employment services in helping people find a job, which again is a reason for registering, differs considerably between Member States. Whereas in Germany, France, Spain, and Sweden, almost all the unemployed use these services as their main method of job search (over 90% in the first two in 1997, over 85% in the last two), in Greece, Ireland, Portugal and the UK, a relatively small minority do so (less than a third in 1997 and only 6% in Greece).

Much effort has, therefore, been devoted to developing alternative measures of unemployment which accord more closely with the ILO convention and which are comparable between countries. These figures are usually derived from labour force surveys which are household based and which directly collect information about the employment status of individuals. Although there are some differences between the surveys carried out in different countries, despite the attempt at harmonisation by Eurostat — such as over what is regarded as ‘active’ job search — the LFS figures provide the best basis for international comparisons of unemployment.

This, however, does not necessarily mean that the figures are ideal. In particular, it is open to question whether someone who normally works only one or two hours a week can really be considered as employed in any meaningful sense. Since the extent of working short hours varies substantially between countries — it is particularly high in the Netherlands, for example, where, in 1997, 10% of women in employment worked under 10 hours a week — this in itself can distort comparisons.

The problem with national registers of the unemployed seems to be increasingly recognised across the Union and a number of Member States have gone over to using LFS-based figures as the main indicators of unemployment.

In practice, registration figures in most countries diverge significantly from the survey-based ones.

Although over the Union as a whole (excluding Greece, Italy and Finland for which no national registration figures are available), there was only a difference of 5% between the sum of the registration figures for unemployment and the ILO ones based on the Community LFS (the former being lower than the latter), this conceals large differences in both directions in individual Member States (Graph 162). In Germany, France and the Netherlands the number of registered unemployed exceeds the LFS figure by 15% or less. In Belgium, Ireland and Austria, the registration figure was over 40% higher than the ILO figure, while in Spain and the UK, it was over 20% lower.

### LFS data on registrations and registered unemployment

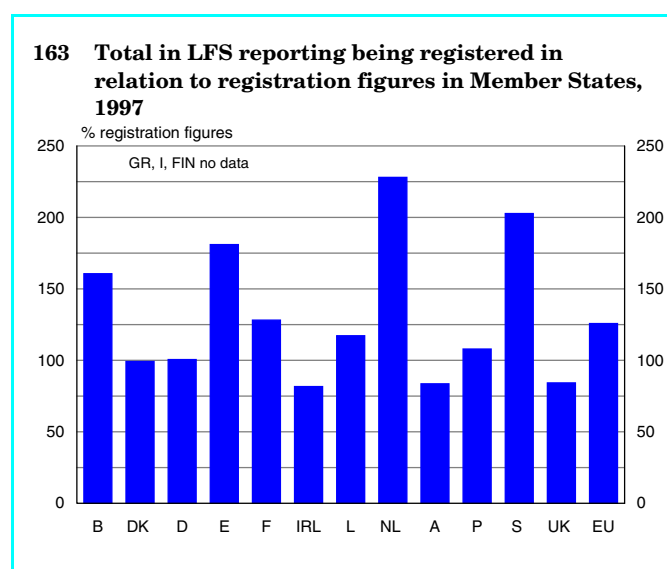
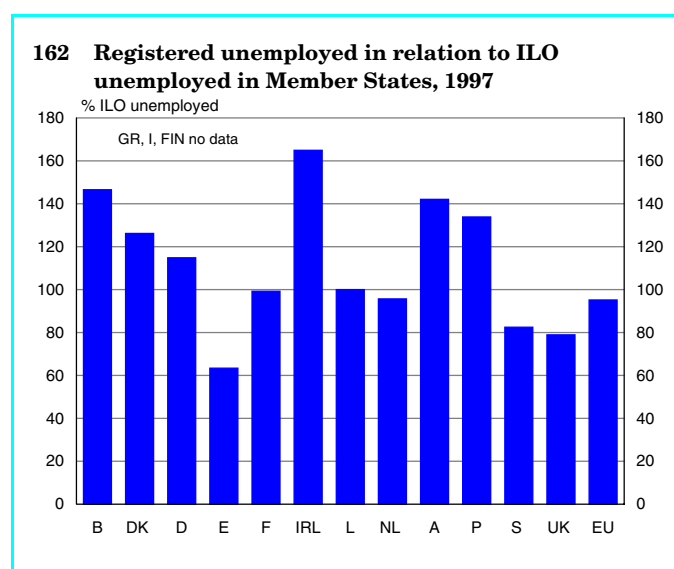
In principle, it is possible to gain an insight into this divergence from other information collected by the Community LFS. Specifically, as part of the survey, respondents are asked whether they are registered at labour offices, and the answers given can be compared with their employment status as recorded in the survey to see how many of those classed as unemployed, economically inactive or employed in the LFS are registered. In practice, there is some divergence between the numbers reporting themselves as being registered in the LFS and the numbers of unemployed obtained from the register itself. This is only to be expected since in a number of countries people can register at employment offices even if they are not unemployed, as defined nationally — if they are looking for a job, for example — but will not be included in the unemployment figures.

Over the Union as a whole, those reporting being registered exceeded the actual registration figures by some 25% in 1997 and by more than 60% in Belgium (where as noted the registration figure was already much higher than the figure for ILO unemployed), Spain, the Netherlands and Sweden (Graph 163). In Denmark, Germany and Portugal, the figures were much the same. In Ireland, Austria and the UK, however, the number reporting being registered fell short of the actual registration figure by 15–20%, which is difficult to explain and makes it hard to interpret the reported figures in the LFS.

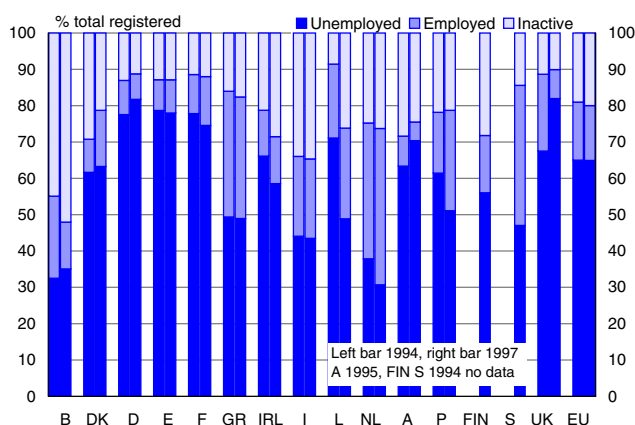
If those reporting being registered who are classed as being employed in the LFS are excluded, because many are likely to have been looking for a job (as confirmed below), then the figure is reduced much closer to the actual registration figure in a number of countries. In Sweden, it is reduced from over 100% above to just 14% above, in the Netherlands, from 130% above to 27% above — still a significant amount — and in France, from 35% above to 9% above. This leaves only Belgium and Spain as well as the Netherlands, where the figure for those reporting being registered after this adjustment diverges from the actual registration figure by much more than 15%.

### The LFS data and employment status

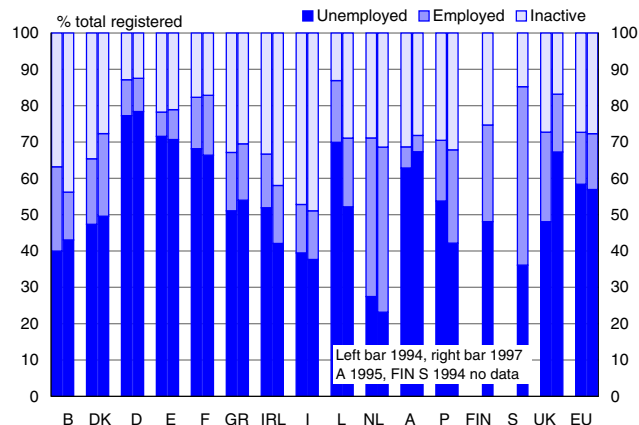
Examining in more detail the LFS data on those reporting being registered reveals that, in 1997, in 7 of the 15 Member States for men (including Greece and Italy where no actual registration figures are available) and 9 for women, half or less of those who reported being registered at labour offices were counted as unemployed



**164 Men in LFS reporting being registered at labour offices in Member States, 1994 and 1997**



**165 Women in LFS reporting being registered at labour offices in Member States, 1994 and 1997**



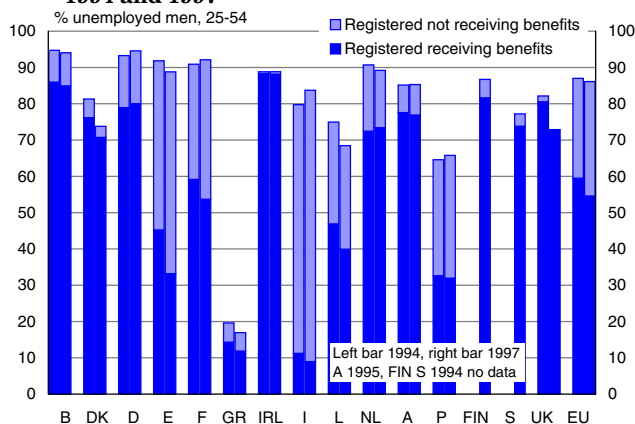
on the ILO definition (Graphs 164 and 165). The figures were in most cases very similar in 1994 (the main difference being in the UK, where a more restrictive procedure was introduced between the two years). In the Netherlands, Sweden and Greece (for men), most of those not recorded as being unemployed in the LFS were counted as being in employment. In the other countries, most were counted as economically inactive.

In most Member States, the great majority of men classed as unemployed in the LFS reported themselves as being registered at employment offices — around 83% of 25 to 54 year olds (to exclude young people and older people who may be treated differently by labour offices) in the Union as a whole (Graph 166). Nevertheless,

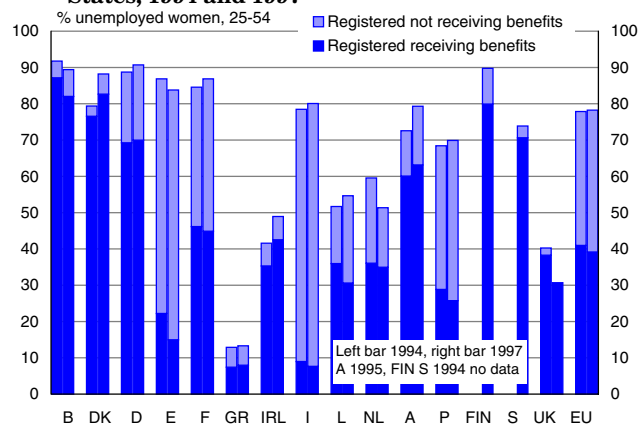
in 7 countries — Denmark, Greece, Luxembourg, the Netherlands, Portugal, Sweden and the UK — over 25% of the unemployed were not registered (in Greece, over 80%) and, accordingly, would be excluded from any unemployment figure based on the registration data. Indeed, even in the other 8 Member States, over 10% of those classed as unemployed in the LFS were not registered at labour offices in all but Belgium, Germany and France. In most countries, moreover, the proportion registered declined between 1994 and 1997.

For women, fewer of those classed as unemployed in the LFS said they were registered. In the Union as a whole, the figure was 78% in 1997 and under 80% in all countries bar 6 (Graph 167). In four countries — Greece,

**166 Men, 25-54, unemployed in LFS reporting being registered at labour offices in Member States, 1994 and 1997**



**167 Women, 25-54, unemployed in LFS reporting being registered at labour offices in Member States, 1994 and 1997**



Ireland, the Netherlands and the UK — half or less of the unemployed were registered. For women, therefore, any figures for unemployment based on registrations are likely to be even less reliable than for men.

On average, around 60% of the unemployed men registered were in receipt of benefit in 1997, though the proportion varied markedly from under a third in Spain and Italy to 100%, or virtually so, in the UK and Ireland, where the register is restricted to those eligible for benefit. A much lower proportion of women unemployed received benefit than men, only around half in the Union as a whole, giving them less of an incentive to register unless they are using the public employment services for job search.

### Registered and employed

Those reporting being registered at labour offices who were classed as employed in the LFS amounted, on average, to 2% of the total employed in 1997 in the case of men and to almost 3% in the case of women (Graphs 168 and 169). In Italy and the Netherlands, however, over 4% of men employed were registered at labour offices and in Sweden, over 7%. For women, the figures in all three countries were even higher, over 5% in Italy, almost 7% in the Netherlands and over 10% in Sweden, while in Finland, the proportion was also over 7%.

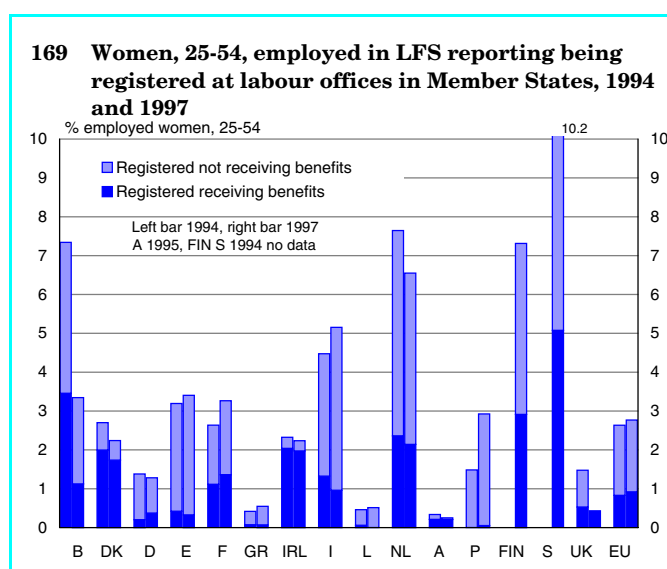
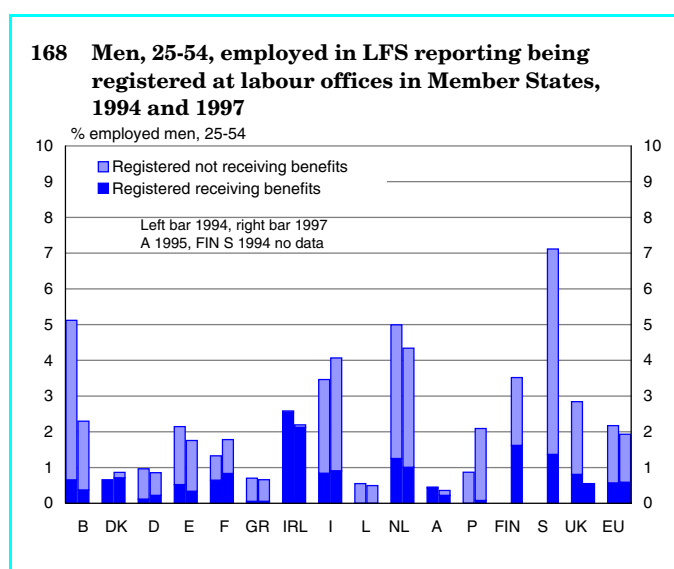
In many cases, as surmised above, a major reason for these people being registered is to obtain help over job search. Over half of those registered and in employment in the Union stated that they were looking to change their job (over 60% in the case of women), in Germany,

all of the men and women concerned and in France and Sweden, over 75% (Graphs 170 and 171). In the other countries, however, this still leaves a significant proportion who were not looking for other work — in Italy, around half of the relatively large number of men and women registered, in Finland, some 60% of the many women and in the Netherlands, around 70% of men and women.

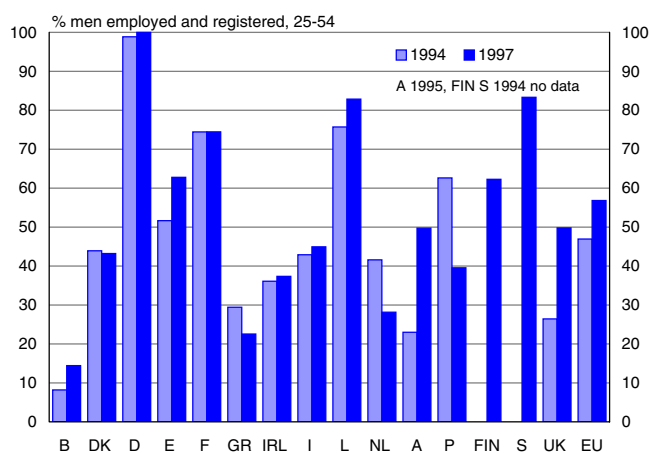
The other main reason for being registered while in employment is because of working short hours. In a number of countries, such people are counted as being unemployed. In practice, except in a few Member States, the proportion registered and in employment who work under 15 hours a week is relatively small (Graphs 172 and 173). In the UK, however, it amounted to almost 45% of men and just under 60% of women in 1997, though the numbers involved were very small, and in France and Ireland, to over 25% of men. In Italy, the Netherlands and Finland, however, where the number in work and registered was high, the proportion working short hours was relatively low. In these three countries, in particular, the reason for being registered when in employment remains unclear.

### Registered and inactive

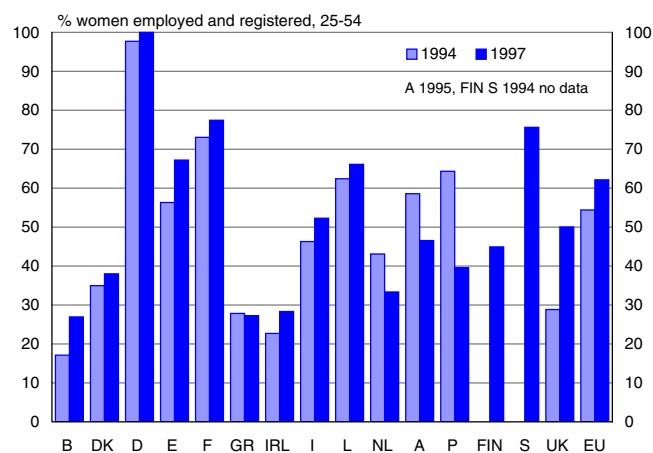
Finally, a significant proportion of those who reported being registered at labour offices were classed as economically inactive in the LFS, suggesting that they may have been looking for work but either not actively enough to merit inclusion in the unemployment figures on strict ILO definitions or that they were not immediately available for work (because of illness, for



**170 Men, 25-54, employed and registered looking to change job in Member States, 1994 and 1997**



**171 Women, 25-54, employed and registered looking to change job in Member States, 1994 and 1997**



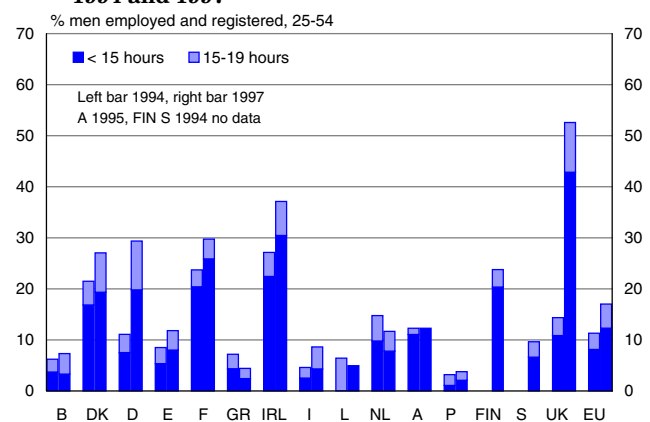
example). In 1997, an average of around 17% of all men in the 25 to 54 age group who were classed as inactive were registered at labour offices and half of these were drawing unemployment benefit (Graph 174). In Belgium, the proportion was as high as 40%, in Ireland and the Netherlands, over 35% and in Finland, over 30%, and in all four countries, most of these were drawing unemployment benefit.

benefits (the number involved was particularly high in Belgium given the higher rate of inactivity of women of this age — 30% or so as against 15% in Finland). In Italy, which with Luxembourg has the highest rate of inactivity among women in this age group in the Union (45%), around 17% of all women classed as inactive were registered at labour offices (Graph 175).

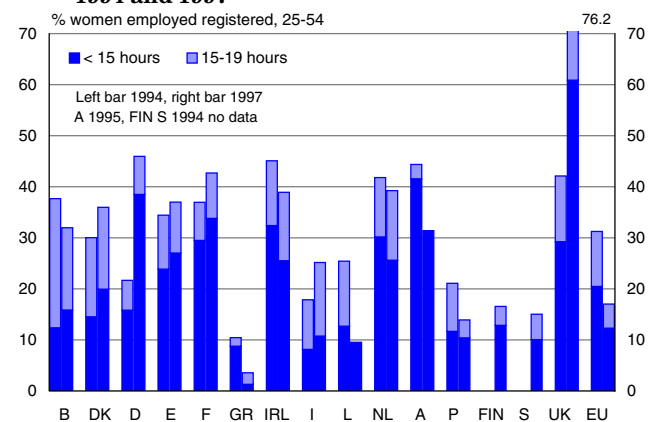
For women in the same age group, the proportions were lower in most countries, which is only to be expected given the much larger number who are economically inactive for family reasons. Nevertheless, in Belgium and Finland, almost 20% of women classed as inactive were registered at labour offices, most receiving

It remains unclear how far these people are available for work and should be regarded as part of the labour force and how far they are registered at labour offices only to obtain income support (though this seems not to be a reason in Italy, where relatively few receive benefit). In all the countries where the proportion of the inactive who are registered is high, except Finland

**172 Men, 25-54, employed and registered at labour offices working short hours in Member States, 1994 and 1997**

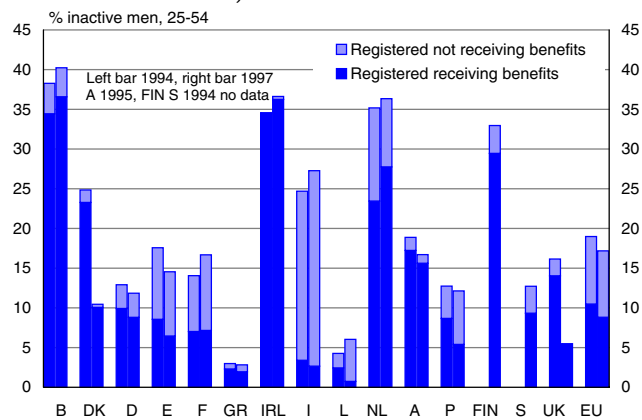


**173 Women, 25-54, employed and registered at labour offices working short hours in Member States, 1994 and 1997**

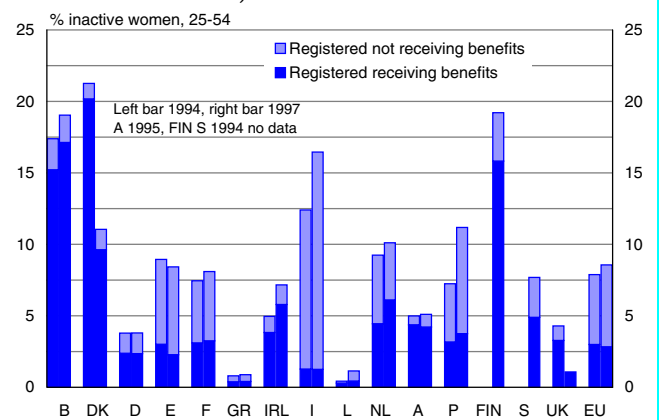


which was not included beforehand, the figures for harmonised unemployment were reduced in 1995 through the application of tighter criteria in the LFS for classing someone as unemployed.

**174 Men, 25-54, economically inactive in LFS reporting being registered at labour offices in Member States, 1994 and 1997**



**175 Women, 25-54, economically inactive in LFS reporting being registered at labour offices in Member States, 1994 and 1997**



## Key employment indicators in the European Union (E15)

Total	Excl. the new German Länder				Incl. the new German Länder				
	1975	1985	1990	1991	1991	1994	1995	1996	1997
Total population (000)	332391	342153	348398	350307	366217	370990	372103	373158	374203
Population of working-age (15-64) (000)	206478	224122	229686	231408	242020	244180	244828	245927	246263
Total employment (000)	132559	133998	143740	144301	151622	146742	147717	148222	149042
Annual change in employment (%)	-	0.1	1.4	0.4	0.5	-1.1	0.7	0.3	0.6
Employment rate (% working-age population)	64.2	59.8	62.6	62.4	62.6	60.1	60.3	60.2	60.5
FTE employment rate (% working-age population)	na	55.6	57.9	57.6	58.0	55.1	55.2	55.0	55.0
Self-employed (% total employment)	15.8	15.2	15.3	15.2	14.7	14.9	15.0	15.0	14.9
Employed part-time (% total employment)	na	12.7	13.8	14.1	13.7	15.6	16.0	16.4	16.9
Employed on fixed term contracts (%)	na	8.4	10.4	10.3	10.4	10.9	11.5	11.8	12.2
Share of employment in agriculture (%)	11.1	8.3	6.6	6.3	6.3	5.5	5.3	5.1	5.0
Share of employment in industry (%)	39.5	34.3	33.1	32.8	33.2	30.6	30.2	29.7	29.4
Share of employment in services (%)	49.4	57.5	60.2	61.0	60.5	64.0	64.5	65.2	65.6
Activity rate (% working-age population)	66.7	66.4	67.8	67.8	68.3	67.6	67.6	67.6	67.8
Total unemployed (000)	5099	14758	12007	12681	13603	18448	17861	18180	17933
Unemployment rate (%)	3.7	9.9	7.7	8.1	8.2	11.1	10.7	10.8	10.7
Youth unemployed (% labour force 15-24)	na	21.9	15.6	16.7	16.2	22.0	21.5	22.0	21.2
Long-term unemployment (% unemployed)	na	53.5	51.0	47.6	45.2	47.4	49.1	48.2	49.0
15-19 year olds in education/training (%)	na	na	na	na	na	82.1	82.5	82.5	83.2
20-24 year olds in education/training (%)	na	na	na	na	na	34.9	35.9	37.0	38.0
<b>Men</b>									
Total population (000)	161670	166349	169734	170773	178379	181020	181619	182189	182746
Population of working-age (15-64) (000)	101673	110521	114049	115070	120283	121781	122134	122679	122876
Total employment (000)	86054	82904	86645	86417	90265	86113	86507	86386	86700
Annual change in employment (%)	-	-0.4	0.9	-0.3	-0.2	-1.6	0.5	-0.1	0.4
Employment rate (% working-age population)	84.6	75.0	76.0	75.1	75.0	70.7	70.8	70.4	70.5
FTE employment rate (% working-age population)	na	73.5	74.2	73.3	73.3	68.8	68.8	68.3	68.3
Self-employed (% total employment)	na	18.8	19.1	18.9	18.3	18.9	18.9	18.9	18.8
Employed part-time (% total employment)	na	3.7	4.0	4.2	4.0	4.9	5.2	5.5	5.8
Employed on fixed term contracts (%)	na	7.5	9.3	9.1	9.3	10.0	10.7	11.0	11.5
Share of employment in agriculture (%)	na	8.7	7.1	6.8	6.9	6.2	5.9	5.7	5.6
Share of employment in industry (%)	na	42.6	42.0	41.8	42.3	40.0	39.7	39.4	39.2
Share of employment in services (%)	na	48.7	50.9	51.4	50.9	53.8	54.4	54.9	55.2
Activity rate (% working-age population)	87.6	82.2	81.0	80.6	80.6	78.5	78.2	77.9	77.8
Total unemployed (000)	2968	7987	5783	6360	6727	9578	9059	9281	9016
Unemployment rate (%)	3.3	8.8	6.3	6.9	7.0	10.0	9.4	9.6	9.3
Youth unemployed (% labour force 15-24)	na	20.5	13.9	15.5	15.0	21.4	20.1	20.7	19.7
Long-term unemployment (% unemployed)	na	53.4	49.9	45.3	43.4	46.0	48.3	46.3	47.4
15-19 year olds in education/training (%)	na	na	na	na	na	81.8	82.2	82.0	82.5
20-24 year olds in education/training (%)	na	na	na	na	na	34.5	35.5	35.7	36.4
<b>Women</b>									
Total population (000)	170720	175804	178664	179534	187838	189970	190484	190969	191456
Population of working-age (15-64) (000)	104805	113601	115636	116338	121737	122398	122688	123258	123365
Total employment (000)	46505	51094	57095	57885	61357	60629	61210	61836	62342
Annual change in employment (%)	-	0.9	2.2	1.4	1.5	-0.4	1.0	1.0	0.8
Employment rate (% working-age population)	44.4	45.0	49.4	49.8	50.4	49.5	49.9	50.2	50.5
FTE employment rate (% working-age population)	na	38.6	42.1	42.4	43.2	41.8	42.0	42.1	42.2
Self-employed (% total employment)	na	9.3	9.6	9.7	9.3	9.4	9.4	9.5	9.5
Employed part-time (% total employment)	na	28.0	28.6	28.8	28.0	30.6	31.3	31.6	32.4
Employed on fixed term contracts (%)	na	9.7	11.8	11.8	11.9	12.2	12.5	12.7	13.1
Share of employment in agriculture (%)	na	7.7	5.9	5.5	5.5	4.6	4.5	4.2	4.0
Share of employment in industry (%)	na	20.7	19.7	19.2	19.8	17.2	16.7	16.3	15.8
Share of employment in services (%)	na	71.7	74.4	75.2	74.7	78.3	78.8	79.6	80.2
Activity rate (% working-age population)	46.4	50.9	54.8	55.2	56.0	56.8	57.1	57.4	57.7
Total unemployed (000)	2131	6770	6224	6321	6876	8870	8803	8898	8917
Unemployment rate (%)	4.4	11.7	9.8	9.8	10.0	12.7	12.5	12.5	12.4
Youth unemployed (% labour force 15-24)	na	23.4	17.6	18.0	17.6	22.8	23.2	23.5	22.9
Long-term unemployment (% unemployed)	na	53.5	51.8	49.8	46.9	49.0	50.0	50.2	50.6
15-19 year olds in education/training (%)	na	na	na	na	na	82.4	82.9	83.0	83.8
20-24 year olds in education/training (%)	na	na	na	na	na	35.4	36.4	38.2	39.6

Notes: Total employment is derived from the most reliable source in each Member State, as noted in the following tables. Working-age population and other employment details are from the Community Labour Force Survey (LFS). The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90. The FTE (full-time equivalent) employment rate adjusts numbers employed for differences of working hours from average hours worked by those in full-time employment. Figures for long-term unemployment 1985-94 are for E13 excluding A and FIN for which no data are available. Education/training data include employed and unemployed receiving education/training but exclude those receiving only 'on-the-job' training; data are not available on the same basis before 1992 and exclude A, FIN and S for years before 1995.

## Key employment indicators in Belgium

<b>Total</b>	<b>1975</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Total population (000)	9795	9858	9967	10004	10116	10137	10157	10184
Population of working-age (15-64) (000)	6080	6610	6628	6625	6688	6701	6695	6701
Total employment (000)	3566	3512	3625	3719	3748	3793	3791	3838
Annual change in employment (%)	-	-0.2	0.6	2.6	0.3	1.2	-0.1	1.2
Employment rate (% working-age population)	58.7	53.1	54.7	56.1	56.0	56.6	56.6	57.3
FTE employment rate (% working-age population)	na	50.8	51.6	52.7	52.3	52.7	52.5	53.0
Self-employed (% total employment)	14.8	15.9	16.1	14.9	15.3	15.4	15.4	14.9
Employed part-time (% total employment)	na	8.6	10.9	11.8	12.8	13.6	14.0	14.7
Employed on fixed term contracts (%)	na	6.9	5.3	5.1	5.1	5.3	5.9	6.3
Share of employment in agriculture (%)	3.8	3.6	3.3	2.7	2.9	2.7	2.7	2.6
Share of employment in industry (%)	39.6	31.9	30.7	30.5	28.9	28.3	27.6	27.6
Share of employment in services (%)	56.5	64.5	66.0	66.8	68.2	69.0	69.6	69.8
Activity rate (% working-age population)	60.9	59.3	58.6	60.1	62.3	62.8	62.7	63.1
Total unemployed (000)	136.6	405.3	260.6	263.0	416.2	416.2	408.0	389.2
Unemployment rate (%)	3.8	10.3	6.7	6.6	10.0	9.9	9.7	9.2
Youth unemployed (% labour force 15-24)	na	23.0	15.3	14.9	24.2	23.9	23.1	23.0
Long-term unemployment (% unemployed)	na	69.2	68.2	62.8	58.3	62.4	61.2	60.5
15-19 year olds in education/training (%)	na	na	na	na	92.6	93.4	93.8	94.2
20-24 year olds in education/training (%)	na	na	na	na	37.5	39.3	41.4	41.1
<b>Men</b>								
Total population (000)	4794	4812	4870	4890	4947	4957	4965	4978
Population of working-age (15-64) (000)	3035	3301	3314	3317	3367	3375	3373	3374
Total employment (000)	2447	2281	2267	2291	2253	2274	2269	2277
Annual change in employment (%)	-	-0.7	-0.1	1.0	-0.6	0.9	-0.2	0.4
Employment rate (% working-age population)	80.6	69.1	68.4	69.1	66.9	67.4	67.3	67.5
FTE employment rate (% working-age population)	na	68.5	67.7	68.3	66.0	66.4	66.2	66.4
Self-employed (% total employment)	16.5	18.6	19.2	17.9	18.7	18.4	18.7	18.2
Employed part-time (% total employment)	na	1.8	2.0	2.1	2.5	2.8	3.0	3.3
Employed on fixed term contracts (%)	na	4.7	3.3	3.0	3.5	3.9	4.5	4.6
Share of employment in agriculture (%)	4.5	3.9	3.9	3.0	3.4	3.1	3.1	3.0
Share of employment in industry (%)	47.9	40.1	39.6	40.3	38.6	38.0	37.3	37.3
Share of employment in services (%)	47.6	56.0	56.6	56.7	58.0	58.9	59.6	59.7
Activity rate (% working-age population)	82.6	73.8	71.4	72.2	72.7	73.0	72.8	72.7
Total unemployed (000)	60.0	157.4	97.8	104.0	193.6	190.9	185.4	177.8
Unemployment rate (%)	2.4	6.5	4.1	4.3	7.9	7.8	7.6	7.2
Youth unemployed (% labour force 15-24)	na	16.9	11.0	11.9	22.6	21.5	19.4	19.0
Long-term unemployment (% unemployed)	na	64.0	65.6	59.0	53.4	61.4	59.1	59.5
15-19 year olds in education/training (%)	na	na	na	na	92.0	92.3	93.1	93.5
20-24 year olds in education/training (%)	na	na	na	na	37.4	40.1	39.8	40.5
<b>Women</b>								
Total population (000)	5001	5046	5097	5115	5168	5180	5191	5205
Population of working-age (15-64) (000)	3045	3309	3314	3308	3321	3326	3325	3325
Total employment (000)	1120	1231	1358	1428	1495	1519	1522	1561
Annual change in employment (%)	-	1.0	2.0	5.2	1.5	1.6	0.2	2.6
Employment rate (% working-age population)	36.8	37.2	41.0	43.2	45.0	45.7	45.8	47.0
FTE employment rate (% working-age population)	na	33.3	35.7	37.4	38.8	39.1	39.1	39.9
Self-employed (% total employment)	10.8	10.9	10.8	10.2	10.2	10.9	10.4	10.1
Employed part-time (% total employment)	na	21.1	25.8	27.4	28.3	29.8	30.6	31.4
Employed on fixed term contracts (%)	na	10.9	8.6	8.3	7.5	7.4	8.0	8.6
Share of employment in agriculture (%)	2.6	3.1	2.3	2.2	2.1	2.1	2.2	2.0
Share of employment in industry (%)	23.7	16.7	15.9	14.8	14.2	13.6	13.3	13.2
Share of employment in services (%)	73.8	80.2	81.8	82.9	83.7	84.3	84.6	84.8
Activity rate (% working-age population)	39.3	44.7	45.9	48.0	51.7	52.4	52.5	53.3
Total unemployed (000)	76.7	247.9	162.8	159.0	222.6	225.3	222.6	211.4
Unemployment rate (%)	6.4	16.7	10.6	10.0	12.9	12.9	12.7	11.9
Youth unemployed (% labour force 15-24)	na	29.4	19.9	18.0	26.0	26.6	27.5	27.8
Long-term unemployment (% unemployed)	na	72.7	70.4	65.2	62.6	63.2	63.0	61.6
15-19 year olds in education/training (%)	na	na	na	na	93.2	94.6	94.6	95.2
20-24 year olds in education/training (%)	na	na	na	na	37.5	38.5	43.0	41.7

Source: Working-age population and all employment details are from the Community Labour Force Survey (LFS). Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS. See notes to the table for the European Union.



## Key employment indicators in Denmark

Total	1975	1985	1990	1991	1994	1995	1996	1997
Total population (000)	5060	5114	5140	5154	5205	5228	5262	5286
Population of working-age (15-64) (000)	3212	3357	3445	3461	3478	3489	3512	3510
Total employment (000)	2332	2598	2674	2650	2585	2617	2649	2720
Annual change in employment (%)	-	1.1	0.6	-0.9	-0.8	1.2	1.2	2.7
Employment rate (% working-age population)	72.6	77.4	77.6	76.6	74.3	75.0	75.4	77.5
FTE employment rate (% working-age population)	na	67.2	68.0	67.4	66.1	66.6	67.0	68.5
Self-employed (% total employment)	13.9	9.9	9.5	9.0	8.4	8.4	8.3	8.3
Employed part-time (% total employment)	na	24.3	23.3	23.1	21.2	21.6	21.5	22.2
Employed on fixed term contracts (%)	na	12.3	10.8	11.9	12.0	12.1	11.2	11.1
Share of employment in agriculture (%)	9.8	6.7	5.6	5.7	5.0	4.4	3.9	3.7
Share of employment in industry (%)	31.5	27.9	27.4	27.6	26.5	27.1	26.4	26.2
Share of employment in services (%)	58.7	65.4	67.0	66.7	68.4	68.5	69.7	70.1
Activity rate (% working-age population)	75.5	83.2	84.0	83.6	80.9	80.8	81.0	82.4
Total unemployed (000)	92.5	194.6	221.0	242.9	228.8	203.1	192.1	156.2
Unemployment rate (%)	3.9	7.1	7.7	8.4	8.2	7.2	6.8	5.5
Youth unemployed (% labour force 15-24)	na	11.1	11.4	11.6	11.0	10.6	10.6	8.3
Long-term unemployment (% unemployed)	na	38.6	32.5	35.0	32.1	28.1	26.6	27.2
15-19 year olds in education/training (%)	na	na	na	na	87.3	89.2	81.5	83.7
20-24 year olds in education/training (%)	na	na	na	na	43.8	48.9	48.5	51.4
<b>Men</b>								
Total population (000)	2506	2519	2533	2540	2568	2580	2598	2610
Population of working-age (15-64) (000)	1613	1689	1741	1749	1756	1762	1774	1771
Total employment (000)	1361	1442	1454	1438	1396	1425	1444	1485
Annual change in employment (%)	-	0.6	0.2	-1.1	-1.0	2.1	1.3	2.8
Employment rate (% working-age population)	84.4	85.4	83.5	82.2	79.5	80.9	81.4	83.9
FTE employment rate (% working-age population)	na	80.5	77.5	76.6	74.4	75.3	75.5	77.1
Self-employed (% total employment)	na	15.2	14.9	14.0	12.1	11.9	11.7	12.1
Employed part-time (% total employment)	na	8.4	10.4	10.5	10.0	10.4	10.8	12.1
Employed on fixed term contracts (%)	na	11.6	10.6	11.0	11.1	10.9	10.8	10.6
Share of employment in agriculture (%)	na	9.4	7.9	7.9	7.1	5.9	5.3	5.4
Share of employment in industry (%)	na	37.7	37.2	37.2	36.1	36.8	35.6	35.9
Share of employment in services (%)	na	52.9	54.9	54.9	56.8	57.3	59.1	58.6
Activity rate (% working-age population)	87.6	90.5	89.8	88.9	85.7	85.9	86.2	87.9
Total unemployed (000)	51.6	85.8	108.7	115.7	109.7	89.3	84.6	70.2
Unemployment rate (%)	3.7	5.8	7.0	7.5	7.3	5.9	5.5	4.6
Youth unemployed (% labour force 15-24)	na	10.0	11.3	11.1	10.6	8.5	8.8	6.7
Long-term unemployment (% unemployed)	na	36.5	31.4	31.0	31.9	31.9	28.2	25.0
15-19 year olds in education/training (%)	na	na	na	na	88.5	91.0	82.0	84.0
20-24 year olds in education/training (%)	na	na	na	na	43.1	46.2	48.5	47.9
<b>Women</b>								
Total population (000)	2554	2595	2607	2614	2637	2648	2664	2676
Population of working-age (15-64) (000)	1600	1668	1704	1713	1722	1727	1738	1738
Total employment (000)	971	1156	1220	1212	1189	1192	1205	1235
Annual change in employment (%)	-	1.8	1.1	-0.7	-0.6	0.3	1.1	2.5
Employment rate (% working-age population)	60.7	69.3	71.6	70.8	69.0	69.0	69.3	71.1
FTE employment rate (% working-age population)	na	54.5	58.9	58.8	58.2	58.1	58.7	60.3
Self-employed (% total employment)	na	3.3	3.2	3.3	4.1	4.0	4.2	3.7
Employed part-time (% total employment)	na	43.9	38.4	37.8	34.4	35.5	34.6	34.5
Employed on fixed term contracts (%)	na	13.1	11.0	12.9	12.9	13.5	11.8	11.6
Share of employment in agriculture (%)	na	3.4	2.8	3.1	2.6	2.5	2.1	1.4
Share of employment in industry (%)	na	15.8	16.0	16.4	15.1	15.0	15.1	14.5
Share of employment in services (%)	na	80.8	81.2	80.5	82.3	82.5	82.8	84.1
Activity rate (% working-age population)	63.3	75.8	78.2	78.2	76.0	75.6	75.7	76.8
Total unemployed (000)	40.9	108.8	112.3	127.2	119.1	113.8	107.5	86.0
Unemployment rate (%)	4.0	8.6	8.4	9.5	9.3	8.9	8.3	6.6
Youth unemployed (% labour force 15-24)	na	12.5	11.5	12.2	11.6	12.9	12.6	10.3
Long-term unemployment (% unemployed)	na	40.2	34.0	38.7	32.4	25.0	25.0	27.7
15-19 year olds in education/training (%)	na	na	na	na	85.9	87.2	81.0	84.0
20-24 year olds in education/training (%)	na	na	na	na	44.6	51.4	48.5	55.3

Source: Total employment is from register-based labour statistics. Working-age population and other employment details are from the Community Labour Force Survey (LFS).

Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS.

See notes to the table for the European Union.

## Key employment indicators in Germany

Total	Excl. the new German Länder				Incl. the new German Länder				
	1975	1985	1990	1991	1991	1994	1995	1996	1997
Total population (000)	61829	61024	63254	64074	79984	81422	81661	81896	82090
Population of working-age (15-64) (000)	39921	42002	43212	43478	54090	54936	54779	55042	54942
Total employment (000)	26020	26489	28479	29189	36510	34986	34860	34415	33928
Annual change in employment (%)	-	0.2	1.5	2.5	2.5	-1.4	-0.4	-1.3	-1.4
Employment rate (% working-age population)	65.2	63.1	65.9	67.1	67.5	63.7	63.6	62.5	61.8
FTE employment rate (% working-age population)	na	58.8	60.5	61.5	62.6	58.5	58.1	56.8	55.7
Self-employed (% total employment)	9.4	9.2	8.9	9.2	8.2	9.3	9.4	9.6	9.9
Employed part-time (% total employment)	na	12.8	15.2	15.5	14.1	15.8	16.3	16.5	17.5
Employed on fixed term contracts (%)	na	10.0	10.5	9.5	10.1	10.3	10.4	11.1	11.7
Share of employment in agriculture (%)	6.8	5.2	3.7	3.5	4.2	3.3	3.2	2.9	2.9
Share of employment in industry (%)	45.4	41.0	40.1	40.1	40.3	37.0	36.0	35.3	34.7
Share of employment in services (%)	47.8	53.8	56.2	56.4	55.5	59.7	60.8	61.8	62.4
Activity rate (% working-age population)	67.5	67.9	69.3	70.1	71.6	69.7	69.5	68.8	68.7
Total unemployed (000)	915.1	2024.5	1453.4	1273.0	2195.2	3299.3	3192.6	3475.5	3910.3
Unemployment rate (%)	3.5	7.2	4.8	4.2	5.6	8.4	8.2	8.9	10.0
Youth unemployed (% labour force 15-24)	na	10.3	4.5	4.0	5.9	8.7	8.8	10.0	11.0
Long-term unemployment (% unemployed)	na	47.9	46.0	45.5	30.8	44.3	48.7	47.8	50.1
15-19 year olds in education/training (%)	na	na	na	na	na	91.6	91.7	91.9	93.0
20-24 year olds in education/training (%)	na	na	na	na	na	34.7	35.5	37.0	38.5
<b>Men</b>									
Total population (000)	29499	29181	30569	31051	38658	39576	39731	39888	39993
Population of working-age (15-64) (000)	19515	20672	21744	21940	27153	27811	27686	27765	27767
Total employment (000)	16154	16154	16977	17343	21192	20301	20135	19700	19375
Annual change in employment (%)	-	0.0	1.0	2.2	2.2	-1.4	-0.8	-2.2	-1.6
Employment rate (% working-age population)	82.8	78.1	78.1	79.0	78.0	73.0	72.7	71.0	69.8
FTE employment rate (% working-age population)	na	77.3	76.9	77.8	76.9	71.7	71.2	69.3	67.9
Self-employed (% total employment)	12.6	11.7	11.3	11.5	10.5	11.8	11.9	12.3	12.6
Employed part-time (% total employment)	na	2.0	2.6	2.7	2.4	3.2	3.6	3.8	4.2
Employed on fixed term contracts (%)	na	9.2	9.8	8.8	9.4	9.8	9.9	11.0	11.5
Share of employment in agriculture (%)	5.3	4.5	3.5	3.4	4.2	3.4	3.3	3.2	3.2
Share of employment in industry (%)	54.7	50.8	50.1	50.3	50.7	48.5	47.5	47.1	46.5
Share of employment in services (%)	40.1	44.7	46.4	46.3	45.1	48.1	49.2	49.7	50.3
Activity rate (% working-age population)	85.4	83.2	81.4	82.1	81.8	78.8	78.4	77.5	77.1
Total unemployed (000)	513.6	1050.6	717.9	664.0	1031.2	1609.2	1577.0	1825.7	2067.1
Unemployment rate (%)	3.1	6.2	4.0	3.7	4.6	7.2	7.1	8.2	9.3
Youth unemployed (% labour force 15-24)	na	9.5	4.3	3.9	5.4	8.8	8.9	10.6	11.9
Long-term unemployment (% unemployed)	na	49.6	49.1	48.9	35.2	41.2	45.9	44.5	47.1
15-19 year olds in education/training (%)	na	na	na	na	na	91.6	91.7	91.8	93.5
20-24 year olds in education/training (%)	na	na	na	na	na	36.7	37.6	38.0	38.8
<b>Women</b>									
Total population (000)	32330	31843	32685	33023	41327	41846	41930	42008	42097
Population of working-age (15-64) (000)	20406	21330	21468	21538	26937	27125	27093	27277	27175
Total employment (000)	9866	10335	11502	11846	15318	14685	14725	14715	14553
Annual change in employment (%)	-	0.5	2.2	3.0	3.0	-1.4	0.3	-0.1	-1.1
Employment rate (% working-age population)	48.3	48.5	53.6	55.0	56.9	54.1	54.3	53.9	53.6
FTE employment rate (% working-age population)	na	41.1	44.1	45.1	48.3	45.1	44.9	44.3	43.4
Self-employed (% total employment)	4.4	5.4	5.4	5.7	5.0	5.8	5.8	6.2	6.4
Employed part-time (% total employment)	na	29.6	33.8	34.3	30.1	33.1	33.8	33.6	35.1
Employed on fixed term contracts (%)	na	11.1	11.6	10.4	10.9	11.0	11.1	11.2	12.1
Share of employment in agriculture (%)	9.3	6.3	4.1	3.7	4.2	3.1	3.0	2.6	2.5
Share of employment in industry (%)	30.5	25.6	25.2	25.1	25.9	21.1	20.2	19.5	18.9
Share of employment in services (%)	60.2	68.1	70.7	71.2	69.9	75.8	76.7	77.9	78.6
Activity rate (% working-age population)	50.3	53.0	57.0	57.8	61.2	60.4	60.3	60.0	60.2
Total unemployed (000)	401.5	973.9	735.5	609.0	1164.0	1690.1	1615.6	1649.8	1843.2
Unemployment rate (%)	3.9	8.7	5.9	4.9	7.0	10.1	9.6	9.8	10.8
Youth unemployed (% labour force 15-24)	na	11.2	4.7	4.0	6.3	8.6	8.7	9.2	9.9
Long-term unemployment (% unemployed)	na	46.0	43.1	42.0	26.8	47.2	51.3	51.7	53.6
15-19 year olds in education/training (%)	na	na	na	na	na	91.6	91.8	92.1	92.6
20-24 year olds in education/training (%)	na	na	na	na	na	32.8	33.4	36.0	38.3

Source: Total employment is from national accounts; working-age population and other employment details are from the Community Labour Force Survey (LFS). Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS. See notes to the table for the European Union.

## Key employment indicators in Greece

<b>Total</b>	<b>1977</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Total population (000)	9309	9934	10160	10247	10426	10454	10476	10497
Population of working-age (15-64) (000)	5671	6259	6571	6638	6769	6775	6796	6791
Total employment (000)	3263	3589	3719	3632	3786	3821	3868	3853
Annual change in employment (%)	-	1.2	0.7	-2.3	1.4	0.9	1.2	-0.4
Employment rate (% working-age population)	57.5	57.3	56.6	54.7	55.9	56.4	56.9	56.7
FTE employment rate (% working-age population)	na	55.8	55.3	53.6	54.7	55.1	55.6	55.4
Self-employed (% total employment)	37.7	36.0	34.8	35.2	34.4	33.8	33.7	33.3
Employed part-time (% total employment)	na	5.3	4.1	3.9	4.8	4.8	5.3	4.6
Employed on fixed term contracts (%)	na	21.1	16.5	14.7	10.3	10.2	11.0	10.9
Share of employment in agriculture (%)	33.2	28.9	23.9	22.2	20.8	20.4	20.3	19.8
Share of employment in industry (%)	29.2	25.7	25.9	25.7	23.6	23.2	22.9	22.5
Share of employment in services (%)	37.5	45.4	50.2	52.1	55.6	56.4	56.9	57.7
Activity rate (% working-age population)	58.4	61.6	60.5	58.9	61.4	62.1	63.0	62.8
Total unemployed (000)	50.1	268.5	254.7	276.3	369.5	385.8	410.8	408.4
Unemployment rate (%)	1.5	7.0	6.4	7.0	8.9	9.2	9.6	9.6
Youth unemployed (% labour force 15-24)	na	21.9	21.5	22.9	27.7	28.5	31.0	31.0
Long-term unemployment (% unemployed)	na	46.2	51.8	48.3	50.5	51.2	56.7	55.7
15-19 year olds in education/training (%)	na	na	na	na	79.8	80.0	80.4	82.3
20-24 year olds in education/training (%)	na	na	na	na	30.5	29.2	30.2	31.9
<b>Men</b>								
Total population (000)	4558	4887	5003	5050	5148	5160	5169	5178
Population of working-age (15-64) (000)	2717	3002	3173	3221	3268	3263	3271	3259
Total employment (000)	2279	2371	2409	2406	2449	2450	2467	2438
Annual change in employment (%)	-	0.5	0.3	-0.1	0.6	0.0	0.7	-1.2
Employment rate (% working-age population)	83.9	79.0	75.9	74.7	74.9	75.1	75.4	74.8
FTE employment rate (% working-age population)	na	77.9	75.0	73.9	73.9	74.2	74.4	73.9
Self-employed (% total employment)	44.9	44.1	42.6	42.9	42.6	42.2	41.8	41.7
Employed part-time (% total employment)	na	2.8	2.2	2.2	3.1	2.8	3.3	2.6
Employed on fixed term contracts (%)	na	21.8	16.9	14.8	10.2	9.5	10.5	10.2
Share of employment in agriculture (%)	26.8	24.3	20.5	19.9	18.6	18.5	18.2	17.9
Share of employment in industry (%)	33.9	30.4	30.5	29.9	28.8	28.4	28.1	27.7
Share of employment in services (%)	39.3	45.3	49.0	50.2	52.6	53.1	53.7	54.4
Activity rate (% working-age population)	84.8	83.1	79.0	78.2	79.7	80.0	80.3	79.8
Total unemployed (000)	25.1	124.9	98.7	110.7	157.0	160.9	158.8	161.7
Unemployment rate (%)	1.1	5.0	3.9	4.4	6.0	6.2	6.1	6.2
Youth unemployed (% labour force 15-24)	na	15.9	14.4	16.0	19.7	19.8	21.5	22.1
Long-term unemployment (% unemployed)	na	36.3	42.7	38.6	41.3	42.3	47.1	45.3
15-19 year olds in education/training (%)	na	na	na	na	80.4	81.1	81.8	82.4
20-24 year olds in education/training (%)	na	na	na	na	30.2	28.1	28.7	30.8
<b>Women</b>								
Total population (000)	4751	5047	5157	5197	5278	5294	5307	5320
Population of working-age (15-64) (000)	2954	3257	3397	3417	3501	3511	3527	3529
Total employment (000)	983	1218	1310	1226	1337	1371	1401	1415
Annual change in employment (%)	-	2.7	1.5	-6.4	2.9	2.6	2.2	1.0
Employment rate (% working-age population)	33.3	37.4	38.5	35.9	38.2	39.1	39.7	40.1
FTE employment rate (% working-age population)	na	35.5	37.0	34.5	36.8	37.6	38.1	38.5
Self-employed (% total employment)	22.3	20.0	20.3	20.1	19.5	18.7	19.4	18.7
Employed part-time (% total employment)	na	10.0	7.6	7.2	8.0	8.4	8.9	8.1
Employed on fixed term contracts (%)	na	19.6	15.9	14.6	10.5	11.2	11.9	11.9
Share of employment in agriculture (%)	48.1	37.9	30.3	26.7	24.8	23.9	23.9	23.0
Share of employment in industry (%)	18.4	16.5	17.3	17.5	14.1	13.9	13.7	13.3
Share of employment in services (%)	33.5	45.6	52.4	55.8	61.0	62.2	62.4	63.6
Activity rate (% working-age population)	34.1	41.8	43.1	40.7	44.3	45.5	46.9	47.1
Total unemployed (000)	25.0	143.6	156.0	165.6	212.5	224.9	252.0	246.7
Unemployment rate (%)	2.5	10.6	10.8	11.8	13.7	14.1	15.2	14.9
Youth unemployed (% labour force 15-24)	na	29.4	29.9	31.3	37.0	38.3	41.0	40.6
Long-term unemployment (% unemployed)	na	54.8	57.4	55.0	57.2	57.8	62.6	62.0
15-19 year olds in education/training (%)	na	na	na	na	79.1	78.9	79.1	82.3
20-24 year olds in education/training (%)	na	na	na	na	30.6	30.2	31.4	32.9

Source: Working-age population and all employment details are from the Community Labour Force Survey (LFS).

Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS.

See notes to the table for the European Union.

Note: Data for 1975 not available.

## Key employment indicators in Spain

<b>Total</b>	<b>1975</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Total population (000)	35515	38420	38851	38920	39149	39210	39270	39327
Population of working-age (15-64) (000)	21517	24102	25289	25359	25770	25936	26253	26280
Total employment (000)	12439	10641	12579	12609	11730	12042	12396	12765
Annual change in employment (%)	-	-1.5	3.4	0.2	-2.4	2.7	2.9	3.0
Employment rate (% working-age population)	57.8	44.1	49.7	49.7	45.5	46.4	47.2	48.6
FTE employment rate (% working-age population)	na	42.8	48.4	48.4	43.7	44.4	45.1	46.3
Self-employed (% total employment)*	21.0	22.6	20.9	20.4	22.1	21.8	21.5	20.9
Employed part-time (% total employment)+	na	5.8	4.9	4.7	6.9	7.5	8.0	8.2
Employed on fixed term contracts (%)+	na	15.6	29.8	32.2	33.7	35.0	33.6	33.6
Share of employment in agriculture (%)*	22.1	16.2	12.0	10.9	9.9	9.3	8.6	8.3
Share of employment in industry (%)*	38.3	31.9	33.6	33.0	30.1	30.2	29.4	29.9
Share of employment in services (%)*	39.7	52.0	54.5	56.1	60.0	60.5	62.0	61.8
Activity rate (% working-age population)	60.5	56.3	59.4	59.5	60.0	60.2	60.6	61.3
Total unemployed (000)	579.5	2940.2	2435.5	2476.4	3732.0	3583.3	3529.4	3357.9
Unemployment rate (%)	4.4	21.6	16.2	16.4	24.1	22.9	22.2	20.8
Youth unemployed (% labour force 15-24)	na	47.8	32.2	31.1	45.0	42.5	41.9	39.1
Long-term unemployment (% unemployed)*	na	58.5	54.7	51.9	52.7	54.6	52.9	51.8
15-19 year olds in education/training (%)	na	na	na	na	78.4	79.6	80.7	80.8
20-24 year olds in education/training (%)	na	na	na	na	39.7	41.9	44.6	45.0
<b>Men</b>								
Total population (000)	17381	18851	19032	19060	19165	19191	19215	19240
Population of working-age (15-64) (000)	10561	11830	12421	12467	12757	12832	12977	13020
Total employment (000)	8985	7553	8576	8531	7740	7889	8069	8267
Annual change in employment (%)	-	-1.7	2.6	-0.5	-3.2	1.9	2.3	2.5
Employment rate (% working-age population)	85.1	63.8	69.0	68.4	60.7	61.5	62.2	63.5
FTE employment rate (% working-age population)	na	63.1	68.5	67.9	59.8	60.6	61.1	62.4
Self-employed (% total employment)*	23.0	24.7	23.2	22.7	24.9	24.2	24.1	23.6
Employed part-time (% total employment)+	na	2.4	1.6	1.6	2.6	2.7	3.1	3.2
Employed on fixed term contracts (%)+	na	14.4	27.8	29.3	31.4	33.2	31.9	32.4
Share of employment in agriculture (%)*	22.7	17.2	12.8	11.7	11.0	10.3	9.8	9.5
Share of employment in industry (%)*	42.6	38.1	41.0	40.9	38.2	38.7	37.9	38.7
Share of employment in services (%)*	34.7	44.7	46.3	47.4	50.8	51.0	52.3	51.8
Activity rate (% working-age population)	89.5	80.0	78.4	78.0	75.6	75.1	75.4	75.6
Total unemployed (000)	470.3	1906.7	1161.8	1197.4	1908.7	1757.0	1721.9	1582.2
Unemployment rate (%)	5.0	20.2	11.9	12.3	19.8	18.2	17.6	16.1
Youth unemployed (% labour force 15-24)	na	45.6	26.2	25.7	41.0	37.0	36.2	33.2
Long-term unemployment (% unemployed)*	na	55.2	47.1	43.1	46.3	49.0	45.9	45.7
15-19 year olds in education/training (%)	na	na	na	na	75.9	77.6	78.5	78.2
20-24 year olds in education/training (%)	na	na	na	na	35.5	37.9	39.1	40.8
<b>Women</b>								
Total population (000)	18134	19568	19820	19860	19984	20019	20055	20087
Population of working-age (15-64) (000)	10956	12272	12868	12892	13013	13104	13276	13260
Total employment (000)	3454	3088	4003	4078	3990	4153	4327	4498
Annual change in employment (%)	-	-1.1	5.3	1.9	-0.7	4.1	4.2	4.0
Employment rate (% working-age population)	31.5	25.2	31.1	31.6	30.7	31.7	32.6	33.9
FTE employment rate (% working-age population)	na	23.3	29.0	29.6	28.0	28.7	29.4	30.6
Self-employed (% total employment)*	15.8	17.5	16.0	15.6	16.7	17.0	16.7	15.8
Employed part-time (% total employment)+	na	13.9	12.1	11.2	15.2	16.6	17.0	17.4
Employed on fixed term contracts (%)+	na	18.4	34.2	38.2	37.9	38.3	36.7	35.8
Share of employment in agriculture (%)*	20.5	13.9	10.2	9.2	7.9	7.5	6.4	6.1
Share of employment in industry (%)*	26.8	16.8	17.7	16.6	14.4	14.0	13.6	13.6
Share of employment in services (%)*	52.7	69.3	72.1	74.2	77.7	78.6	79.9	80.3
Activity rate (% working-age population)	32.5	33.6	41.0	41.6	44.7	45.6	46.2	47.3
Total unemployed (000)	109.2	1033.5	1273.7	1279.0	1823.3	1826.3	1807.5	1775.7
Unemployment rate (%)	3.1	25.1	24.1	23.9	31.4	30.5	29.5	28.3
Youth unemployed (% labour force 15-24)	na	51.0	39.7	37.9	50.0	49.0	48.7	46.2
Long-term unemployment (% unemployed)*	na	64.4	61.5	60.1	59.4	60.0	59.6	57.3
15-19 year olds in education/training (%)	na	na	na	na	80.9	81.6	83.0	83.5
20-24 year olds in education/training (%)	na	na	na	na	44.1	46.1	50.2	49.3

Source: Total employment is an average of quarterly Labour Force Survey data; working-age population and other employment details are from the Community Labour Force Survey (LFS).

Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS.

See notes to the table for the European Union.

\* 1985 data relate to 1986. + 1985 data relate to 1987.

## Key employment indicators in France

<b>Total</b>	<b>1975</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Total population (000)	52699	55284	56735	57055	57900	58139	58375	58609
Population of working-age (15-64) (000)	31047	34825	35733	36304	36677	36853	36968	37125
Total employment (000)	21409	21608	22478	22502	22063	22284	22287	22306
Annual change in employment (%)	-	0.1	0.8	0.1	-0.7	1.0	0.0	0.1
Employment rate (% working-age population)	69.0	62.0	62.9	62.0	60.2	60.5	60.3	60.1
FTE employment rate (% working-age population)	na	59.0	59.4	58.5	56.0	56.1	55.8	55.4
Self-employed (% total employment)	14.4	12.6	12.9	12.6	11.8	11.6	11.3	11.2
Employed part-time (% total employment)	na	10.9	11.9	12.1	14.9	15.6	16.0	16.8
Employed on fixed term contracts (%)	na	4.7	10.5	10.2	11.0	12.3	12.6	13.1
Share of employment in agriculture (%)	10.3	8.2	6.4	6.0	5.2	4.9	4.8	4.6
Share of employment in industry (%)	38.6	32.4	30.4	30.0	26.9	27.0	26.5	26.6
Share of employment in services (%)	51.1	59.4	63.2	63.9	67.9	68.1	68.6	68.8
Activity rate (% working-age population)	71.7	68.9	68.9	68.4	68.5	68.4	68.8	68.5
Total unemployed (000)	862.9	2394.1	2152.7	2323.3	3049.9	2924.9	3129.4	3126.2
Unemployment rate (%)	3.9	10.1	8.9	9.5	12.3	11.7	12.4	12.4
Youth unemployed (% labour force 15-24)	na	25.4	19.3	21.5	29.0	27.5	29.2	29.1
Long-term unemployment (% unemployed)	na	46.8	44.8	43.1	37.5	40.2	38.3	39.6
15-19 year olds in education/training (%)	na	na	na	na	92.5	93.2	92.9	92.9
20-24 year olds in education/training (%)	na	na	na	na	40.9	42.5	42.4	43.9
<b>Men</b>								
Total population (000)	25807	26946	27623	27783	28195	28309	28420	28538
Population of working-age (15-64) (000)	15270	17088	17592	17868	18057	18142	18207	18295
Total employment (000)	13337	12621	12932	12805	12302	12406	12381	12383
Annual change in employment (%)	-	-0.6	0.5	-1.0	-1.3	0.8	-0.2	0.0
Employment rate (% working-age population)	87.3	73.9	73.5	71.7	68.1	68.4	68.0	67.7
FTE employment rate (% working-age population)	na	73.0	72.5	70.6	66.7	66.9	66.4	66.0
Self-employed (% total employment)	na	17.1	17.0	16.4	15.8	15.3	15.1	14.9
Employed part-time (% total employment)	na	3.2	3.3	3.4	4.6	5.1	5.2	5.4
Employed on fixed term contracts (%)	na	4.8	9.4	8.7	9.7	11.4	11.5	12.1
Share of employment in agriculture (%)	na	8.9	7.3	6.8	6.2	5.8	5.9	5.7
Share of employment in industry (%)	na	41.7	39.8	39.7	36.1	36.4	36.2	36.3
Share of employment in services (%)	na	49.4	52.9	53.5	57.7	57.8	57.9	58.0
Activity rate (% working-age population)	89.8	80.4	78.7	77.3	76.0	75.7	76.0	75.7
Total unemployed (000)	372.6	1124.1	907.5	1004.1	1416.6	1328.0	1453.7	1470.4
Unemployment rate (%)	2.7	8.3	6.7	7.4	10.4	9.8	10.6	10.7
Youth unemployed (% labour force 15-24)	na	22.1	15.8	18.1	26.2	23.9	26.3	26.5
Long-term unemployment (% unemployed)	na	42.7	43.1	40.7	36.8	39.1	36.4	38.0
15-19 year olds in education/training (%)	na	na	na	na	92.4	93.0	92.2	92.2
20-24 year olds in education/training (%)	na	na	na	na	39.4	41.7	40.9	42.3
<b>Women</b>								
Total population (000)	26892	28338	29112	29272	29704	29830	29954	30071
Population of working-age (15-64) (000)	15776	17736	18141	18436	18620	18712	18763	18829
Total employment (000)	8072	8987	9546	9697	9761	9878	9906	9923
Annual change in employment (%)	-	1.1	1.2	1.6	0.2	1.2	0.3	0.2
Employment rate (% working-age population)	51.2	50.7	52.6	52.6	52.4	52.8	52.8	52.7
FTE employment rate (% working-age population)	na	45.8	47.1	47.2	46.1	46.2	46.1	45.8
Self-employed (% total employment)	na	6.4	7.2	7.5	6.8	6.9	6.6	6.5
Employed part-time (% total employment)	na	21.8	23.6	23.5	27.8	28.9	29.5	30.9
Employed on fixed term contracts (%)	na	4.6	12.0	12.0	12.4	13.4	13.9	14.3
Share of employment in agriculture (%)	na	7.1	5.2	5.0	4.0	3.7	3.5	3.4
Share of employment in industry (%)	na	19.3	17.8	17.3	15.2	15.1	14.4	14.5
Share of employment in services (%)	na	73.6	77.0	77.7	80.8	81.2	82.0	82.2
Activity rate (% working-age population)	54.3	57.8	59.5	59.8	61.2	61.3	61.7	61.5
Total unemployed (000)	490.3	1270.0	1245.2	1319.2	1633.3	1596.9	1675.7	1655.8
Unemployment rate (%)	5.7	12.5	11.8	12.2	14.5	14.0	14.5	14.4
Youth unemployed (% labour force 15-24)	na	28.8	23.0	25.0	32.0	31.2	32.2	31.9
Long-term unemployment (% unemployed)	na	50.5	46.1	45.0	38.1	41.1	39.8	41.0
15-19 year olds in education/training (%)	na	na	na	na	92.6	93.5	93.6	93.7
20-24 year olds in education/training (%)	na	na	na	na	42.3	43.2	43.7	45.5

Source: Total employment is from national accounts; working-age population and other employment details are from the Community Labour Force Survey (LFS). Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS. See notes to the table for the European Union.

## Key employment indicators in Ireland

<b>Total</b>	<b>1975</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Total population (000)	3177	3540	3506	3526	3586	3601	3626	3658
Population of working-age (15-64) (000)	1807	2079	2120	2152	2236	2273	2324	2376
Total employment (000)	1061	1069	1135	1134	1207	1262	1308	1373
Annual change in employment (%)	-	0.1	1.2	-0.1	2.1	4.6	3.6	5.0
Employment rate (% working-age population)	58.7	51.4	53.5	52.7	54.0	55.5	56.3	57.8
FTE employment rate (% working-age population)	na	49.6	51.1	50.2	50.6	51.8	52.7	53.7
Self-employed (% total employment)	24.4	21.5	22.6	21.5	21.0	20.8	19.8	19.5
Employed part-time (% total employment)	na	6.5	8.1	8.4	11.4	12.1	11.6	12.3
Employed on fixed term contracts (%)	na	7.3	8.5	8.3	9.5	10.2	9.2	9.4
Share of employment in agriculture (%)	22.4	16.5	15.3	14.0	12.6	12.0	11.2	10.8
Share of employment in industry (%)	31.8	29.9	28.8	29.0	27.9	27.8	27.3	28.5
Share of employment in services (%)	45.8	53.6	55.9	57.0	59.6	60.2	61.5	60.7
Activity rate (% working-age population)	63.3	61.9	61.8	61.9	63.0	63.3	63.7	64.3
Total unemployed (000)	83.0	217.2	175.7	197.5	202.2	177.1	173.2	154.5
Unemployment rate (%)	7.3	16.9	13.4	14.8	14.3	12.3	11.6	10.1
Youth unemployed (% labour force 15-24)	na	24.2	19.4	22.4	22.8	19.4	18.2	15.7
Long-term unemployment (% unemployed)	na	64.0	66.7	62.6	64.3	61.4	59.6	56.6
15-19 year olds in education/training (%)	na	na	na	na	80.8	81.9	82.2	81.2
20-24 year olds in education/training (%)	na	na	na	na	25.4	25.8	28.0	28.5
<b>Men</b>								
Total population (000)	1597	1771	1743	1753	1783	1788	1800	1816
Population of working-age (15-64) (000)	920	1053	1079	1091	1120	1140	1168	1193
Total employment (000)	769	739	758	751	758	788	807	838
Annual change in employment (%)	-	-0.4	0.5	-1.0	0.3	4.0	2.4	3.8
Employment rate (% working-age population)	83.6	70.2	70.3	68.8	67.7	69.1	69.1	70.2
FTE employment rate (% working-age population)	na	69.4	69.1	67.5	65.8	67.1	67.3	68.1
Self-employed (% total employment)	na	27.8	29.8	28.5	28.9	28.5	27.0	27.0
Employed part-time (% total employment)	na	2.4	3.4	3.6	5.1	5.5	5.0	5.4
Employed on fixed term contracts (%)	na	5.5	6.6	6.1	8.0	8.7	7.1	7.1
Share of employment in agriculture (%)	na	20.6	20.6	19.2	17.9	17.1	15.9	15.6
Share of employment in industry (%)	na	34.7	33.6	34.5	34.1	34.1	34.2	35.8
Share of employment in services (%)	na	44.6	45.8	46.3	48.0	48.8	49.9	48.6
Activity rate (% working-age population)	89.7	83.7	80.6	80.2	78.9	78.7	78.1	78.0
Total unemployed (000)	55.9	141.8	111.3	124.4	125.2	109.0	105.5	93.3
Unemployment rate (%)	6.8	16.1	12.8	14.2	14.1	12.1	11.5	10.0
Youth unemployed (% labour force 15-24)	na	25.5	20.4	23.7	24.7	20.7	18.9	16.5
Long-term unemployment (% unemployed)	na	69.1	71.9	67.0	68.5	66.8	64.8	63.4
15-19 year olds in education/training (%)	na	na	na	na	78.1	79.0	79.6	78.5
20-24 year olds in education/training (%)	na	na	na	na	26.2	25.3	27.5	27.4
<b>Women</b>								
Total population (000)	1580	1769	1763	1772	1803	1813	1826	1842
Population of working-age (15-64) (000)	888	1026	1041	1061	1115	1132	1156	1182
Total employment (000)	292	330	377	383	449	474	501	535
Annual change in employment (%)	-	1.2	2.7	1.8	5.4	5.6	5.7	6.8
Employment rate (% working-age population)	32.9	32.1	36.2	36.1	40.3	41.9	43.3	45.3
FTE employment rate (% working-age population)	na	29.6	32.9	32.8	35.9	36.9	38.4	39.8
Self-employed (% total employment)	na	7.4	8.0	7.8	8.0	7.8	8.2	7.5
Employed part-time (% total employment)	na	15.5	17.6	17.8	21.8	23.0	22.2	23.2
Employed on fixed term contracts (%)	na	10.6	11.3	11.5	11.4	12.2	11.8	12.1
Share of employment in agriculture (%)	na	7.1	4.7	3.8	3.8	3.6	3.8	3.2
Share of employment in industry (%)	na	19.1	19.0	18.4	17.2	17.3	16.2	16.7
Share of employment in services (%)	na	73.8	76.4	77.8	79.0	79.1	80.0	80.1
Activity rate (% working-age population)	35.9	39.5	42.4	43.0	47.2	47.9	49.2	50.4
Total unemployed (000)	27.1	75.4	64.4	73.1	77.0	68.1	67.7	61.2
Unemployment rate (%)	8.5	18.5	14.6	15.9	14.6	12.5	11.8	10.3
Youth unemployed (% labour force 15-24)	na	22.7	18.2	20.9	20.6	17.9	17.2	14.9
Long-term unemployment (% unemployed)	na	53.9	57.1	54.0	57.4	52.3	51.5	46.6
15-19 year olds in education/training (%)	na	na	na	na	83.7	85.0	85.0	84.1
20-24 year olds in education/training (%)	na	na	na	na	24.5	26.4	28.6	29.7

Source: Working-age population and all employment details are from the Community Labour Force Survey (LFS). Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS. See notes to the table for the European Union.

## Key employment indicators in Italy

<b>Total</b>	<b>1975</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Total population (000)	55441	56593	56719	56751	57204	57301	57397	57525
Population of working-age (15-64) (000)	35058	38048	38642	39088	38751	38928	38978	39070
Total employment (000)	19293	20179	20726	21006	20024	19943	20037	20044
Annual change in employment (%)	-	0.5	0.5	1.4	-1.6	-0.4	0.5	0.0
Employment rate (% working-age population)	55.0	53.0	53.6	53.7	51.7	51.2	51.4	51.3
FTE employment rate (% working-age population)	na	52.2	52.7	52.6	50.5	49.9	50.1	49.8
Self-employed (% total employment)	29.5	24.1	24.3	24.3	24.1	24.5	24.8	24.5
Employed part-time (% total employment)	na	5.3	4.9	5.5	6.2	6.4	6.6	7.1
Employed on fixed term contracts (%)	na	4.8	5.2	5.4	7.3	7.2	7.5	8.2
Share of employment in agriculture (%)	15.8	11.0	9.0	8.5	7.7	7.5	6.7	6.5
Share of employment in industry (%)	38.5	33.5	32.4	32.2	32.1	32.1	32.2	31.7
Share of employment in services (%)	45.7	55.5	58.6	59.3	60.2	60.4	61.1	61.8
Activity rate (% working-age population)	57.8	58.0	59.1	59.0	58.3	58.1	58.4	58.4
Total unemployed (000)	978.7	1905.1	2123.9	2064.3	2570.5	2688.6	2732.3	2756.6
Unemployment rate (%)	4.8	8.4	9.1	8.8	11.4	11.9	12.0	12.1
Youth unemployed (% labour force 15-24)	na	29.4	27.4	26.0	32.3	33.3	33.5	33.0
Long-term unemployment (% unemployed)	na	65.8	70.8	68.9	61.5	63.6	65.6	66.3
15-19 year olds in education/training (%)	na	na	na	na	73.6	74.8	74.9	76.7
20-24 year olds in education/training (%)	na	na	na	na	32.9	35.1	35.3	35.8
<b>Men</b>								
Total population (000)	27072	27501	27538	27548	27765	27804	27855	27924
Population of working-age (15-64) (000)	17112	18601	19000	19282	19139	19275	19310	19351
Total employment (000)	13784	13681	13637	13706	12960	12871	12844	12818
Annual change in employment (%)	-	-0.1	-0.1	0.5	-1.8	-0.7	-0.2	-0.2
Employment rate (% working-age population)	80.6	73.5	71.8	71.1	67.7	66.8	66.5	66.2
FTE employment rate (% working-age population)	na	73.0	71.2	70.5	67.2	66.2	65.9	65.5
Self-employed (% total employment)	29.3	28.0	28.3	28.3	28.4	28.9	29.2	28.9
Employed part-time (% total employment)	na	3.0	2.4	2.9	2.8	2.9	3.1	3.3
Employed on fixed term contracts (%)	na	3.6	3.9	4.0	6.1	6.0	6.6	7.3
Share of employment in agriculture (%)	14.4	10.7	8.8	8.3	7.7	7.4	6.8	6.8
Share of employment in industry (%)	42.8	37.8	37.2	37.5	37.7	37.9	38.1	37.5
Share of employment in services (%)	42.8	51.5	54.0	54.2	54.6	54.7	55.1	55.6
Activity rate (% working-age population)	83.3	78.2	76.8	75.9	74.3	73.5	73.4	73.1
Total unemployed (000)	461.6	856.8	954.7	934.2	1260.1	1304.3	1329.9	1322.3
Unemployment rate (%)	3.2	5.8	6.4	6.2	8.8	9.2	9.4	9.3
Youth unemployed (% labour force 15-24)	na	24.5	23.3	22.6	29.0	29.1	29.1	28.5
Long-term unemployment (% unemployed)	na	62.9	69.1	67.1	59.6	62.7	64.1	66.5
15-19 year olds in education/training (%)	na	na	na	na	72.8	73.2	73.8	75.5
20-24 year olds in education/training (%)	na	na	na	na	31.2	32.7	32.6	32.8
<b>Women</b>								
Total population (000)	28369	29092	29182	29203	29439	29497	29542	29601
Population of working-age (15-64) (000)	17945	19447	19643	19806	19612	19651	19668	19717
Total employment (000)	5508	6498	7089	7300	7064	7072	7193	7226
Annual change in employment (%)	-	1.7	1.8	3.0	-1.1	0.1	1.7	0.5
Employment rate (% working-age population)	30.7	33.4	36.1	36.9	36.0	36.0	36.6	36.7
FTE employment rate (% working-age population)	na	32.3	34.8	35.4	34.3	34.1	34.7	34.6
Self-employed (% total employment)	30.2	15.8	16.5	16.9	16.3	16.6	16.9	16.7
Employed part-time (% total employment)	na	10.1	9.6	10.4	12.4	12.7	12.7	13.7
Employed on fixed term contracts (%)	na	7.0	7.6	7.7	9.3	9.1	8.9	9.7
Share of employment in agriculture (%)	18.1	11.5	9.4	8.8	7.9	7.5	6.4	5.9
Share of employment in industry (%)	28.5	24.5	23.2	22.2	21.8	21.6	21.7	21.4
Share of employment in services (%)	53.3	64.0	67.4	69.0	70.4	70.9	72.0	72.7
Activity rate (% working-age population)	33.6	38.8	42.0	42.6	42.7	43.0	43.7	43.9
Total unemployed (000)	517.0	1048.3	1169.2	1130.1	1310.4	1384.3	1402.4	1434.3
Unemployment rate (%)	8.6	13.5	13.8	13.2	15.7	16.4	16.4	16.6
Youth unemployed (% labour force 15-24)	na	35.4	32.4	30.3	36.4	38.7	39.0	38.8
Long-term unemployment (% unemployed)	na	68.0	71.9	70.1	63.3	64.4	67.1	66.2
15-19 year olds in education/training (%)	na	na	na	na	74.3	76.5	76.0	78.0
20-24 year olds in education/training (%)	na	na	na	na	34.5	37.4	37.9	38.7

Source: Total employment is the average of quarterly Labour Force Survey data; working-age population and other employment details are from the Community Labour Force Survey (LFS).

Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS.  
See notes to the table for the European Union.

## Key employment indicators in Luxembourg

Total	1975	1985	1990	1991	1994	1995	1996	1997
Total population (000)	359	367	382	387	404	410	416	421
Population of working-age (15-64) (000)	234	250	264	266	272	276	277	279
Total employment (000)	158	160	187	195	208	214	219	227
Annual change in employment (%)	-	0.2	3.2	4.1	2.3	2.6	2.5	3.4
Employment rate (% working-age population)	61.9	59.0	59.6	61.1	60.8	58.3	59.6	60.6
FTE employment rate (% working-age population)	na	57.3	57.8	58.9	58.3	56.0	57.4	58.1
Self-employed (% total employment)	15.8	9.4	9.5	9.2	9.7	9.9	9.1	8.4
Employed part-time (% total employment)	na	7.2	7.0	7.5	7.9	8.0	7.9	7.7
Employed on fixed term contracts (%)	na	4.7	3.4	3.3	2.9	na	2.6	2.1
Share of employment in agriculture (%)	6.8	4.6	3.7	3.5	3.1	3.7	2.4	1.8
Share of employment in industry (%)	43.6	32.0	29.4	28.9	27.0	25.5	23.0	23.0
Share of employment in services (%)	49.6	63.5	66.9	67.6	69.9	70.8	74.5	75.2
Activity rate (% working-age population)	62.2	60.8	60.6	62.1	62.7	60.1	61.6	62.8
Total unemployed (000)	0.6	4.5	2.7	2.8	5.4	4.9	5.1	4.5
Unemployment rate (%)	1.1	2.9	1.7	1.7	3.2	2.9	3.0	2.6
Youth unemployed (% labour force 15-24)	na	6.7	3.8	3.2	7.3	7.4	8.5	7.7
Long-term unemployment (% unemployed)	na	na	na	na	na	na	na	na
15-19 year olds in education/training (%)	na	na	na	na	85.7	87.0	88.3	92.7
20-24 year olds in education/training (%)	na	na	na	na	28.1	34.6	34.2	34.9
<b>Men</b>								
Total population (000)	178	178	187	190	198	201	204	207
Population of working-age (15-64) (000)	117	124	134	135	138	140	140	140
Total employment (000)	112	106	123	126	131	138	139	142
Annual change in employment (%)	-	-0.6	3.0	2.7	1.4	5.2	1.0	1.7
Employment rate (% working-age population)	88.0	78.2	77.0	77.7	75.4	74.3	75.0	75.6
FTE employment rate (% working-age population)	na	77.8	76.7	77.4	75.1	74.0	74.7	75.3
Self-employed (% total employment)	na	11.0	10.8	10.5	10.6	11.5	10.5	9.5
Employed part-time (% total employment)	na	2.6	1.9	1.9	1.0	1.0	1.9	1.0
Employed on fixed term contracts (%)	na	3.5	2.6	2.3	2.0	na	2.4	1.8
Share of employment in agriculture (%)	na	4.9	3.9	3.8	2.9	3.9	2.9	2.0
Share of employment in industry (%)	na	43.4	40.3	39.4	37.9	35.0	32.4	33.3
Share of employment in services (%)	na	51.7	55.7	56.9	59.2	61.2	64.8	64.7
Activity rate (% working-age population)	88.3	79.9	78.0	78.7	77.4	75.9	76.9	77.7
Total unemployed (000)	0.4	2.2	1.3	1.4	2.8	2.2	2.4	2.0
Unemployment rate (%)	0.3	2.2	1.2	1.3	2.7	2.1	2.2	1.8
Youth unemployed (% labour force 15-24)	na	6.4	3.2	3.3	7.5	7.1	8.4	5.7
Long-term unemployment (% unemployed)	na	na	na	na	na	na	na	na
15-19 year olds in education/training (%)	na	na	na	na	85.5	88.3	89.4	91.3
20-24 year olds in education/training (%)	na	na	na	na	32.2	37.6	37.5	38.2
<b>Women</b>								
Total population (000)	181	188	195	197	205	209	212	214
Population of working-age (15-64) (000)	117	126	130	131	134	135	137	136
Total employment (000)	45	55	65	69	77	76	80	85
Annual change in employment (%)	-	1.9	3.4	6.8	3.8	-1.7	5.3	6.3
Employment rate (% working-age population)	35.8	40.1	41.7	44.0	45.6	42.2	43.8	46.5
FTE employment rate (% working-age population)	na	37.1	38.4	40.1	41.2	38.0	39.9	41.9
Self-employed (% total employment)	na	6.3	7.4	7.0	8.2	6.9	6.7	6.5
Employed part-time (% total employment)	na	16.3	16.7	17.9	19.7	20.7	18.3	19.4
Employed on fixed term contracts (%)	na	7.0	4.9	4.9	4.4	na	3.1	2.7
Share of employment in agriculture (%)	na	3.8	3.3	2.9	3.3	3.4	1.7	0.0
Share of employment in industry (%)	na	10.1	8.6	9.9	8.2	8.6	6.7	5.0
Share of employment in services (%)	na	86.1	88.1	87.2	88.5	87.9	91.7	95.0
Activity rate (% working-age population)	36.0	41.9	42.8	45.0	47.6	44.2	45.9	48.9
Total unemployed (000)	0.3	2.3	1.4	1.4	2.6	2.7	2.7	2.5
Unemployment rate (%)	0.6	4.4	2.5	2.3	4.1	4.4	4.3	3.8
Youth unemployed (% labour force 15-24)	na	7.1	4.6	3.1	7.2	7.8	8.5	10.0
Long-term unemployment (% unemployed)	na	na	na	na	na	na	na	na
15-19 year olds in education/training (%)	na	na	na	na	86.0	85.6	87.2	94.1
20-24 year olds in education/training (%)	na	na	na	na	24.0	31.3	30.9	34.4

Source: Total employment is from national accounts; working-age population and other employment details (including the employment figures used in the calculation of employment and activity rates) are from the Community Labour Force Survey (LFS).

Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment data are too small.

See notes to the table for the European Union.



## Key employment indicators in the Netherlands

<b>Total</b>	<b>1975</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Total population (000)	13666	14492	14952	15070	15383	15459	15531	15604
Population of working-age (15-64) (000)	8561	9744	10157	10234	10427	10496	10509	10551
Total employment (000)	5250	5621	6315	6443	6594	6703	6846	7037
Annual change in employment (%)	-	0.7	2.4	2.0	0.8	1.7	2.1	2.8
Employment rate (% working-age population)	61.3	57.7	62.2	63.0	63.2	63.9	65.1	66.7
FTE employment rate (% working-age population)	na	47.2	50.0	50.6	50.2	50.5	51.6	53.0
Self-employed (% total employment)	10.3	9.1	10.0	9.8	11.1	11.5	11.2	11.3
Employed part-time (% total employment)	na	22.7	31.8	32.6	36.4	37.3	38.1	38.0
Employed on fixed term contracts (%)	na	7.5	7.6	7.7	10.9	11.4	12.0	11.4
Share of employment in agriculture (%)	5.7	5.3	4.7	4.4	4.0	3.8	3.8	3.7
Share of employment in industry (%)	34.9	28.2	26.3	25.6	23.3	23.3	23.2	22.9
Share of employment in services (%)	59.4	66.5	69.1	70.1	72.7	72.8	73.1	73.4
Activity rate (% working-age population)	63.7	62.5	66.2	66.8	68.2	68.7	69.6	70.4
Total unemployed (000)	205.9	467.3	413.2	395.1	516.3	505.1	468.4	392.2
Unemployment rate (%)	4.3	8.3	6.2	5.8	7.1	6.9	6.3	5.2
Youth unemployed (% labour force 15-24)	na	13.1	8.6	8.3	11.4	12.0	11.7	9.2
Long-term unemployment (% unemployed)	na	58.8	47.1	43.9	49.4	46.6	49.0	49.2
15-19 year olds in education/training (%)	na	na	na	na	91.1	88.4	81.3	80.7
20-24 year olds in education/training (%)	na	na	na	na	48.3	47.6	48.4	49.4
<b>Men</b>								
Total population (000)	6804	7167	7389	7450	7607	7645	7680	7715
Population of working-age (15-64) (000)	4312	4907	5121	5169	5279	5321	5331	5350
Total employment (000)	3840	3712	3946	3974	3975	4032	4091	4181
Annual change in employment (%)	-	-0.3	1.2	0.7	0.0	1.4	1.5	2.2
Employment rate (% working-age population)	89.0	75.6	77.1	76.9	75.3	75.8	76.7	78.1
FTE employment rate (% working-age population)	na	69.1	69.6	69.4	68.6	68.8	69.8	71.1
Self-employed (% total employment)	na	11.6	11.3	11.0	12.9	13.2	13.2	13.4
Employed part-time (% total employment)	na	13.8	15.0	15.7	16.1	16.7	17.0	17.0
Employed on fixed term contracts (%)	na	5.9	6.1	5.9	7.9	8.9	9.1	8.8
Share of employment in agriculture (%)	na	6.4	5.4	5.2	5.0	4.9	4.8	4.6
Share of employment in industry (%)	na	36.7	35.6	34.8	32.7	32.3	32.1	32.1
Share of employment in services (%)	na	56.9	59.0	60.0	62.3	62.8	63.1	63.3
Activity rate (% working-age population)	92.5	80.8	80.5	80.1	80.4	80.4	80.8	81.3
Total unemployed (000)	149.3	253.2	176.2	168.3	267.9	244.9	214.7	170.8
Unemployment rate (%)	3.7	6.9	4.3	4.1	6.3	5.7	5.0	3.9
Youth unemployed (% labour force 15-24)	na	12.8	7.5	7.4	12.2	11.3	11.1	8.1
Long-term unemployment (% unemployed)	na	61.5	52.9	52.2	50.0	52.2	53.7	49.7
15-19 year olds in education/training (%)	na	na	na	na	91.5	87.7	81.1	80.8
20-24 year olds in education/training (%)	na	na	na	na	52.6	52.7	52.0	51.6
<b>Women</b>								
Total population (000)	6862	7325	7563	7620	7776	7814	7851	7889
Population of working-age (15-64) (000)	4248	4837	5036	5065	5148	5175	5178	5200
Total employment (000)	1411	1909	2369	2469	2619	2671	2755	2856
Annual change in employment (%)	-	3.1	4.4	4.2	2.0	2.0	3.1	3.7
Employment rate (% working-age population)	33.2	39.5	47.0	48.7	50.9	51.6	53.2	54.9
FTE employment rate (% working-age population)	na	25.8	30.5	31.9	32.1	32.5	33.4	35.1
Self-employed (% total employment)	na	4.3	7.7	7.8	8.5	8.8	8.2	8.3
Employed part-time (% total employment)	na	57.5	59.4	59.9	66.0	67.3	68.5	67.9
Employed on fixed term contracts (%)	na	10.8	10.2	10.6	15.0	14.9	15.9	14.9
Share of employment in agriculture (%)	na	3.1	3.4	3.0	2.5	2.2	2.3	2.3
Share of employment in industry (%)	na	11.9	11.1	10.8	9.5	10.0	9.6	9.3
Share of employment in services (%)	na	85.0	85.5	86.1	87.9	87.8	88.1	88.3
Activity rate (% working-age population)	34.5	43.9	51.8	53.2	55.7	56.6	58.1	59.2
Total unemployed (000)	56.6	214.1	237.0	226.8	248.4	260.2	253.7	221.4
Unemployment rate (%)	3.9	10.8	9.1	8.4	8.3	8.6	8.1	6.9
Youth unemployed (% labour force 15-24)	na	13.4	9.6	9.1	10.7	12.7	12.4	10.4
Long-term unemployment (% unemployed)	na	54.9	42.4	36.8	48.7	41.2	45.3	48.3
15-19 year olds in education/training (%)	na	na	na	na	90.8	89.3	81.5	80.6
20-24 year olds in education/training (%)	na	na	na	na	43.9	42.5	44.8	47.1

Source: Total employment is from the labour accounts; working-age population and other employment details are from the Community Labour Force Survey (LFS). The working time figures used in the calculation of FTE employment rates in 1985 relate to 1987.

Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS. See notes to the table for the European Union.

## Key employment indicators in Austria

Total	1975	1985	1990	1991	1994	1995	1996	1997
Total population (000)	7579	7578	7729	7813	8030	8047	8059	8072
Population of working-age (15-64) (000)	4627	5042	5130	5218	5306	5306	5314	5319
Total employment (000)	3087	3392	3578	3644	3742	3759	3710	3719
Annual change in employment (%)	-	0.9	1.1	1.9	0.9	0.5	-1.3	0.2
Employment rate (% working-age population)	66.7	67.3	69.7	69.8	70.5	70.8	69.8	69.9
FTE employment rate (% working-age population)	na	63.2	65.5	65.6	66.3	66.6	64.9	65.0
Self-employed (% total employment)	13.7	11.3	11.3	11.0	10.8	10.9	10.8	10.8
Employed part-time (% total employment)	na	11.1	13.3	12.9	13.9	13.9	14.9	14.9
Employed on fixed term contracts (%)	na	na	na	na	na	6.0	8.0	7.8
Share of employment in agriculture (%)	12.5	9.1	7.9	7.8	7.4	7.3	7.4	6.9
Share of employment in industry (%)	40.9	38.0	36.8	37.2	34.5	32.1	30.3	29.6
Share of employment in services (%)	46.5	52.3	55.3	55.0	58.0	60.5	62.3	63.5
Activity rate (% working-age population)	67.8	69.7	72.0	72.3	73.3	73.7	72.9	73.0
Total unemployed (000)	52.0	121.0	114.0	130.0	146.1	149.4	164.4	164.2
Unemployment rate (%)	1.7	3.6	3.2	3.4	3.8	3.9	4.3	4.4
Youth unemployed (% labour force 15-24)	na	na	na	5.5	5.7	5.5	6.2	6.7
Long-term unemployment (% unemployed)	na	na	na	na	na	27.5	25.7	28.5
15-19 year olds in education/training (%)	na	na	na	na	na	80.5	81.6	82.8
20-24 year olds in education/training (%)	na	na	na	na	na	30.8	32.3	31.7
<b>Men</b>								
Total population (000)	3581	3599	3711	3763	3892	3902	3910	3917
Population of working-age (15-64) (000)	2265	2471	2553	2612	2655	2655	2659	2656
Total employment (000)	1903	2053	2118	2151	2147	2163	2131	2136
Annual change in employment (%)	-	0.8	0.6	1.6	-0.1	0.7	-1.5	0.2
Employment rate (% working-age population)	84.0	83.1	83.0	82.3	80.9	81.5	80.1	80.4
FTE employment rate (% working-age population)	na	81.6	81.4	80.8	79.4	80.0	78.6	78.9
Self-employed (% total employment)	na	12.4	13.1	12.5	12.3	12.4	12.4	12.6
Employed part-time (% total employment)	na	3.4	4.3	4.0	4.0	4.0	4.2	4.0
Employed on fixed term contracts (%)	na	na	na	na	na	5.7	8.1	7.3
Share of employment in agriculture (%)	na	8.4	6.9	7.1	7.3	6.7	6.5	6.2
Share of employment in industry (%)	na	48.5	48.3	48.4	46.0	43.2	41.6	41.2
Share of employment in services (%)	na	43.2	44.8	44.6	46.7	50.1	51.9	52.6
Activity rate (% working-age population)	85.2	86.1	85.4	84.4	83.3	84.0	83.0	83.3
Total unemployed (000)	26.0	74.0	63.0	53.1	63.7	66.6	77.2	76.0
Unemployment rate (%)	1.3	3.5	2.9	2.4	2.9	3.1	3.6	3.6
Youth unemployed (% labour force 15-24)	na	na	na	4.4	5.0	4.4	5.2	5.6
Long-term unemployment (% unemployed)	na	na	na	na	na	24.6	23.5	28.6
15-19 year olds in education/training (%)	na	na	na	na	na	82.2	83.7	84.3
20-24 year olds in education/training (%)	na	na	na	na	na	33.4	35.3	33.0
<b>Women</b>								
Total population (000)	3998	3979	4018	4050	4138	4144	4149	4155
Population of working-age (15-64) (000)	2362	2571	2577	2606	2651	2651	2656	2662
Total employment (000)	1184	1339	1460	1494	1595	1596	1579	1583
Annual change in employment (%)	-	1.2	1.7	2.3	2.2	0.1	-1.1	0.2
Employment rate (% working-age population)	50.1	52.1	56.7	57.3	60.2	60.2	59.5	59.5
FTE employment rate (% working-age population)	na	46.2	50.3	50.9	53.4	53.4	51.4	51.5
Self-employed (% total employment)	na	9.7	8.9	9.0	8.8	8.7	8.8	8.4
Employed part-time (% total employment)	na	23.1	25.4	24.9	26.9	26.9	28.8	29.0
Employed on fixed term contracts (%)	na	na	na	na	na	6.3	7.9	8.4
Share of employment in agriculture (%)	na	10.6	9.3	8.7	7.6	8.2	8.6	7.7
Share of employment in industry (%)	na	22.4	21.3	22.3	19.7	17.6	15.6	14.6
Share of employment in services (%)	na	66.9	69.3	68.9	72.7	74.3	75.8	77.7
Activity rate (% working-age population)	51.2	53.9	58.6	60.3	63.3	63.3	62.7	62.8
Total unemployed (000)	26.0	47.0	51.0	76.9	82.4	82.8	87.2	88.2
Unemployment rate (%)	2.1	3.4	3.4	4.9	4.9	5.0	5.3	5.3
Youth unemployed (% labour force 15-24)	na	na	na	9.1	7.5	6.7	7.3	7.8
Long-term unemployment (% unemployed)	na	na	na	na	na	30.6	29.1	27.6
15-19 year olds in education/training (%)	na	na	na	na	na	78.9	79.4	81.3
20-24 year olds in education/training (%)	na	na	na	na	na	28.3	29.3	30.6

Source: Total employment is from the microcensus. Working-age population and other employment details are also from the LFS from 1995 and from national sources before then. There is, therefore, a break in the series between 1994 and 1995.

Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS. See notes to the table for the European Union.

## Key employment indicators in Portugal

<b>Total</b>	<b>1975</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Total population (000)	9094	10011	9896	9867	9902	9916	9927	9941
Population of working-age (15-64) (000)	5857	6537	6781	6814	6750	6741	6728	6705
Total employment (000)	3845	4149	4490	4616	4444	4413	4443	4529
Annual change in employment (%)	-	0.8	1.6	2.8	-1.3	-0.7	0.7	1.9
Employment rate (% working-age population)	65.6	63.5	66.2	67.7	65.8	65.5	66.0	67.5
FTE employment rate (% working-age population)	na	61.8	64.5	65.8	63.5	63.3	63.8	64.6
Self-employed (% total employment)*	27.7	26.2	25.8	26.4	25.3	25.8	26.8	26.9
Employed part-time (% total employment)	na	6.0	6.0	7.0	8.0	7.5	8.7	9.9
Employed on fixed term contracts (%)	na	14.4	18.3	16.4	9.4	10.0	10.6	12.2
Share of employment in agriculture (%)	33.9	21.6	18.1	17.4	11.8	11.5	12.2	13.3
Share of employment in industry (%)*	33.8	33.9	34.1	34.0	32.5	32.2	31.3	31.0
Share of employment in services (%)*	32.3	44.5	47.8	48.6	55.8	56.3	56.5	55.7
Activity rate (% working-age population)	68.7	69.5	69.4	70.5	70.8	70.6	71.2	72.5
Total unemployed (000)	179.1	394.0	213.2	190.9	332.6	346.5	348.7	328.1
Unemployment rate (%)	4.4	8.7	4.6	4.0	7.0	7.3	7.3	6.8
Youth unemployed (% labour force 15-24)	na	20.0	10.0	8.8	15.1	16.6	16.8	15.0
Long-term unemployment (% unemployed)	na	56.1	47.5	39.6	43.4	50.9	53.0	55.4
15-19 year olds in education/training (%)	na	na	na	na	71.4	73.5	76.2	73.8
20-24 year olds in education/training (%)	na	na	na	na	37.1	40.5	40.5	40.5
<b>Men</b>								
Total population (000)	4306	4828	4771	4756	4769	4776	4781	4787
Population of working-age (15-64) (000)	2813	3140	3259	3270	3233	3253	3247	3229
Total employment (000)	2377	2510	2609	2644	2481	2444	2461	2492
Annual change in employment (%)	-	0.5	0.8	1.3	-2.1	-1.5	0.7	1.2
Employment rate (% working-age population)	84.5	79.9	80.1	80.9	76.7	75.1	75.8	77.2
FTE employment rate (% working-age population)	na	79.0	79.1	79.7	75.3	74.0	74.5	75.5
Self-employed (% total employment)*	na	25.9	25.7	26.5	27.0	28.1	28.9	28.3
Employed part-time (% total employment)	na	3.4	3.5	4.0	4.7	4.2	5.1	5.7
Employed on fixed term contracts (%)	na	13.5	16.8	14.8	8.5	9.1	10.2	11.7
Share of employment in agriculture (%)	na	18.6	15.8	14.8	10.8	10.5	11.2	11.6
Share of employment in industry (%)*	na	40.2	40.2	40.9	39.4	39.7	38.7	39.8
Share of employment in services (%)*	na	41.2	44.1	44.3	49.9	49.7	50.1	48.6
Activity rate (% working-age population)	88.1	85.5	82.7	83.2	81.7	80.4	81.0	82.1
Total unemployed (000)	102.6	174.1	85.7	75.4	160.7	170.4	169.7	159.7
Unemployment rate (%)	4.1	6.6	3.2	2.8	6.1	6.5	6.5	6.0
Youth unemployed (% labour force 15-24)	na	16.3	8.4	6.8	13.5	15.1	14.3	11.9
Long-term unemployment (% unemployed)	na	50.6	40.7	33.3	42.3	48.4	51.3	53.4
15-19 year olds in education/training (%)	na	na	na	na	70.8	71.3	74.3	72.4
20-24 year olds in education/training (%)	na	na	na	na	32.9	36.3	35.5	36.7
<b>Women</b>								
Total population (000)	4788	5183	5125	5110	5133	5141	5147	5154
Population of working-age (15-64) (000)	3044	3397	3522	3544	3517	3488	3482	3473
Total employment (000)	1468	1639	1881	1972	1963	1969	1982	2037
Annual change in employment (%)	-	1.1	2.8	4.8	-0.2	0.3	0.6	2.8
Employment rate (% working-age population)	48.2	48.2	53.4	55.6	55.8	56.5	56.9	58.6
FTE employment rate (% working-age population)	na	46.0	51.1	53.1	52.8	53.5	53.9	54.7
Self-employed (% total employment)*	na	26.6	25.9	26.1	23.1	22.9	24.2	25.1
Employed part-time (% total employment)	na	10.0	9.4	11.0	12.1	11.6	13.1	15.0
Employed on fixed term contracts (%)	na	15.9	20.5	18.6	10.5	11.1	11.1	12.9
Share of employment in agriculture (%)	na	25.9	21.4	20.9	13.0	12.6	13.5	15.2
Share of employment in industry (%)*	na	24.5	25.8	24.9	23.9	22.8	22.0	20.2
Share of employment in services (%)*	na	49.6	52.9	54.2	63.1	64.6	64.5	64.6
Activity rate (% working-age population)	50.7	54.7	57.0	58.9	60.7	61.5	62.1	63.6
Total unemployed (000)	76.6	219.9	127.5	115.5	171.9	176.1	179.0	168.4
Unemployment rate (%)	5.0	11.7	6.2	5.4	8.0	8.2	8.3	7.7
Youth unemployed (% labour force 15-24)	na	24.6	11.9	11.1	17.0	18.5	19.9	18.9
Long-term unemployment (% unemployed)	na	60.6	52.3	43.5	44.3	53.4	54.7	57.3
15-19 year olds in education/training (%)	na	na	na	na	72.0	75.8	78.2	75.2
20-24 year olds in education/training (%)	na	na	na	na	41.2	44.6	45.5	44.4

Source: Total employment is an average of quarterly Labour Force Survey data; working-age population and other employment details are from the Community Labour Force Survey (LFS).

Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS.

See notes to the table for the European Union.

\* 1985 data relate to 1986.

## Key employment indicators in Finland

<b>Total</b>	<b>1975</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Total population (000)	4711	4902	4986	5014	5088	5108	5125	5140
Population of working-age (15-64) (000)	3104	3266	3282	3305	3331	3338	3384	3398
Total employment (000)	2238	2456	2486	2358	2040	2084	2112	2170
Annual change in employment (%)	-	0.9	0.2	-5.1	-4.7	2.2	1.4	2.7
Employment rate (% working-age population)	72.1	75.2	75.8	71.4	61.2	62.4	62.4	63.9
FTE employment rate (% working-age population)	na	71.3	71.9	67.7	58.1	59.2	59.1	60.7
Self-employed (% total employment)	na	14.7	14.1	14.1	15.0	14.3	15.1	14.4
Employed part-time (% total employment)	na	11.5	9.5	10.3	11.8	11.8	11.6	11.4
Employed on fixed term contracts (%)	na	10.4	na	11.8	12.5	16.5	17.3	17.1
Share of employment in agriculture (%)	14.9	11.3	8.2	8.2	8.1	7.7	7.9	7.7
Share of employment in industry (%)	36.1	31.8	30.9	29.5	26.4	27.6	27.1	27.4
Share of employment in services (%)	49.0	56.9	60.9	62.3	65.4	64.6	65.0	64.9
Activity rate (% working-age population)	73.9	79.9	78.3	76.8	73.8	74.3	73.5	74.0
Total unemployed (000)	57.0	152.4	84.2	174.1	423.3	396.4	376.8	325.5
Unemployment rate (%)	2.4	6.0	3.3	7.0	17.4	16.2	15.3	13.1
Youth unemployed (% labour force 15-24)	na	10.0	9.7	17.0	35.1	30.7	28.9	25.7
Long-term unemployment (% unemployed)	na	na	na	na	na	37.0	35.9	29.6
15-19 year olds in education/training (%)	na	na	na	na	na	86.4	86.7	90.2
20-24 year olds in education/training (%)	na	na	na	na	na	42.7	49.2	50.5
<b>Men</b>								
Total population (000)	2278	2374	2419	2435	2476	2487	2496	2504
Population of working-age (15-64) (000)	1540	1624	1643	1655	1669	1672	1707	1706
Total employment (000)	1191	1270	1300	1219	1049	1074	1102	1142
Annual change in employment (%)	-	0.6	0.5	-6.2	-4.9	2.4	2.6	3.6
Employment rate (% working-age population)	77.3	78.2	79.1	73.6	62.9	64.3	64.6	66.9
FTE employment rate (% working-age population)	na	75.5	76.4	71.1	60.7	62.0	62.2	64.6
Self-employed (% total employment)	na	16.7	17.7	18.1	19.6	18.7	19.9	19.6
Employed part-time (% total employment)	na	6.2	5.8	7.0	8.1	8.1	7.9	7.6
Employed on fixed term contracts (%)	na	9.6	na	9.8	11.5	13.4	14.1	15.3
Share of employment in agriculture (%)	15.4	13.6	10.1	10.2	10.5	10.0	9.9	9.9
Share of employment in industry (%)	48.0	43.1	43.4	41.9	37.7	39.6	39.2	39.6
Share of employment in services (%)	36.6	43.3	46.5	47.9	51.8	50.4	51.0	50.5
Activity rate (% working-age population)	79.3	83.1	82.1	80.4	76.8	76.7	75.7	76.8
Total unemployed (000)	29.9	79.2	50.1	109.2	241.6	209.7	191.7	164.9
Unemployment rate (%)	2.4	6.1	3.7	8.3	18.9	16.3	14.9	12.6
Youth unemployed (% labour force 15-24)	na	9.8	10.2	19.0	37.2	30.6	29.5	25.0
Long-term unemployment (% unemployed)	na	na	na	na	na	42.0	40.4	31.9
15-19 year olds in education/training (%)	na	na	na	na	na	85.9	87.8	89.7
20-24 year olds in education/training (%)	na	na	na	na	na	35.5	46.5	47.0
<b>Women</b>								
Total population (000)	2433	2529	2567	2579	2612	2621	2628	2636
Population of working-age (15-64) (000)	1564	1641	1640	1649	1663	1665	1677	1691
Total employment (000)	1046	1186	1187	1139	991	1010	1010	1028
Annual change in employment (%)	-	1.3	0.0	-4.0	-4.6	1.9	0.0	1.8
Employment rate (% working-age population)	66.9	72.3	72.4	69.1	59.6	60.6	60.2	60.8
FTE employment rate (% working-age population)	na	67.5	67.6	64.6	55.7	56.7	56.2	56.9
Self-employed (% total employment)	na	12.3	10.2	9.9	10.2	9.6	9.8	8.7
Employed part-time (% total employment)	na	17.2	13.5	13.9	15.7	15.7	15.7	15.6
Employed on fixed term contracts (%)	na	11.2	na	13.6	13.5	19.5	20.5	18.9
Share of employment in agriculture (%)	14.3	8.8	6.0	6.1	5.6	5.3	5.7	5.2
Share of employment in industry (%)	22.5	19.7	17.3	16.2	14.5	14.9	13.9	13.9
Share of employment in services (%)	63.2	71.5	76.7	77.7	79.9	79.8	80.3	80.9
Activity rate (% working-age population)	68.6	76.7	74.4	73.2	70.8	72.0	71.3	71.2
Total unemployed (000)	27.1	73.3	34.1	64.9	181.7	186.7	185.1	160.6
Unemployment rate (%)	2.5	6.0	2.9	5.5	15.8	16.1	15.8	13.7
Youth unemployed (% labour force 15-24)	na	10.1	9.0	14.6	32.6	30.7	28.2	26.6
Long-term unemployment (% unemployed)	na	na	na	na	na	31.5	31.0	27.1
15-19 year olds in education/training (%)	na	na	na	na	na	87.1	85.6	91.3
20-24 year olds in education/training (%)	na	na	na	na	na	49.9	52.1	53.9

Source: Total employment is an average of quarterly Labour Force Survey data; Working-age population and other employment details are also from the LFS from 1995 and from national sources before then. There is, therefore, a break in the series between 1994 and 1995.

Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS. See notes to the table for the European Union.

## Key employment indicators in Sweden

<b>Total</b>	<b>1975</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Total population (000)	8193	8350	8559	8617	8781	8827	8841	8848
Population of working-age (15-64) (000)	5163	5295	5415	5434	5502	5526	5636	5645
Total employment (000)	3996	4252	4486	4396	3928	3986	3963	3922
Annual change in employment (%)	-	0.6	1.1	-2.0	-3.7	1.5	-0.6	-1.0
Employment rate (% working-age population)	77.4	80.3	82.8	80.9	71.4	72.1	70.3	69.5
FTE employment rate (% working-age population)	na	70.4	72.7	71.0	62.6	63.3	62.0	61.6
Self-employed (% total employment)*	7.2	9.4	9.3	9.2	11.1	11.3	11.7	11.2
Employed part-time (% total employment)*	na	25.6	23.6	23.8	25.0	25.8	24.5	24.5
Employed on fixed term contracts (%)*	na	11.9	10.0	9.8	11.5	12.5	11.8	12.1
Share of employment in agriculture (%)*	6.4	4.3	3.7	3.6	3.7	3.3	3.3	3.2
Share of employment in industry (%)*	36.5	29.6	28.9	28.0	25.3	25.8	25.9	25.5
Share of employment in services (%)*	57.1	66.1	67.3	68.3	70.9	71.0	70.9	71.3
Activity rate (% working-age population)	78.8	82.8	84.4	83.6	79.1	79.4	78.1	77.4
Total unemployed (000)	71.6	127.9	79.9	143.0	411.8	390.6	425.6	436.0
Unemployment rate (%)	1.7	2.9	1.7	3.1	9.4	8.8	9.6	9.9
Youth unemployed (% labour force 15-24)	na	6.9	4.4	7.6	22.0	19.1	20.5	20.6
Long-term unemployment (% unemployed)	na	11.7	7.0	4.0	11.0	20.2	19.1	34.2
15-19 year olds in education/training (%)	na	na	na	na	na	68.6	76.2	76.2
20-24 year olds in education/training (%)	na	na	na	na	na	26.5	27.7	30.7
<b>Men</b>								
Total population (000)	4075	4124	4228	4257	4339	4361	4368	4371
Population of working-age (15-64) (000)	2616	2684	2748	2759	2794	2806	2864	2868
Total employment (000)	2304	2239	2333	2278	2017	2061	2058	2041
Annual change in employment (%)	-	-0.3	0.8	-2.3	-4.0	2.2	-0.1	-0.8
Employment rate (% working-age population)	88.1	83.4	84.9	82.6	72.2	73.4	71.9	71.2
FTE employment rate (% working-age population)	na	78.2	79.6	77.4	67.7	68.8	67.6	67.1
Self-employed (% total employment)*	10.4	13.3	13.4	13.5	16.2	16.3	16.9	16.0
Employed part-time (% total employment)*	na	6.8	7.4	7.6	9.1	10.3	8.9	9.3
Employed on fixed term contracts (%)*	na	9.6	7.3	7.4	9.9	10.5	10.1	10.1
Share of employment in agriculture (%)*	8.2	6.2	5.5	5.3	5.5	4.8	4.7	4.6
Share of employment in industry (%)*	49.3	43.6	42.8	41.9	38.4	38.9	38.8	38.2
Share of employment in services (%)*	42.4	50.2	51.7	52.8	56.2	56.3	56.5	57.2
Activity rate (% working-age population)	89.4	86.1	86.5	85.6	81.3	81.7	80.3	79.6
Total unemployed (000)	34.6	70.1	42.1	82.6	247.9	225.0	235.8	237.9
Unemployment rate (%)	1.5	3.0	1.7	3.4	10.8	9.7	10.1	10.2
Youth unemployed (% labour force 15-24)	na	7.2	4.5	8.3	24.9	20.4	21.3	21.0
Long-term unemployment (% unemployed)	na	11.6	5.4	4.3	12.1	23.4	21.3	35.5
15-19 year olds in education/training (%)	na	na	na	na	na	72.6	76.6	78.0
20-24 year olds in education/training (%)	na	na	na	na	na	28.6	26.7	26.1
<b>Women</b>								
Total population (000)	4118	4227	4331	4360	4442	4466	4473	4477
Population of working-age (15-64) (000)	2547	2611	2667	2675	2708	2720	2773	2776
Total employment (000)	1692	2013	2153	2118	1911	1925	1905	1880
Annual change in employment (%)	-	1.8	1.4	-1.6	-3.4	0.7	-1.0	-1.3
Employment rate (% working-age population)	66.4	77.1	80.7	79.2	70.6	70.8	68.7	67.7
FTE employment rate (% working-age population)	na	63.0	66.0	64.7	57.7	57.9	56.6	56.2
Self-employed (% total employment)*	2.8	5.2	4.8	4.6	5.8	5.9	6.1	6.0
Employed part-time (% total employment)*	na	46.6	41.8	41.8	42.2	43.0	41.8	41.4
Employed on fixed term contracts (%)*	na	14.2	12.7	12.2	13.0	14.4	13.4	14.0
Share of employment in agriculture (%)*	4.0	2.3	1.8	1.9	1.9	1.6	1.7	1.6
Share of employment in industry (%)*	19.0	14.2	13.8	13.0	11.7	11.6	12.1	11.6
Share of employment in services (%)*	77.1	83.5	84.3	85.1	86.5	86.8	86.2	86.7
Activity rate (% working-age population)	68.0	79.4	82.2	81.5	76.9	77.1	75.8	75.0
Total unemployed (000)	36.9	57.8	37.8	60.4	163.9	165.6	189.8	198.1
Unemployment rate (%)	2.1	2.8	1.7	2.8	7.8	7.8	9.0	9.5
Youth unemployed (% labour force 15-24)	na	6.5	4.3	6.8	19.0	17.7	19.8	20.1
Long-term unemployment (% unemployed)	na	11.9	8.6	3.5	9.1	15.9	16.0	32.2
15-19 year olds in education/training (%)	na	na	na	na	na	64.4	75.8	74.6
20-24 year olds in education/training (%)	na	na	na	na	na	24.4	28.7	35.4

Source: Total employment is an average of quarterly Labour Force Survey data; Working-age population and other employment details are also from the LFS from 1995 and from national sources before then. There is, therefore, a break in the series between 1994 and 1995.

Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS.

See notes to the table for the European Union.

\* 1985 data relate to 1987.

## Key employment indicators in the United Kingdom

<b>Total</b>	<b>1975</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Total population (000)	56226	56685	57561	57808	58395	58606	58802	59000
Population of working-age (15-64) (000)	34767	36706	37018	37033	37286	37411	37511	37571
Total employment (000)	24667	24282	26783	26207	25657	25936	26177	26612
Annual change in employment (%)	-	-0.2	2.0	-2.2	-0.7	1.1	0.9	1.7
Employment rate (% working-age population)	71.0	66.2	72.4	70.8	68.8	69.3	69.8	70.8
FTE employment rate (% working-age population)	na	57.6	62.7	61.1	58.8	59.1	59.3	60.2
Self-employed (% total employment)	8.1	11.4	13.4	13.1	12.9	13.0	12.6	12.6
Employed part-time (% total employment)	na	21.2	21.7	22.2	23.8	24.1	24.6	24.9
Employed on fixed term contracts (%)	na	7.0	5.2	5.3	6.5	7.0	7.1	7.4
Share of employment in agriculture (%)	2.8	2.4	2.2	2.3	2.1	2.1	2.0	1.9
Share of employment in industry (%)	40.4	34.7	32.3	31.2	27.8	27.4	27.4	26.9
Share of employment in services (%)	56.8	63.0	65.5	66.5	70.1	70.5	70.6	71.2
Activity rate (% working-age population)	73.3	74.7	77.8	77.6	76.2	76.0	76.0	76.2
Total unemployed (000)	817.3	3141.3	2022.4	2528.4	2744.0	2496.8	2339.8	2022.9
Unemployment rate (%)	3.2	11.5	7.0	8.8	9.6	8.7	8.2	7.0
Youth unemployed (% labour force 15-24)	na	18.5	10.8	14.3	17.0	15.9	15.5	14.2
Long-term unemployment (% unemployed)	na	48.1	35.5	29.6	45.4	43.6	39.8	38.6
15-19 year olds in education/training (%)	na	na	na	na	71.2	71.7	70.9	70.6
20-24 year olds in education/training (%)	na	na	na	na	23.6	23.2	23.8	24.3
<b>Men</b>								
Total population (000)	27361	27611	28118	28246	28592	28728	28840	28967
Population of working-age (15-64) (000)	17337	18333	18529	18536	18740	18812	18886	18897
Total employment (000)	15252	14172	15207	14753	14153	14357	14423	14685
Annual change in employment (%)	-	-0.7	1.4	-3.0	-1.4	1.4	0.5	1.8
Employment rate (% working-age population)	88.0	77.3	82.1	79.6	75.5	76.3	76.4	77.7
FTE employment rate (% working-age population)	na	75.1	79.0	76.6	72.1	72.5	72.4	73.4
Self-employed (% total employment)	10.6	14.7	18.0	17.7	17.6	17.8	17.1	16.9
Employed part-time (% total employment)	na	4.4	5.3	5.5	7.1	7.7	8.1	8.8
Employed on fixed term contracts (%)	na	5.7	3.7	3.9	5.5	6.2	6.0	6.5
Share of employment in agriculture (%)	3.6	3.1	3.0	3.2	2.9	2.7	2.6	2.5
Share of employment in industry (%)	49.8	45.5	43.7	42.5	38.8	38.3	38.5	38.0
Share of employment in services (%)	46.5	51.4	53.3	54.3	58.3	59.0	58.9	59.5
Activity rate (% working-age population)	91.5	87.6	88.6	88.3	85.2	85.0	84.4	84.4
Total unemployed (000)	605.0	1886.6	1206.4	1615.6	1813.3	1623.5	1524.3	1259.8
Unemployment rate (%)	3.8	11.8	7.4	9.9	11.3	10.1	9.5	7.8
Youth unemployed (% labour force 15-24)	na	19.7	11.9	16.6	19.7	18.0	18.0	15.9
Long-term unemployment (% unemployed)	na	55.2	43.9	34.2	51.2	49.6	45.9	44.8
15-19 year olds in education/training (%)	na	na	na	na	72.6	73.4	71.9	70.5
20-24 year olds in education/training (%)	na	na	na	na	24.9	24.5	24.7	25.0
<b>Women</b>								
Total population (000)	28865	29074	29443	29562	29803	29878	29962	30033
Population of working-age (15-64) (000)	17430	18372	18489	18498	18547	18598	18625	18672
Total employment (000)	9415	10110	11576	11454	11504	11579	11754	11927
Annual change in employment (%)	-	0.7	2.7	-1.1	0.1	0.7	1.5	1.5
Employment rate (% working-age population)	54.0	55.0	62.6	61.9	62.0	62.3	63.1	63.9
FTE employment rate (% working-age population)	na	41.0	47.4	46.5	46.3	46.6	47.0	47.7
Self-employed (% total employment)	4.1	6.9	7.5	7.2	7.2	7.0	7.0	7.2
Employed part-time (% total employment)	na	44.8	43.2	43.7	44.4	44.3	44.8	44.9
Employed on fixed term contracts (%)	na	8.8	7.0	7.0	7.5	7.8	8.2	8.4
Share of employment in agriculture (%)	1.5	1.3	1.1	1.1	1.2	1.2	1.2	1.0
Share of employment in industry (%)	25.5	19.5	17.3	16.7	14.2	14.0	13.9	13.2
Share of employment in services (%)	73.1	79.2	81.5	82.2	84.6	84.8	85.0	85.7
Activity rate (% working-age population)	55.2	61.9	67.0	66.9	67.0	66.9	67.5	68.0
Total unemployed (000)	212.3	1254.7	816.0	912.8	930.7	873.3	815.5	763.1
Unemployment rate (%)	2.2	11.0	6.6	7.4	7.5	7.0	6.5	6.0
Youth unemployed (% labour force 15-24)	na	17.0	9.6	11.6	13.7	13.3	12.5	12.2
Long-term unemployment (% unemployed)	na	36.0	23.1	21.8	33.9	32.3	28.1	27.8
15-19 year olds in education/training (%)	na	na	na	na	69.8	69.9	69.8	70.7
20-24 year olds in education/training (%)	na	na	na	na	22.2	21.8	22.8	23.6

Source: Total employment is an average of quarterly Labour Force Survey data; working-age population and other employment details are from the Community Labour Force Survey (LFS).

Total unemployed and youth unemployed are harmonised Eurostat figures; long-term unemployment is from the LFS.

See notes to the table for the European Union.

## Macroeconomic indicators: output, employment, productivity and labour costs

	Annual average % change								
	1975-85	1985-90	1990-97	1990-94	1994-97	1994-95	1995-96	1996-97	
<b>European Union</b>									
GDP growth	2.3	3.2	1.7	1.2	2.3	2.4	1.7	2.6	
Number employed	0.1	1.4	-0.2	-0.7	0.5	0.7	0.3	0.6	
Average hours worked	-	-0.3	-0.3	-0.3	-0.3	-0.3	-0.1	-0.4	
GDP/number employed	2.1	1.8	1.8	1.9	1.7	1.8	1.4	2.1	
GDP/total hours worked	-	2.1	2.1	2.2	2.0	2.0	1.5	2.5	
Consumer price inflation	10.1	4.3	3.3	4.1	2.4	3.0	2.4	1.7	
Average earnings	11.5	6.6	4.6	5.5	3.5	3.5	3.7	3.2	
Average real earnings	1.3	2.1	1.3	1.4	1.1	0.5	1.3	1.5	
Average real labour costs	1.5	1.6	1.3	1.4	1.1	0.6	1.3	1.4	
Real unit labour costs	-1.2	-0.7	-0.9	-0.9	-1.0	-1.4	-0.5	-1.0	
<b>Belgium</b>									
GDP growth	1.9	3.0	1.5	1.0	2.1	2.1	1.5	2.7	
Number employed	-0.2	0.6	0.8	0.8	0.8	1.2	-0.1	1.2	
Average hours worked	-	-0.7	-0.4	-0.6	-0.1	0.5	-0.8	0.0	
GDP/number employed	2.1	2.4	0.6	0.2	1.3	0.9	1.5	1.5	
GDP/total hours worked	-	3.1	1.0	0.7	1.4	0.3	2.3	1.5	
Consumer price inflation	6.7	2.1	2.2	2.7	1.6	1.5	1.7	1.5	
Average earnings	7.9	3.8	4.1	5.5	2.3	2.9	0.9	3.2	
Average real earnings	1.1	1.7	1.9	2.7	0.8	1.4	-0.8	1.7	
Average real labour costs	2.0	0.7	1.5	2.1	0.7	1.2	-0.7	1.7	
Real unit labour costs	-0.3	-1.2	-0.1	0.5	-0.9	-0.3	-1.7	-0.8	
<b>Denmark</b>									
GDP growth	2.6	1.4	2.2	1.8	2.7	2.6	2.7	2.9	
Number employed	1.1	0.6	0.2	-0.8	1.7	1.2	1.2	2.7	
Average hours worked	-	-0.7	-0.1	0.4	-0.8	-0.8	-0.6	-1.1	
GDP/number employed	1.5	0.8	2.0	2.7	1.0	1.4	1.4	0.3	
GDP/total hours worked	-	1.5	2.1	2.3	1.9	2.2	2.0	1.4	
Consumer price inflation	9.2	3.9	2.0	1.9	2.0	2.1	2.0	2.0	
Average earnings	8.9	5.1	3.5	3.4	3.6	3.6	3.2	4.0	
Average real earnings	-0.2	1.1	1.4	1.4	1.5	1.4	1.1	2.0	
Average real labour costs	0.7	1.2	1.4	1.5	1.3	1.5	1.2	1.3	
Real unit labour costs	-1.1	0.0	-0.6	-1.2	0.2	0.5	-0.4	0.6	
<b>Germany</b>									
GDP growth	2.2	3.4	2.0	2.2	1.8	1.8	1.4	2.2	
Number employed	0.2	1.5	-0.7	-0.4	-1.0	-0.4	-1.3	-1.4	
Average hours worked	-	-0.9	-0.4	-0.5	-0.3	-0.5	0.5	-0.8	
GDP/number employed	2.0	1.9	2.7	2.6	2.8	2.2	2.7	3.7	
GDP/total hours worked	-	2.8	3.1	3.2	3.1	2.7	2.1	4.5	
Consumer price inflation	4.0	1.4	2.9	4.0	1.5	1.8	1.2	1.5	
Average earnings	5.1	3.5	4.6	6.1	2.7	3.9	2.5	1.8	
Average real earnings	1.1	2.1	1.7	2.0	1.2	2.0	1.3	0.3	
Average real labour costs	1.4	1.0	1.8	2.0	1.5	1.7	1.5	1.2	
Real unit labour costs	-0.6	-0.8	-0.9	-0.6	-1.3	-0.4	-1.2	-2.4	
<b>Greece</b>									
GDP growth	2.8	1.9	1.7	1.0	2.6	1.8	2.6	3.5	
Number employed	1.2	0.7	0.5	0.4	0.6	0.9	1.2	-0.4	
Average hours worked	-	-0.5	0.0	0.2	-0.3	-0.2	-0.2	-0.5	
GDP/number employed	1.7	1.2	1.2	0.5	2.0	0.9	1.3	3.9	
GDP/total hours worked	-	1.6	1.2	0.3	2.4	1.1	1.6	4.4	
Consumer price inflation	18.5	17.4	11.8	15.1	7.5	9.3	7.9	5.4	
Average earnings	21.9	17.9	12.0	12.1	11.8	13.2	11.5	10.7	
Average real earnings	2.9	0.5	0.1	-2.6	4.0	3.6	3.4	5.0	
Average real labour costs	3.4	1.2	-0.1	-2.6	3.4	3.7	2.8	3.7	
Real unit labour costs	1.7	0.1	-1.0	-3.0	1.6	3.3	0.9	0.7	
<b>Spain</b>									
GDP growth	1.7	4.5	1.8	1.0	2.8	2.7	2.3	3.4	
Number employed	-1.5	3.4	0.2	-1.7	2.9	2.7	2.9	3.0	
Average hours worked	-	-0.2	-0.3	-0.3	-0.3	-0.2	-0.5	-0.2	
GDP/number employed	3.3	1.1	1.6	2.8	-0.1	0.1	-0.6	0.4	
GDP/total hours worked	-	1.3	1.9	3.1	0.3	0.3	-0.2	0.7	
Consumer price inflation	15.3	6.5	4.5	5.3	3.4	4.7	3.5	1.9	
Average earnings	17.2	8.0	5.5	7.3	3.1	2.9	3.7	2.7	
Average real earnings	1.7	1.4	1.0	2.0	-0.2	-1.7	0.2	0.8	
Average real labour costs	2.1	0.5	0.9	1.7	-0.2	-1.8	0.6	0.5	
Real unit labour costs	-1.1	-0.7	-0.7	-0.4	-1.1	-2.8	-0.2	-0.3	

Note: See Sources, p.153 for a description of figures

## Macroeconomic indicators: output, employment, productivity and labour costs

	Annual average % change								
	1975-85	1985-90	1990-97	1990-94	1994-97	1994-95	1995-96	1996-97	
<b>France</b>									
GDP growth	2.3	3.2	1.3	0.8	2.0	2.1	1.5	2.4	
Number employed	0.1	0.8	-0.1	-0.5	0.4	1.0	0.0	0.1	
Average hours worked	-	-0.4	-0.4	-0.2	-0.6	-0.8	-0.5	-0.5	
GDP/number employed	2.2	2.4	1.5	1.3	1.6	1.1	1.5	2.3	
GDP/total hours worked	-	2.8	1.8	1.5	2.3	1.9	2.0	2.9	
Consumer price inflation	10.0	3.1	2.1	2.3	1.7	1.7	2.0	1.3	
Average earnings	11.9	4.3	3.0	3.4	2.6	2.5	2.6	2.5	
Average real earnings	1.7	1.1	0.9	1.0	0.9	0.8	0.6	1.2	
Average real labour costs	1.9	0.8	1.1	1.0	1.4	1.0	1.5	1.6	
Real unit labour costs	-0.3	-1.6	-0.3	-0.3	-0.3	-0.1	0.1	-0.9	
<b>Ireland</b>									
GDP growth	3.5	4.7	6.8	4.6	9.9	11.1	8.6	10.0	
Number employed	0.1	1.2	2.8	1.5	4.4	4.6	3.6	5.0	
Average hours worked	-	-0.1	-0.9	-1.0	-0.8	-0.5	0.2	-2.2	
GDP/number employed	3.4	3.4	4.0	3.0	5.3	6.3	4.8	4.8	
GDP/total hours worked	-	3.5	4.9	4.0	6.2	6.8	4.5	7.1	
Consumer price inflation	13.2	3.3	2.3	2.5	2.0	2.6	2.1	1.2	
Average earnings	15.5	5.6	4.2	5.2	2.9	1.2	2.1	5.5	
Average real earnings	2.0	2.2	1.9	2.6	0.9	-1.3	-0.1	4.2	
Average real labour costs	2.4	2.3	2.3	2.8	1.6	0.8	1.0	3.0	
Real unit labour costs	-1.1	-1.2	-2.0	-0.6	-3.8	-4.7	-3.4	-3.4	
<b>Italy</b>									
GDP growth	3.0	3.0	1.1	0.7	1.7	2.9	0.7	1.5	
Number employed	0.5	0.5	-0.5	-0.9	0.0	-0.4	0.5	0.0	
Average hours worked	-	0.0	-0.2	-0.2	-0.2	-0.3	0.3	-0.5	
GDP/number employed	2.5	2.4	1.6	1.5	1.7	3.4	0.2	1.5	
GDP/total hours worked	-	2.4	1.8	1.7	1.8	3.6	-0.1	2.0	
Consumer price inflation	15.2	5.7	4.4	5.0	3.7	5.2	4.0	1.9	
Average earnings	17.5	8.8	5.2	5.3	5.1	4.5	6.1	4.7	
Average real earnings	2.1	2.9	0.8	0.3	1.4	-0.6	2.1	2.7	
Average real labour costs	1.4	1.7	0.5	0.2	0.9	-0.5	1.1	2.0	
Real unit labour costs	-0.6	-0.6	-1.3	-1.6	-1.0	-3.6	0.5	0.3	
<b>Luxembourg</b>									
GDP growth	2.4	6.4	4.9	5.9	3.6	3.8	3.0	4.1	
Number employed	0.2	3.2	2.8	2.7	2.8	2.6	2.5	3.4	
Average hours worked	-	-0.1	-0.5	-0.3	-0.8	-0.5	-0.8	-1.3	
GDP/number employed	2.2	3.2	2.1	3.1	0.8	1.1	0.5	0.7	
GDP/total hours worked	-	3.3	2.6	3.4	1.6	1.6	1.3	2.0	
Consumer price inflation	6.7	1.7	2.4	3.0	1.5	1.9	1.2	1.4	
Average earnings	7.6	5.3	4.0	5.2	2.4	2.3	1.8	3.3	
Average real earnings	0.9	3.5	1.6	2.1	0.9	0.4	0.6	1.8	
Average real labour costs	1.1	3.0	1.7	2.2	1.2	1.6	1.8	0.2	
Real unit labour costs	-1.1	-0.2	-0.5	-0.8	0.0	0.3	1.3	-1.6	
<b>Netherlands</b>									
GDP growth	1.9	3.1	2.4	2.1	3.0	2.3	3.3	3.3	
Number employed	0.7	2.4	1.6	1.1	2.2	1.7	2.1	2.8	
Average hours worked	-	-0.9	-0.1	-0.1	-0.1	0.0	-0.3	0.0	
GDP/number employed	1.2	0.7	0.9	1.0	0.7	0.6	1.1	0.5	
GDP/total hours worked	-	1.6	1.0	1.0	0.8	0.6	1.4	0.5	
Consumer price inflation	5.1	0.8	2.5	3.1	1.7	1.9	1.4	1.9	
Average earnings	5.1	1.7	3.2	3.8	2.3	2.1	2.0	2.9	
Average real earnings	0.0	0.8	0.6	0.7	0.6	0.2	0.5	1.0	
Average real labour costs	0.5	0.8	1.1	1.5	0.7	0.4	0.7	0.9	
Real unit labour costs	-1.5	-0.3	-0.2	-0.1	-0.4	-0.4	-0.7	-0.2	
<b>Austria</b>									
GDP growth	2.4	3.2	2.0	1.9	2.1	2.1	1.6	2.5	
Number employed	0.9	1.1	0.6	1.1	-0.2	0.5	-1.3	0.2	
Average hours worked	-	-0.3	-0.3	-0.4	0.0	-0.3	0.3	0.0	
GDP/number employed	1.4	2.1	1.4	0.8	2.3	1.6	3.0	2.3	
GDP/total hours worked	-	2.5	1.7	1.3	2.3	1.9	2.7	2.3	
Consumer price inflation	5.1	2.2	2.7	3.5	1.7	2.2	1.7	1.2	
Average earnings	7.4	4.5	3.7	5.0	2.1	2.9	1.7	1.6	
Average real earnings	2.2	2.3	1.0	1.5	0.3	0.7	0.0	0.4	
Average real labour costs	2.4	2.0	1.0	1.6	0.2	0.8	-0.3	0.2	
Real unit labour costs	0.1	-0.4	-0.9	0.0	-2.0	-1.0	-2.6	-2.4	

Note: See Sources, p.153 for a description of figures



## Macroeconomic indicators: output, employment, productivity and labour costs

	Annual average % change							
	1975-85	1985-90	1990-97	1990-94	1994-97	1994-95	1995-96	1996-97
<b>Portugal</b>								
GDP growth	3.0	5.0	2.1	1.3	3.1	1.9	3.6	3.8
Number employed	0.8	1.6	0.1	-0.3	0.6	-0.7	0.7	1.9
Average hours worked	-	-0.5	-0.7	-0.8	-0.6	0.7	-0.2	-2.4
GDP/number employed	2.2	3.3	1.9	1.6	2.4	2.6	2.9	1.8
GDP/total hours worked	-	3.9	2.7	2.3	3.1	1.8	3.2	4.3
Consumer price inflation	22.7	11.3	5.7	7.9	3.0	4.1	2.9	1.9
Average earnings	22.0	16.6	9.4	12.8	4.9	4.5	5.9	4.3
Average real earnings	-0.6	4.8	3.4	4.6	1.9	0.3	2.9	2.4
Average real labour costs	0.5	2.9	3.0	3.9	1.7	-0.5	3.4	2.3
Real unit labour costs	-2.7	-0.9	0.8	2.1	-0.8	-3.3	0.4	0.5
<b>Finland</b>								
GDP growth	2.8	3.4	0.9	-1.9	4.8	5.1	3.6	5.9
Number employed	0.9	0.2	-1.9	-4.8	2.1	2.2	1.4	2.7
Average hours worked	-	-0.3	0.2	-0.1	0.6	0.0	0.5	1.3
GDP/number employed	1.9	3.1	2.9	3.1	2.7	2.8	2.2	3.1
GDP/total hours worked	-	3.4	2.7	3.1	2.1	2.8	1.7	1.8
Consumer price inflation	9.6	5.0	2.0	2.6	1.1	1.0	1.1	1.2
Average earnings	11.0	8.8	2.9	3.0	2.8	4.0	3.2	1.3
Average real earnings	1.3	3.7	0.9	0.4	1.7	3.0	2.1	0.1
Average real labour costs	1.6	3.0	1.2	1.3	1.2	1.6	1.9	0.1
Real unit labour costs	-0.8	-0.2	-1.9	-1.9	-2.0	-1.6	-0.6	-3.6
<b>Sweden</b>								
GDP growth	1.5	2.3	0.8	-0.4	2.3	3.9	1.3	1.8
Number employed	0.6	1.1	-1.9	-3.3	-0.1	1.5	-0.6	-1.0
Average hours worked	-	0.0	0.2	0.0	0.4	-0.3	0.8	0.5
GDP/number employed	0.9	1.2	2.7	3.0	2.4	2.4	1.8	2.8
GDP/total hours worked	-	1.2	2.6	3.0	2.0	2.7	1.0	2.3
Consumer price inflation	9.7	6.2	3.4	4.6	1.7	2.5	0.8	1.9
Average earnings	9.9	9.2	4.7	5.0	4.4	2.9	6.5	3.8
Average real earnings	0.1	2.8	1.3	0.4	2.6	0.3	5.6	1.8
Average real labour costs	0.5	2.0	1.9	1.5	2.3	-0.8	5.4	2.5
Real unit labour costs	-0.5	0.8	-0.7	-1.2	0.0	-3.1	3.5	-0.4
<b>UK</b>								
GDP growth	1.9	3.3	1.8	0.9	2.9	2.8	2.3	3.5
Number employed	-0.2	2.0	-0.1	-1.1	1.2	1.1	0.9	1.7
Average hours worked	-	0.2	-0.3	-0.5	-0.1	0.3	-0.5	0.0
GDP/number employed	2.0	1.3	1.8	2.0	1.6	1.6	1.4	1.8
GDP/total hours worked	-	1.1	2.1	2.5	1.7	1.4	1.9	1.8
Consumer price inflation	10.7	5.9	3.0	3.4	2.6	3.4	2.5	1.8
Average earnings	11.8	8.5	4.6	5.2	3.9	3.0	4.3	4.3
Average real earnings	1.0	2.4	1.5	1.7	1.3	-0.4	1.8	2.5
Average real labour costs	0.8	2.8	1.2	1.2	1.1	0.6	1.2	1.6
Real unit labour costs	-1.2	1.2	-1.0	-1.3	-0.6	-0.8	-0.7	-0.2

Note: See Sources, p.153 for a description of figures

## Sources

The data on which this Report is based come predominantly from the Statistical Office of the European Communities (Eurostat), statisticians from which have cooperated closely in the preparation of the Report. Without their assistance the analysis would not have been possible.

The main source of data is the Community Labour Force Survey (LFS). This provides the only statistics on employment, unemployment and related variables which are comparable and, except for a few items, complete for all Member States and which enable structural features of the Union's work force to be analysed on a consistent basis. Since it is based on a survey of households and uses a common set of questions and methodology, the LFS abstracts from national differences in definitions, methods of classification and administrative procedures and regulations. Data from national sources may, therefore, differ from the figures presented in this Report. This is particularly so for unemployment statistics, which in individual countries are based largely on registrations at labour offices, the coverage of which varies significantly between Member States (see Annex).

The LFS has been carried out annually since 1983. Data for Spain and Portugal, however, are available only from 1986 (1987 for some data) and for Austria, Finland and Sweden, only from 1995. For the most part, the data analysed have been specially extracted from the LFS by statisticians at Eurostat who have given considerable help and advice in so doing.

In addition to LFS data, use is made of the 'benchmark' employment series which is the most reliable guide to changes in the total number in work across the Union, since it is based on the series which statisticians in each of the Member States regard as the most satisfactory national source of data. The footnotes to the Tables indicate the source used in each case.

The data used in the analysis of Part I, Sections 1, 2 and 5 are taken mainly from the Community LFS, supplemented by the Eurostat benchmark employment series, comparable unemployment statistics and migration statistics.

Data used in the analysis of Central and Eastern European countries were supplied by Eurostat and, where possible, come from the labour force surveys of the countries concerned as well as from national sources; Eurostat, national accounts data and external trade statistics for these countries are also used.

Data on which the analysis of the dispersion of wages in Part I, Section 4 is based come from the Eurostat, *Structure of Earnings Survey* conducted in 1995 for all Member States, except France (1994) and Austria (1996, though data are not yet available). Data on employment by size of enterprise, used in the analysis of employment by size of firm in Part II, Section 1, come from the Eurostat, *Enterprises in Europe* database. In both cases, statisticians gave invaluable assistance in helping to interpret the data as well as providing them. Data used in the analysis of globalisation in Part II, Section 2 come from Eurostat, external trade statistics and foreign direct investment statistics. The latter were supplemented by data from UNCTAD, *World Investment Report, 1997*. Finally, data used in the analysis of restructuring public expenditure come from the DGII, AMECO national accounts database, the Eurostat, ESSPROS database of social protection statistics and the OECD database on public expenditure on labour market policies. The figures on population projections also come from Eurostat.

### Germany

The data for Germany include the new Länder so far as possible. Since data are not available for unified Germany before 1991 — and would be difficult to interpret if they were — the analysis for the years before 1991 relates to the former West Germany. Where the analysis spans years before and after unification, the change for West Germany up to 1991 is linked to the change for total Germany from 1991 on. The same procedure has been adopted for the changes shown for the Union as a whole.

### Austria, Finland and Sweden

The data for detailed analysis of the structure of the labour force and employment in Austria, Finland and Sweden before 1995 come from national sources as well as OECD statistics and are not necessarily consistent with the data from 1995 on. Longer-term changes for these countries and comparisons of periods before and after 1995 should, therefore, be interpreted with caution.

### Sources of data in the Tables of macroeconomic indicators

The main source of data is the DGII, AMECO national accounts database, June 1998, except for employment and hours worked, where the Eurostat, benchmark employment series and Community LFS, respectively, are used. GDP growth is from national accounts statistics; the number employed is from the Eurostat benchmark series, extended backwards using the most appropriate series available; average hours worked are based on Community LFS data for average usual hours worked per week (for Portugal, the 1985 figures are for 1986 and for Spain and the Netherlands, for 1987; for Austria, Finland and Sweden, the data before 1995 are estimates from national sources, which are then linked to LFS data); consumer price inflation is based on the consumer price index in each Member State; average earnings relate to average compensation per employee; average real earnings are average compensation per employee deflated by the consumer price index; average real labour costs are average compensation per employee deflated by the GDP deflator as a measure of costs; real unit labour costs are average real labour costs per unit of GDP, adjusted for self-employment (ie imputing average labour costs to the self-employed — the employment figures in this case being from the AMECO national accounts database in order to be consistent with the series for earnings).

For Germany, the figures before 1991 relate to the former West Germany and for subsequent years to total Germany; the same method as elsewhere in this Report is used to estimate changes which span the pre- and post-unification period — eg for 1990-97, the change over the year 1990-91 for the former West Germany is linked to the change over the period 1991-97 for total Germany.

The EU averages are calculated by weighting the annual changes in Member States by an appropriate set of weights. For consumer price inflation, the annual percentage change in the consumer price index is weighted across countries by private consumption valued at current PPS (purchasing power standards); the change in the GDP deflator by GDP valued in the same terms; the change in average earnings by the number of wage and salary earners.

The source of data for each of the graphs is listed below.

### Availability of data

Most of the data used in the preparation of *Employment in Europe* can be made available in machine-readable form in a number of standard file formats. Requests for data should indicate the graph or map for which the data are required and should be addressed to:

Commission for the European Communities  
 DG V/A/1  
 200 rue de la Loi  
 B-1049 Brussels

A small fee will usually be charged to cover the preparation costs.

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