
European Commission

Employment in
EUROPE
1999

Foreword

During my period as Commissioner — which began in January 1993 — I have seen the issue of employment take on an increasingly important political profile within the European Union.

I am pleased to have been able to play my part in taking the European policy debate and action forward during this period — from the era when we were developing the policy ideas which enriched the White Paper on *Growth, competitiveness, employment*, through to the establishment of the new Employment Chapter in the Amsterdam Treaty. Now we have both the political commitment for treating employment as a matter of common European concern and the operational machinery for ensuring effective inter-governmental policy cooperation on employment.

I am pleased, too, that these policy developments have been based on the solid analytical foundations that were established by the *Employment in Europe* Reports. Since this is my final year as Commissioner, and my last *Employment in Europe* Report, I would like to take this opportunity to thank all of the staff and researchers who have worked over the years to produce such consistently high quality work.

The Commission's original intention was to provide an authoritative and readable Report, that was not just of interest to labour market specialists, but to all those with a wider concern for employment and

related social issues. That goal has been realised. The Reports have established a large, loyal and influential readership, and I am sure they will continue to do so in the future.

Like its predecessors, this 1999 Report serves two main purposes. The first is to provide a comprehensive report on recent developments in employment in Europe. This year's Report takes this first aspect somewhat further and looks at the ups and downs of employment performance in recent years, not only in the Union but also in the United States and Japan. One notable and disturbing fact is that, despite the success of some individual Member States in improving their performance over recent years, employment in the Union as a whole in 1998 had still not regained the level of 1991 before the onset of the recession in the early 1990s.

The second purpose of the Report is to investigate specific labour market topics and issues which are of particular policy concern. In these cases, new research and new analysis enable us to gain better insights and understanding of what is happening in the labour market so that more effective policies can be developed to improve Europe's overall employment performance.

This year's Report looks at a number of important issues: changes in the structure of employment in the Central and Eastern European economies; divergence and convergence in employment performance across the

regions of the Union; the contrasting job creation patterns in the United States and European labour markets; job quality and wage developments within the Union and the impact of an ageing population on Europe's labour markets.

The Report assesses how the ten Central and Eastern European candidate countries are facing up to the employment challenge of preparing for Union membership. With up to half of their exports committed to the Union, the Report considers the implications for future employment developments of their success in coping with structural change, trade liberalisation and rationalisation.

In looking at the balance of economic and employment developments across Europe's regions, the Report throws light on the state of preparation of Europe's labour markets for full Economic and Monetary Union and on how far problems of structural imbalance still need to be addressed across the 200 or more regions of the Union.

Some of the major differences between the United States and European Union labour markets are well known — not least the much higher levels of employment, notably in services and notably among women, in the United States. The Report goes further in its analysis, though. Using newly available and specially compiled data, it identifies the common trends and the points of difference in sectoral and occupational developments.

Next the Report considers one of the most difficult issues we have to face in employment and labour market policy — namely whether there is a simple trade-off between quantity and quality in terms of employment creation, or whether more complex relationships are at work. Making use of a variety of data on earnings and employment, the Report conducts a detailed analysis, looking also at the comparative experience of different Member States.

Finally, the Report considers the ageing of Europe's population and of its workforce. Many of the issues are now well recognised and have already given rise to a variety of concerns — from the financial sustainability of pension systems to the effect of fewer young people entering the labour market. The report looks in detail at some of the issues that have been much less analysed — not least the question of where older people actually work in the labour market at the present time and the implications of encouraging people to stay longer in employment.

These are some of the many important issues high on our employment agenda today. As in previous years, I would invite you to study the findings of the Report in detail and to draw your views and conclusions. As we advance in terms of policy action, we need, not less analysis and information, but more. In that spirit, I strongly recommend the 1999 Report to you.

Pádraig Flynn

Employment in Europe 1999

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Jobs in Europe: confidence amidst uncertainty

The Employment in Europe report 1999 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 2000. The immediate outlook is one of confidence — based on the launch of EMU and the strengthened job creation process — tinged with uncertainties at the global level. The start of a process towards a European Employment Pact, combining the strengths of the employment and macroeconomic strategies, can only tip the balance further towards a healthier labour market in Europe with more and better jobs for all those who wish to work.

Recent developments — the stylised facts

From the summer of 1998, the recovery of the Union economy lost momentum. This essentially reflects the direct and indirect impact of the sharp deterioration in the world economy on exports and investment in the Union. Given the underlying strength of the Union economy, some improvement of the external economic environment and confidence-building economic policies, economic activity is expected to regain its momentum. GDP growth is now forecast to reach 2.1% in 1999 and to accelerate further to 2.7% in 2000.

Trends and prospects suggest that the job creation process in Europe is gaining strength, although this

depends critically on maintaining the level of GDP growth, and challenges in continuing the process of structural change remain.

- Economic growth continued modestly in 1998, at 2.9% and is expected to grow modestly again in 1999 at 2.1%.
- Employment expanded strongly in 1998, by 1.8 million, or 1.2%, to bring total employment to 151 million and the employment rate to 61%.
- Employment of men increased significantly for the first time in the present recovery, almost half of the net additional jobs going to men; the share of women in employment, however, rose further to 42% and the gender gap in the employment rate declined to just under 20 percentage points.
- More permanent jobs than temporary ones were created in 1998, but the latter still made up over 40% of the increase in employment and now account for 12½% of all jobs.
- Unemployment fell further in 1998 to an average of 10% for the year as a whole, a decline of over 1 million during the year.
- Women and men benefited equally from the decline in unemployment, so that the unemployment rate for women is still some 3 percentage points higher than for men.
- Youth unemployment fell sharply during the year, by some three times more than for adults, a decline of some 4 percentage points since the peak.
- Long-term unemployment fell little in 1998, the rate falling by only a third of a percentage point to 4.9% of the labour force and the share remaining at 49% of the total unemployed. The proportion unemployed for two years or more also rose to 31%, or 62% of all long-term unemployed.

Employment rises but remains below 1991 peak

Total employment increased by 1.8 million in the Union in 1998, equivalent to a rise of 1.2%, more than double the increase in 1997 and the highest rate of growth since 1990 (Graph I). Despite this growth, the number in work in 1998 was still over 600 thousand below the peak reached in 1991. Four years of economic recovery and continuous expansion in employment, therefore, have not yet offset the three years of decline between 1991 and 1994. Given the continuing growth of working-age population, the employment rate in 1998 (at just over 61%), though up on the 1997 level (by over ½ percentage point) was, nevertheless, still some 1½ percentage points below the level 7 years earlier before the onset of the recession (almost 63%).

While job growth in Europe in 1998 was closer to the rate achieved in the US (1½%), it was still lower, just as it has been every year since 1991. On the other hand, it was substantially higher than in Japan, where employment fell for the first time during the present recession — and, indeed, for the first time since the first oil crisis in 1974. Nevertheless, the employment rate in Europe remains substantially below the level in either Japan or the US (close to 75% in both) (Graph II).

For the first time during the present recovery, employment of men increased by almost as much as that of women. Some 49% of the net additional jobs created in 1998 went to men, but the number of women in employment relative to men continued to increase (to almost 42%). Over the four years 1994 to 1998 as a whole, almost two-thirds of the net additional jobs went to women rather than men.

Also for the first time during the present recovery, the number of full-time jobs increased significantly in 1998, but this was still matched by the growth of

part-time ones (Graph III). In the Union as a whole, half of the net additional jobs were part-time. For women, however, almost 70% of the increased jobs were part-time. Even for men, the figure was 28%, which means that there was a significant and ongoing increase in the proportion of men working part-time. Over the four years of recovery 1994 to 1998, over 3 million of the 4 million net additional jobs were part-time.

Even in 1998, the general pattern was not repeated in all Member States. In Germany, in particular, the small rise in total employment was a result of a sharp decline in full-time jobs (by almost 300 thousand) compensated by an expansion of part-time ones. This is in line with the experience since 1991, since when over 3½ million full-time jobs were lost to be partially replaced by just over 1 million part-time ones.

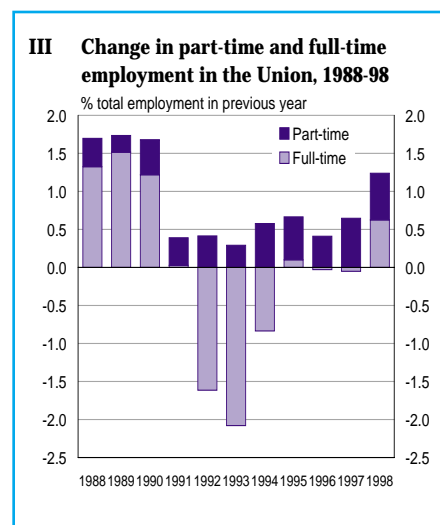
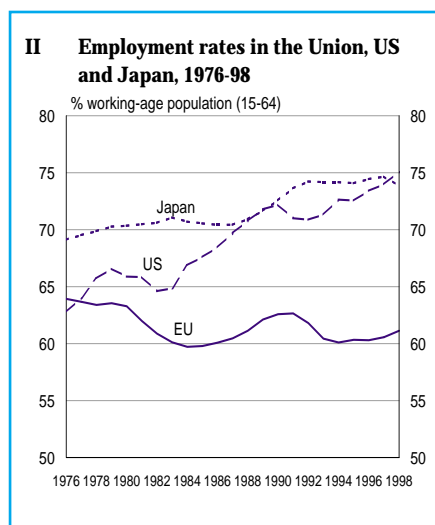
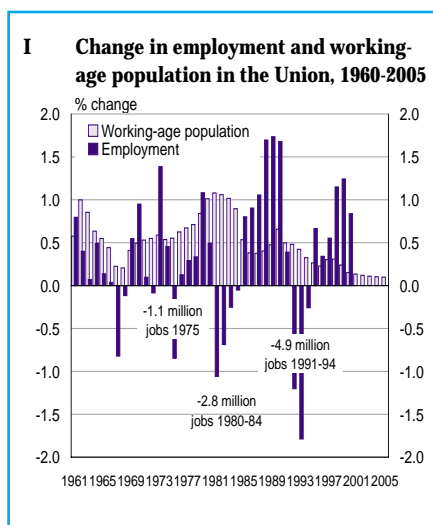
There were also more permanent jobs created in 1998 than temporary ones, in contrast to the earlier years of recovery. Nevertheless, it was still the case that some 41½% of the increase in employment in the Union stemmed from the rise in

the number in work on fixed-term contracts, the figures being much the same for men and women, signifying a continuing growth in the importance of temporary working (which now accounts for around 12½% of all those employed in the Union). Moreover, it means that over the period 1994 to 1998, well over half of the net additional jobs created were temporary ones (56%) and almost all of those for men (86%).

Unemployment falls ...

Unemployment continued to fall, from just over 10½% in 1997, and a peak of just over 11% in 1994, to an average of 10% in 1998 (Graph IV). Given the increase in the number in work, this implies that around 60% of the net additional jobs since 1994 have gone to new entrants to the labour force rather than to those who were previously recorded as being unemployed.

Unemployment declined throughout 1998 and has continued to do so during the first few months of 1999, if comparatively slowly, to around 9½% at the last count. During this period, the fall has been much the same for women as for men, though the rate for



women is some 3 percentage points higher than for men and, since the peak rates reached in 1994, it has fallen by less (1½ percentage points as opposed to 2 percentage points).

The decline since the beginning of 1998 has been larger for young people under 25 than for the rest of the labour force. The average rate for these has fallen by 2 percentage points as against just over ½ percentage point for those of 25 and over. This means that since the peak rate reached in 1994, youth unemployment has fallen by 4 percentage points — though much more for men (over 5 percentage points) than for women — as opposed to a fall of only just over 1 percentage point for adult workers.

...but no change in long-term unemployment

Despite the decline in overall unemployment, however, there has been little alleviation of the problem of long-term unemployment. In 1998, 49% of the unemployed had been out of work for a year or more, the same proportion as in 1997, and in three of the four largest Member States, the proportion increased, especially so in Germany, where it rose from 50% of the unemployed to 52½%. Moreover, the relative number of the unemployed out of work for two years or more went up from 30% in 1997 to almost 31% in 1998, 62% of all long-term unemployed, and equivalent to some 5.2 million people. This latter figure, in particular, emphasises both the scale of the problem and the difficulty of resolving it and reinforces the importance of the active implementation of the first two Employment Guidelines.

European calm amid global uncertainty

Despite the disturbances in the global economy in the last 12 months, European growth and employment have held up well. The risks pointed out in last year's report have been largely avoided, predominantly because of internal expansion, though the economic recovery has still been slowed down by the slow growth in many export markets and is still being affected by this. The continued growth of not just the European economy but also the rest of the world depends on this internal expansion being maintained and strengthened.

During the mid-1990s the trade surplus of some 1½% of GDP compensated in part for slow growth in domestic consumption and investment. During the last quarter of 1997, the contribution of net export growth to EU GDP growth became negative, and this trend continued during 1998, although the Union continues to have a large surplus on external trade.

But domestic demand held up well in 1998, partly as a result of the shift towards investment and stockbuilding that had taken place in anticipation of stronger growth prior to the downturn in world trade. That is estimated to have contributed close to 1% of GDP growth in 1998. The other 2% improvement came from private consumption, in the wake of an improvement in consumer confidence, which was itself the result of rising employment, extremely low levels of inflation, rising stock market prices and lower nominal interest rates.

Thus, while overall EU growth prospects have been reduced,

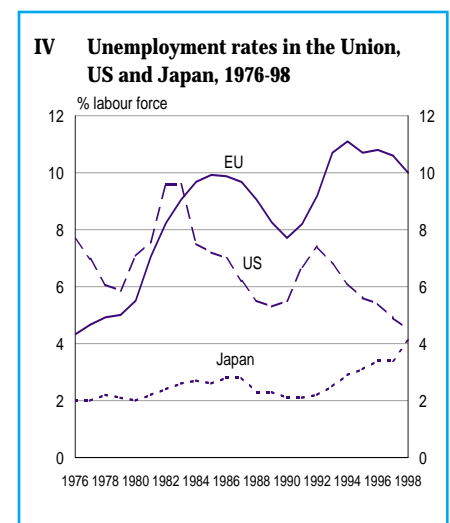
domestic demand has become the strongest element in growth in 1999. As noted in *Employment in Europe 1998*, internal trade in goods accounts for some 15% of EU GDP and internal trade in services for some 3% of GDP, and external trade in goods and services together amount to some 13% of GDP. Almost 90% of GDP, therefore, is accounted for by internal European demand.

Addressing the challenges

Raising the employment performance of the Union, and exploiting its employment potential requires the definition and development of responses to the challenges set out above. Of these, first and foremost is the need to exploit the employment potential of the growth performance of the European economy, while avoiding the creation of further imbalances.

Launch of the Euro

The successful birth of the Euro on 1 January 1999 was a milestone in the process of European integration. Its introduction will contribute to growth and stability and act



as a lever to strengthen the Union's position in the world economy. At the same time, it presents challenges. Economic and social conditions in each of the participating Member States will be influenced more than before by developments in partner countries. Exploiting the mutually reinforcing effects of growth and stability-oriented macroeconomic policies, sound structural policies and the employment strategy will be the key to sustained growth of output and employment.

Exploiting the growth potential

Employment growth is closely linked to overall GDP growth, with a lag of some 6 months in the response of employment to changes in GDP (Graph V). But GDP must grow by at least as much as productivity just to maintain the level of employment. In the light of the world economic situation, and the level of domestic business and consumer confidence, the forecast rate of growth of the EU economy in 1999 has been revised downwards slightly since Autumn 1998, but in the longer term, it is expected to pick up again, on the back of a revival in investment. Prior to the

last year's disturbances in the world economy, growth rates of 3–3½% a year were being forecast. The expectation was that Europe was entering a sustainable period of growth, of the kind experienced in the late 1980s, with employment growth of 1–1½% a year.

While the relationship between GDP and employment growth at aggregate Union level is fairly stable, it varies significantly between Member States. In all countries, however, the relationship is extremely evident, in the sense that above average growth of GDP invariably leads to above average growth of employment, though the extent of the rise may differ.

The rise in total employment in the Union in 1998 reflects the continuing economic recovery and is broadly in line with what would have been expected given the rate of GDP growth in 1997 and 1998. The underlying growth in output per person employed, or productivity, therefore, still seems to be around 1.8% a year in the Union as a whole. This compares with an underlying productivity growth of only around 1% a year in the US. In other words, the gap between GDP growth and employment growth is much wider in the EU than in the US.

As before, employment developments in 1998 varied markedly across the Union. In contrast to the previous years of the present recovery, however, all Member States experienced some growth of employment, though in Germany, the rise was very small. The variation in employment performance between Member States in large measure reflects the variation in the growth of output. The relationship between the two, however, was not uniform or systematic. While the countries in which employment

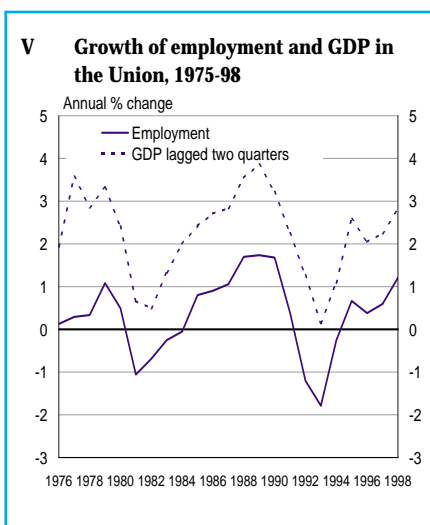
increased by most in 1998 also experienced the highest rates of GDP growth, some Member States with above average growth witnessed increases in employment well below average.

Two conclusions can be drawn from recent experience. The first is that relatively high growth of GDP appears to be a necessary condition for achieving a relatively high rate of net job creation. The second is that high GDP growth in itself is not a sufficient condition for attaining employment objectives. The success of countries in translating growth of output into more jobs, therefore, varies significantly between them, but the higher growth of output, the more chance there is of success.

Avoiding regional imbalances

Within any economy, and the European Union is no exception, some areas tend to suffer overheating while some have spare capacity. Balanced development across the different regions of the Union is important not just for reasons of economic and social cohesion, it is also a means, first, of increasing the overall rate of growth that the Union is likely to be able to sustain and, secondly, of improving its competitiveness.

In 1998, the employment rate in the group of regions where the rate was highest averaged 76½% of working-age population, whereas in the regions with the lowest rate, it averaged only 42½%. Of the 17 regions with the lowest employment rates in 1998, 10 had been in the bottom group in 1985 and 1980. At the top end of the scale, there was more movement, largely because of the big



fall in employment in Sweden and Germany during the 1990s.

The main conclusion to emerge from the analysis in Part I, Section 4 is that, contrary to the convergence in GDP per head in the Union over the past 15–20 years, disparities in employment rates between regions have remained wide and, indeed, in most countries seem to have increased slightly over this period.

Furthermore, in most countries, the pattern of employment rates between regions, as indeed across the Union as a whole, has not changed a great deal since 1980, which implies that structural problems of job creation in many parts of the Union have not been greatly alleviated over this period, which reflects their deep-seated nature.

In addition, there is little evidence in most Member States of a systematic relationship between changes in employment and those in GDP per head: in many regions a relative increase in GDP has been accompanied by a relative decline in the employment rate and *vice versa*.

Indeed, regional policy in Member States, as at the Union level, has been far more successful in correcting disparities in GDP per head between regions than in achieving a more balanced distribution of net job creation. The imbalance which exists in job creation and in the level of employment across the Union imposes an inevitable constraint on the conduct of economic policy and on the achievement of high and sustained rates of economic growth.

Filling the gender gap

Effectively, only prime-age males between 25 and 54 are in a situation

which could be described as close to full employment with an employment rate of around 90% (though even among these, the rate differs markedly between Member States and has fallen over the long-term).

The employment rate of women in the European Union in 1998 was 51%, almost a quarter lower than in the US where it is some 67½% (Graph VI). This cannot wholly be explained by differences in culture between Europe and the US, since in the three best performing Member States the employment rate of women is similar or superior to that in the US. Various factors may be contributing to the low employment rate of women in the majority of Member States, which provide pointers to the kinds of policy action which might be taken to address them.

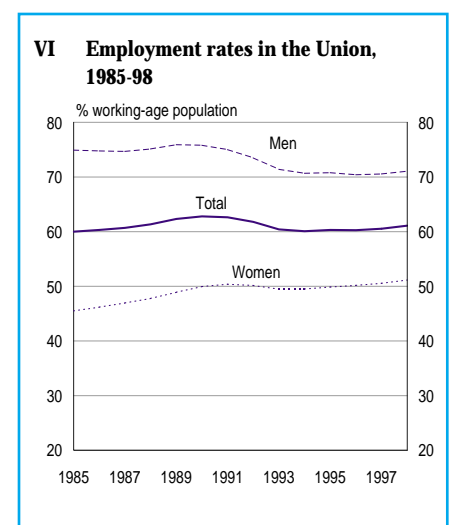
Social protection systems in Europe may not be providing the right incentives for women to participate in the labour market. Moreover, adequate childcare facilities to enable women to reconcile family responsibilities with the pursuit of a working career may not be available. The nature of the jobs available, and the wages they offer, may not be sufficient to attract women back into employment, particularly if they are returning to work after bringing up children. Evidence was presented in *Employment in Europe 1997* which suggests that many women are working in jobs well below their potential as reflected in their educational attainment level.

Opening the labour market to all ages

The number of young people entering the labour market has been falling for some years. In part, this may

be due to a perception on the part of young people that jobs are difficult to obtain and a desire to remain in full-time education and training as long as possible. Insofar as the fall in participation in the labour force is almost exactly matched by a rise in participation in education and training, this appears to be the case. If this also leads to increased qualification, it should improve their employability in the longer run. As the share of older people in the labour force rises, however, it is important to maintain an adequate inflow of young people onto the labour market. (The labour market implications of the ageing of the population are examined below.)

The low employment rate of workers over 50 in Europe is made up of two parts: traditionally low employment rates for women in this age group in many Member States and declining rates for men, especially those over 55. In the case of women, many left the labour force to bring up children and would be available to work if the right kind of jobs were available. For many men, losing a job at the age of 50 or 55 is likely to mean taking early retirement. This may be because few other jobs are available, or only jobs at much lower pay, often part-time and



temporary, the result in part perhaps of a prejudicial attitude of employers to the recruitment of older workers. At the same time, many workers, both men and women, choose voluntarily to take early retirement, possibly because they are encouraged to do so by collective agreements in situations of industrial restructuring, or by labour market policies aimed at reducing the apparent unemployment rate, or by the way that invalidity schemes operate.

Whatever the reason, it is evident that the decline of agriculture and manufacturing has led to many people, particularly men in the older age groups, losing their jobs and being unable to find new ones and that the growth of the service sector has, in many cases, failed to resolve this problem.

Development of the service sector

The principal elements of the Commission's report on Employment Performance in Member States (Employment Rates Report) were summarised in *Employment in Europe 1998*. But the analysis left open a range of questions about the

way in which the employment potential of the Union, reflected in its low employment rate relative to that in the US and Japan, could be developed in terms of sectors, occupations and the skill levels of the workforce, as well as other factors which influence the overall employment performance of these economies. This year's *Employment in Europe* report addresses some of these issues.

There is no simple explanation of why some countries achieve higher rates of employment creation than others and there are significant differences in this respect between economies with apparently similar features. The implication is that institutional characteristics tend to have an important influence.

The main difference in employment between the US and Europe is not in agriculture or manufacturing, where employment rates are broadly similar, but in services, where the overall gap in employment rates is 14% points. Services were the main area of job growth in both economies. In the US jobs also expanded in the rest of the economy, but in Europe, the rise in services was offset by major job losses elsewhere.

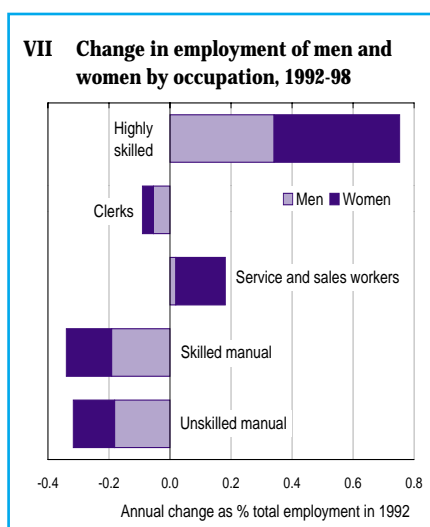
creating jobs in services and low participation of women in the work force, which are interrelated. In these three countries, not only is the overall employment rate lower now than it was in the mid-1980s, but the growth of services over this period has been relatively slow, employment in the sector increasing by under 5% of working-age population, less than the EU average and well below the increase in Austria, the UK and the Netherlands (9% of working-age population).

A feature which is common across the Union is the shift towards higher skilled occupations and, in most countries, a decline in the number of manual workers in employment (Graph VII), a decline which has been particularly pronounced in Germany over the 1990s reflecting the large scale job losses in manufacturing.

Where will the service jobs be?

The structural shift towards a service economy is clear from the sectors in Europe which are growing fastest. They are all service sectors (business activities, health and social work, hotels and restaurant, education, recreational and computer-related activities), while the declining sectors are nearly all in agriculture and industry. Five growth sectors merit particular attention, because of their size and growing importance: business activities, health and social work, hotels and restaurants, education and retail trade.

In fact, these sectors are those where there is the greatest gap in employment relative to working-age population between



Performance in key countries

All European countries are moving towards becoming service economies, although for some the transition is slow. This is particularly the case in the largest Member States, apart from the UK — ie Germany, France and Italy — where some of the main features of Europe's poor employment performance are especially marked, in particular, the difficulty of

Europe and the US. The structure of employment for the first three is remarkably similar in the EU and the US, with more or less the same proportion of skilled and unskilled jobs. In Europe, more occupations are classified as low skilled manual, in the US as low skilled non-manual, but the low skilled share as a whole is remarkably similar. Thus, the extra jobs in these sectors in the US seem to be right across the occupational structure, benefiting people with both low and high skills.

Education and retail trade are different. Here there are clearer structural differences between Europe and the US. In Europe, the share of skilled jobs is generally larger than in the US. In retailing, high skilled non-manual jobs account for 1½% of working-age population in Europe compared with only 0.6% in the US, although overall the US employs 2% more people of working age in this sector. Some of this is maybe a classification problem, as there seems to be a general tendency in Europe to classify people to a higher skilled occupation than might be expected. More significantly, however, it may arise from the structure of the sector and the number of small shops.

Matching skills with jobs

Countries in the EU with high employment rates have more jobs at all skill levels, as does the US as compared with Europe. Equally, in countries where there is high employment in a given sector, this affects all levels of skill. It is also by no means clear that the US has a more highly-skilled work force than Europe. In general, European countries with a high level of employment (Denmark, Sweden, the UK and the Netherlands) have more

people in high skilled jobs than the US. Since the US has a higher employment rate overall, this implies that it is managing to create more jobs for the low-skilled than in Europe. In fact, the US employs many more people with low levels of skill (around 20% of working-age population in the US, 13% in the EU). Nevertheless, European countries with high employment rates also have high employment in low-skilled jobs: in Denmark, 21% of working-age population, in Sweden and the UK, around 16%.

Given that the low skilled represent a disproportionate number of the unemployed, high job growth is one way of tackling the problem, and indeed the evidence suggests that countries which experience the highest rates of employment increase tend to create disproportionately more jobs in lower skilled occupations than those in which growth is slow.

On the other hand, there is a wide margin of manoeuvre for increasing the employment rate for people with high skills. Within Europe, the three best performers in advanced services (Denmark, Sweden and the Netherlands) employ an average of around 30% of working-age population in high skilled non-manual jobs. The corresponding figure for the EU as a whole is 22%, in Germany 24%, for France 21% and in Italy 14%. More jobs in Europe would imply higher employment rates for people both with high and low skills.

Wages and job quality

It is often argued that in Europe low skilled workers are priced out of the market and that lower wages would allow them to find a job. As stated in the Broad

Economic Policy Guidelines and underlined in the Amsterdam Resolution on growth and employment, *'the social partners are responsible — at the national, regional, sectoral or even at a more decentralised level following their respective traditions — for reconciling high employment with appropriate wage settlements'*. While it is undoubtedly the case that wage dispersion in the US, especially at the bottom end of the scale, is wider than in most EU Member States, there are, nevertheless, some large earnings differentials in Europe, with many people earning less than two-thirds of the average wage, as indicated in *Employment in Europe, 1998* (Part I, Section 4). In the UK, for example, the bottom 10% of wage earners received under 42% of the average wage in 1995, while in France and Spain, they received only 47–48% of the average.

As also shown in the 1998 report, there is no clear and systematic evidence of a relationship, however, between a wide wage dispersion — measured as the ratio of the earnings of the bottom 10% of employees to the average wage — and higher employment rates, either in services, or in the economy as a whole.

This is the case in the more advanced sectors of banking, insurance and business services, where high employment rates are associated with both relatively high and low levels of low pay at the bottom end of the scale. It is also the case, however, in the more basic services, where there is perhaps more scope for employing less skilled people. The only sector where some relationship is apparent is hotels and restaurants, where 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.

Women tend to earn less than men in all Member States. A disproportionate number of those in the lowest paid 10% of wage earners are 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.

The gap between men's and women's earnings for the higher paid was more than that for the lower paid in all Member States without exception. This implies that observed differences in average earnings between men and women arise more from differentials among higher paid workers than among lower paid and that women are less well represented among the higher paid. Women 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.

It is clear that the picture that emerges is a complex one with no

simple explanation. This impression is reinforced by the analysis in this year's report (Part II, Section 2), which finds a lack of any strong association between low wages for workers in the lower skilled occupations and the relative number of people employed in such jobs.

The ageing of Europe

One of the major challenges facing the Union is to find ways of making full use of older workers and to halt the decline in the participation and employment of those aged over 55 (and increasingly, over 50). Part II, chapter 3 presents a detailed analysis of this issue.

The slowdown in the birth rate coupled with more people living longer has led to an ageing of the population throughout the European Union. This trend is set to accelerate in the next 10–15 years, leading to a pronounced increase in the number of people of 65 and over as the post-war 'baby-boom' generation reaches this age.

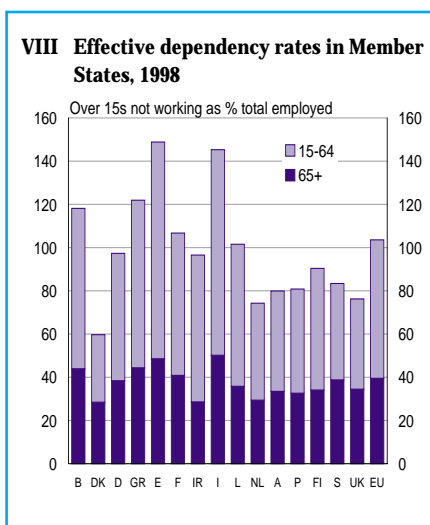
The ageing of the European population is only one of the factors leading to increased dependency. An analysis of effective dependency ratios, ie the ratio of all those of 15 and over who are not in work (and therefore not contributing to the funding of social protection) to those in employment, shows a rather different picture than the 'theoretical' dependency ratio, or people above retirement age relative to those of working age (the usual definition). Whereas the latter is around 24% in the Union at present (just under one person aged 65 and over for every four people of working age) and is set to rise to around 32% over the next 20 years (one person aged 65 and over for

every three people of working age), the effective dependency ratio is already over 100% (ie more than one person aged 15 and over not working for every person employed) and has risen by 10 percentage points over the 1990s alone.

However, while this seems to indicate that the problem is worse than it is usually portrayed, it also suggests that there is more scope for a solution.

Two factors have contributed to the present situation. First, the decline in participation in the labour market of men aged over 50 years, which has been analysed in several recent *Employment in Europe* reports, means that the effective age of retirement has now fallen on average to some 5 years below the official age in most Member States. Efforts to raise the effective age of retirement have mainly been made in Member States where rates of economic inactivity among men in their late 50s and early 60s have risen to high levels. Measures have been introduced to increase the official age of retirement, extend the number of years of contributions required for a full pension or restrict access to early retirement benefits in all 9 countries with the highest inactivity rates for men in this age group (the three Benelux countries, Germany, Austria, France, Spain, Italy and Finland). It should be recognised, however, that a major aim of these policies is to reduce the cost falling on systems of social protection, independently of their effect on early retirement *per se*.

Secondly, high unemployment, particularly among unskilled and older workers, has led many to withdraw from the labour market. A significant proportion of expenditure on social protection at present goes on



people of working age who are not in employment and effectively the financing burden has to be borne by those in paid work. The future development of the effective dependency rate depends, in practice, as much on the relative number of those of working age who need support from those in work, as on the relative number of people of retirement age and over (Graph VIII).

In addition, many of those who have retired early have done so simply because they lost their job and could not find another one. Many of them were manual workers employed in manufacturing, mining or agriculture. With the decline of these sectors and the growth of services, there may be less need in future for people to retire early because of the physically demanding nature of the job they are doing. In any event, there is a shift in the emphasis of policy across the Union away from encouraging older workers to retire early and towards keeping them in employment.

An alternative means of reducing outflows of older workers from the labour market is to make it possible for those approaching retirement age to work part-time rather than stopping work completely. In a context where job shortages remain a major problem, this type of arrangement is in some sense a compromise between combating unemployment and keeping older workers in employment and, indeed, in a number of countries has included an obligation for companies to take on other people at the same time.

As yet, however, comparatively few men work part-time even in the older age groups — only around 6% of those aged 55 to 59 and around 12% of those aged 60 to 64.

The Luxembourg process — a medium term strategy towards more and better jobs

The European employment strategy, or 'the Luxembourg process', is an all-European effort to meet the challenges identified above.

This strategy is now well under way. This strategy is founded in the Employment Title of the Amsterdam Treaty, which states that employment is an issue of 'common concern' and sets out the objectives and processes for promoting employment in the Union. With the entry into force of the Treaty, the Strategy will now come fully into its own. The centrepiece of the strategy is the definition and implementation of the Employment Guidelines each year, adopted by the Member States on a proposal from the Commission and involving a country surveillance procedure, based on National Action Plans and yearly implementation reports examined by the Commission and the Council. The first Guidelines were agreed by the Extraordinary European Council in Luxembourg in 1997, following the decision of the Amsterdam European Council to implement the provisions of the Employment Title immediately.

The Employment Guidelines for 1999, largely similar to those for 1998, take account of the experience of Member States in applying the Guidelines for the first time. In a series of seminars in all the Member States to examine the implementation of the National Action Plans, the lessons of the first implementation of a set of guidelines for employment policy on a Union-wide basis were drawn and built upon.

The European Employment Strategy is not an instant solution and will need to be implemented steadfastly over a number of years, although progress to date has been encouraging. Using the four pillars of the strategy as the main instruments, a number of challenges can be identified.

The European Council of Vienna placed employment at the heart of the strategy for the future development of the Union. It noted that employment is the top priority for the Union, as the best way of providing real opportunity for people and of combating poverty and exclusion effectively, serving as the basis for the European social model.

The Cologne European Council called for the development of a European Employment Pact aimed at a sustainable reduction of unemployment. It comprises three main elements which together represent the key elements of a policy response to the employment challenges of the Union:

- At the core of the European Employment Pact is an increased synergy between a macroeconomic policy based on growth and stability, the European employment strategy to improve the efficiency of labour markets and structural reforms in goods, services and capital markets. It combines action for growth and employment at the level of the Member States with a strategy agreed at European level to maximise the efficient interaction between them. The Employment Pact considers structural reforms to be essential to improving competitiveness and the functioning of markets.

- It calls for a more vigorous implementation of the Employment Guidelines, within the framework of the National Action Plans for employment, which will address many of the individual policy issues outlined above.
- It calls for an enhanced role for the social partners, in a macroeconomic and employment dialogue, in a partnership approach to reconciling economic and employment objectives.

The main messages

Employment in Europe 1999 examines the background to these issues and analyses some of the major features of the European labour market. The main conclusions are:

Europe should be seen as an economic entity. The Union is the world's largest trading bloc, but it can never be completely isolated from ups and downs in world trade and activity. Taking a view of Europe as a 'heterogeneous whole' allows the problems and the benefits from being part of the whole to be shared, while at the same time highlighting the importance of differences between Member States and regions.

Providing jobs for all sections of the labour force. In the Union, only one group even comes close to full employment. While the employment rate of prime-age men is some 80–90%, that of young people and older men and women is much lower.

Avoiding regional imbalances. With the launch of the Euro, the structural problems which can impede growth and employment

are not limited just to market inflexibility but more importantly are linked to regional disparities, and these can affect the extent to which macroeconomic policy can be supportive of growth and employment.

Improving the employment performance of the service sector. More employment in services will benefit the whole of the work force irrespective of their skill levels.

Improving the quality of the labour force. Maintaining and upgrading the skills of the work force will improve their ability to take and keep the kinds of job which are being created in the new sectors.

Keeping older workers in employment. 16% of the population are now over 65 and the dependency rate in the Union has increased from 20% in 1980 to over 23% today. Such an increase has special implications for social protection systems, not only for pensions but also for expenditure on health and long-term care and for the relationship between the generation in work and that in retirement.

Part I Section 1 Developments at the Union level

The number employed in the Union increased by 1.8 million in 1998, or by 1.2%, twice the rise in 1997 and the highest rate of growth since 1990. Moreover, also for the first time since 1990, employment went up in all Member States without exception, although in Germany the rise was marginal. The increase is a result of the continuing recovery in the EU economy, the rate of GDP growth going up from 2.7% in 1997 to 2.9% in 1998. The underlying growth in output per person employed, or productivity, therefore, remains at just under 2% a year over the Union as a whole, much the same as it has been since the mid-1970s.

Despite the growth in employment, the number in work in 1998 was still over 600 thousand below the peak reached in 1991. Four years of economic recovery and continuous expansion of employment,

therefore, have not yet offset the three years of decline between 1991 and 1994. As shown below, however, there are substantial differences between Member States, job losses over the 1990s being concentrated in 5 countries, Germany, Italy, Austria, Finland and Sweden.

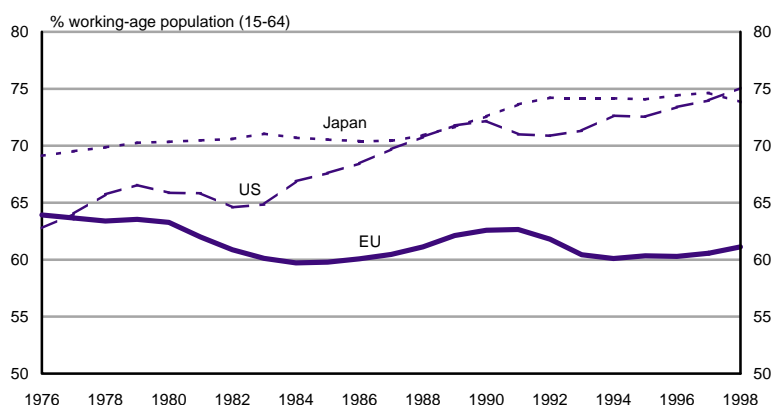
As a result, the employment rate (the number employed relative to population 15 to 64) in the Union in 1998 was just over 61%, a rise of ½ percentage point on the 1997 level (see Box). Nevertheless, it was still 1½ percentage points below the level at the onset of the recession in 1991 and much lower than in the US or Japan (around 74–75% — Graph 1).

Despite the relatively high job growth in Europe in 1998, it was still lower than in the US (1½%), just as over the previous 6 years. On

the other hand, it was substantially higher than in Japan, where employment fell for the first time during the present recession (by ½% or so) — and, indeed, for the first time since the first oil crisis in 1974.

The growth of employment in the Union was accompanied by a continuing fall in unemployment, from an average of just over 10½% of the work force in 1997 to 19% in 1998 (Graph 2). Unemployment has continued to decline during the first few months of 1999, to 9.4% of the work force in June. Nevertheless, it remains well above the level in either the US (4.3%), where the rate has continued to edge down, or Japan (4.8%), where it has gone on rising. Indeed, unemployment in Japan is now well above the previous peak rate reached over the past 40 years or so (just under 3%), which given the deficiency of

1 Employment rates in the Union, US and Japan, 1976-98



The employment rate in the EU has risen only slowly during the four years of recovery since 1994. In 1998, it was much the same as in the early 1980s, some 3 percentage points below the level in the mid-1970s after the first oil crisis, when it was higher than in the US, since then, the rate in the US has risen almost continuously.

Source: For the EU, Eurostat benchmark employment series extended backwards and Union LFS for population; for the US and Japan, labour force statistics.

The benchmark employment series and the employment rate

The employment figures cited in this Report and used in the analysis are taken from the Eurostat benchmark series. This is considered 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, though in most, they come from labour force surveys, either quarterly (in 6 cases) or annual (in three). (In three other countries, they come from the national accounts and in the others, from registration data, labour accounts and a microcensus.) The source in each case is given in the notes to the tables at the back of the Report.

Despite these differences, the benchmark series seems the best compromise until a quarterly and continuous labour force survey of sufficient size becomes available for all Member States. In the analysis here, the benchmark employment series are used as the measure of the total number employed in any year as well as to track changes over time. This approach has been adopted in order to avoid inconsistencies between different parts of the analysis, though it is recognised that in principle the LFS should be the most reliable source of the *level* of employment in a given year. The detailed data from the Union LFS — of, for example, the number employed part-time or by sector — are then constrained to equal this total in each country. This means that the percentage breakdown of employment — such as, by sector — is the same in each case as that given by the LFS.

For the employment rate, the measure used is the total in work relative relation to population of working age (taken as 15 to 64). This is intended to be an indicator of the performance of Member States in creating jobs for those who potentially would like to work. Use of the benchmark series means that the figures calculated differ slightly from those obtained from the LFS. (In 1998, the employment rate derived from the benchmark series is 61.1%, from the LFS, 61.6%.)

Moreover, since there are a few people of 65 and over still employed — though on average they account for only just over 1% of all those employed — the figure calculated differs slightly from the proportion of working-age population who are in work (around 0.8 of a percentage point more).

systems of income support is beginning to create serious social problems.

The employment content of growth

The increase in employment across the Union in 1998 was much the same relative to the growth of GDP as would have been predicted given the underlying, long-term trend relationship between the two. This has remained very stable over the past 20 years or so, GDP per person employed rising consistently at just under 2% a year (Graph 3).

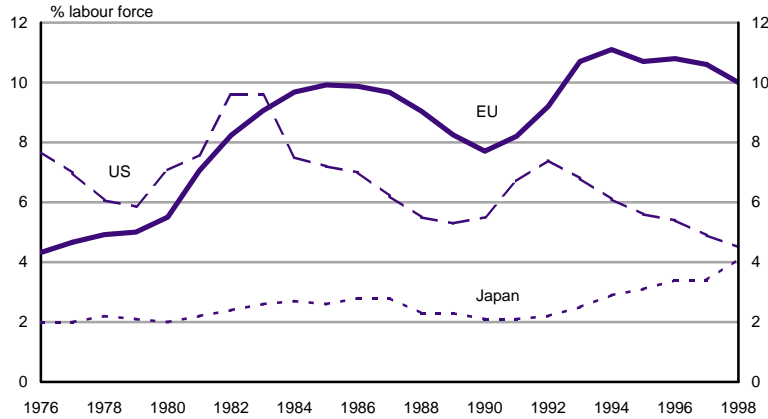
In the US, in contrast, there are some signs of an increase in underlying productivity growth, as GDP per person employed has gone up by an average of around 1½% a year over the present upturn (Graph 4). For the US, however, assessment of the underlying rate over the economic cycle as a whole is complicated by the fact that, unlike in the EU, growth of GDP per person employed has tended to fall significantly during recent cyclical downturns.

In Japan, on the other hand, GDP per person employed has risen much more slowly during the 1990s than previously and fell in 1998 (Graph 5). Nevertheless, GDP growth has consistently been well below its previous trend, and whether the growth of GDP per person employed will increase back to the high rates of the 1970s and 1980s once output growth recovers remains to be seen.

Labour force developments

The fall in unemployment in the Union over the recovery years of

2 Unemployment rates in the Union, US and Japan, 1976-98



Unemployment in the EU in 1998 at 9.9% was only slightly below its peak level in 1994 (11.1%) and the same as in 1985-86, the previous peak. It was well above the rate in Japan (4.1%) and the US (4.5%), in which unemployment has shown a downward trend since the early 1980s instead of an upward one as in the EU.

Source: Eurostat comparable unemployment rates.

1994 to 1998 amounted to some 1.5 million. Given the increase in the number in work, of around 4.3 million, this implies that around 65% (some 2.8 million) of the net additional jobs went to new entrants to the labour force, either those leaving the education system or those who for some other reason had not been actively looking for work, who had not previously been recorded as unemployed. This is slightly lower than during the growth years 1985 to 1990, when over 70% of those taking up the extra jobs created

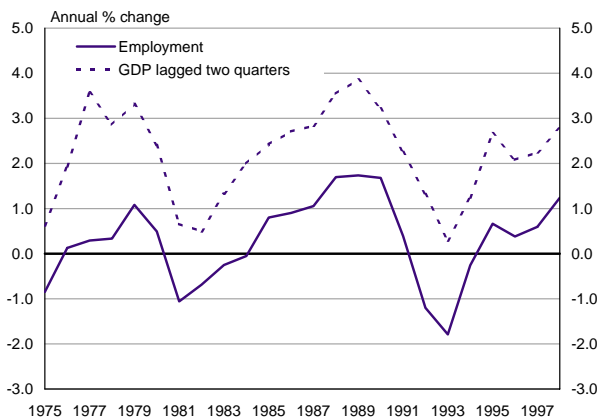
were new entrants to the labour force.

The increase in the labour force since 1994, however, is much the same as the growth of working-age population, implying that over the four years of economic recovery, there has hardly been any rise in the rate of participation in the labour force. In the Union as a whole, the rate is still only around 68% of population aged 15 to 64, a full 10 percentage points below the level in the US and Japan. The

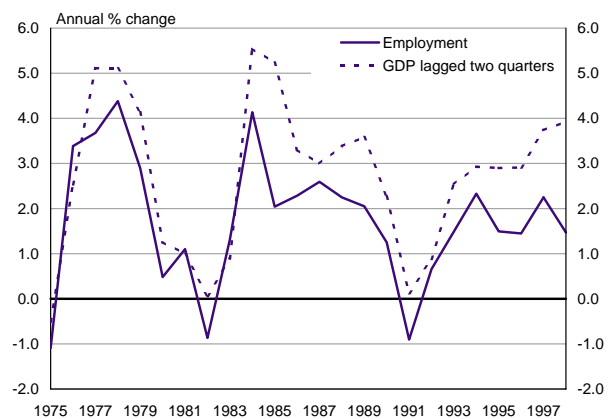
recent experience contrasts markedly with the rise during the last economic recovery in the second half of the 1980s when participation went up by some 1½% of working-age population.

The four years of net job creation since 1994 have, therefore, done little to raise the low rate of participation in the Union, which is a particular problem among women. In 1998, the number of women employed was still only around 51% of women of working age — though there are

3 Growth of GDP and employment in the Union, 1975-98



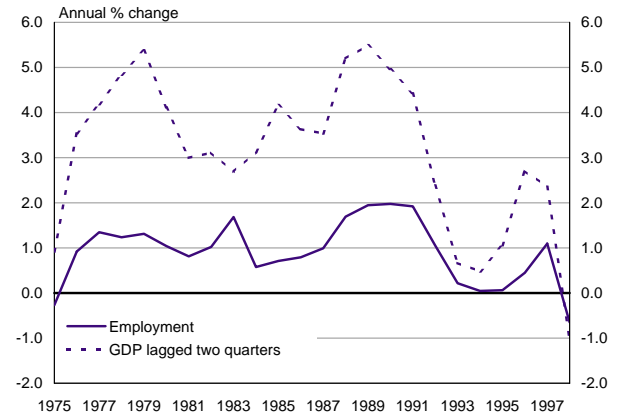
4 Growth of GDP and employment in the US, 1975-98



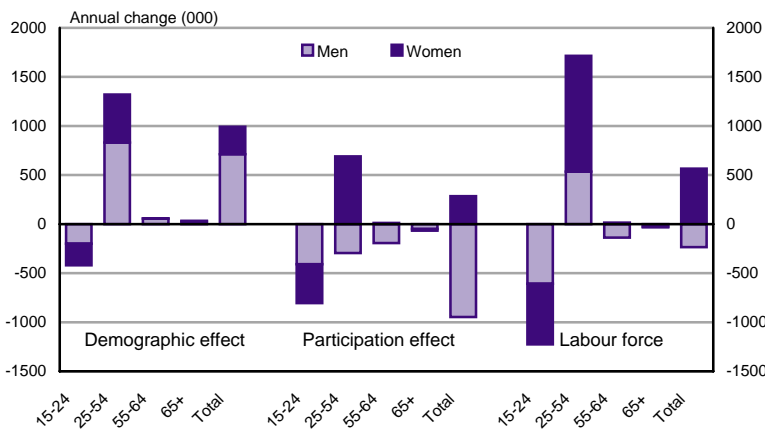
substantial differences between Member States as shown below — some 20 percentage points below the employment rate for men and some 17 percentage points below the rate for women in the US. To put this in perspective, if the employment rate of women in the EU were the same as in the US, there would be over 20 million more women in work.

The very small rise in participation in the Union since 1994 results from a combination of a continuing fall in participation of men, concentrated particularly among older

5 Growth of GDP and employment in Japan, 1975-98



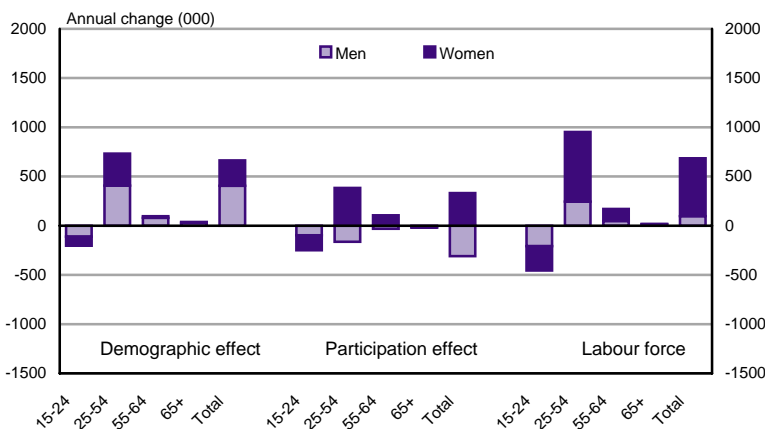
6 Changes in the labour force in the Union, 1990-94



The change in the labour force is divided between a demographic effect and a participation effect, each estimated by assuming the other remains unchanged. The main contribution to labour force growth was the increase in population coupled with the rise in participation of women which partly offset the large decline for men.

Source: Eurostat, Union LFS for population and participation, total labour force being given by benchmark employment plus comparable unemployment.

7 Changes in the labour force in the Union, 1994-98



The labour force in the EU increased by more in these 4 years than in the previous 4 despite lower rate population growth. The rise in participation of women was much the same as before, though divided differently between age groups, but participation of men fell by less, especially in the older and younger age groups.

Source: Eurostat, Union LFS for population and participation, total labour force being given by benchmark employment plus comparable unemployment.

workers and those under 25 staying longer in education, and an ongoing increase in participation of women. In each case, however, the scale of the change was smaller than in the preceding period (Graphs 6 and 7). The trend towards early retirement of men, though still evident, seems to have slowed down as labour market conditions have improved, as has the increase in the proportion of young people remaining in the education and training system beyond basic schooling. For women, the rise in participation since 1994 has been particularly significant among those of 55 and older, reflecting perhaps the 'cohort effect' of women in the 25 to 54 age group, who are accustomed to pursuing a working career, growing older.

Despite the slowdown in the downward trend in participation, the number of men in the labour force in the Union fell slightly from just over 78½% of working-age population in 1994 — and from 80½% in 1991 — to 78% in 1998. By contrast, the number of women rose from just under 57% in 1994 — and 55½% in 1990 — to 58% in 1998 (still well below the level in the US — 71%).

Changes in employment and unemployment of men and women

In 1998, for the first time for many years, the number of men employed in the Union increased by almost as much as that of women. Even in the high growth period in the late 1980s, the number of women in work rose by more than the number of men, and during the recession years of the early 1990s, job losses were largely concentrated among men, while the employment of women increased marginally. Some 49% of the net additional jobs created in 1998 were taken by men. Nevertheless, the share of women in total employment still went up slightly (to 42%), and over the four years of recovery as a whole, over 63% of the net additional jobs went to women rather than men.

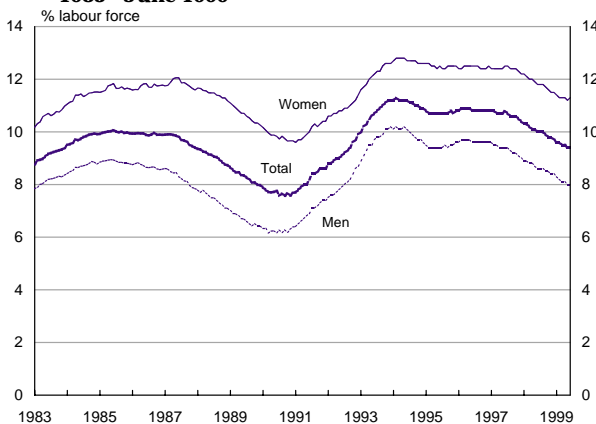
The fall in unemployment in the Union during 1998 and the first few months of 1999 has been much the same for women as for men, whereas in the earlier years of recovery there had been a tendency for the rate for men to come

down by more than that for women. Since the peak rates reached during 1994, unemployment of men has fallen by over 2% of the work force, whereas for women, it has declined by 1½% (Graph 8). The gap between the two rates at the Union level, therefore, has widened a little during the course of the recovery to just over 3 percentage points (just over 11% for women, 8% for men).

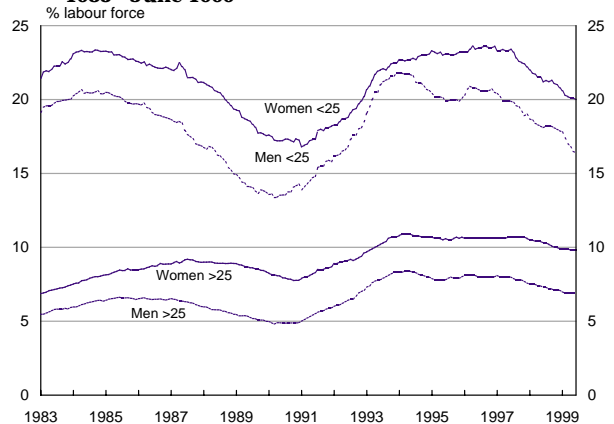
The rate of unemployment of young people under 25 has fallen over the present recovery by much more than the rate for those of 25 and over. From the beginning of 1994 to the last monthly count the rate for young people fell by over 4 percentage points (to 18%) as against a fall of just over 1 percentage point for those of 25 and over (to 8%) (Graph 9). The gap between the two, however, remains wide.

It is also a similar gap to that in Japan (where the unemployment rate of young people was around 8½% at the last count) but smaller than in the US (9½%, as opposed to a rate of just over 3% for those of 25 and older).

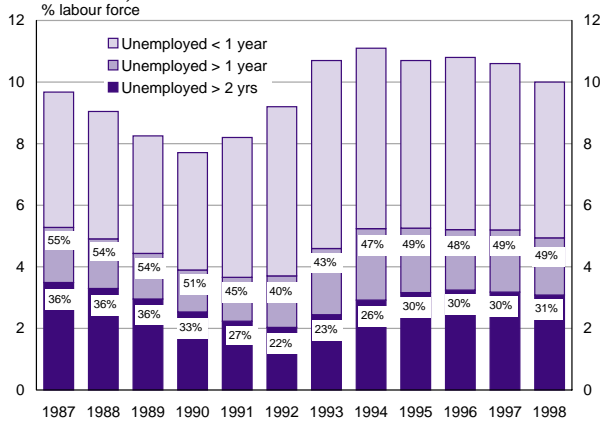
8 Unemployment rates by sex in the Union, 1983 - June 1999



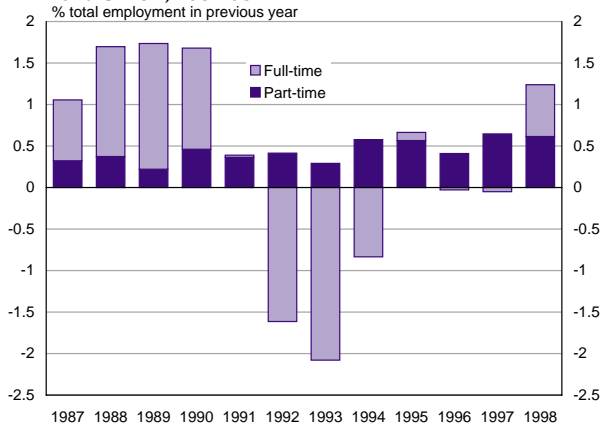
9 Unemployment rates by sex and age in the Union, 1983 - June 1999



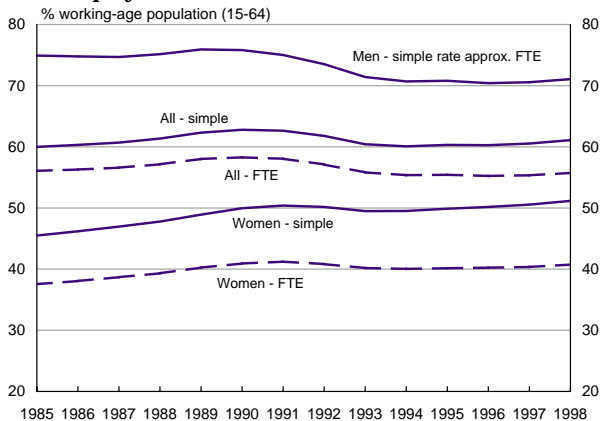
10 Total and long-term unemployment rates in the Union, 1987-98



11 Change in part-time and full-time employment in the Union, 1987-98



12 Simple employment rates and full-time equivalent employment rates in the Union, 1985-98



Long-term unemployment

The fall in the overall rate of unemployment in the Union in recent years has been accompanied by a decline in the number of long-term unemployed, from 5.2% of the labour force in 1994 to 4.9% in 1998. The decline, however, has been less than that in the overall rate and the share of the unemployed who had been out of work for a year or more in 1998, at 49½%, was higher than in 1994 (47%) and slightly above the level in 1997. As yet, therefore, there has been no tendency for the increased rate of net job creation to benefit the long-term unemployed greatly (Graph 10). The rate of long-term unemployment in 1998, therefore, at 4.9% of the labour force was not much lower than in 1994 (5.2%) and the number affected, at around 8.4 million was only some 4% less than four years earlier when unemployment was at its peak.

More disturbingly, the number of very long-term unemployed in the Union, those who had been looking for a job for two years or more, was actually slightly higher in 1998 than in 1994, as was the rate of very long-term unemployment (3% of the labour force), which was not much lower than in the mid-1980s. The range of measures introduced across the Union since then to combat long-term unemployment, therefore, seems to have had relatively little effect on the scale of the problem, though, of course, it is impossible to judge what would have happened in the absence of these policies.

Part-time employment

In 1998, for the first time during the present recovery — and indeed

since 1990 — there was more than a marginal increase in the number of full-time jobs in the Union. Nevertheless, the number of people in part-time employment still rose considerably, accounting for around half the net additional number in work in the Union as a whole (Graph 11). Over the four years 1994 to 1998, 78% of the net additional jobs created were part-time, around 3.3 million of the extra 4.3 million, around two-thirds of these going to women, who also took some 52% of the extra full-time jobs.

FTE employment

The growth of part-time working means that there has been very little increase in the employment rate in the Union since 1994 if this is expressed in full-time equivalent terms (ie adjusted for hours worked). It also means that the full-time equivalent rate in 1998 was slightly lower than in the mid-1980s when the simple employment rate was at its lowest level (Graph 12). Over this period, the rate for men in both simple and FTE terms has fallen significantly, while the rate for women has risen in terms of both but by less if measured in FTE.

The employment gap between men and women, which was 20 percentage points in terms of the simple rate, was 30 percentage points in FTE terms in 1998 and only marginally lower than in 1994.

Part I Section 2 Developments in Member States

The aim of this section is to review the major aspects of employment and related developments across the Union. In so doing, it attempts to indicate features which are common to Member States which have a similar performance in terms of the number of people in work and the rate of net job creation over the recent past (see Box).

Employment increased in all Member States in 1998 for the first time during the 1990s. Nevertheless, in only 8 of the 15 countries has the number employed grown by more than 1% a year over the four years of economic recovery since 1994 (Graph 13). In two Member States, Italy and Sweden, there was very little growth over this period at all, in Austria, there was a marginal fall and in Germany, the number in work declined by over ½% a year — in the old Länder as well as the new.

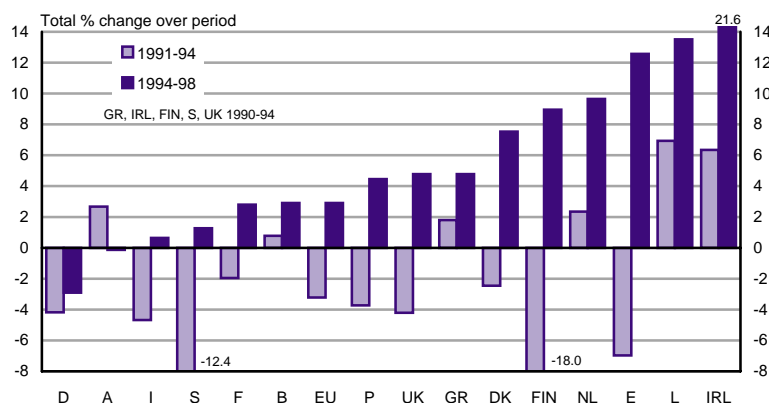
In Germany, employment in 1998 was still some 7% (over 2½ million) below the level at the beginning of the recession in 1991. While the decline was particularly pronounced in the new Länder (over 17%), it was also significant in the old Länder (4½%). There was also a fall in Italy (amounting to some 4%), the only other country in the Union where this was the case, apart from Finland and Sweden, where there were special circumstances, the collapse of trade with the former Soviet Union in particular.

However, although employment in France and the UK in 1998 was higher than before the onset of recession in the early 1990s, it was only marginally so (around ½% in each case), despite the relatively high rate of job creation since 1993 in the UK. The poor performance of the largest four Member States in

creating jobs over the 1990s is the major proximate reason why employment growth in the EU as a whole over this period has been so low (between them they account for 70% of total employment). In the smaller countries, the growth of employment, in general, has not been much below the rate experienced in the 1980s. In the Netherlands, it has exceeded 1½% a year, in Luxembourg and Ireland, over 3% a year, while in Spain, Greece, Belgium and Denmark, it has averaged ½% a year or more.

There are, however, signs of improvement in three of the four large economies, with only the UK showing a decline in employment growth as economic recovery moderates. This is particularly the case in France, where the number employed rose by just under 1½% in 1998, the highest growth rate since 1989. In Italy, the number rose by

13 Changes in employment in Member States, 1991-94 (or 1990-94) and 1994-98



Employment rose in the 4 years 1994-98 in all countries apart from Austria and Germany, though in Finland and Sweden, the rise did not compensate for the fall during the recession years (either 1990-94 or 1991-94 depending on the country). In France and the UK, the rise was barely enough to compensate.

Source: Eurostat benchmark employment series.

Comparative employment performance

Growth of employment, productivity, the labour force and jobs for men and women

Employment performance in Member States over the four years 1994 to 1998 varied from growth of 5% a year in Ireland and over 3% a year in Spain and Luxembourg to virtually no change in Austria and Italy and a decline of over ½% a year in Germany (Graph 13). The comparative performance bears little relationship to the change in employment over the preceding 3 or 4 years of recession. There was not much convergence in employment levels. Though Spain and Ireland with among the lowest levels had high rates of net job creation, there was little growth at all in Italy.

The underlying rate of productivity growth, which would normally be expected to be relatively high in economies where development is lagging, has in fact been close to zero in recent years in Spain, where GDP growth has not been much above average (Graph 15). This is a major reason for the increase in employment over the period, as it has been in a number of other countries. Leaving aside Ireland, where the growth of GDP has been exceptional, there was, therefore, more variation between Member States in employment growth than in GDP growth (Graph 14).

In general, those countries in which employment rose by most also experienced the largest fall in unemployment, though the relationship is not entirely uniform because of different growth rates of working-age population and, more importantly, differing changes in participation (Graph 21). Spain, for example, was less successful in reducing unemployment than Finland because of a large rise in participation (especially among women), while the UK achieved the same reduction as in Spain despite much lower employment growth because participation did not change. Similarly, Sweden was able to reduce unemployment despite low employment growth because of significant withdrawals from the labour force. This differential experience in part reflects the prevailing level of participation, which is low in Spain, as in most other countries where the rate rose significantly over the period, and high in Sweden and the UK.

There is also a general tendency for the relative increase in the employment of men to have been higher in Member States which achieved high overall rates of net job creation (Graph 22). This tendency, however, has been accompanied by a parallel one for the employment of women to decline relative to that of men in countries where the participation of women is already relatively high — the three Nordic countries and the UK, in particular.

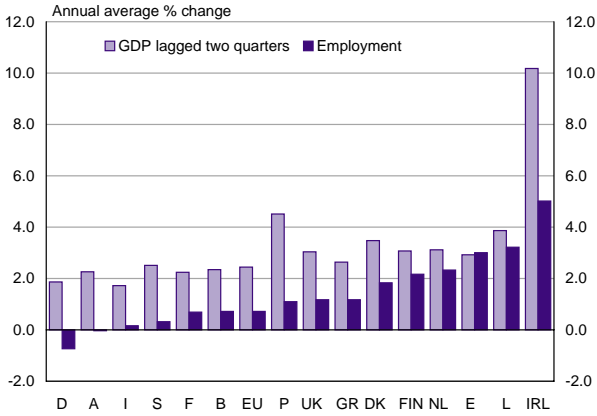
½%, after not increasing at all in 1997, while in Germany, it went up, even if marginally, for the first time since unification.

Employment content of growth

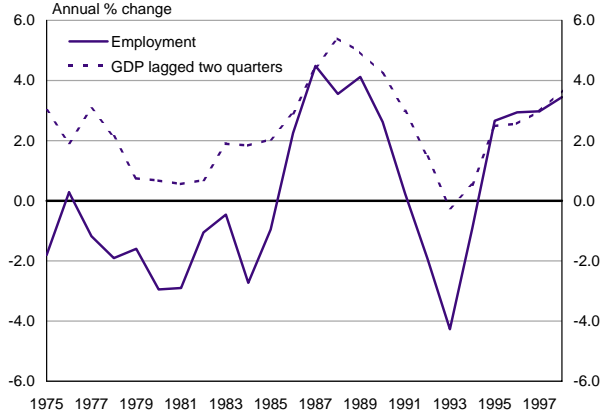
The stability of the relationship between the growth of GDP and employment at the Union level over the long-term, noted above, is not repeated in all Member States. Although in all countries employment growth closely follows the growth of GDP, with an average lag of around 6 months (the only countries where the relationship is not very close are Greece and Luxembourg), the precise form of the relationship — ie the extent of growth in output per person employed — differs (Graph 14). Moreover, the relationship seems to have altered during the 1990s in some countries. In particular, in Belgium and Spain (Graph 15), and to a lesser extent in France and Italy (Graphs 16 and 17), the underlying growth of output per person employed seems to have fallen in recent years.

This is particularly the case in Spain, where output per person employed has actually declined during the four years of recovery 1994 to 1998 (if allowance is made for the lag), whereas previously the long-term trend rate of growth was around 2% a year. While the reasons for this decline remain uncertain, it has been accompanied by a reduction in average real labour costs, which might have been a contributory factor. Alternatively, the fall in labour costs might be a consequence rather than a determinant of the fall in productivity, or indeed a corollary of activities being developed with a relatively low level of productivity. Real labour costs also fell in Italy over this period and rose only slightly in Belgium (by

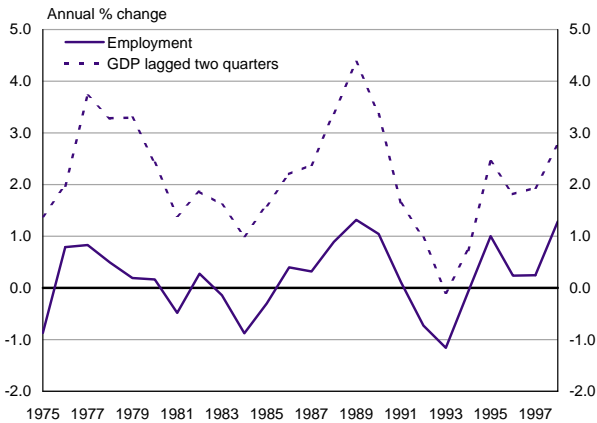
14 Growth of GDP and employment in Member States, 1994-98



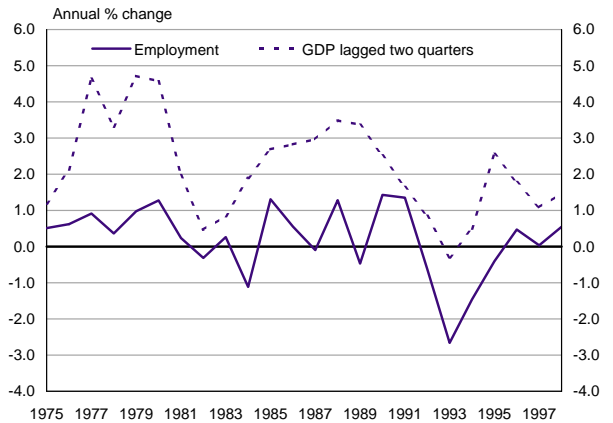
15 Growth of GDP and employment in Spain, 1975-98



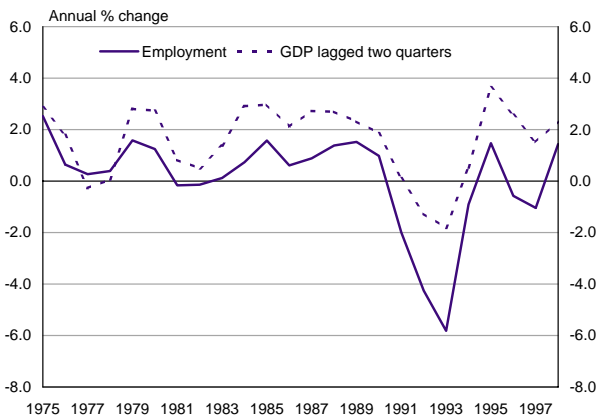
16 Growth of GDP and employment in France, 1975-98



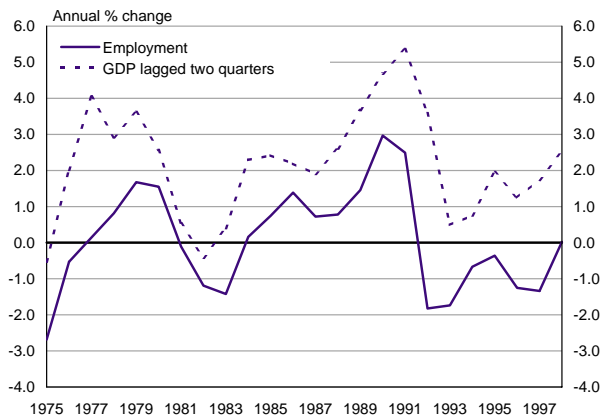
17 Growth of GDP and employment in Italy, 1975-98



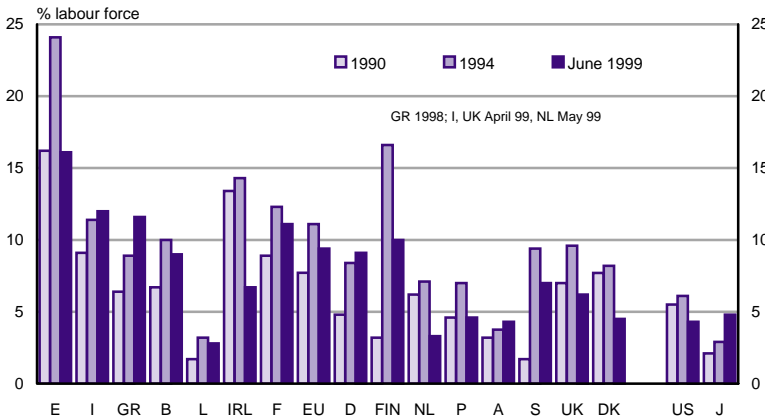
18 Growth of GDP and employment in Sweden, 1975-98



19 Growth of GDP and employment in Germany, 1975-98



20 Unemployment rates in Member States, US and Japan, 1990, 1994 and June 1999



Countries are ordered in terms of the employment rate in 1998. In all but 5 Member States, unemployment in June 1999 was above the level in 1990 before the onset of recession. In Germany, Italy and Austria, it was above the level in 1994 at the end of the recession period. In Spain, Ireland and Finland, however, the rate has declined by some 6-7 percentage points since 1994.

Source: Eurostat comparable unemployment rates.

around ½% a year), which in both cases facilitated the reduction in output per person employed, in the sense of relieving upward pressure on prices and downward pressure on profits.

By contrast, the rate of growth in output per person employed has risen over the 1990s in Denmark, Sweden (Graph 18) and Germany (Graph 19) and, to a lesser extent, in Austria. In both Denmark and Sweden, this has occurred after a lengthy period of relatively low growth in output per

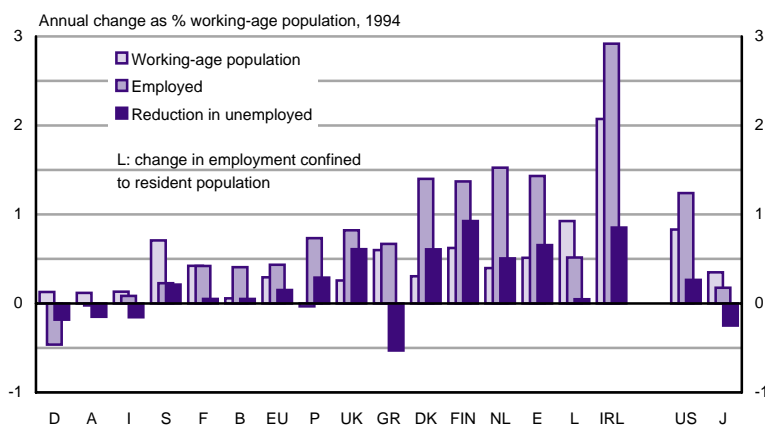
person employed. In Denmark, it has coincided with an increased rate of GDP growth (to 3½% a year during the recovery period). In Germany, the rise dates back to unification and is, to a large extent, a direct result of economic restructuring in the new Länder. Here GDP growth averaged 5½% a year between 1991 and 1998 but employment fell by over 2½% a year, implying a growth in output per person employed of over 8% a year as rationalisation took place and as inefficient production facilities were closed down. This is the main reason

for the apparent increase in productivity growth in Germany as a whole in the 1990s to over 2½% a year, although growth of GDP per person employed has also risen slightly in the old Länder since 1991 (to over 2% a year between 1994 and 1998).

Unemployment developments in Member States

Unemployment fell in nearly all Member States in 1998 and, in most

21 Change in employment, unemployment and working-age population, 1994-98



Changes in employment and unemployment are measured relative to working-age population (15-64). The increase in the labour force is given by the rise in employment less the reduction in unemployment, or for Germany and Austria, by the increase in unemployment less the fall in employment and for Greece and Italy, by the rise in the two.

Source: Eurostat, Union LFS, benchmark employment series and comparable unemployment statistics.

cases, the fall seems to be continuing during 1999. The 5 countries where this is not so are Italy, where unemployment rose in 1998 but has fallen a little since, Germany, where the reverse is the case, Greece, where the figures fluctuate a lot from month to month, Luxembourg, where unemployment is already below 3%, and the UK, where growth has slackened. However, in a number of countries, the fall so far has been modest and the pace of decline very slow. In only 4 Member States — Spain, Ireland, Finland and Sweden, in the latter without much job growth — was the rate of unemployment in June 1999 more than 1% below the rate one year earlier and only in 7 cases was it more than 2% below the peak rate reached in 1994 at the start of the present recovery (Graph 20).

Labour force developments

The change in unemployment across the Union is affected not only by job growth but also by changes in labour force participation. This, on average, has risen only marginally in recent years and in a number of Member States, it has fallen, especially in those in which net job creation has been relatively low (Graph 21). This is particularly the case in Germany, where the number in the labour force has declined by 1½% of working-age population since 1994 and by 3½% since 1991. Although this fall was initially concentrated in the new Länder, where participation among women especially had been relatively high under the previous regime, since 1994, it has occurred much more in the old Länder than the new. This reduction has moderated the rise in unemployment significantly. Had participation remained the same as in 1991, without additional job

Comparative employment performance

Employment and unemployment rates

In general, unemployment rates are high in Member States with the lowest employment rates (Graph 20). However, those with the highest employment rates — Denmark, the UK and Sweden — also have high levels of labour force participation and, therefore, unemployment is higher than in a number of countries — the Netherlands, Portugal and Austria — where employment rates are lower but participation is also lower. Further down the scale, participation is unusually low in Belgium (which may reflect a high rate of employment in the informal economy), Luxembourg (where over 20% of jobs are undertaken by people commuting from outside) and Ireland (where participation is increasing rapidly), and this is reflected in lower than expected rates of unemployment.

Member States with low employment rates and the highest rates of unemployment also tend to have very high unemployment of women relative to men (Graph 23). Accordingly, it is not only the case that comparatively few women participate in the labour force in these countries, but a disproportionate number of those who do cannot find a job.

Equally, countries with low employment rates also tend to have a high proportion of young people under 25 unemployed (Graph 24). Belgium and Ireland are again exceptions, in the former because of low participation in the work force of people in this age group. Germany, with one of the lowest incidences of unemployment among young people despite an employment rate around the EU average is also out of line with other Member States, in part reflecting the large number in initial vocational training (as in Austria). Finland, where the employment rate is above average, is equally out of line, though in the opposite direction, with the third highest incidence of unemployment among young people in the Union.

There is fairly uniform tendency for long-term rates of unemployment to vary inversely with employment rates, leaving aside Luxembourg which is a special case. Indeed the relationship is closer than for overall unemployment rates (Graph 27).

growth there would have been almost 2 million more people unemployed in Germany in 1998 than there actually were.

The same is true in Sweden, where the fall in unemployment since 1994 is entirely the consequence of a withdrawal of people — mainly women — from the labour market, the number in the work force falling by over 2% of working-age population between 1994 and 1998 following a fall of over 5% in the preceding four years. Indeed, unemployment has come down at the same time as the employment rate has also fallen. Participation has fallen from over 84% of working-age population in 1990 — the highest rate in Western Europe — to 76½%, about the same as in the UK and much less than in Denmark, where participation is still over 83%. Participation also fell markedly in Finland during the early 1990s, though since

the recovery began, the rate has remained much the same.

In all other Member States, apart from Luxembourg, participation either remained unchanged over this period (France, Austria, Finland and the UK) or increased.

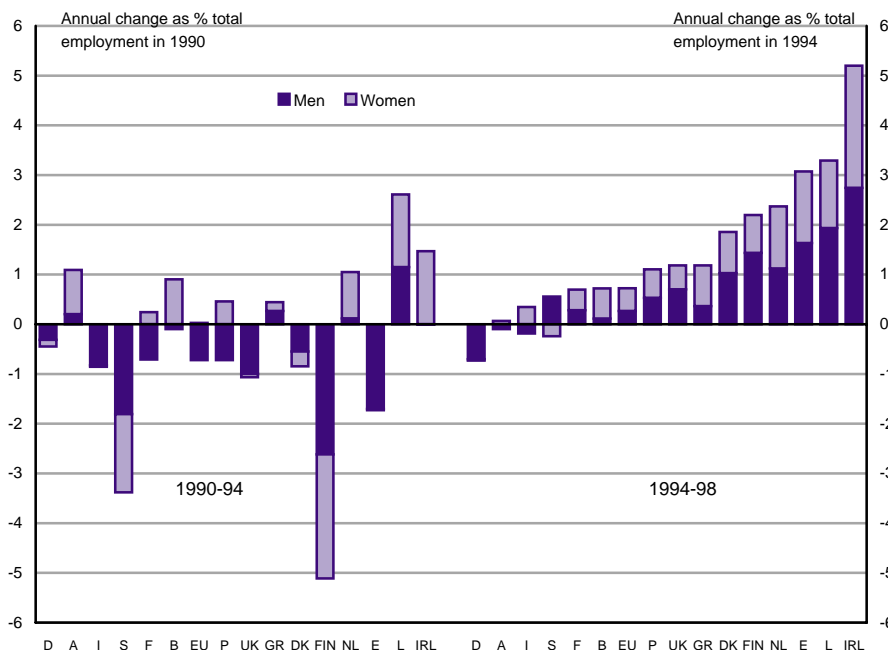
Changes in employment of men and women

The significant rise in men's employment which occurred at the Union level in 1998 was by no means universal across Member States. In both Belgium and Germany, the number of women employed went up in 1998 while the number of men declined, and in Italy, all of the job gains were for women rather than men, who suffered a net fall in employment. In Germany, the fall meant that the number of men in work was almost 2 million less than in 1991 before the

beginning of the recession, a decline of 9% over the period and in the new Länder, a fall of some 16%. This is similar to the decline which has occurred in Finland and Sweden over the 1990s (around 10%), though the fall in the number of women in work has been even more pronounced in both countries (11% in the former, 13% in the latter).

Indeed, in Sweden, the number of women in work fell while the number of men rose, continuing the pattern of recent years. Nevertheless, other than in Sweden, the other two Nordic countries and the UK, women accounted for a disproportionate share of net job creation throughout the Union over the period 1994 to 1998 (Graph 22). (It should be noted that LFS data for 1998, on which the split between men and women is based, are not available for Ireland; see Sources for the method of estimation.)

22 Relative change in employment of men and women in Member States, 1990-94 and 1994-98



The employment of women rose relative to that of men in most countries over the years 1994 to 1998, especially in Belgium, Germany, Greece and Italy. This continues the pattern during the previous 4 years of slow growth or decline, when the number of men in employment fell almost everywhere, while the number of women either increased or remained much the same.

Source: Eurostat benchmark employment series and Union LFS for gender breakdown where this is not given in the benchmark series.

Changes in unemployment of men and women

The rate of women's unemployment was higher than that of men at the last count in all but three Member States — in the UK, Sweden and Ireland — and in the last of these, the difference was very small (Graph 23). In both Sweden and Finland, where women's unemployment was much lower than men's in the early 1990s, the rate for men has fallen by considerably more than for women during the last four years, reflecting the relative rates of employment growth. In Ireland, on the other hand, the unemployment of women has fallen to the same rate as for men over this period whereas previously it was above, again reflecting the higher job growth for women than for men over the 1990s (the number of women in work rose by over 50% between 1990 and 1998, three times the increase for men).

This gap is particularly pronounced in the South of the Union, in Spain (where it amounts to 13 percentage points), Greece (9½ percentage

points) and Italy (7½ percentage points). In these three countries, moreover, the gap widened between 1994 and 1998, unemployment of women rising by more than for men in Greece and Italy and falling by less in Spain.

Youth unemployment

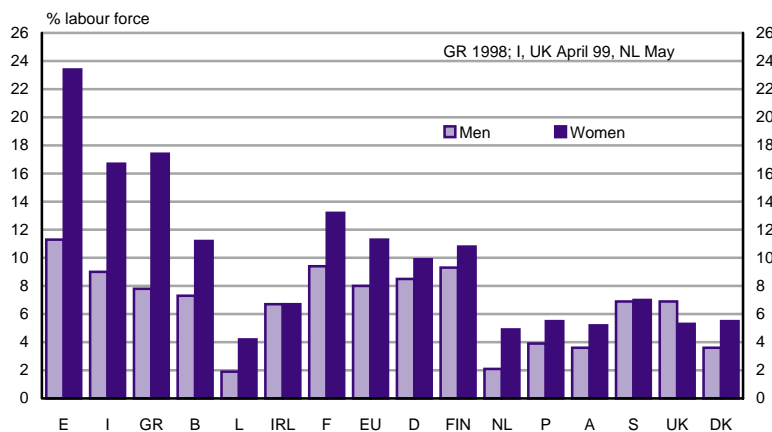
The relative scale of youth unemployment continues to vary markedly across the Union. It is particularly high in Italy and Greece, where over 30% of young people under 25 in the labour force are unemployed, a rate which is 4–4½ times higher than for people of 25 and older. In both these countries, moreover, the rate has not changed much over the past year and at the last count was higher than in 1994. The youth unemployment rate is also high in Spain, but for the first time in many years it is now lower than in Italy. In contrast to the other two countries, it has fallen dramatically since 1994, when it was over 45%, and is continuing to fall rapidly.

Germany remains the only country in the Union where the youth unemployment rate is lower than

the rate for 25s and over, largely because of the relatively low rate in the new Länder (in the older Länder, the youth rate is above the rate for other workers). In only three other Member States — Denmark, Ireland and Austria — is the youth rate less than twice as high as the rate for other workers, and only in a few countries (the latter two plus France, Portugal and Sweden) has the gap narrowed significantly since 1994.

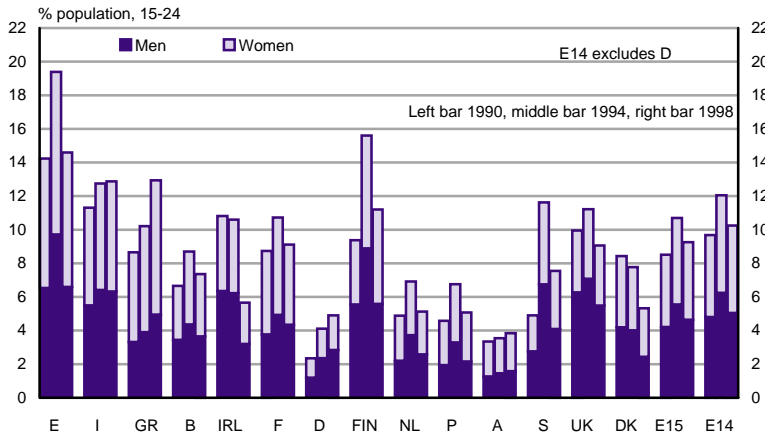
The above figures, however, can give a misleading impression of the changing importance of youth unemployment, given that a growing proportion of young people in most Member States are remaining longer in education and initial vocational training rather than joining the work force. As indicated above, participation of young people in the labour market has declined significantly over the 1990s, from 55% of those aged 15 to 24 in 1990 to only 45% in 1998, much of the decline occurring in the recession years. Whereas the youth unemployment rate in 1998, expressed in relation to the number of people under 25 in the work force, was still significantly above that in 1991 before the

23 Unemployment rates by gender in Member States, June 1999



Countries are ordered by the employment rate in 1998. Unemployment rates for women at the last count were higher than for men in most countries, but especially in Spain (23½%), Greece (17½%) and Italy (16½%), in the former two, over twice the rate for men. The difference was also wide in Belgium and France (4 percentage points) and only in the UK, was the rate for women much less than for men.
Source: Eurostat, comparable unemployment rates.

24 Young men and women under 25 unemployed in Member States, 1991, 1994 and 1998



Countries are ordered by the employment rate in 1998. The number unemployed under 25 in the EU amounted to 9.3% of those aged 15 to 24 in 1998, down from 10.7% in 1994 and up from 8.5% in 1991, the figure for men being much the same as for women. The rise 1991-98 was especially large for Germany and excluding this, there was little change over the period.

Source: Eurostat, Union LFS

onset of recession, 19½% as opposed to 16%, the proportion of those aged 15 to 24 who are unemployed was only slightly higher (just under 9½% as against 8½% — Graph 24).

Because the number of young people has also fallen over this period, those under 25 represent only around 25% of the total unemployed in the Union at present as compared with 33% in 1991 and 40% in the mid-1980s, and only around 10% in Germany.

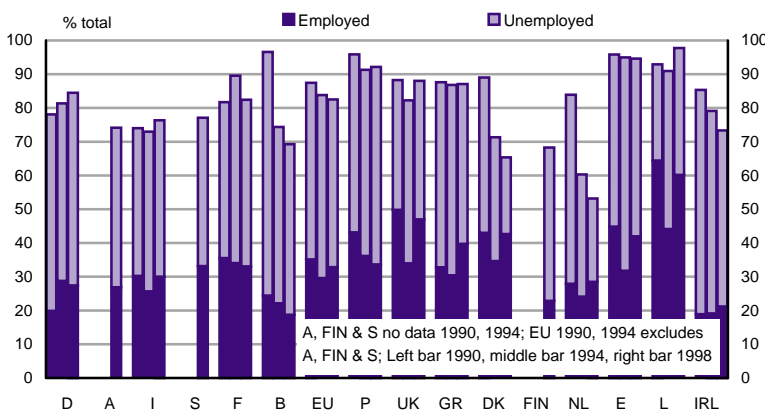
The success of the unemployed in finding work

Just under a third of men of working age in the Union (32½%) unemployed when the LFS was conducted in 1997 were in work one year later at the time of the 1998 LFS (Graph 25). This compares with a figure of 31% for those in work in 1997 who had been unemployed one year before and a figure of 29½ in 1994 at the end of the recession. The higher rate of net job creation during 1998, therefore,

seems to have made it slightly easier for the unemployed to find a job. Nevertheless, the figure is still lower than in 1990 (35%) at the end of the period of high employment growth.

The relative number of men unemployed in 1997 who were in work in 1998 varies markedly between countries. Between 1997 and 1998, there was a rise of more than 1 percentage point in the success rate in only half of the 12 Member States for which data are available —

25 Current work status of men aged 15-64 unemployed one year previously in Member States, 1990, 1994 and 1998



Countries are ordered by the growth of employment 1994-98. The number of men in work in 1998 having been unemployed one year earlier varied from over 40% in Denmark and Portugal – and over 60% in Luxembourg – to only just over 20% in Ireland and Finland and under 20% in Belgium. In Belgium, Germany, Greece, Spain and Ireland, over half were still unemployed.

Source: Eurostat, Union LFS

Germany, Spain, Luxembourg, the Netherlands, Portugal and the UK. With the exception of Germany, these are all countries in which employment increased significantly in 1998. Apart from Germany, these countries also showed a rise in the success rate relative to 1994, as did Denmark and Italy. In Belgium, Greece and France, however, as well as Germany, the relative number of unemployed men finding work within a year was lower in 1998 than in 1994.

Only some 27% of women in the Union unemployed at the time of the 1997 LFS were in work one year later by the time of the 1998 LFS (Graph 26). This is a lower proportion than for men, though still higher than the comparable figure for 1997 (26%) and 1994 (25½%), if slightly below the figure for 1990 before the onset of recession (28%). These figures suggest that, while there was an improvement in the chances of unemployed women finding work in 1998, it was not as large as for men.

In 9 of the 12 Member States for which data are available for both years, the proportion of women

unemployed in 1997 who were in work in 1998 was higher than one year before, and only in Belgium, Greece and France was the figure lower. These countries, together with Germany, were also the only ones in which the chances of an unemployed woman finding a job during 1998 seem to have been less than in 1994.

Long-term unemployment

The rate of long-term unemployment (ie relative to the labour force) declined in most Member States in 1998. It increased, however, in Belgium, Greece, France and Austria as well as in Luxembourg (where the number is very small) — in France, despite the fall in overall unemployment — and in Germany, Italy and Sweden, it declined by less than the overall rate. Indeed, in these three countries, as well as in Greece, the long-term unemployment rate was significantly higher in 1998 than it had been in 1994 at the end of the recession period (over 1 percentage point higher) — it was also higher in France, Austria and Luxembourg — and, indeed, higher than in 1987 at the beginning of the period of high job growth and

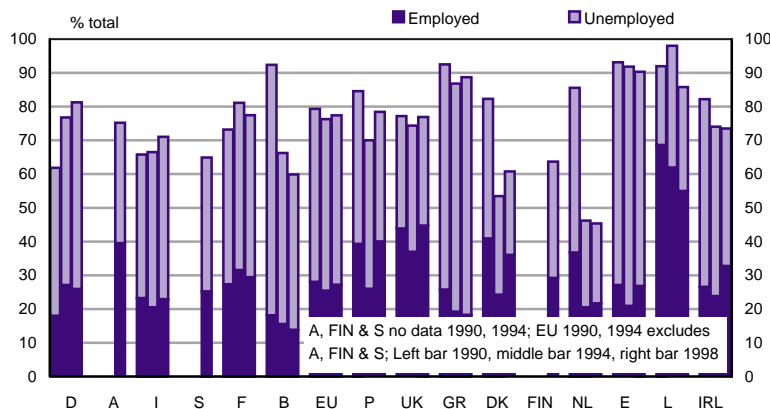
falling unemployment in the late 1980s (Graph 27).

Moreover, in all these countries, except Luxembourg (where the numbers are too small to be reliable) and Sweden (where, according to the LFS, no-one is unemployed for more than two years), but with the addition of Belgium and Portugal, the rate of very-long-term unemployment (the proportion of the work force unemployed for two years or more) has also increased over the period since 1994. There were, therefore, only 6 countries in the Union in which the number of very long-term unemployed had by 1998 come down over the recovery period. The rise was particularly pronounced in Germany and Italy (where the number affected went up by over half and almost a third, respectively), which in 1998 together accounted for almost 50% of the total number unemployed for two years or more in the Union (1.2 million in the former, 1.3 million in the latter).

Part-time employment

Some 6% of men in employment in the Union and around 33% of women worked part-time in 1998,

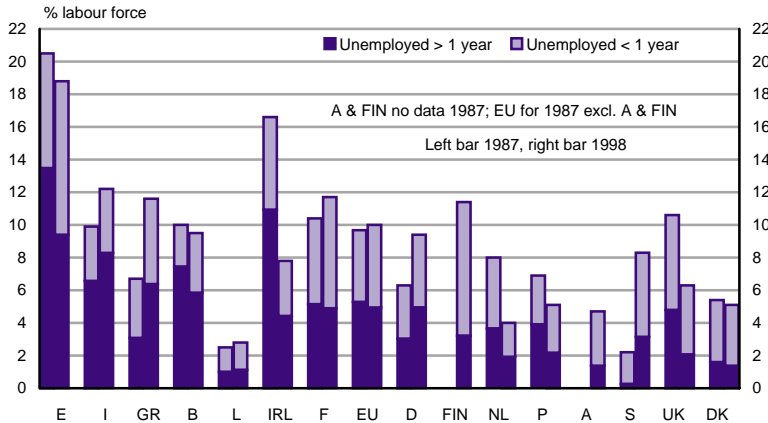
26 Current work status of women aged 15-64 unemployed one year previously in Member States, 1990, 1994 and 1998



Countries are ordered by the growth of employment 1994-98. The number of women employed in 1998 who had been unemployed a year earlier ranged from 55% in Luxembourg, 45% in the UK and 40% in Portugal to well under 20% in Belgium and Greece. In the latter, as well as in Spain, over 60% were still unemployed, while in Denmark and the Netherlands, a significant proportion had withdrawn from the work force.

Source: Eurostat, Union LFS

27 Total and long-term unemployment rates in Member States, 1987 and 1998



Countries are ordered by the employment rate in 1998. The rate of long-term unemployment in 1998 (those unemployed for a year or more relative to the labour force) varied from 9½% in Spain and 8% in Italy to under 1½% in Denmark, Luxembourg and Austria. The rate was higher than in 1987 in Belgium, Greece, and Italy, as well as in Luxembourg, but much lower in Ireland, the Netherlands and the UK.

Source: Eurostat, *Union LFS and comparable unemployment rates*.

both figures higher than in 1997 reflecting the continuing high rate of growth of part-time jobs for men as well as women. Part-time working, however, varies markedly across the Union, from 18% for men and 68% for women in the Netherlands to under 4% for men and under 20% for women in Greece, Spain and Italy (Graphs 28 and 29).

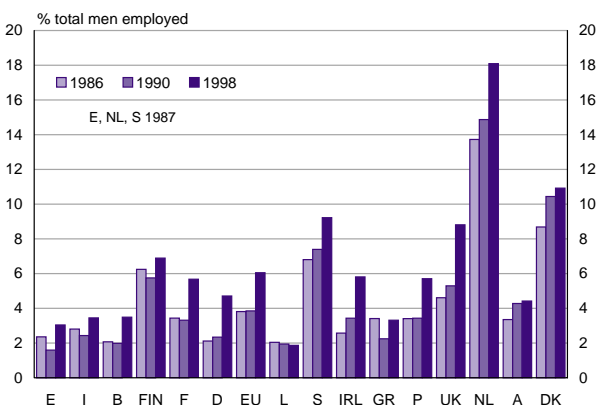
Although the number of full-time jobs in the Union increased by as much as part-time jobs in 1998, this trend was not common to all Member

States. In Germany, in particular, the number of people working full-time fell by 1%, a reduction of almost 300 thousand, whereas the number employed part-time increased by slightly more. In Belgium and Austria, full-time employment also declined to a similar extent, though in both cases, an increase in part-time employment much more than compensated for this. In all three of these countries, there were fewer people working full-time in 1998 than in 1994, in Germany 6% fewer and almost 12%

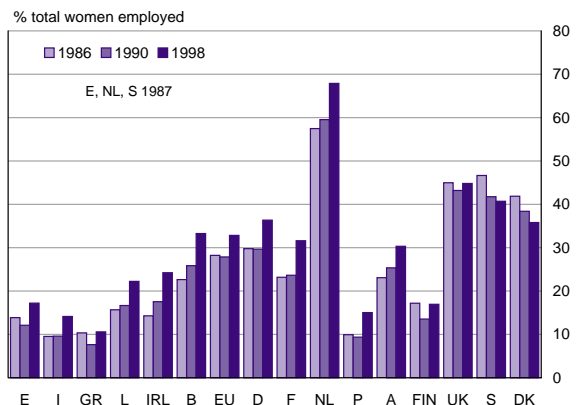
fewer than in 1991 at the start of the recession, a reduction of over 3½ million. In all three, the number of people employed part-time was significantly higher, though in Germany and Austria, not by enough to offset the fall in full-time working which affected both men and women.

Indeed, in all Member States with the sole exception of Sweden, part-time employment increased between 1994 and 1998, by an average of 14% overall, and by over 30% in Greece, Spain, Luxembourg and

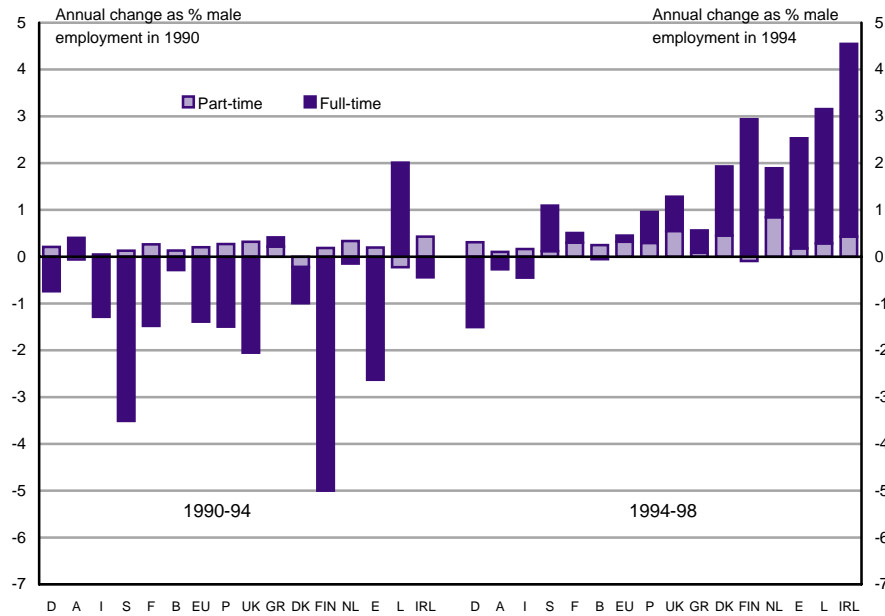
28 Men employed part-time in Member States, 1986, 1990, 1998



29 Women employed part-time in Member States, 1986, 1990, 1998



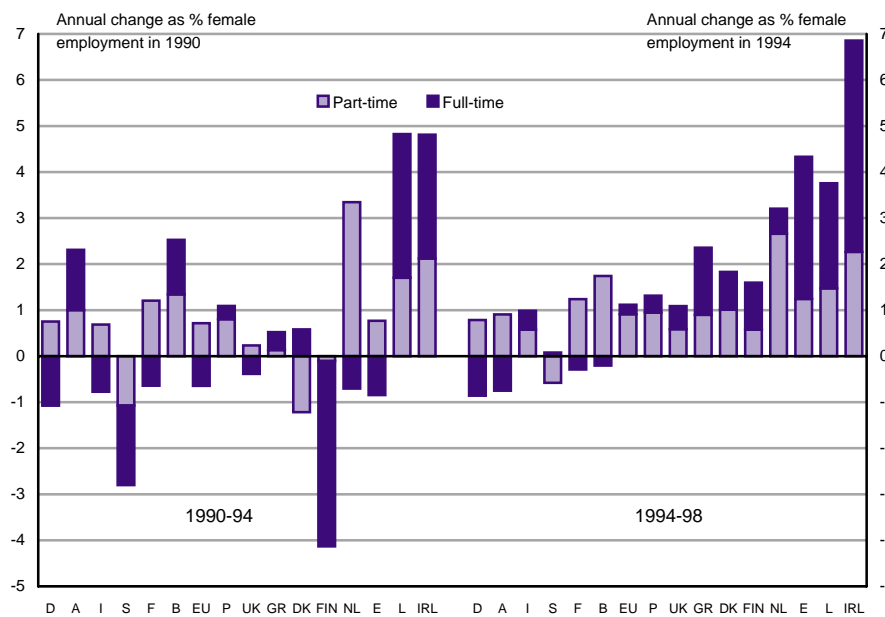
30 Contribution of part-time and full-time jobs to the change in male employment in Member States, 1990-94 and 1994-98



Countries are ordered by the change in employment 1994-98. There was a relative growth in the number of men employed part-time in nearly all countries in the years 1994-98, just as in the 4 years before. In Belgium, Germany, Italy and Austria, this was accompanied by a fall in the number of men employed full-time, following a fall in the earlier period in all but 3 countries.

Source: Eurostat, Union LFS and benchmark employment series.

31 Contribution of part-time and full-time jobs to the change in female employment in Member States, 1990-94 and 1994-98



Countries are ordered by the change in employment 1994-98. The number of women employed part-time increased disproportionately in most countries in the years 1994-98, as in the 4 years before. In Belgium, Germany, France, Austria and Portugal, the number working full-time declined, following a fall in all of these countries bar Austria in the earlier period, as well as Spain, Italy, Finland, Sweden and the UK.

Source: Eurostat, Union LFS and benchmark employment series.

Comparative employment performance

Employment rates and part-time working

There is a general tendency for full-time jobs to have increased by more the higher the overall rate of employment growth over the 4 years 1994 to 1998, and this applies both to men and women. Conversely, the growth of part-time working seems to be a means of maintaining more people in employment where the overall rate of net job creation is low. This was particularly the case during the early 1990s, but it is also true for Germany and Austria in more recent years (Graphs 30 and 31).

There is also an association, if not wholly systematic, between the extent of part-time working and the level of employment in 1998. This could reflect a parallel tendency for both employment rates and the extent of part-time working to be high in the North of the Union and low in the South, which in some degree reflects differences in the level of economic development.

In 3 of the 4 Member States with the highest employment rates among men, the proportion of men in part-time jobs is well above average, while the three countries with the lowest rates all have a below average share of men working part-time (Graph 28, in which countries are ordered by the employment rate of men in 1998). The same is true of women, for whom the association is slightly stronger, though Portugal, Austria and Finland demonstrate that it is not essential to have a large number of women in part-time jobs to have a large number of women in work (Graph 29, in which the countries are ordered by the employment rate of women in 1998).

Ireland (in the last by over 40%), all countries in which the relative number working part-time is well below the Union average (just under 17½%). The growth of part-time working is true of both men and women, and, in most countries, it has been significantly higher than the increase in full-time jobs (Graphs 30 and 31).

In Sweden, however, where the proportion of people working part-time is well above the Union average (24%), part-time employment declined in 1998 as in the preceding two years while full-time employment increased. All of the fall was among women, who also experienced a much smaller rise in full-time jobs than men, and the

number of men working part-time rose slightly. This again is in line with the pattern of recent years.

Full-time equivalent employment

The significant variation in the extent of part-time working across the Union means that there is much less of difference in employment rates measured in these terms than in those measured in terms of numbers of people. The growth of part-time working throughout the 1990s also means that employment in terms of hours worked, or full-time equivalents, has risen by less — or fallen by more — in most

Member States than the number of people in work (Graph 32).

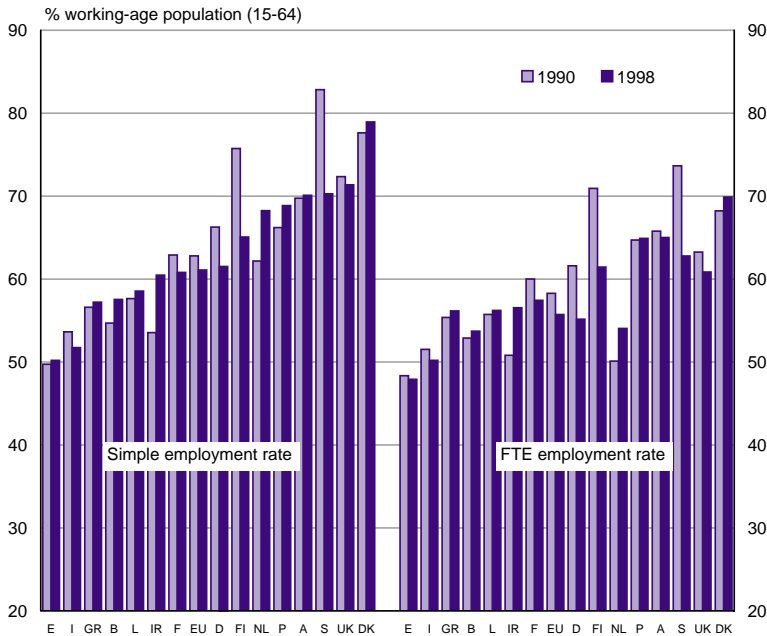
Whereas simple employment rates varied from 50–55% to 65–70% across the Union in 1998, leaving aside Denmark where the rate is much higher than anywhere else, FTE employment rates varied from 50–55% to 60–65%, reflecting the contribution made by part-time working to high levels of employment in countries where the latter is highest. Moreover, the number of Member States showing significant rises in the employment rate over the 1990s is reduced to just two — Ireland and the Netherlands — measured in FTE terms, while the small rise in Spain and Austria in terms of the simple rate is transformed into a decline.

Unemployed moving into part-time jobs

Despite the continued increase in the relative number of people working part-time in 1998, there was a small fall in the proportion of those previously unemployed moving into part-time rather than full-time jobs. Just over 13% of men in the Union who were unemployed a year before the 1998 LFS and who had found work since were employed in part-time jobs in 1998, over twice the average proportion of men working part-time. It was, however, lower than the comparable figure for 1997 (almost 14%), but marginally higher than in 1994 and substantially higher than in 1990 (7½%) (Graph 33).

In addition, some 40% of women in the Union who were in employment in 1998 after being unemployed a year earlier were working part-time. As for men, this was slightly lower than the equivalent figure for 1997 (40½%), but unlike for men, also lower than in

32 Simple and full-time equivalent employment rates in Member States, 1990 and 1998



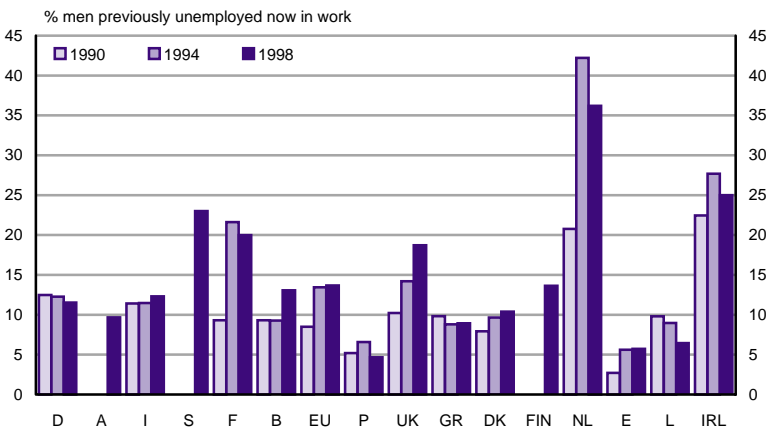
1994, though still well above the 1990 figure (32%) (Graph 34).

Although most of the men and even more of the women working part-time appear to do so out of choice, a significant and growing proportion (just under 40% of men and 16% of women in the Union) do so because they cannot find full-time employment (see Box).

Temporary jobs

The number of people working in jobs with fixed-term contracts increased significantly in 1998, continuing the trend towards temporary employment which has been evident since the onset of recession in the early 1990s. Whereas in the years of high net job creation in the late 1980s, the number employed on temporary contracts declined relative to those on permanent — or, more accurately, standard — ones in most Member States, this has not happened during the present recovery. Nevertheless, despite the growth, it remains the case that in most parts of the Union only relatively few of those in work have temporary contracts of employment (12% of men and

33 Previously unemployed men in part-time employment in Member States, 1990, 1994 and 1998



Countries are ordered by employment growth 1994-98. The proportion of men in work in 1998 who had been unemployed a year before and had moved into a part-time job varied from 36% in the Netherlands - where more men than elsewhere work part-time (18%), and 23-25% in Ireland and Sweden to 5-8% in Greece, Spain, Portugal and Luxembourg, still around twice the proportion of men working part-time.

Source: Eurostat, Union LFS.

Voluntary and involuntary part-time working

Most of the people working part-time in the Union, 80% of whom are women, do so because they do not want a full-time job. In some cases, especially among the young, this is because they are combining paid employment with continuing their education. In others, it is because they are semi-retired or, especially among women, have caring responsibilities which make it difficult to work full-time. Some people, however, work part-time because they are unable to find a full-time job and the only alternative is not to work at all. Just how many people are in this position is an important question for policy purposes since it throws light on how far part-time jobs are, in practice, a satisfactory substitute for full-time ones. This is given added importance by the significant growth of part-time working during the 1990s, as well as by the increasing efforts made in many Member States, especially those where few people work part-time, to encourage their further growth.

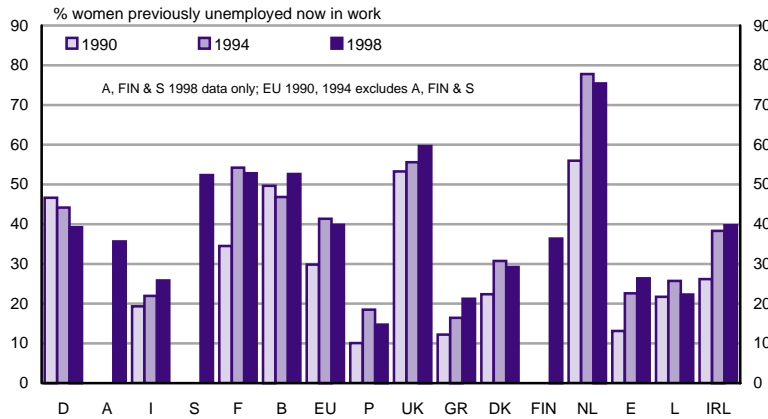
The Union LFS provides an insight into this issue by asking respondents the main reason why they work part-time and, in particular, whether they do so because they could not find a full-time job or because they did not want one. The answers, however, need to be interpreted with caution since not wanting a full-time job may have more to do with force of circumstances — such as not being able to reconcile family responsibilities and doing a paid job in any other way — rather than with a genuine desire to work part-time. Accordingly, the answers may understate the number of people who, given a free choice, would prefer to work full-time rather than part-time.

In practice, a relatively small but growing proportion of those aged 25 to 49 working part-time in the Union do so because they cannot find a full-time job. In 1998, just under 40% of men in this age group in the Union were in this position, or under 1½% of men in employment (Graph 35). The figures are higher, however, in France, Ireland, Finland and Sweden, in each of which around 2½% of men in employment worked part-time for this reason. Moreover, in most countries — the main exceptions being Italy and the Netherlands — the relative number has increased during the 1990s (on average, from ½% of the total in work in 1991 to 1½% in 1998). The growth of part-time working among men, therefore, has to a large extent been involuntary and seems to have stemmed more from employers seeking to increase the flexibility of working arrangements than more men wanting to have a part-time rather than a full-time job.

A much smaller proportion of women in this age group working part-time do so because they could not find a full-time job, only around 16% in 1998 in the Union as a whole (Graph 36). Nevertheless, this represents 5% of all women in work and the figure has doubled over the 1990s. The figure, moreover, is much the same across the Union, irrespective of the relative number of women working part-time. Interestingly, Luxembourg aside, it is lowest (at under 4% of all women employed) in the Netherlands and the UK, the countries with the largest proportion of women in part-time jobs. In addition, the relative number of women working part-time involuntarily is much higher in Sweden than anywhere else (just under 13% of all women employed, almost 40% of those working part-time), a country where there has been a marked shift away from part-time working.

A similar shift has occurred for women in this age group in the UK, a shift which has been offset by a large rise in part-time working among women aged 20 to 24. Such an increase is equally evident in all other Member States, the proportion in this age group employed part-time in the Union rising from 14% in 1991 to almost 25% in 1998, and has been accompanied by a similarly large rise among men of this age, from 5% to 11%. Moreover, an increasing number of these have taken part-time jobs because they could not find full-time ones — over 8% of women in this age group in work in 1998, around a quarter of all those working part-time, as against only 3% in 1991.

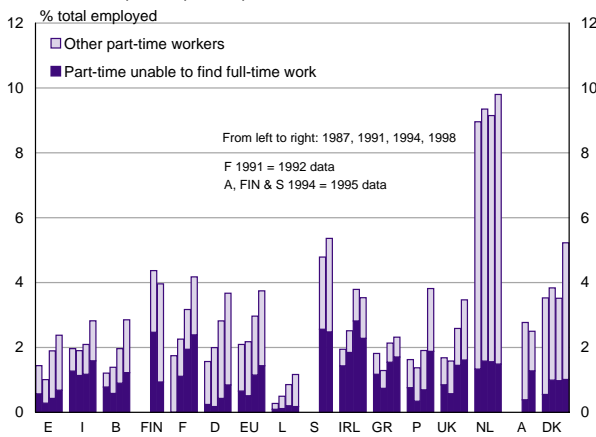
34 Previously unemployed women in part-time employment in Member States, 1990, 1994 and 1998



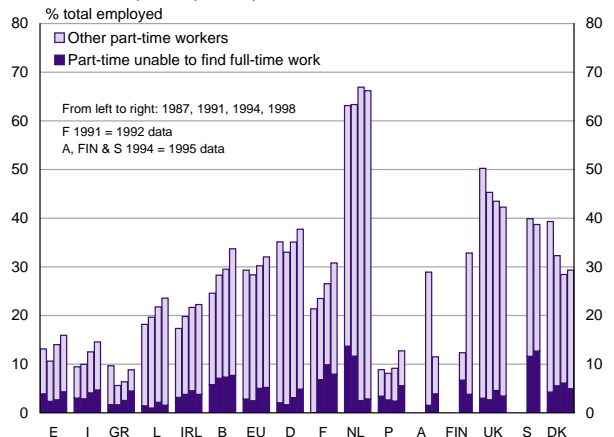
Countries are ordered by employment growth 1994-98. The proportion of women in employment in 1998 who had taken up a part-time job after being unemployed the year before varied markedly across the Union and not altogether in line with the share working part-time. It was over 50% in Belgium and France, some 20 percentage points higher than the part-time share. In Denmark, it was below the part-time share.

Source: Eurostat, Union LFS.

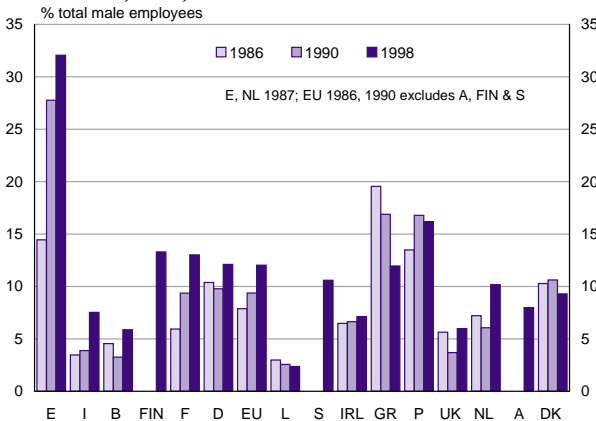
35 Men aged 25-49 employed part-time in Member States, 1987, 1991, 1994 and 1998



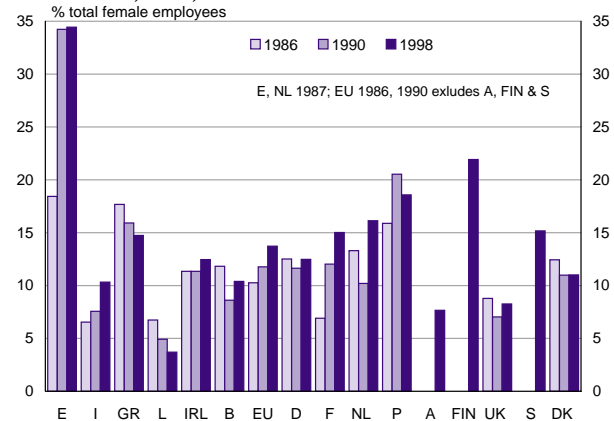
36 Women aged 25-49 employed part-time in Member States, 1987, 1991, 1994 and 1998



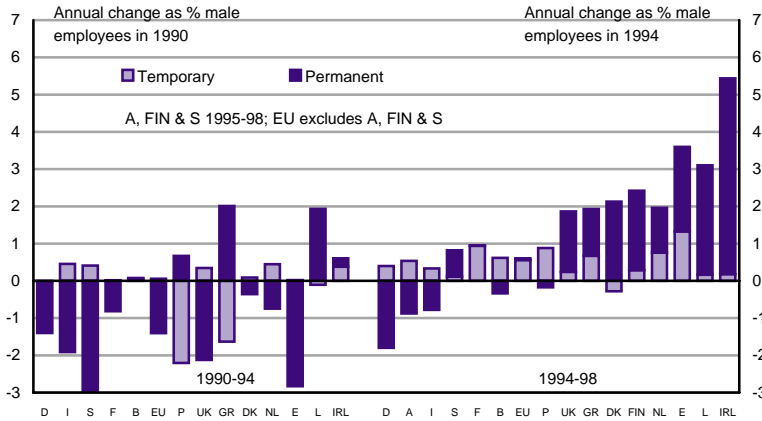
37 Men employed in temporary jobs in Member States, 1986, 1990 and 1998



38 Women employed in temporary jobs in Member States, 1986, 1990 and 1998



39 Contribution of temporary jobs to the change in male employees in Member States, 1990-94 and 1994-98



Countries are ordered by employment growth 1994-98. In all countries bar Denmark the number of men employed in jobs with fixed-term contracts increased in the years 1994-98. In Belgium, Germany, Italy, Austria and Portugal, this was accompanied by a decline in the number of men working in permanent jobs, the first four, countries where full-time employment of men also fell.

Source: Eurostat, Union LFS and benchmark employment series.

13½% of women in the Union — Graphs 37 and 38).

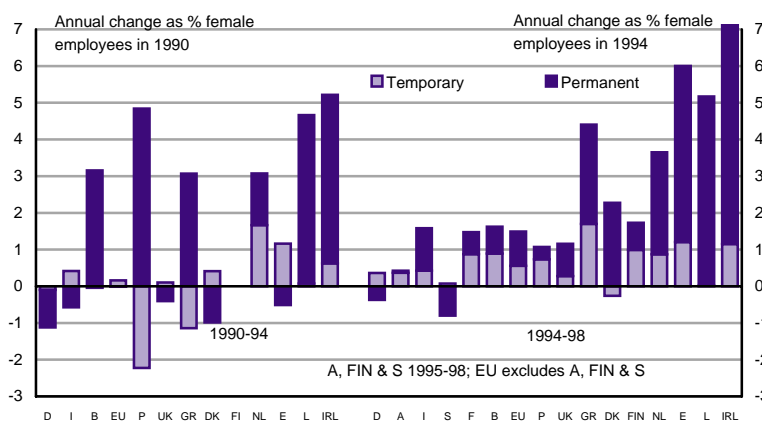
For the first time in the present recovery, growth in the numbers working in jobs with permanent contracts of employment in 1998 exceeded those working in temporary ones. Nevertheless, over 40% of the increase in employment in the Union was accounted for by temporary jobs — 42% in the case of men, 40% for women.

For men, the increase in permanent jobs was the first significant rise (there was a marginal increase in 1997) since the recovery began and, therefore, since 1991. Nevertheless, it still means that between 1994 and 1998, over 85% of the net additional jobs created for men were ones with fixed-term contracts rather than standard ones (Graph 39). The relative growth in temporary working was a feature of all Member States, apart from Denmark (the only country where temporary working declined).

A similar shift is also evident for women. Over the four years 1994 to 1998, some 39% of the net additional jobs filled by women were temporary ones (Graph 40). Moreover, as for men, there was a relative increase in fixed-term jobs in all but three Member States — Denmark (again the only country where the number fell), Italy and Luxembourg.

A further feature of developments is that disproportionate number of those employed in temporary jobs

40 Contribution of temporary jobs to the change in female employees in Member States, 1990-94 and 1994-98



Countries are ordered by employment growth 1994-98. The number of women working in jobs with fixed-term contracts rose disproportionately in all countries except Denmark (where there was a fall), Italy and Luxembourg, while the number in permanent jobs fell in four Member States, Germany, Austria, Portugal and Sweden – in the first three as for men.

Source: Eurostat, Union LFS and benchmark employment series.

Temporary working among part-timers

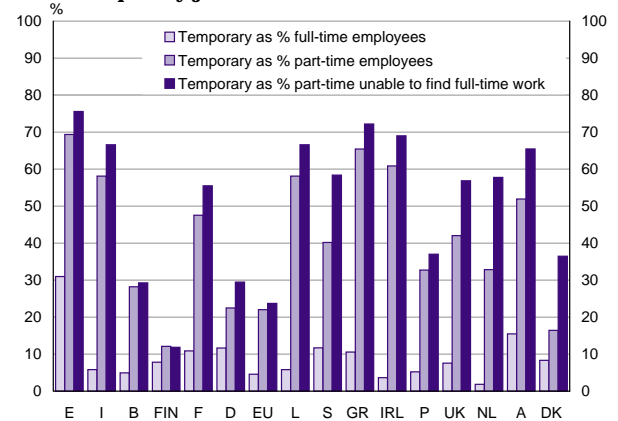
Men and women working part-time are more likely to be in jobs with fixed-term contracts than those working full-time. This is particularly so in the case of men, for whom part-time work is also very often temporary work. In 1998, only around 10% of men in full-time employment in the Union had temporary jobs, and the figure was above 10% only in 5 Member States. Over 31% of men employed part-time, however, were in temporary jobs, over 50% in Spain and Portugal and over 60% in Greece and Ireland (Graph 41 in which countries are ordered by the employment rate of men in 1998).

As might be expected, the relative number of men in temporary jobs is particularly high for those working part-time because they could not find a full-time job. In 1998, some 45% of men in the Union falling into this category were in jobs with fixed-term contracts. In Greece and Spain, the figure was well over 70%, in Ireland, only just below, and in 5 other Member States, over 50%.

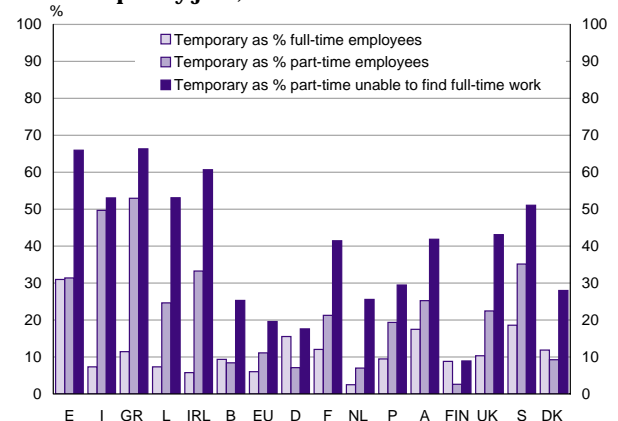
For women, there is much less of a difference in temporary working between those in full-time and those in part-time jobs. In 1998, around 15% of women working part-time were in jobs with fixed-term contracts as compared with just under 13% of those working full-time (Graph 42 in which countries are ordered by the employment rate of women in 1998). As for men, the proportion of part-time employees in temporary jobs was particularly high in Greece and Spain (over 50% in both) and well above average in Ireland (around a third) and Portugal (almost 30%), as well as in Finland (almost 40%).

Again as for men, many of the women working part-time because they could not find a full-time job were in temporary jobs. Over a third of women employed part-time in the Union in 1998 falling into this category had jobs with fixed-term contracts, almost two-thirds in Greece and Spain and over 60% in Ireland.

41 Part-time and full-time men employees in temporary jobs, 1998



42 Part-time and full-time women employees in temporary jobs, 1998



Comparative employment performance

Employment rates and temporary working

There is very little relationship between employment rates and the extent of temporary working (Graphs 35 and 36). The latter is most important in the South of the Union in countries with relatively low levels of GDP per head — Spain, Portugal and Greece — and which, perhaps more importantly, have relatively tight restrictions on hiring and firing, but also in Finland, France and Germany, where restrictions are also relatively tight.

There is, however, some tendency for permanent jobs to have risen by most in those Member States where overall employment growth was highest over the 4 years 1994 to 1998 and, conversely, for most of the additional jobs created in countries where growth was low to have been temporary (Graphs 39 and 40). The growth of temporary jobs was particularly evident during the recession of the early 1990s.

work part-time rather than full-time, implying that these two aspects of labour market flexibility tend to reinforce each other (see Box).

Unemployed moving into temporary jobs

A high proportion of the unemployed finding work in the Union tend to move into a temporary rather than a permanent job. This

not only reflects the relative scarcity of jobs with standard terms and conditions, but also the growing practice by employers to take on people on a trial basis, either to check their suitability or to see whether there is sufficient work for them to do.

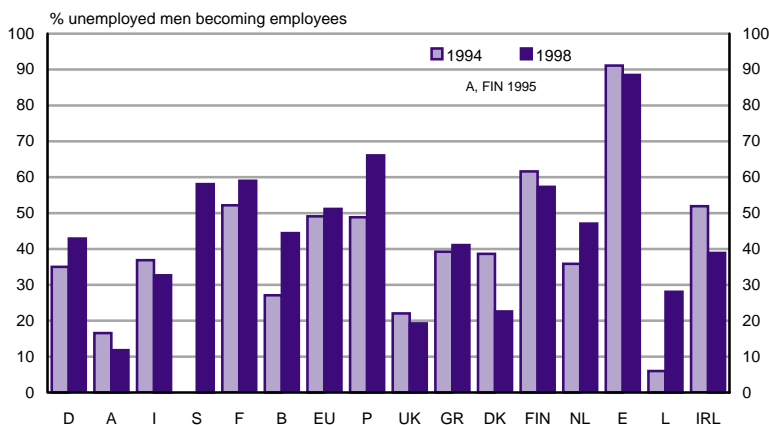
In 1998, just over half of men and around 55% of women in the Union who had previously been unemployed took up a job with a

fixed-term contract (Graphs 43 and 44). Both figures, however, are lower than the year before, the figure for women only slightly (½ percentage point), that for men, significantly (3½ percentage points). Nevertheless, both remain well above the prevailing share of men and women in temporary jobs.

Self-employment

Whereas total employment increased significantly in 1998, the number of self-employed in the Union remained much the same, as it did in 1997. Accordingly, their share of the total in work fell to just over 14½%. The reason for the fall, however, is the marked decline of employment in agriculture (of 3½%) which was composed mainly of the self-employed (though unpaid family workers declined by even more than the self-employed). Since around 17% of the self-employed in the Union work in agriculture (who account for 53% of all those employed in the sector), as opposed to under 2% of wage earners, the continuing exodus from the sector tends to have a significant effect on the overall figures and distorts the trend for self-employment.

43 Men previously unemployed in temporary jobs in Member States, 1994 and 1998



Countries are ordered by employment growth 1994-98. The proportion of men finding work after being unemployed a year earlier who moved into jobs with fixed-term contracts in 1998 was over 40% in all but 6 countries and around 60% or more in Spain, France, Portugal, Finland and Sweden. The figure was lower than in 1994, however, in half of the countries.

Source: Eurostat, Union LFS.

To allow for this, the focus needs to be on changes in self-employment in industry and services. In these two sectors taken together, just under 13% of those in work in the Union were self-employed, much the same as in 1994 but slightly higher than in 1990 (Graph 45).

The number of self-employed in the Union (excluding agriculture), both with and without employees, changed little in 1998, whereas the number of wage earners went up by over 1½%. Only Belgium, Germany and Austria registered a larger rise in self-employed than in wage earners. In the Netherlands, Finland, Sweden and the UK, the number of self-employed declined.

The pattern of change in 1998 was broadly in line with that over the recovery period as a whole. Over the four years 1994 to 1998, the number of self-employed in industry and services rose by slightly less than the number of wage earners, by around 3% (as against just under 4%), the increase for those with employees being much the same as for those without (Graph 46).

Comparative employment performance

Employment rates and self-employment

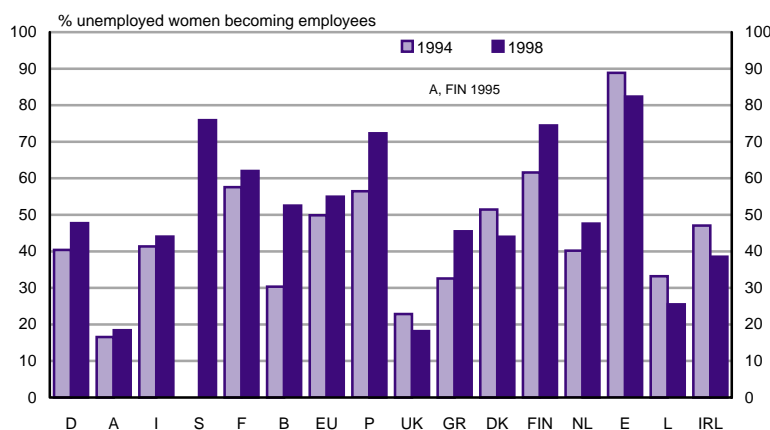
A fairly close inverse association is evident between the level of self-employment and employment rates, the extent of self-employment tending to be greatest in countries where employment rates are lowest, even if agriculture is excluded (Graph 45). This, however, may reflect the relatively low level of GDP per head in these countries and the related structure of economic activity, which tends to be biased towards sectors dominated by small businesses (see *Employment in Europe 1998*, Part II, Section 1). It is also affected by fiscal and other institutional arrangements (such as whether managers of small firms are treated as employees or self-employed), which in part explains the relatively high level of self-employment in Belgium.

There also seems to be some inverse relationship between overall job growth over the period 1994 to 1998 and the increase in the relative number of self-employed. The contribution of self-employment to the total number in work was greatest in the 4 Member States with the lowest rate of net job creation over the period and small in most of the countries experiencing a high rate (Graph 46).

In France, the Netherlands and the UK, the number of self-employed fell over this period and only in Belgium, Denmark, Germany, Italy and Austria did the number increase relative to that of wage earners. On the other hand, in 10 of the 13 Member States for which data are available — all but

Germany, Finland and the UK — there was a relative rise in the number of self-employed with employees. This may be indicative of a growth in the number of small firms, though any such interpretation is hazardous (see Box).

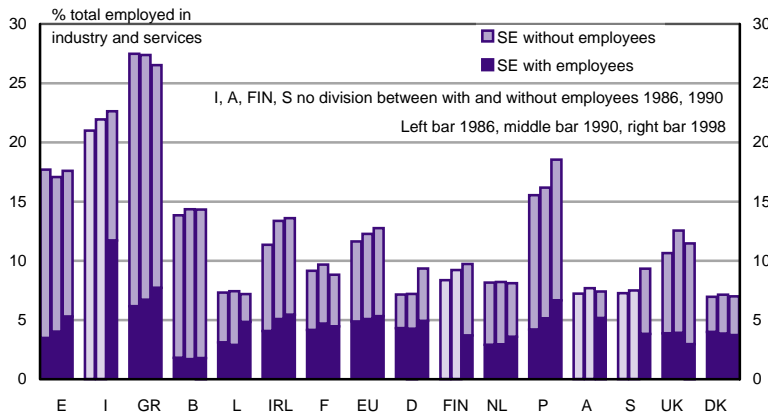
44 Women previously unemployed in temporary jobs in Member States, 1994 and 1998



Countries are ordered by employment growth 1994-98. The proportion of women moving into jobs with fixed-term contract after being unemployed a year before, as for men, is much higher than the overall share of working in such jobs. It was over 40% in all but 4 countries in 1998 and higher than in 1994 in 9 of the 14 for which there are data, most especially in Belgium, Portugal and Finland.

Source: Eurostat, *Union LFS*.

45 Self-employed in industry and services in Member States, 1986, 1990 and 1998



Countries are ordered by the employment rate in 1998. Self-employment, even excluding agriculture, is most prevalent in the four Southern Member States and least prevalent (under 8% of the total number in work in 1998) in Denmark, Luxembourg, the Netherlands and Austria. In most countries, except in the South, bar Italy, and Belgium, around half of the self-employed have employees.

Source: Eurostat, Union LFS and benchmark employment series.

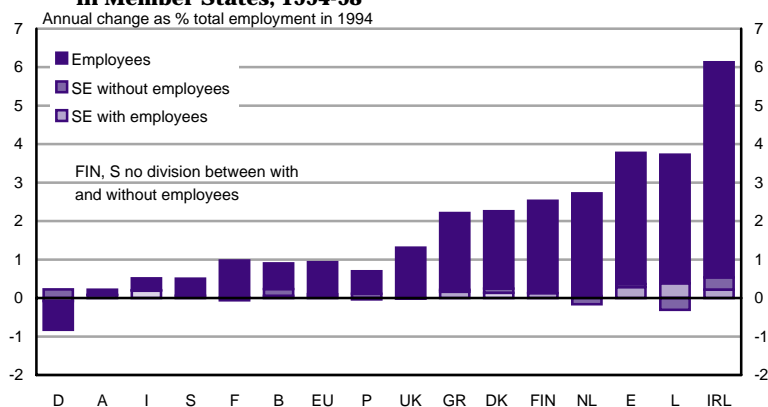
Self-employment and entrepreneurship

Care is needed in interpreting the figures for changes in self-employment. While it may be tempting to regard the growth in the number of self-employed, especially in those with employees, as a proxy for the spread of entrepreneurship as advocated in the Employment Guidelines, there are reasons why this might not be justifiable. In particular, the status of being self-employed may have more to do with legislative and fiscal systems in operation and the scope or incentive they imply for adopting this status rather than that of an employee. A relative increase in the number of self-employed, therefore, may be the result of a change in these systems

rather than of a genuine growth in the number of businesses. Equally, a decline may stem from the authorities clamping down on people who are so registered merely to reduce the tax or social charges they pay, rather than of business closures.

The acute lack of data on business start-ups, or closures, however, means that there is no real alternative indicator of the growth of new enterprises across the Union — though Eurostat is in the process of developing data on enterprise demography — so that despite its shortcomings, the growth of self-employment tends to be used for this purpose.

46 Contribution of self-employed with and without employees to the change in total employment in industry and services in Member States, 1994-98



Countries are ordered by overall employment growth 1994-98. Over the recovery years 1994-98, the number of self-employed with employees went up in industry and services in all Member States, except in Germany and the UK, while the number without employees fell in France, Luxembourg and the Netherlands as well as in the UK (and probably in Sweden, but data are not available for all years).

Source: Eurostat, Union LFS and benchmark employment series.

Sectoral shifts in employment

The shift of employment to services continued in the Union in 1998, but for the first time during the present recovery there was an increase in the number employed in industry (of 1% across the Union as a whole), the rise being common to all Member States except Belgium, Germany and Luxembourg. The increase was particularly marked in Spain, Finland and, probably, Ireland (all over 5%), all countries in which there was high overall employment growth during the year.

The growth of employment in industry more than compensated for the significant loss of jobs in agriculture (the number employed in the Union declining by almost 3½%), whereas in previous years it had reinforced the fall. As a result, all of the expansion of employment in services (just over 1½%) went to increasing the number in work in the economy as a whole, the rise being particularly marked in business services (6%).

Despite the growth in 1998, the number employed in industry in the Union was still lower than at the beginning of the recovery period in 1994 (by over 1%). Employment in agriculture has come down much more sharply, falling by over 10% over the four years. Job losses in these two sectors served to reduce the total number employed in the Union by around 1% over this period. This was more than offset by job gains in services, of 6% between 1994 and 1998, adding just under 1% a year to total employment (Graph 47).

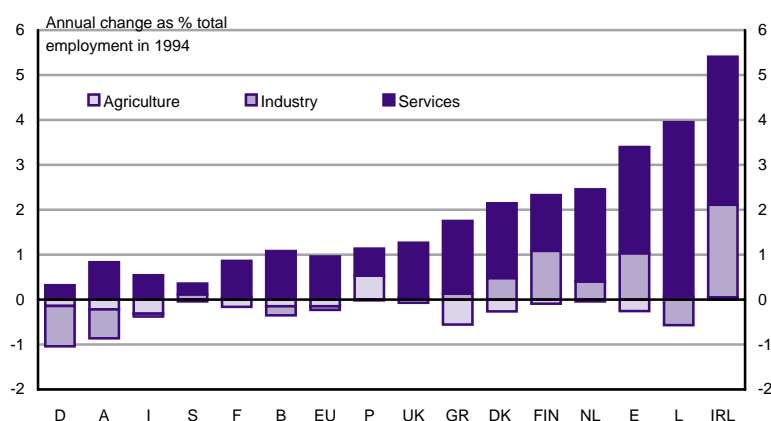
The reduction in employment in industry in the Union was predominantly due to a large fall in Germany, where the number fell by 10%, bringing the total fall since 1991 to over 20%, enough to reduce total employment by almost 1% a year. The decline in Austria was also large over this period. Apart from in Belgium, Italy and Luxembourg, industrial employment rose in all other Member States between 1994 and 1998. As a result, the employment rate in industry — the number employed in the sector relative to working-age population — went up in 5 Member States (Denmark, Spain, Ireland, the

Netherlands and Finland) and remained unchanged in the UK.

The number employed in services has increased in all Member States since 1994, even in Germany and Austria, where the total number in work fell. In consequence, the employment rate in services increased throughout the Union over these four years, except in Sweden, raising the average rate from 38½% to just under 40½%.

Within services, job growth since the recovery began, as before, has been highest in business activities (4½% a year between 1994 and 1998), followed by health and social services and recreational activities (2% a year), while employment declined in public administration, reflecting the widespread squeeze on government spending (see Part II, Section 2 below for a more detailed analysis). The pattern of growth was similar in most Member States, with notable exceptions. In particular, whereas jobs in business services increased significantly in all countries, especially in the South of the Union (by 9% a year in Spain, 8½% in Greece and 7½% in Italy), where they are

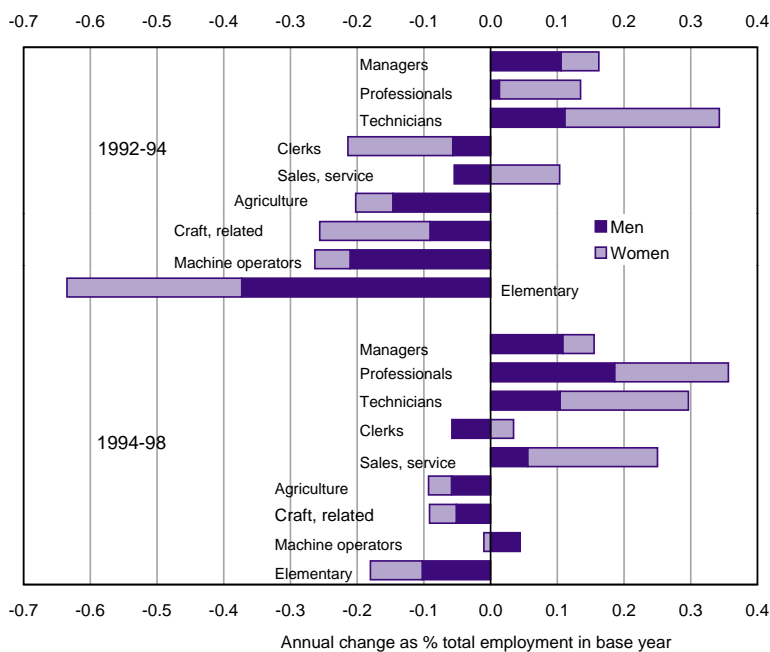
47 Contribution of broad sectors to the change in employment in Member States, 1994-98



Services made the main contribution to employment growth in all countries over the years 1994-98. Employment in agriculture declined everywhere except Ireland, while it increased in industry in 10 Member States, in Spain and Finland, adding 1% a year to total employment and in Ireland, over 2% a year.

Source: Eurostat, Union LFS and benchmark employment series.

48 Change in employment of men and women by occupation, 1992-94 and 1994-98



These occupational shifts are common to virtually all Member States. The number of both men and women employed as managers, professionals and technicians increased significantly throughout the Union between 1994 and 1998, constituting the main element of job growth. In Germany and Italy, these were the only jobs which increased (Graph 49). In most Member States, the number of manual workers declined. The only countries in which there was a significant increase were Spain, Ireland and the Netherlands, the countries in which the total employment rose up by most.

In all Member States, apart from Germany and Italy, the number employed as clerks and office workers and sales and service staff — ie as lower skilled non-manual workers — increased over these four years, the rise being concentrated among the latter group. The rise was generally larger in the countries where total employment went up by more than average. (Occupational shifts are examined in more detail in Part II, Section 2 below.)

relatively under-developed, employment in health care fell by over 1% a year in Sweden.

Occupational shifts

The growth of jobs demanding relatively high skills continued in 1998. The increased employment of managers, professionals and technicians in the Union accounted for most of the overall growth in the number in work, while the number employed in unskilled manual jobs fell. There was also an increase in low skilled sales and service jobs, as in the preceding years of the recovery, as well as in jobs for skilled manual workers, but only very small.

Just over half of the additional jobs for managers, professionals and technicians were taken by men, while women took most (over 80%) of the additional lower skilled

non-manual jobs for sales and service workers.

The pattern of change in 1998 was similar to that for the recovery period as a whole. Over the four years 1994 to 1998, the growth of jobs for managers, professionals and technicians accounted for virtually all of the increase in the number employed in the Union (Graph 48). There was also a significant growth of jobs for relatively low skilled sales and service workers — mainly for women — adding some 1% to total employment over this period. Apart from a small increase in the number of plant and machine operators, there was a decline in all other occupational groups. The loss of jobs was particularly significant for unskilled manual workers, averaging almost 2% a year over the period.

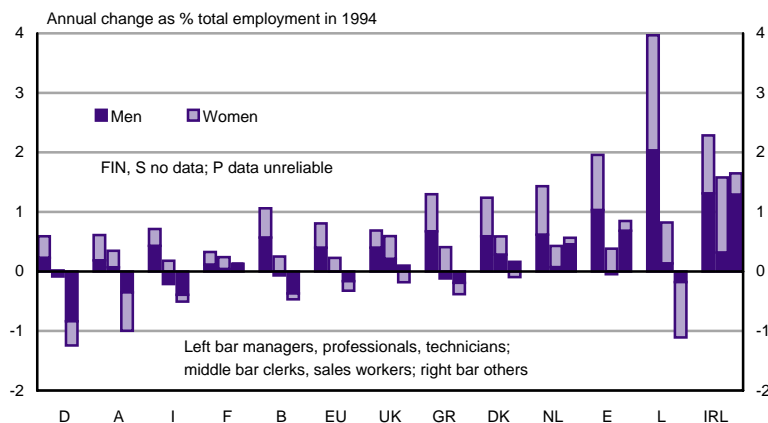
Comparative employment performance

Employment rates and job growth by sector and occupation

There is a strong association between the overall rate of employment growth over the 4 years 1994 to 1998 and net job creation in industry. Leaving Luxembourg aside, the 5 countries with the highest growth of employment over the period also experienced a significant expansion of jobs in industry, while those where employment declined or increased relatively little either experienced job losses in industry or little net job gain (Graph 47). Although the extent of job growth in services also varied between Member States with the rate of overall increase, the variation was less.

There is also a strong association between overall employment growth and the net creation of jobs for less skilled workers. While in all countries, jobs for the highest skilled workers (managers, professionals and technicians) are expanding by most over time, the extent of the increase in jobs for lower skilled workers, or whether there is an increase at all, depends critically on the overall growth of employment (Graph 49). This is especially the case for manual jobs, which, except in France, increased only in countries with high rates of growth over the 4 years 1994 to 1998. Jobs for lower skilled non-manual workers (office workers and sales and service staff) increased over the period in all countries apart from Germany (where total employment fell), the rise tending to be greater in countries with the highest overall rates of growth.

49 Change in employment of men and women by occupation in Member States, 1994-98



Countries are ordered by employment growth 1994-98. The main growth in employment occurred for managers, professionals and technicians in all Member States over the years 1994-98. Growth of lower-skilled non-manual jobs was almost as high in France and the UK, while manual jobs declined in all countries except Spain, France, Ireland and the Netherlands.

Source: Eurostat, Union LFS and benchmark employment series.

Part I Section 3 Employment developments in Central and Eastern Europe

The 10 Central European countries which are candidates to join the European Union still face major structural changes in their economies, even though the transformation which has occurred since the transition began around the turn of the decade has been substantial. Restructuring is having a major effect on the composition of GDP and trade and on the demand for labour of different skills, which has given rise to large-scale job losses and high unemployment. The key challenge facing these countries is to transform their economies to ones which are modern, dynamic and capable of facing up to competition both from Union Member States and the rest of the world, while at the same time achieving acceptable levels of employment.

The concern here is, first, to outline recent developments in

employment and unemployment in the different countries; secondly, to examine changes in output and employment, and the relationship between them, over the transition period and the shifts that have occurred in the structure of economic activity; thirdly, to consider how these changes have affected men and women in employment in different broad age groups.

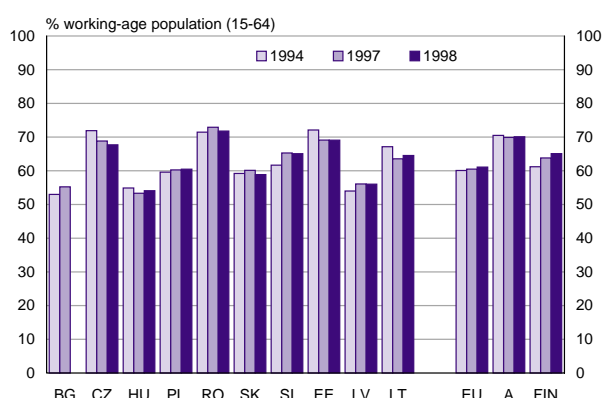
Recent developments

Economic performance has been far from uniform in the transition countries. Average growth in 1998 was around 2½%, somewhat lower than in 1997, with a similar pattern of growth rates between countries. Growth was between 3½–5% in all countries, except the Czech Republic, where GDP fell by almost 2½%

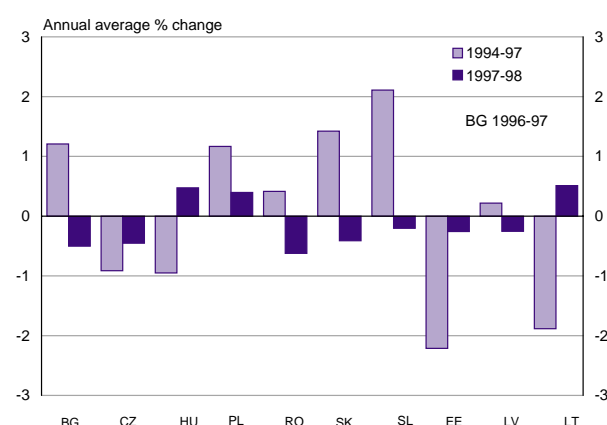
after rising by only 1% in 1997. It also declined by around 7% in Romania for the second consecutive year. On the other hand, there was a significant recovery in Bulgaria, where GDP rose by 3½% after falling markedly in 1997.

In 1998, the average employment rate in the 10 CECs (defined as the total number employed relative to population 15 to 64 in order to be comparable with the figures cited elsewhere in this Report for EU Member States) was around 63%, slightly above the EU average of 61%. While the rates differ between countries, the variation is similar to that between EU Member States, with the highest employment rates of nearly 70% in Estonia, the Czech Republic and Romania and the lowest, at around 55%, in Hungary (Graph 50).

50 Employment rates in Central and Eastern European countries, 1994, 1997, 1998



51 Changes in employment in Central and Eastern Europe, 1994-97 and 1997-98



The coverage of the analysis and data problems

The analysis in this section is confined to the 10 Central and Eastern European countries which have applied for EU membership — Bulgaria, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, Slovenia and the three Baltic States, Estonia, Latvia and Lithuania. For five of these — the Czech Republic, Estonia, Hungary, Poland and Slovenia — the Union has initiated accession negotiations.

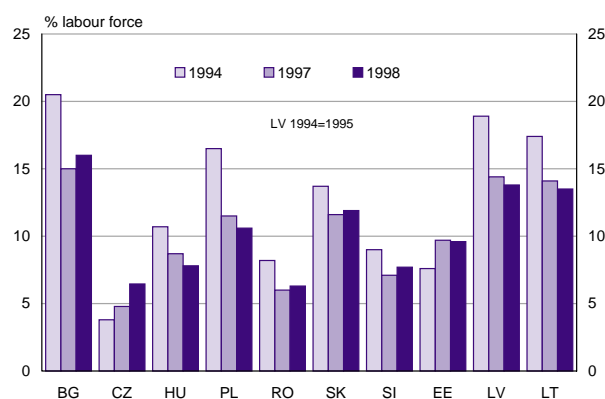
There are considerable problems with the data for these economies in terms of both availability and reliability, especially for the early years of the transition period, though there are substantial ongoing improvements in the quality of the data available on employment and related variables as a result of the establishment of a regular cycle of labour force surveys in all of the countries. The present analysis is based on data available to Eurostat, particularly data from these surveys. The data for GDP for 1998, however, come from national statistical offices in the countries concerned, except in the case of Latvia, Romania and Slovenia, where they come from Eurostat.

There are also acute problems in comparing data for the post-transition period with those for earlier years, not only because of major changes in the way that GDP is measured and activities are classified, but also because of the nature of the move from a centrally-planned economic system to a market economy (see Box on GDP).

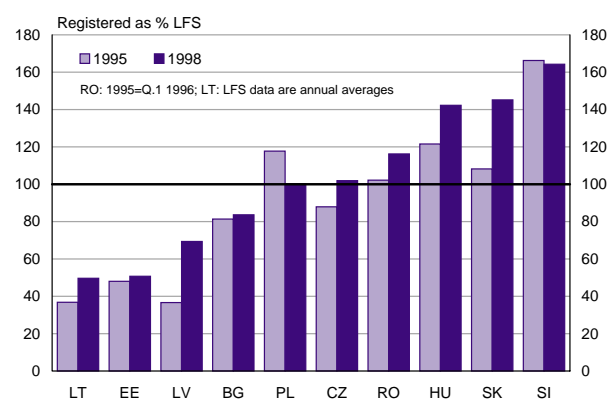
Employment declined in 1998 in all three countries with the highest rates, by 1½–2% in the Czech Republic and Romania (Graph 51). In the latter two countries, the fall in employment was less than the decline in GDP, especially in Romania, where output per person employed seems to have fallen by around 5½%, suggesting a deliberate preservation of jobs. Indeed, in all three cases, employment was lower than in 1994, not only in Estonia where the transition came after that in the other two countries, but also in the Czech Republic and Romania which experienced large scale job losses before then in the initial transition years (however, see Box on the data problems of comparing recent developments with earlier ones).

Elsewhere, employment increased in Poland and Hungary in 1998 — in the former for the fourth consecutive year — as well as Latvia, but fell in all the other countries (though no data are available for Bulgaria). Indeed, in only three of the CECs, Poland, Slovakia and Slovenia, was the number in work higher in 1998 than in 1994 and in most cases — except principally in

52 Unemployment rates in Central and Eastern Europe, 1994, 1997 and 1998



53 Registered unemployed relative to LFS in Central and Eastern Europe, 1995 and 1998



the Baltic States — the largest job losses occurred before then.

The variation in employment developments is mirrored in substantial differences in rates of unemployment, which, as in the Union, have fallen in most countries in recent years, but have risen in a few. In Hungary, Poland and the three Baltic States, unemployment fell in 1998, though in each case by less than 1 percentage point. In the Czech Republic, where unemployment throughout the earlier years of transition had been much lower than elsewhere, reflecting the delayed implementation of a number of reforms, as well as in Bulgaria, the rate increased significantly. Nevertheless, with Romania, it still had the lowest level of unemployment in the region, at around 6½%. Elsewhere, the rate was above 10% in five of the countries and 13½% or above in Latvia, Lithuania and Bulgaria (Graph 52). (These figures, it should be noted, relate to those who are unemployed on the standard international definition and differ, in some cases markedly, from the registered figures — see Box.)

Compared to 1994, when in most countries it reached its peak, unemployment was markedly lower in all countries apart from the Czech Republic and Estonia (where the peak came in 1996), the reduction being especially pronounced in Lithuania, Latvia and Poland (by 4–6 percentage points).

Young people are particularly affected by unemployment, reflecting the inadequate rate of new job creation. Those under 25 represented around a third on average of the total number unemployed in 1998 as compared with around a quarter in the EU, where the proportion exceeds 30% only in the four Southern Member States. The

Registered unemployment versus LFS unemployment in CECs

There are marked differences between the countries in the relationship between registered and LFS unemployment (the latter based on data collected from a representative sample of households and conforming to the generally accepted ILO convention, which defines a person as being unemployed if they are out of work, available for work and actively seeking a job), reflecting the different characteristics of both the labour market and institutional arrangements across the region.

In the Baltic States, the number of registered unemployed is very small relative to the LFS figure. In both Estonia and Lithuania, it was only half the latter in 1998, while in Latvia, it was only around two-thirds (Graph 53). This reflects the low levels of unemployment benefit or assistance available and the under-developed nature of the public employment services, which is manifest in the comparatively few labour offices which exist. These two factors mean, in combination, that there is only a very small incentive for people to register.

In Hungary, Slovakia and Slovenia, by contrast, the number registered at labour offices was 40–60% higher than the LFS level. This implies that only a proportion of those registered as unemployed were recorded as such by the LFS, which further implies that they did not comply with the criteria set, because they were unavailable for work or not actively seeking a job or already employed (which in the LFS can mean that they worked for only a relatively small amount of time in the reference week — one hour or more being sufficient to be counted as being in employment). It may also reflect the relatively large number doing unofficial jobs in the black or grey economy. This was a widespread tendency in Hungary during the previous regime and seems also to be prevalent in the other two economies, especially in Slovenia, where there was relatively wide access to unemployment benefits (though the system was reformed in 1998).

In practice, the picture for the CECs is not so different from that for EU Member States. In 1997, there were three countries, Belgium, Ireland and Austria, where the number of registered unemployed was 40–60% higher than the figures based on the ILO convention, though only one, Spain, where the registered figure was lower relative to the ILO figures than in Latvia, but it was still much higher than in Estonia or Lithuania (see *Employment in Europe, 1998*, Annex).

In all three Baltic States, however, the registered figures have risen significantly relative to the LFS ones since 1995, implying that the coverage of those who are unemployed has increased. At the same time, the registered figures have also risen markedly relative to the LFS ones in Hungary and Slovakia, suggesting that perhaps the extent of informal working has increased over this period. In Poland and the Czech Republic, the two unemployment figures converged to almost the same level between 1995 and 1998, in the former downwards, in the latter upwards.

Interpreting GDP over the transition period

The figures for GDP cited in the text conceal substantial changes in the content of output in the transition countries and the conditions under which it is produced. This, as much as the change in measurement from a net material product basis (which tends to understate the output of services) to the same kind of national accounts basis used in market economies around the world, affects the interpretation of the figures. Whereas previously, enterprises could, in effect, sell whatever they produced, in the new market economy, they can only sell, and therefore produce, whatever consumers are prepared to buy. Accordingly, the pattern of production is no longer dictated by central planners but by market forces. As a result the range of different products and models has increased significantly, with important implications both for consumer welfare and for methods of production, which can no longer put the emphasis on standardisation.

At the same time, there has been an enormous change in the organisation of production, away from large public enterprises dominating particular sectors of industry to small private firms competing in the open market with imports. This has been accompanied by the development of a range of service activities, which largely did not exist before, and in agriculture, by a shift away from collective farms to small holdings.

These profound changes mean not only that the composition of GDP has altered dramatically but that it is not possible to interpret the substantial fall in the total output produced in CECs as indicative of a similar fall in standards of living. Although the volume of what is produced and purchased may have fallen in most of the countries over the transition period, this has to be set against the increase in welfare which comes from a widening of choice and people being able to buy — so long as they can afford it — what they want.

highest figure was in Romania (43%), where it was significantly higher than in Greece or Italy, which had by far the highest figures in the Union (37%).

The relative number of the unemployed under 25 has not changed a great deal in recent years in most countries. Although it has fallen in Bulgaria, Poland and the three Baltic States, the reduction has been relatively small, and it has increased a little in the Czech Republic, Hungary and Slovakia.

As in the EU, unemployment is higher for women than for men in most countries in the region,

according to the last data available (see *Employment in Europe 1998*, Part I, Section 3). Only in Hungary and Estonia, is the rate for women lower than for men, though in Bulgaria, it is similar and in Slovenia and Latvia, the difference is small.

GDP and employment over the transition

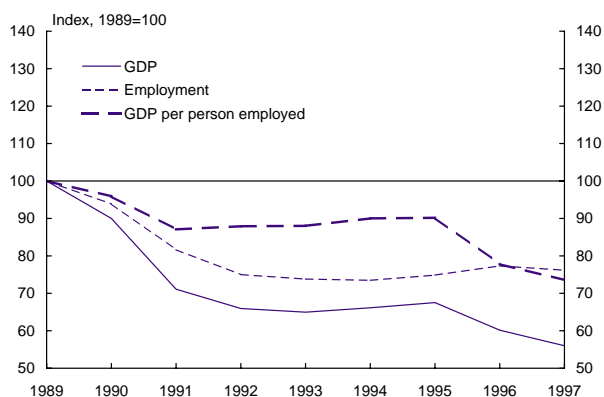
The number in employment in all CECs in 1998 was substantially less than before the transition began. Even in Poland, Slovakia and Slovenia, the growth in employment which has occurred since 1994 has not been nearly

enough to compensate for the job losses during the early 1990s, and the number in work in 1998 was still around 10% lower than in 1989. In Bulgaria and Latvia, the number employed in 1998 was around 23–24% less than 9 years earlier, while in Hungary, it was almost 30% lower.

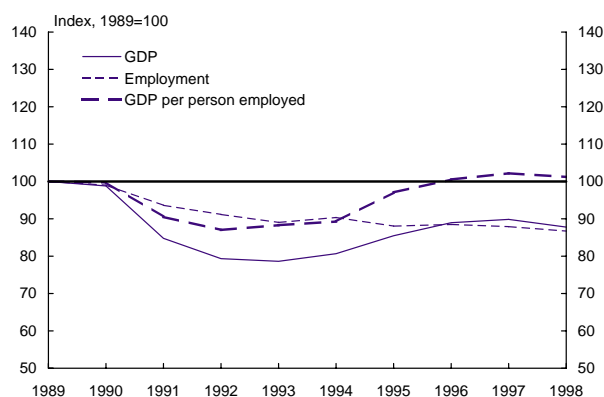
This reduction is the result of both the collapse in output in the early 1990s and the large-scale changes in the organisation and structure of economic activity which have occurred, at different speeds, during the process of transition of the countries to market economies. These have led to pressure to rationalise production and increase efficiency, the more so in countries which have implemented reforms more quickly and are further along the transition path. Accordingly, although output per person employed has risen in most countries after the initial transition period, the rate of growth has varied significantly, as has the pace of economic recovery.

GDP, in terms of the volume of output, fell by at least 20% or so in the early years of the transition in all the countries and by well over 30% in Bulgaria and the three Baltic States. In 1993 or so — one or two years earlier in Poland, a year or so later in the Baltic States — output began to recover and has continued to grow in most countries. In Bulgaria and Romania, however, recovery proved short-lived and has faltered in recent years in the Czech Republic. Only in three countries, Poland, Slovenia and Slovakia, had GDP in 1998 regained its pre-transition level — in Poland it was some 17% higher than in 1989. In Romania and Estonia, it was some 25% lower than 9 years earlier and in Bulgaria, Latvia and Lithuania, around 40% lower (Graphs 54 to 63).

54 Changes in GDP, employment and productivity in Bulgaria, 1989-97



55 Changes in GDP, employment and productivity in the Czech Republic, 1989-98



The figures, however, need to be interpreted with caution since GDP in 1998 was very different in nature and content from what it was before the transition. In particular, it is not possible to regard the large fall in GDP which has occurred over the transition period in customary economic welfare terms, as signifying a fall in standards of living (see Box).

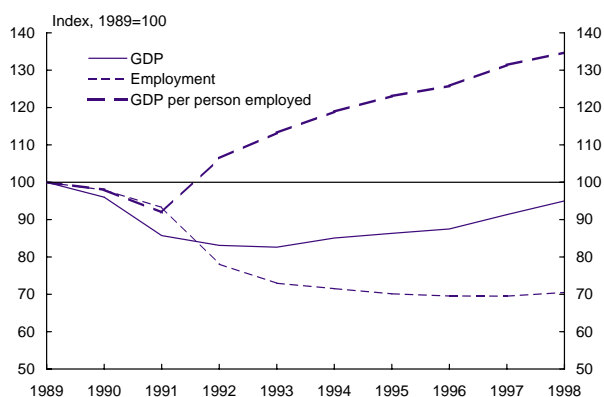
The extent of recovery of output reflects in some degree the rate of gain in productivity (or output per person employed), which in turn

reflects the pace of reform. Productivity, which fell everywhere in the initial post-transition period, has risen fastest since then in Poland, Slovakia and Estonia, in all of which the level of output per person employed in 1998 was substantially above the pre-transition level. These three countries have also experienced the highest growth of output in the region. Moreover, in Hungary, where output per person employed is further above its pre-transition level than anywhere else, partly because of a less protracted initial decline,

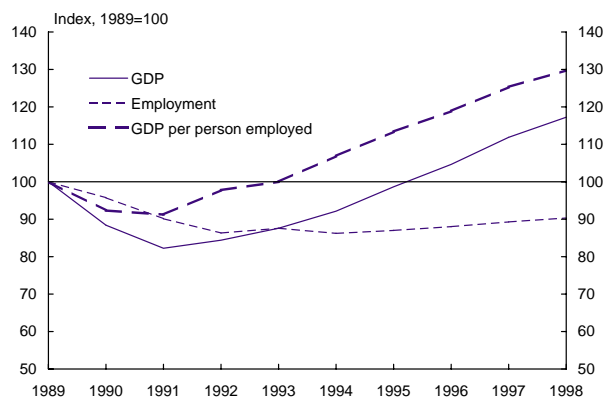
GDP has also begun to grow significantly in recent years. By contrast, in the Czech Republic, output per person employed is still only around its pre-transition level and GDP has risen relatively little since 1993, while in both Bulgaria and Romania, where the pace of reform has been slower than elsewhere, both output per person employed and GDP are well below their levels before the transition began.

In these three countries, in particular, therefore, there is still a long

56 Changes in GDP, employment and productivity in Hungary, 1989-98



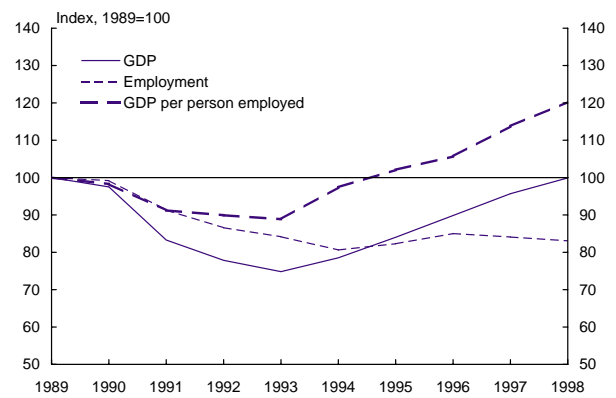
57 Changes in GDP, employment and productivity in Poland, 1989-98



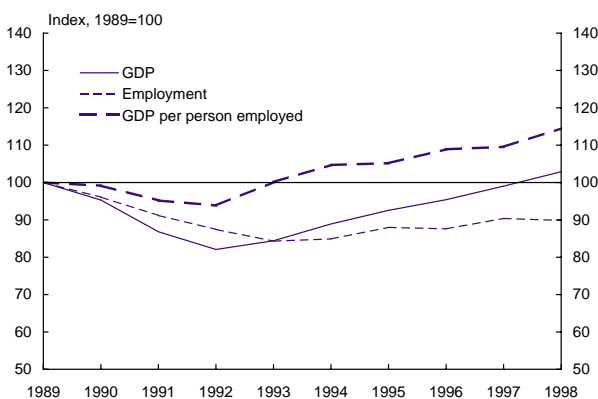
58 Changes in GDP, employment and productivity in Romania, 1989-98



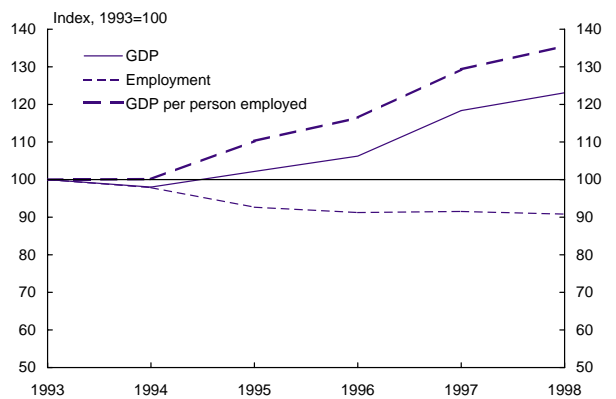
59 Changes in GDP, employment and productivity in Slovakia, 1989-98



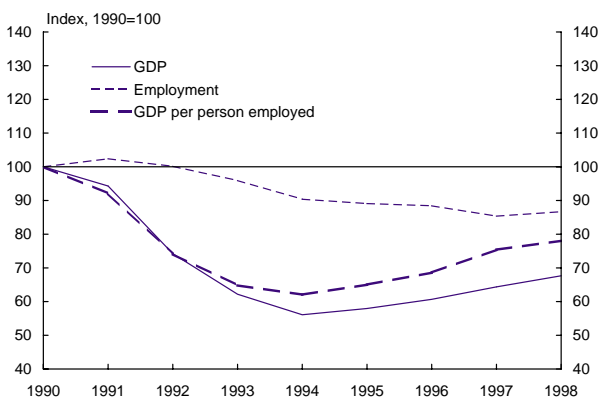
60 Changes in GDP, employment and productivity in Slovenia, 1989-98



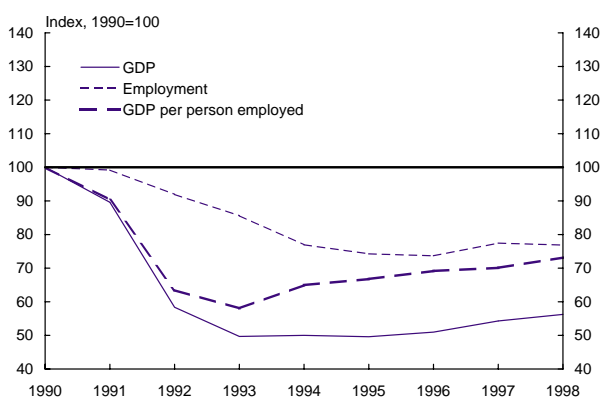
61 Changes in GDP, employment and productivity in Estonia, 1993-98



62 Changes in GDP, employment and productivity in Lithuania, 1990-98



63 Changes in GDP, employment and productivity in Latvia, 1990-98



way to go in the transition process, to rationalise production, to raise efficiency and to reduce the level of overmanning which was endemic under the previous economic system. At the same time, the recovery in output which has occurred in most countries has not yet been accompanied by a recovery in employment in any of the countries to the level which obtained before the transition. The challenge facing all of the countries, as it has done since the reform process began, is to complete the transition to a market economy while increasing the rate of net job creation. This can only plausibly be achieved through the continued development of service activities.

Productivity growth in industry

Raising efficiency levels in industry is particularly important since this is the main source of export earnings and the sector most exposed to competition from imports. In practice, productivity in industry has increased in all the countries, though at varying rates, largely in line with the relative changes in

GDP per person employed examined above (Graph 64). While productivity growth has, in general, been higher than in the economy as a whole, the rise has been particularly marked in Hungary and Poland, where in each case productivity is estimated to have risen by over 10% a year since the initial fall in the early 1990s. In the Czech Republic, it is estimated to have increased at only around half this rate since 1992, though the rate has progressively risen over the transition and between 1994 and 1997, growth averaged just under 10% a year. Nevertheless, the level of industrial productivity in 1997 was only some 14% above its level 8 years earlier. However, in all three countries, productivity in industry has been raised by capital investment, the introduction of new technology and modern management methods.

Growth of productivity in Slovakia and Slovenia has been slightly less than in these three countries, averaging around 6–7% a year between 1994 and 1997, which is high by EU standards, though in the former country the level of productivity was still below its pre-transition

level. This was also the case in Romania, while in Bulgaria, the level is estimated to have been much the same in 1997 as in 1989. Despite the growth of productivity in most countries, industrial output in 1997 was well below its pre-transition level in all countries apart from Poland (where it is estimated to have been some 12% higher than in 1989), though it has shown some tendency to increase in Hungary, the Czech Republic and Slovakia as the transition has gone on. The rate of output growth, therefore, as in the economy as a whole, seems to be positively related in some degree to the extent of productivity gain, which has come mainly from the large-scale shedding of labour. Even in Poland, where the recovery of output has been most marked, the number employed in industry in 1997 was well below the level in 1989 (15% or so), but in most of the other countries, it was under 60% of its level 8 years earlier.

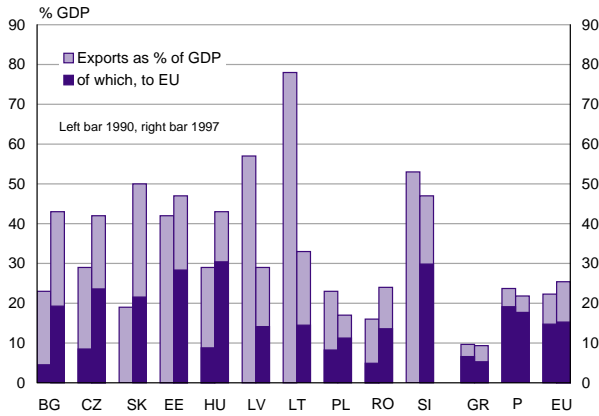
Restructuring of output and trade

As emphasised above, huge changes have occurred in the composition of output in the CECs over the transition period. Industrial production has not only declined in absolute terms over the 1990s in all countries apart from Poland but also in relation to GDP. This has been accompanied by an increase in services which were both under-developed and under-valued under the previous economic system. It has also been accompanied by a shift in the structure of industrial output in a number of countries, away from heavy industry and basic goods towards more sophisticated manufactures and better designed products. This is in a large measure a result of the opening up of the economy to market forces and competitive pressure. Such a structural shift is difficult to observe directly, but is reflected in the changing composition of trade, which, in turn, is an indicator of comparative advantage

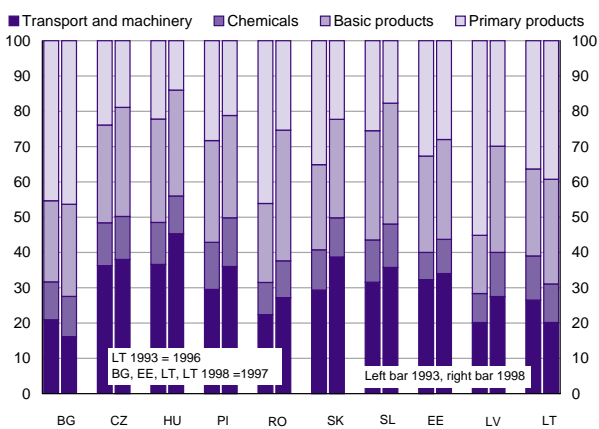
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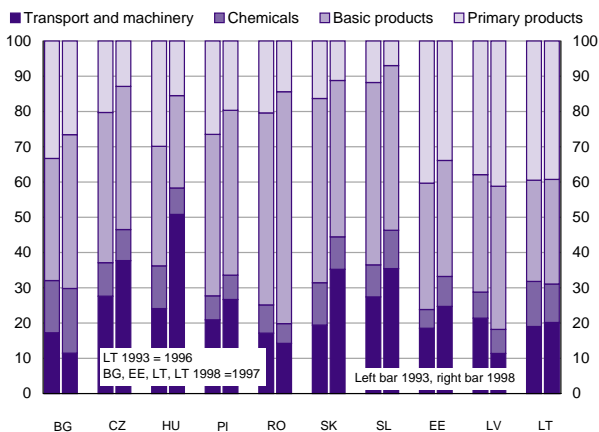
65 Exports of goods of Central and Eastern European countries, 1990 and 1997



66 Composition of imports of Central and Eastern European countries, 1993 and 1998



67 Composition of exports of Central and Eastern European countries, 1993 and 1998



of producers in the countries concerned.

Since the transition began, major changes have occurred in the scale, composition and orientation of trade of CECs. In particular, exports and imports have expanded substantially, especially to and from the EU, which has replaced the former Soviet Union as the main trading partner. In the Czech Republic, Hungary and Bulgaria, exports have increased from under 30% of GDP in 1990 to over 40% in 1997 and in Slovakia, to 50% (Graph 65). On the other hand, in Latvia and Lithuania, exports have fallen significantly in relation to GDP, reflecting the very high levels under the former regime, while they have also declined in Poland and Slovenia. CEC exports to the EU make up over 40% of the total for all of the countries and over half in most, while in Hungary, Poland, Estonia and Slovenia, the EU share is over 60%, which is the average for EU Member States. (All four of these countries are in the first group of applicant countries with which negotiations on EU entry have begun; in the fifth country, the Czech Republic, the figure was around 56% in 1997, still higher than for many Member States.)

All of the countries in the region have experienced a significant growth in imports of both consumer goods — especially appliances of one kind or another, but also fashion products — and machinery and equipment to modernise processes of production. This was combined, at least initially, with a concentration of exports on more basic manufactures and primary products, even in those countries, like the Czech Republic, which were traditionally strong in engineering goods.

In a number of countries, however — the Czech Republic, Hungary and Slovakia, in particular — there has been a strong growth in the exports of engineering products in more recent years, partly reflecting the inward investment which has occurred — from manufacturers in the EU, in particular — and a shift in the composition of the goods sold abroad towards more advanced, higher value-added products (Graphs 66 and 67). In these countries, therefore, there is no longer much difference in the types of goods exported and imported.

In Hungary, around half of all exports of goods consisted of machinery and transport equipment in 1998, and in the Czech Republic, around 40%, in both cases more than the share of such products in imports and up substantially since 1993 (when their share in exports was only around a quarter). Similarly, in Slovakia, engineering products accounted for some 35% of exports in 1998, much the same as in Slovenia, and up from under 20% in 1993.

On the other hand, in Bulgaria, Romania and Latvia (there are no data available for the other two Baltic States), transport equipment and machinery make up less than 15% of exports, which predominantly consist of primary products and basic goods. In these countries, however, advanced manufactures represent only a relatively small proportion of imports as well, reflecting the much less developed nature of their economies and the lower levels of income per head.

Employment by broad sector

The changes in the structure of economic activity over the transition

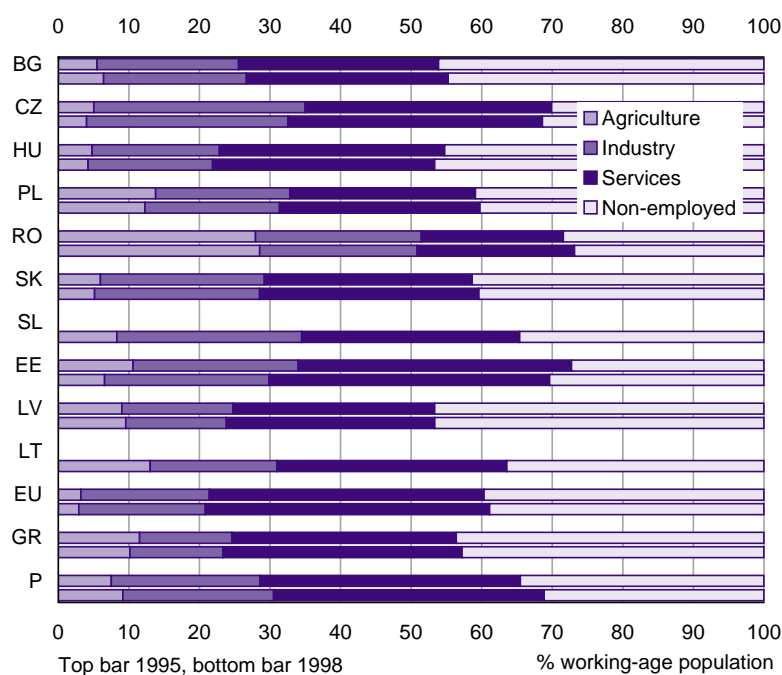
years have been associated with a growth of employment in services in most countries and a decline in agriculture and industry. Nevertheless, with only a few exceptions, the number employed in the latter two sectors is still significantly higher than in the EU despite the labour shedding which has occurred.

In all countries, apart from Bulgaria, Romania and Latvia, agriculture has provided progressively fewer jobs for those of working age as the transition has gone on. In these three countries, employment in agriculture increased between 1995 and 1998 (Graph 68). In Romania, the number employed rose to over 28% of those aged 15 to 64, almost three times higher than in Greece, which has the highest number employed in agriculture in the Union (just over 10% of working-age population). The

number, however, was also significantly higher in Poland and Latvia (12–13% of working-age population) than in Greece, while in Latvia (9½%), it was only slightly below (and broadly on a par with Portugal). Moreover, in Slovenia (just under 8½%), it was much higher than in any EU Member State apart from Greece and Portugal. In the Czech Republic and Hungary, by contrast, the figure was only around 4%, though this is still higher than the EU average (3%).

Despite the job losses in industry, which continued between 1995 and 1998 in four of the 8 countries for which data are available (the Czech Republic, Hungary, Romania and Latvia), the number employed in the sector relative to working-age population in 1998 was higher than the EU average (18%) in 7 of the 10 countries. In the Czech Republic

68 Employment rates by broad sector in Central and Eastern European countries, 1995 and 1998



(28½%) and Slovenia (26%), the figure was well above that in Portugal (21½%), which had the largest number employed in industry in relation to those aged 15 to 64 in the Union (Germany has the second highest figure at 21%). In Latvia, on the other hand, industry employed only 14% of working-age population in 1998 — which is, nevertheless, slightly higher than in Greece (13%) — while in Hungary (17½%), the figure was also below the EU average, if only slightly. In Lithuania, it was the same.

Employment in services has risen relative to working-age population since 1995 in all CECs, apart from Hungary, where the sectoral distribution has not changed much in recent years. Nevertheless, in all the countries, the number employed in services in 1998 was below the EU average relative to people of working age (40%), though in Estonia (just under 40%), it was only marginally below. Indeed, apart from Estonia, only the Czech Republic (36%) of the CECs had a larger number employed in services than in Greece, which had the second lowest figure in the Union (33%), while only these two plus Hungary and Lithuania had a larger number than Spain, which had the lowest figure in the EU (31%). In Romania, services employed only just over 22% of working-age population in 1998. In general, therefore, services have not yet expanded by nearly enough to compensate for the job losses in the early years of the transition in agriculture and industry.

Employment by age and gender

The job losses which have occurred during the transition and the relatively low rate of new job creation

have affected some groups in the labour market more than others, especially older people and young people starting their working careers.

Overall, the differential in employment between men and women has remained smaller in the transition countries than in most EU Member States. Employment rates for women, on the latest data available, varied from around 68% of working-age population in Romania to around 45% in Hungary, the only country where the rate was less than the EU average (51%). Rates for men ranged from close to 80% in Romania to under 60% in Bulgaria and Hungary, and only Romania and the Czech Republic (77%), had a higher employment rate than the EU average (71%), though in Estonia, it was much the same. In all countries in the region, therefore, the difference in the employment rate between men and women was less than the average in the EU.

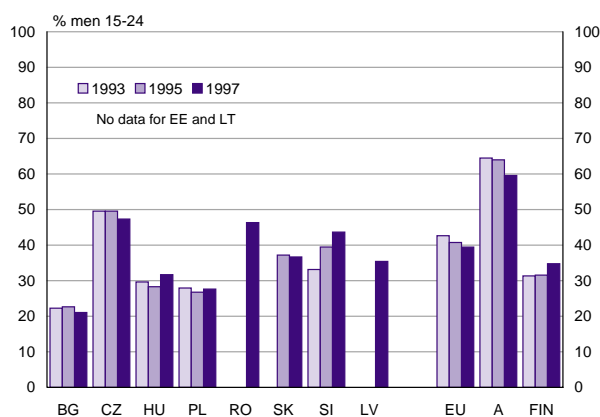
In all the countries, job losses in the early transition years affected both men and women, though in a number of cases — the Czech Republic, Slovakia and Romania — the employment rate of men fell by more than for women because of the larger losses in traditional industries which employed more men than women. Since then, the employment rate of women has fallen relative to that of men in the Czech Republic, Hungary and Poland. By contrast, it has risen relative to that of men in Bulgaria, Romania, Slovakia, Estonia and Latvia, while in Slovenia, both rates have risen by much the same.

Unlike in the EU (Finland is one of the few exceptions), there is little evidence of increasing participation of young people in education beyond basic schooling which

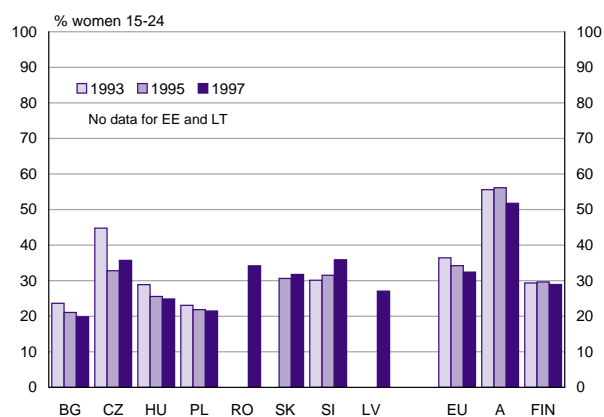
should show up in a continuing decline in employment rates. While rates have fallen slightly in Bulgaria, the Czech Republic and Hungary since 1994, this may reflect an overall shortage of jobs rather than any tendency for young people to stay longer in education and initial training. In Poland, Slovakia and Slovenia, where total employment has risen, the employment rates of those aged 15 to 24 have also risen (Graphs 69 and 70). Nevertheless, employment rates for young people are slightly lower in most of the countries than in the Union, only exceeding the EU average in the Czech Republic, Romania and Slovenia, which reflects both a high level of unemployment and high participation in education and vocational training. In Poland (where the rate is just under 25%) and Bulgaria (around 20%), they are lower than in any EU Member State (the lowest rate in 1998 was in France at just over 25%).

For men of prime working-age, 25 to 49, the proportion in employment has changed relatively little in recent years and in 1997 was similar to that in the Union in all countries except Latvia, where it was under 70% (Graph 71). In the Czech Republic and Romania, it was well above the average. For women in the same age group, the employment rate has fallen markedly in the Czech Republic (from 87% to 77% between 1993 and 1997), but has remained unchanged or has risen slightly elsewhere (Graph 72). Nevertheless, despite the large fall, employment among women in this age group was higher in the Czech Republic than in most EU Member States in 1997 (indeed, only Denmark had a higher rate, at 79%, a rate which was exceeded by Slovenia, at over 81%). Moreover, in all CECs, the employment rate for women aged 25 to 49 was higher

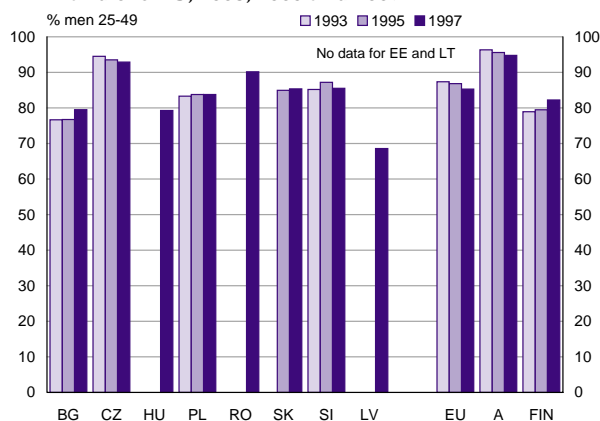
69 Employment rates of men aged 15-24 in the CECs and the EU, 1993, 1995 and 1997



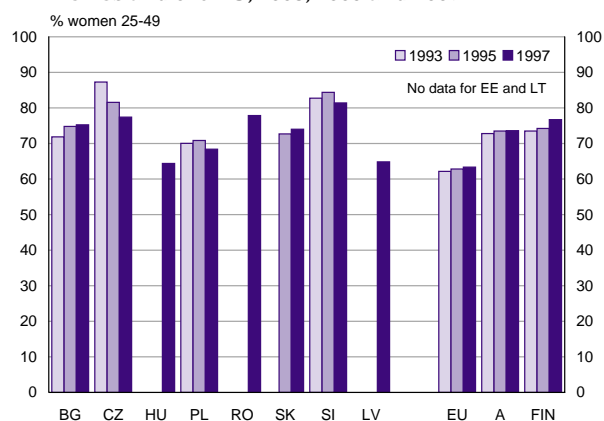
70 Employment rates of women aged 15-24 in the CECs and the EU, 1993, 1995 and 1997



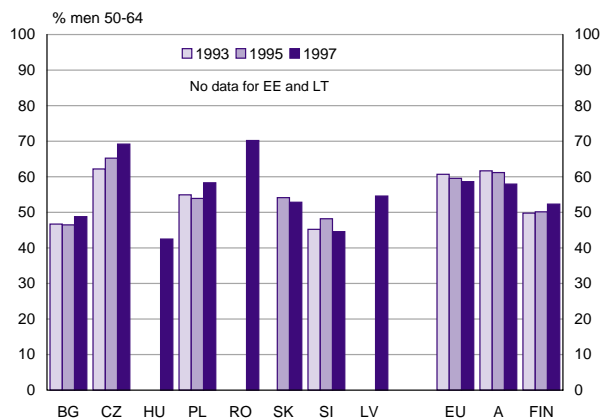
71 Employment rates of men aged 25-49 in the CECs and the EU, 1993, 1995 and 1997



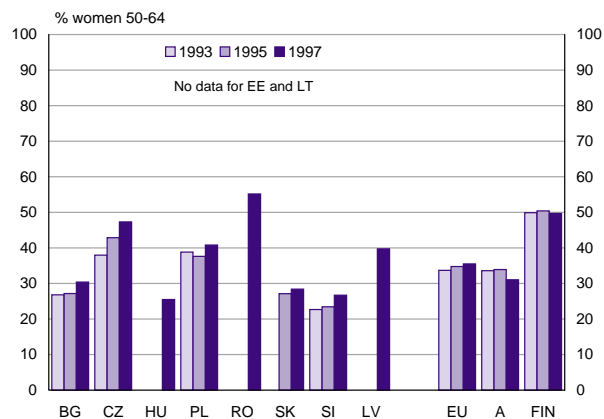
72 Employment rates of women aged 25-49 in the CECs and the EU, 1993, 1995 and 1997



73 Employment rates of men aged 50-64 in the CECs and the EU, 1993, 1995 and 1997



74 Employment rates of women aged 50-64 in the CECs and the EU, 1993, 1995 and 1997



than the EU average (63%), significantly so in most cases, though only slightly so in Hungary and Latvia.

In all countries, apart from Romania, where agriculture absorbed the large numbers unable to find work in industry or services, and Slovenia, job losses led to significant numbers of both men and women withdrawing from the labour force as well as to increases in unemployment. This was associated with a substantial rise in early retirement and a corresponding fall in employment rates of those aged 50 and over. In consequence, the old-age dependency ratio — measured as the number of people drawing pensions relative to those in work financing these — rose steeply in all CECs to above the level in most EU Member States.

For men approaching retirement age, the proportion of those aged 50 to 64 in work has fallen in Slovakia and Slovenia since 1993, as it has in most EU Member States, but has risen markedly in the Czech Republic, which could reflect changes in policy on early retirement (Graph 73). Indeed, here as well as in Romania, around 70% of men in this age group were still in employment in 1997, well above the average in the EU (just under 60%). By contrast, the figure was only around 45% or less in Hungary and Slovenia.

Women approaching retirement age (which is lower in most CECs than in most EU Member States — 55 in many cases) have experienced some improvement in their employment position in recent years in the five countries for which data are available for more than one year, which has also been the tendency in the Union (Graph 74). As for men, the proportion in work in 1997 in the Czech Republic and Romania

(around half) was significantly above the EU average (35%) and well below in Hungary and Slovenia (25%).

Concluding remarks

In all countries in Central and Eastern Europe, profound changes have occurred in the organisation of the economy, though the pace of the transition process varies markedly between them. All of them have suffered a substantial loss of output and a reduction in employment during the 1990s as the economy has been opened up to market forces and competitive pressures, but the extent to which protection has been withdrawn from inefficient producers and overmanning has been reduced is very different in different countries. Equally, there are significant variations across the region in the scale of the shift which has so far taken place in the structure of economic activity. All the countries have some way to go in increasing the efficiency of agriculture and industry and expanding services so as to be able to compete more effectively on world markets, which is essential for their continued growth and development, and to do so while achieving high levels of employment.

The challenge facing all of the countries is to complete the transition to a competitive market economy while at the same time creating sufficient jobs to avoid excessive rates of unemployment or inactivity, especially among those completing their education or older age groups. This is particularly the case in countries such as Bulgaria, Romania, Latvia and Lithuania, where the structure of the economy has so far changed comparatively little, or in the Czech Republic, where overmanning seems to remain

relatively high. It is less the case in the other five countries, though even here serious problems remain to be overcome, such as reducing reliance on agriculture in Poland or managing the inevitable long-term job losses in industry in Slovenia, where employment remains high. In all of them, there is a need to develop services and their potential for job creation in order to absorb the labour shed by agriculture and industry as new methods of working are introduced and productivity continues to increase.

Part I Section 4 Regional developments in employment rates

It is commonly accepted that economic and monetary union in Europe lays the foundations for higher and more sustained rates of growth and is, accordingly, a key element in the resolution of the long-standing problems of inadequate levels of employment and excessive rates of unemployment. However, while there is little question that EMU provides the potential for a more dynamic European economy, capable of creating increased numbers of jobs, there remains the problem of converting this potential into reality and of ensuring that all parts of the Union gain in the process.

Balanced development across the different regions of the Union is important not just for reasons of economic and social cohesion, it is also a means of increasing the overall rate of growth that the Union is likely to be able to sustain. This is the case, first, because the more uneven economic development is across the Union, the more likely is it that activity will be overly concentrated in the most prosperous regions and, accordingly, the tighter the constraints implied for monetary policy. If demand were more evenly distributed across markets, then monetary policy could be set to achieve a higher overall level of demand without endangering financial stability and control of inflation. Reducing regional disparities in economic activity should, therefore, make it easier to pursue a more coherent and rational monetary policy over the Union as a whole — in

particular, within the Euro zone — aimed at sustaining the overall rate of growth required to attain employment objectives.

Secondly, the Union's competitiveness, which is a key determinant of the rate of economic growth and level of employment which can be sustained, depends to an important extent on each region fulfilling its development potential, so that the businesses located there can compete effectively on world markets and contribute to the overall generation of income. This makes it important to reduce the structural impediments to growth, stemming from inadequate infrastructure, a lack of support services and amenities, inefficient public administration, deficiencies in the education and training system, skill shortages in the local work force and so on, which make it difficult for businesses to compete on equal terms with those elsewhere. Such impediments are arguably at least as significant as labour market rigidities which are widely regarded as the major structural problems inhibiting growth in the Union.

Aims of the analysis

The aim here is to examine the scale of disparities in labour market performance across the Union and how far they have tended to change over time, to see whether there is evidence of a tendency towards a more balanced regional distribution of the supply and demand for labour, which is important both to achieve

cohesion objectives and to facilitate the pursuit of a more expansionary macroeconomic policy. The focus is on variations in employment rates across regions (specifically, NUTS 2-regions, of which there are just over 200 in the Union), both across the Union as a whole and within Member States, and on the extent to which these have widened or narrowed over the past 15 years or more. Since this is a period over which EU structural policies, aimed at supporting the development of weaker regions and reducing regional disparities, have strengthened, the analysis also provides an insight into the effectiveness of these in terms of job creation.

Although regional variations in unemployment are also examined, employment rates (ie the number in work relative to working-age population) arguably give a better guide to labour market balance. Since employment rates reflect the relative size of the potential labour force in a region which is not being put to use and not just those who are actively seeking work, they are likely to be a better indicator of the degree of excess demand or supply which exists.

In practice, the two tend to go together, though the relationship is far from being one-to-one. Regions with low employment rates, for example, also generally have high levels of inactivity among people of working age, as many are discouraged from even joining the labour force, which tends to moderate the

The data used in the analysis

The data used in the analysis come predominantly from the Union Labour Force Survey and relate to NUTS 2-level regions, of which there are 206 in the Union as a whole. Though most NUTS 2-level regions are broadly comparable in size, there are some extreme variations, most notably Ile de France and Lombardia at the top end of the scale with a population of 9–10 million and Corse, Burgenland and Highlands and Islands at the bottom with a population of 2–300 thousand and even more, extremely, Valle d'Aosta with only 120 thousand.

For each Member State, the LFS data on employment by region have been aligned with the benchmark employment series to ensure consistency over time. Because the basic source of the data, however, is the LFS, employment relates to those resident in a region rather than those working there. Accordingly, the analysis says little directly about the number of jobs generated in a region, only about the success or failure of people living in a region to find work. Since, however, the number commuting between regions is mostly relatively small and does not tend to change much over time, the data should be a close proxy, except in a few cases, both of the jobs available in a region and of changes in this over the period examined.

Where data are missing, such as for the years before the annual LFS was instituted (1983) or before a number of present Member States entered the Union, they are supplemented with data from the regional accounts, which are then aligned to the LFS data. Although the regional accounts data are on a different basis from the LFS figures in that they relate to the people employed in a region rather than those resident there who are in employment, they are reasonably consistent, particularly in terms of the changes over time. For Portugal, because of the break in the LFS in 1998 (see Sources at the back of the report), the regional division of employment in 1997 has been applied to the 1998 benchmark figure for the year.

Similarly, regional demographic data are used to supplement LFS data on working-age population where figures are missing for particular years or particular regions. Again these are on a slightly different basis in that they relate to the total number of people aged 15 to 64, whereas the LFS data exclude those not living in private households, who in practice are relatively few in number (only 1–2%).

Unemployment data are also from the LFS and are aligned by Eurostat to be consistent with the harmonised statistics on unemployment rates. These data at present are available only up to 1997 whereas the employment data go up to 1998.

GDP data are from the regional accounts and are available only up to 1996. Even then, for the later years they involve some estimation in respect of some countries. In particular, there are as yet no regional data for Greece for 1995 and 1996 and the figures published simply assume that the growth rate of GDP in each region for these years was the same as the national average. Equally in Germany for these two years data are only available for NUTS 1-level regions and again the figures for NUTS 2-level regions are estimated by assuming that the growth rate for each is the same as that for the NUTS 1-level region in which they are located.

The GDP per head data used in the analysis are in terms of PPS (purchasing power standards) and, therefore, take account of differences in price levels between countries, though not between regions within countries.

Since data are not available for all regions in the EU throughout the period examined — from the early 1980s on — EU average figures, and figures for the regional groups defined in the text, for each year, have been adjusted to form a reasonably consistent series. (The main missing regions from 1985 are in Austria and Finland, few of which, except Åland, are likely to have figured in the top or bottom groups over this period.)

Because of the estimated nature of some of the data, the results need to be interpreted with due caution and too much importance should not be attached to the precise figures quoted. Nevertheless, they should be indicative both of the scale of the difference in employment rates between regions and the changes which have occurred over time.

scale of unemployment and to understate the extent of the employment problem. At the same time, however, there are a number of regions, such as in Northern Italy, where unemployment is well below the Union average but employment rates are also relatively low, signifying perhaps that the pressure of demand in the labour market is not as great as the rate of unemployment appears to imply.

A further concern is to see whether there is any sign of the long-term nature of regional disparities in labour market balance being moderated, to see how far structural policies, or economic forces, are succeeding in correcting long-standing regional problems which have been associated with low levels of employment for a great many years.

Disparities in employment rates across the Union

In 1998, the number employed relative to working-age population (15 to 64) averaged just over 61% across the Union as a whole. The rate, however, varied from just over 80% in Åland in Finland and Berkshire, Buckinghamshire and Oxford in South-East England to only around 39% in Calabria and Sicily in Southern Italy. These are obviously extreme cases, but the disparity is pronounced right across the Union. This can be demonstrated by comparing the regions with the highest employment rates which account for 10% of working-age population in the EU with those with the lowest rates which also account for 10% of people of working-age. (This is a more sophisticated exercise than simply comparing a given number

of regions at the top and bottom end of the scale, since the size of regions can vary substantially — see Box on data. This can be important when assessing changes over time since the effective coverage of the top or bottom group can change significantly.) In 1998, the number in employment in the top group of regions so defined averaged just 76½% of the working-age population living in these regions, whereas the number in work in the bottom group averaged only 42½%.

Most of the regions with the highest employment rates were in the UK, most of those with the lowest rates were in the South of Italy and Spain. As shown below, the composition of the top group has altered over the past 15–20 years, with regions in Sweden and Germany, in which employment has fallen, being replaced by UK regions where rates over the 1990s have remained high. The composition of the bottom group, however, has not changed substantially.

Changes in disparities, 1980 to 1998

There has been very little change in regional disparities in employment rates in the Union over the long-term. Indeed, if anything, disparities between regions have widened over the past 15–20 years. Between 1985 and 1998, the average employment rate in the top group of regions increased from 75% to 76½%. In the bottom group of regions, it was the same in 1998 as 13 years earlier (42½%). In the remaining regions (which together account for 80% of working-age population living in the Union), the rate rose from 60½% to 61½% (Graph 75, which contains a reasonably consistent set of data for the years 1985 to 1998).

Although the data available for the early 1980s are less complete (they exclude, in particular, data for Sweden which features prominently in the top group of regions during the 1980s but include data for most of the bottom regions), they suggest that regional disparities widened over this period. Between 1980 and 1985, which was generally a period of low growth, the employment rate in the bottom group of regions declined by some 4½ percentage points, in the top group by 3 percentage points.

There were, however, as indicated below, some differences in the pattern of change during different phases of the economic cycle when there were differing overall rates of net job creation.

The growth years of the late-1980s

In the five years 1985 to 1990, employment in the Union increased from 60% of working-age population to 63%. The rise was particularly pronounced in the regions with the highest employment rates (from 74½% to almost 79½%). It was less marked in those with the lowest rates (from 42½% to just over 45%). Regional disparities in employment, therefore, widened over this period (the standard deviation of the employment rate, which is a measure of dispersion, increased from 7.2 to 7.7). The high growth in employment during this period, therefore, seems to have benefited regions where employment was already high more than those where it was low. The larger increase in employment in the top group of regions was associated with a comparatively small fall in unemployment (from just under 5½% to just over 3½%), which suggests that a large proportion of the additional jobs created went to new

entrants to the labour market (ie those not previously recorded as being unemployed). The fall in the bottom group of regions was slightly greater (from 22½% to 19½%), implying that proportionately more of those taking up work had previously been recorded as being unemployed (Graph 76).

The recession years of the early 1990s

Regional disparities in employment narrowed during the period of low growth in the early 1990s. Between 1990 and 1994, the employment rate in the top regions fell by some 6 percentage points (from 79½% to 73½%) as regions in Sweden, Germany and the UK were hit relatively hard by recession. In the bottom group of regions, the decline in employment was slightly less, the rate falling by just over 3½ percentage points (from just over 45% to 41½%). This, however, was more than in the remaining regions (where the decline was some 3 percentage points), so that the bottom group of regions still lost out over this period. Nevertheless, there was some narrowing of the overall regional disparity because of the

large-scale job losses in the top group of regions.

These relative changes in the employment rate, however, are not closely reflected in differential changes in unemployment in the top and bottom groups. In the regions with the highest employment rates, unemployment went up by comparatively little, implying that the decline in employment led to many people withdrawing from the labour force. In the bottom group of regions, unemployment went up substantially, suggesting that most of those losing their jobs remained in the labour force and continued actively to seek work.

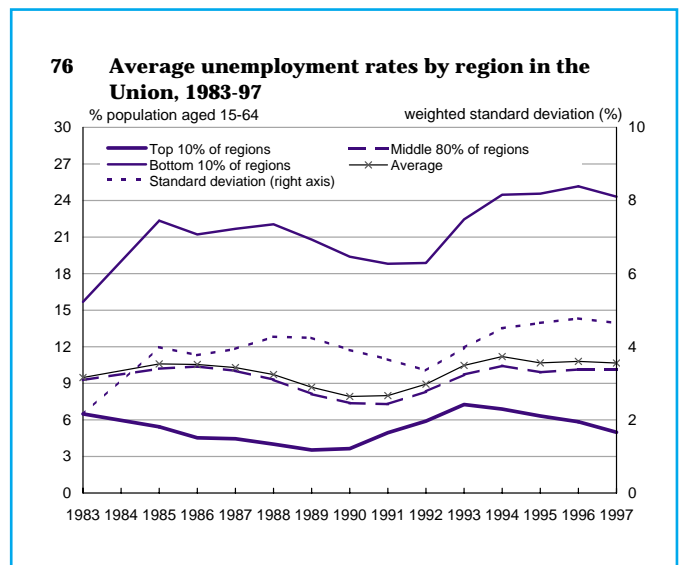
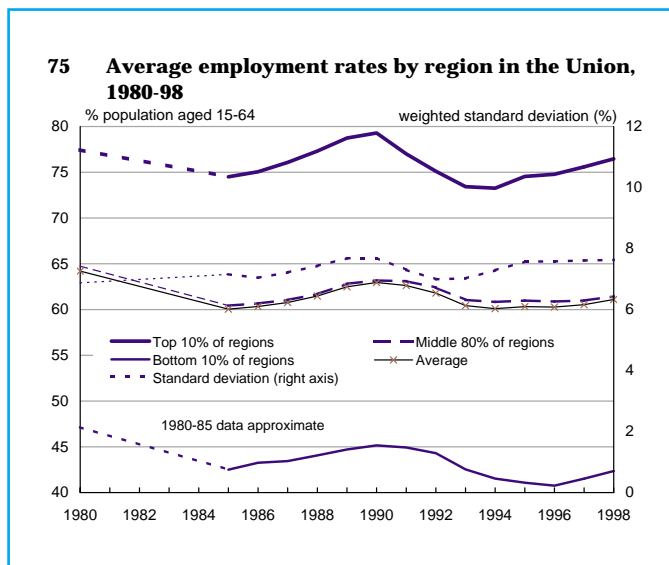
The years of recovery 1994 to 1998

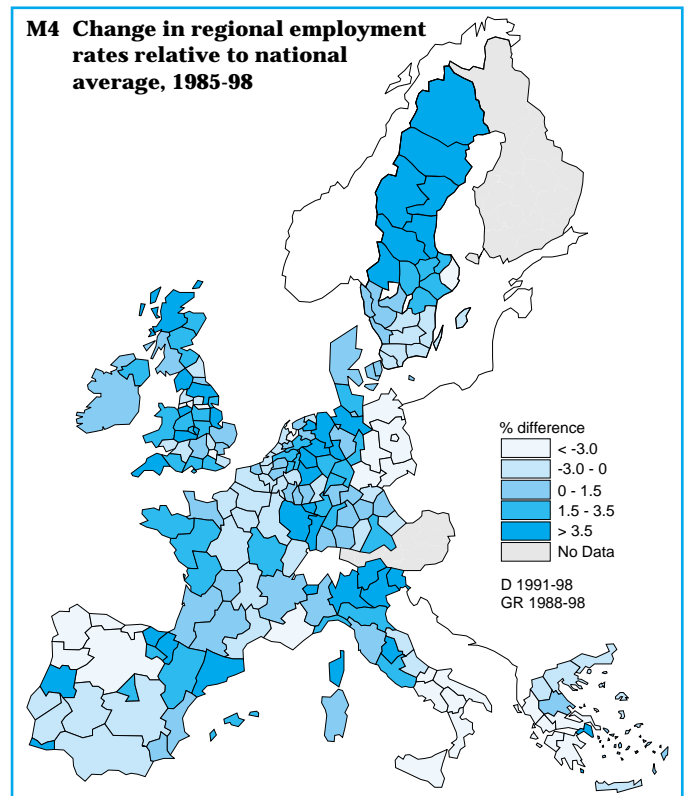
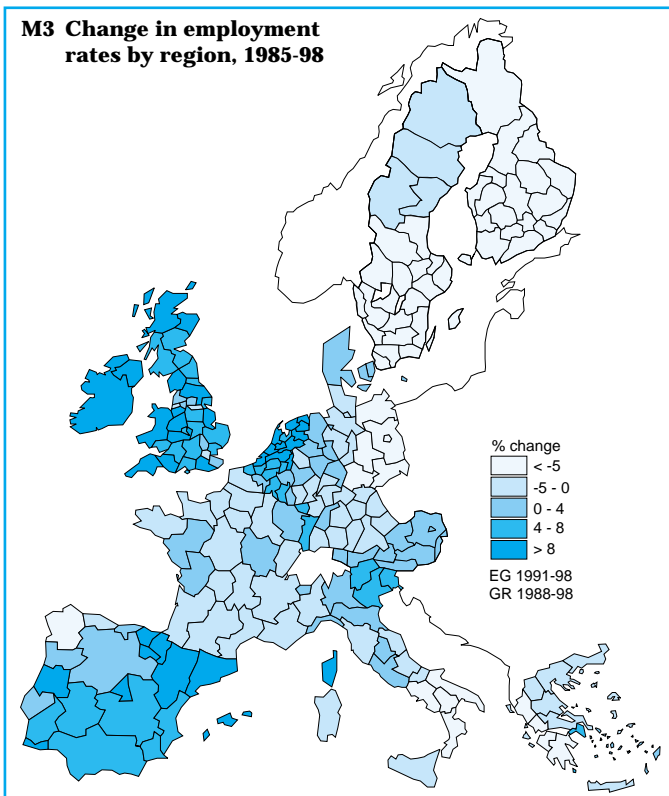
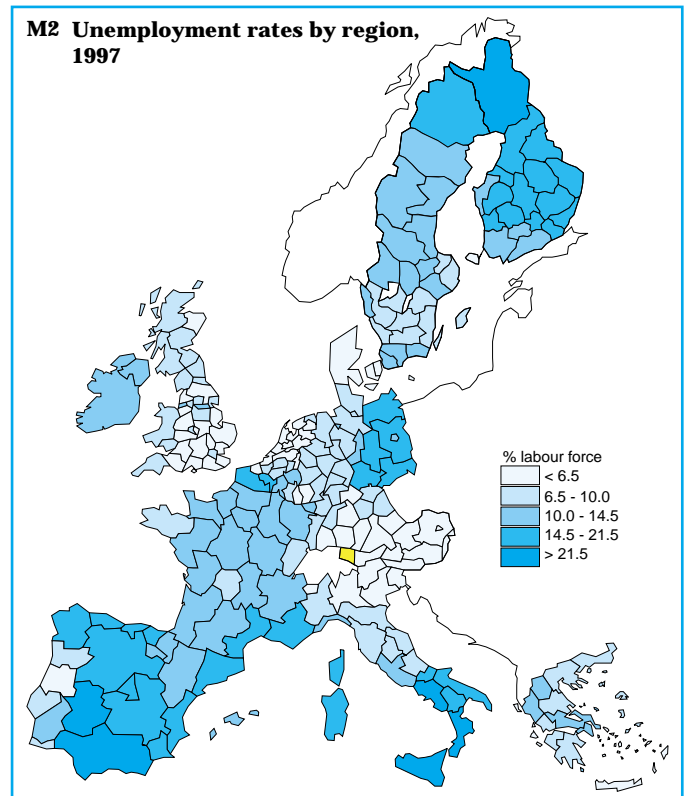
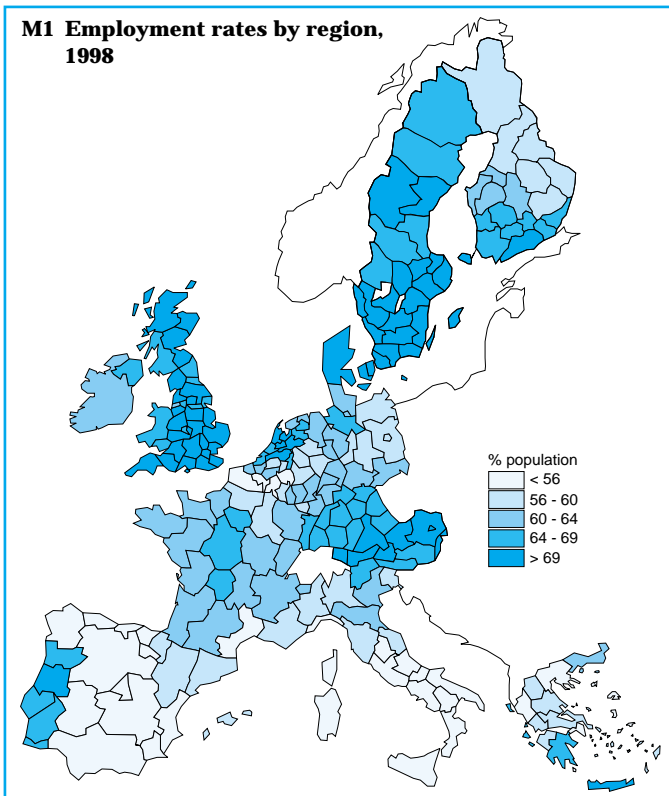
Regional employment disparities have widened slightly since 1994. The employment rate in the top regions increased by 2 percentage points in the four years up to 1998 (from 74½% to 76½%), while in the bottom group, it rose by only 1 percentage point (from 41½% to 42½%). This, however, was marginally more than in the remaining regions. The pattern during the

recovery has, therefore, been for a slight convergence of employment rates in the regions where these are lowest towards those elsewhere, but for the rates in the regions where employment is highest to rise even further above rates in other parts of the Union.

There has, however, been a slight narrowing of the disparity between Member States, caused partly by relatively large increases in employment in Ireland and Spain, countries where the number in work is below average in relation to working-age population. This suggests that, on average, regional disparities widened within countries over this period, an implication which is confirmed by the analysis of individual countries below.

The rise in employment in the top group of regions was associated with a significant fall in unemployment (from an average of almost 7% to 5%), implying that most of the net additional jobs were taken by those who had previously been recorded as unemployed. By contrast, in the bottom group of regions, unemployment fell hardly at all (from 24½% to just over 24%),





suggesting that the increase in net job creation attracted more people into the labour force in regions where participation was generally well below that elsewhere in the Union.

Stability of regional disparities

All but four — Denmark (which is treated as a single region for this purpose), Centro in Portugal (the Lisbon region), Åland in Finland and Småland med öarna in Sweden — of the 21 regions with the highest employment rates in the Union in 1998 (and which together accounted for 10% of working-age population) were in the UK (17 of the 35 UK regions), mostly in Southern England. The UK also accounted for most of the regions in the top group in 1990, 12 of the 21, though then 8 of the remaining regions in the group were in Sweden (ie all of Swedish NUTS 2 regions). The main change over the 1990s at the top end of the scale has, therefore, been the substantial reduction in employment across Sweden, while in the UK, employment rates have remained high without increasing much further in most cases (there are no comparable regional data available for Finland in 1990).

Slightly lower down the scale, the fall in Sweden has been accompanied by lower employment throughout Germany, which in 1985 accounted for three of the regions in the top group (Oberfranken, Mittelfranken and Schwaben). In the mid-1980s, however, apart from the inclusion of these German regions, the composition of the top group was much the same as in 1990 at the end of the period of high net job creation.

At the other end of the scale, 7 of the 17 regions with the lowest

employment rates in the Union (which together account for 10% of working-age population) were in the South of Italy in 1998, including the bottom three (Campania, Sicilia and Calabria), in each of which the rate was below 40%, 7 were in Spain, mostly in the South and East, two were in France (Corse and Nord-Pas-de-Calais) and one was in Belgium (Hainaut, which borders Nord-Pas-de-Calais).

The main change since 1990 has been the exit from the bottom group of two Spanish regions (Castilla-la-Mancha and País Vasco), which have experienced a significant rise in employment, since 1994 in particular (of 5–6% of working-age population), to be replaced by Nord-Pas-de-Calais and Molise in Italy, both of which experienced a significant fall in employment during the early 1990s and little rise since then.

Between 1985 and 1990, the main change was also the exit of Spanish regions (Madrid, Cataluña, La Rioja and Comunidad Valenciana), which in the earlier year comprised 13 of the 17 regions with the lowest employment rates (ie 13 of the 18 regions in Spain) and 5 of the bottom 6 (the exception being Corse). Over the period since 1985, therefore, the major movement at the bottom end of the scale has been the rise in employment in a number of the more industrialised regions in Spain and the fall in employment in the less industrialised (Southern) Italian regions.

Nevertheless, 10 of the 17 regions with the lowest employment rate in 1985 — and indeed in 1980 — were still among the bottom 17 in 1998. At the other end of the scale, 10 of the 21 regions with the highest employment rates in 1985 — though only 7 of those with the

highest rates in 1980 — remained among the top group of regions in 1998.

Regional disparities in Member States

A similar exercise comparing regions with the highest and lowest employment rates can be carried out for individual Member States in order to examine the changing regional disparities within countries. In this case, regions have been grouped according to those with the highest and lowest rates which account for 20% of working-age population in each case. The results show marked differences in experience between Member States.

Germany

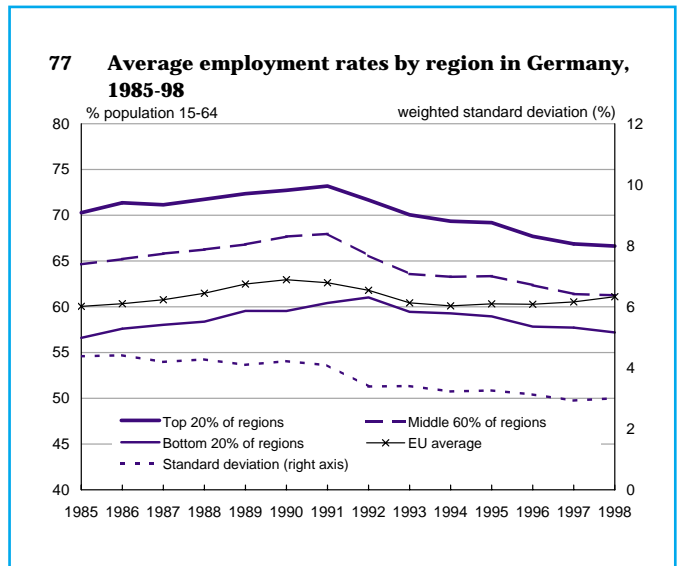
In Germany, regional disparities in employment at least are less than in other large economies in the Union. Though GDP per head is much lower in the new Länder than the old and unemployment much higher, it remains the case that the number employed is not much lower than the national average (61½%). The gap in the average employment rate in the top and bottom groups of regions was under 10 percentage points in 1998 (Graph 77). Moreover, four of the 9 regions with the lowest employment rates in 1998 (which accounted for 20% of working-age population in the country) were in the old Länder rather than the new (Düsseldorf, Arnsberg, Bremen and West Berlin).

Three of these four regions (all except Arnsberg) had a level of GDP per head well above the national average, while three with among the highest employment rates — Niederbayern, Oberpfalz and

Oberfranken — all had GDP below the average. The variation in employment rates across regions is, therefore, not closely related to differences in GDP per head.

Assessing regional developments over the past 15–20 years is complicated by unification in 1991. Most of the new Länder in the East of the country had relatively high employment rates at the time, though all have suffered a substantial decline since. Indeed, three of the regions in the new Länder — East Berlin, Sachsen and Brandenburg — were among the group of (7) regions with the highest employment rates in 1991, each having rates of over 72%. In 1998, none of them were in the top group and in one, Brandenburg, employment had fallen by so much that it was one of the regions with the lowest rates.

Each of these three regions experienced a fall in the employment rate of over 11 percentage points between 1991 and 1998, their exit from the top group contributing to a significant reduction in the average employment rate in this group over the period (from 73% to 67%). This was much larger than the decline in the rate in the bottom group (from 60½% to 57½%), so that there has been some narrowing of the regional disparity in employment over the 1990s. Large falls in employment in regions with high levels, however, were not confined to the new Länder. In three of the four regions in the old Länder, the employment rate declined by at least 6 percentage points over this period (the exception was Oberbayern where it fell by 4½ points). Even if the new Länder are set on one side, therefore, there was still some convergence of employment rates over the 1990s as rates fell by more in the top group of regions than the bottom group.



Employment rates and the age structure of population

The age structure of the population can potentially affect employment rates in different regions. If, for example, people of working age in a particular region are disproportionately in older age groups, because perhaps of migration of younger people to regions where job prospects are better, then this in itself might deter job creation, though much is likely to depend on the skills which those who remain have to offer. In practice, differences in employment rates between regions tend to affect all age groups, though some more than others. The same is true of differential rates of change in employment. Accordingly, variations in the age structure of working-age population as such, and in the gender composition, seem at most to have a minor effect on the regional disparities which are observed. (It is possible, for example, to standardise for the direct effect of differences in population structure between regions on the overall employment rate, though the validity of doing so is questionable since such differences do not necessarily reflect the skills or productive potential of the available work force; the effect on the results of standardising in this way is, in any event, small.)

In the new German Länder, for instance, men of all ages and women of most suffered a substantial decline in employment between 1991 and 1998, as noted in the text. In Italy, the fall in employment rates of men in both the 15 to 24 and 25 to 54 age groups in regions in the South over the period 1985 to 1998 was markedly greater than in those in the North, while men aged 55 to 64 experienced a reduction of much the same size. Similarly for women, there was, on average, a fall in the employment rate for those in all age groups in Southern regions, while for those in the North of 25 and over there was a significant increase.

The decline in employment affected both men and women in most age groups. In the new Länder, the reduction in employment was significant for men of all ages, as it was for women up to the age of 55. The only group not to experience a large-scale fall in the proportion in work were women of 55 and over for whom there was a small increase, reflecting a rise in the effective retirement age after 1991. (In 1991, the employment rate for women in this age group, in marked contrast to that for women aged 25 to 54, was lower in the new Länder than in the old.)

A further feature of developments during the 1990s has been the change in the age structure of working-age population in the new Länder relative to that in the rest of Germany as those in their 20s and 30s in particular, migrated westwards. This in itself may have contributed to the negative rate of net job creation (see Box).

Over the 1980s, there was little change in employment disparities between regions, those at the top and bottom of the scale experiencing much the same fall in

employment over the first half of the decade and much the same rise over the second half, with little alteration in the composition of the top and bottom groups. Indeed, leaving aside the new Länder, the regional pattern of relative employment rates in Germany in 1998 was not much different from 18 years earlier. Regions which had the highest rates in 1980 (and the lowest unemployment) — those in the South in particular — still had the highest rates in 1998. Those with the lowest rates — Saarland, Arnsberg, Düsseldorf and Münster — still had rates well below average in 1998.

The relative changes in employment rates over the 1990 have not been mirrored by a similar convergence in unemployment. Regional disparities in unemployment have generally widened over the 1990s as rates have continued to rise in the new Länder. In 1997, there was a difference of some 16 percentage points between Oberbayern, with the lowest rate, and Magdeburg, with the highest rate.

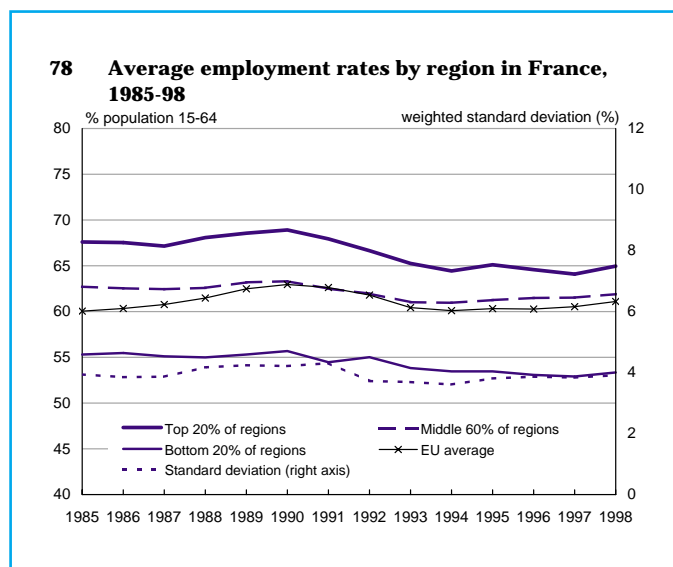
There has, however, been a significant convergence in GDP per head, as levels have risen markedly in the new Länder since unification, though primarily during the first few years. While income has increased in this part of Germany, therefore, largely because of transfers, the increase has not been accompanied as yet by a growth of employment.

France

In France, regional disparities in employment are wider than in Germany, the average employment rate in the top group of regions being some 11½% higher than in the bottom group in 1998 (Graph 78). Ile de France (the Paris region) accounts for around 20% of working-age population in the country. Since it also has one of the highest levels of employment, it dominates the top group as defined here, which is comprised only of this region and Alsace (which accounts for just 3% of working-age population). These two regions also have below average rates of unemployment, especially Alsace (where cross border commuting to Germany and Switzerland is important), and above average levels of GDP per head, though only marginally so in Alsace (but given the dominance of Ile de France, in which GDP per head is well over 50% higher than the national average, this is one of only two other regions where the level is above average).

The regions with the lowest employment rates are made up of areas in the North with declining traditional industries (steel and coal mining) — Nord-Pas-de-Calais and Champagne-Ardenne, in particular — and areas in the South (Provence-Alpes-Côte d'Azur, Languedoc-Roussillon and, above all, Corse) where the employment rate is over 20 percentage points below the national average. These regions also have above average rates of unemployment and levels of GDP per head well below average.

The regional pattern of employment rates has changed little over the 1990s, in contrast to the 1980s, when there was a relative decline in the North in particular. Both



Alsace and Ile de France had the highest employment rates in 1990 and, in the case of the latter, throughout the 1980s. Corse, Languedoc-Roussillon and Nord-Pas-de-Calais were the three regions with the lowest employment rates in 1998, in 1990 and in 1980. Nevertheless, there has been some increase in relative levels of employment since 1980 in some Northern (Picardie and Lorraine) and Western regions (Poitou-Charentes and Basse-Normandie), though in most cases, this has not been accompanied by a relative fall in unemployment (suggesting that participation has risen), or by a rise in relative GDP per head.

There has been some slight narrowing of regional disparities in employment in France over the 1990s, resulting, as in Germany, from the employment rate declining in the top group of regions by more than in the bottom group. This relative fall, however, was concentrated in the early part of the decade and since 1994, employment in the top group has risen slightly, while in the bottom group it was still a little lower in 1998 than four years earlier. There was also a widening of disparities in the second half of the 1980s, as the increase in employment was concentrated in the regions where the level was already high. This more than offset the narrowing of the difference which occurred over the first half of the decade as employment declined throughout the country.

The general tendency in France, therefore, has been for regional disparities in employment to narrow during periods of recession and to widen during periods of recovery with very little change in the extent of the difference over the long-term. The overall disparity, therefore

(as measured by the standard deviation), was much the same in 1998 as in 1985, or, indeed, 1980.

Italy

The North-South divide in Italy is pronounced in terms of both employment and income levels. In 1998, employment in the (four) regions with the highest levels (accounting for 20% of population aged 15 to 64) — Trentino-Alto-Adige, Emilia-Romagna, Valle d'Aosta and Veneto — averaged 61½% of working-age population, some 22 percentage points higher than in the (three) regions with the lowest levels — Calabria, Sicilia and Campania — where it averaged only 39½% (Graph 79). This gap in employment rates was mirrored by a difference of almost 20 percentage points in rates of unemployment and one of two to one in levels of GDP per head.

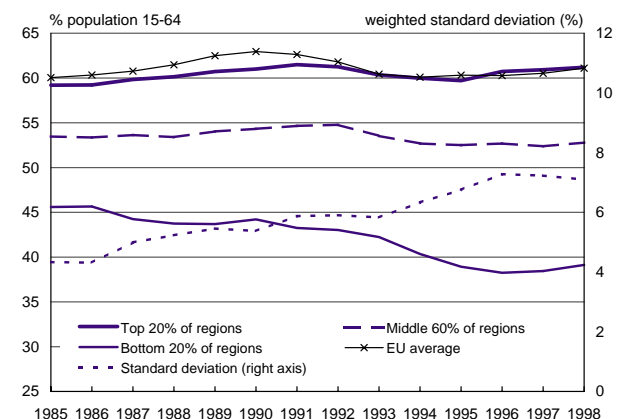
Moreover, there has been a significant widening of disparities in regional employment rates over the 1990s, which followed a slight widening over the 1980s. Between 1990 and 1998, the average employment rate in the bottom group of regions fell by 5 percentage points, having also fallen in the second half of the 1980s (by 1½ percentage points) when employment overall increased. This, moreover, followed a decline in the first half of the decade. There has, therefore, been

a persistent fall in employment relative to working-age population in the bottom group of regions — and, indeed, in most parts of the South — over both the 1980s and 1990s.

In the top group of regions, by contrast, the employment rate rose slightly in the 1990s, following an increase in the second half of the 1980s (by almost 2 percentage points). Whereas the average number employed in the top group of regions in Italy was much the same in 1998 relative to working-age population as in 1980, in the bottom group, it was over 8 percentage points lower. Since the average employment rate in Italy also declined relative to the EU average during the 1990s, and indeed during the 1980s, this means that the gap between levels of employment in the Southern Italian regions and the rest of the Union widened even more than with the rest of Italy over this period.

This widening in employment disparities was accompanied by a similar increase in the gap in unemployment rates between the North and South of the country, but was associated with a smaller rise

79 Average employment rates by region in Italy, 1985-98



in the differential in GDP per head. Indeed, in the 1980s, there was a reduction in the gap in GDP per head between the regions with the highest and lowest employment rates (the average GDP per head in the bottom group of regions rising from 53% of that in the top group in 1980 to 55% in 1990), though this was more than cancelled out by an increase in the gap during the 1990s (the average GDP per head in the bottom group of regions falling to 50% of that in the top group in 1998).

Nevertheless, since there has been a significant rise in GDP per head in the top group of Italian regions relative to the EU average over the 1990s, the level in Southern Italian regions has not changed much in relation to the rest of the EU during this period (if allowance is made for the effect of the entry of the new Länder in reducing the average) or, indeed, since 1980.

UK

In the UK, the employment rate in 1998 in all regions, except Merseyside (Liverpool), was higher than the EU average. Nevertheless,

the gap in the average rate between the top group of regions where employment was highest and in the bottom group where it was lowest was some 15 percentage points, far narrower than in Italy but wider than in France and Germany. While most of the regions with the highest rates are located in the South of the country and most of those with the lowest rates in the North of England, Scotland, Wales and Northern Ireland, there are a few exceptions, especially North Yorkshire in North-East England, which has the second highest rate in the country, and London, which has a below average rate.

Although there is a general association between relative employment rates and relative unemployment rates across regions, the relationship is not systematic. In particular, the gap in unemployment between the two groups is much smaller than the gap in employment, reflecting the tendency for participation to be lower in regions, such as in Wales and in the North of England, where unemployment is relatively high.

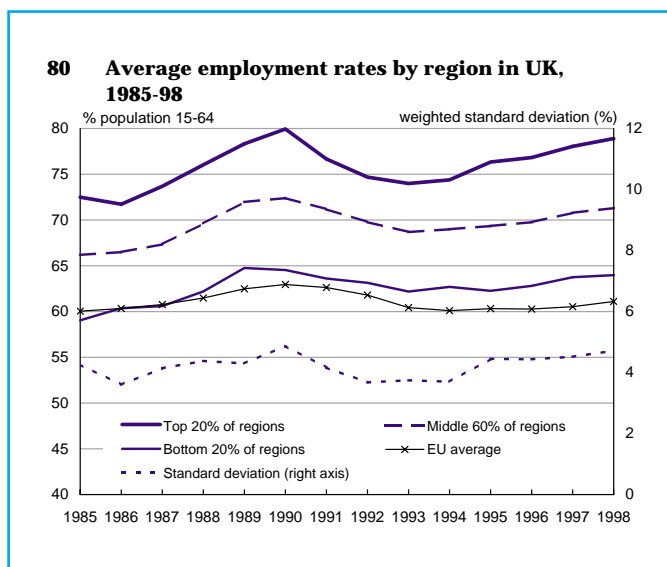
Similarly, while there is a broad relationship between relative employment rates and GDP per head, it is not particularly close. London, for example, has a GDP per head some 40% above the national average, but a below average employment rate, while GDP per head in North Yorkshire, where

employment is among the highest in the country, is only around average.

Over the 1990s, there has been very little change in employment disparities between regions. Although the average employment rate in the top regions has risen by more over the recovery years since 1994 than in the bottom regions, it also declined by more during the earlier recession years. In 1998, therefore, the employment rate was some 1 percentage point below its level in 1990 in both groups of regions (Graph 80). In the 1980s however, there was a small widening of disparities, concentrated in the growth years in the second half of the decade.

The pattern of change in regional disparities in employment in the UK, therefore, has been very similar to that in France, with the disparities tending to widen in the growth years, when the top regions in general enjoy a higher rate of net job creation than elsewhere, and to narrow in periods of downturn, when there is slightly less decline in employment in the bottom regions than in the top group. Over the long-term, however, disparities between regions have widened a little.

By contrast, the disparity in unemployment rates has narrowed significantly over the 1990s, the average rate in the top group of regions rising slightly (from 3½% in 1990 to just under 4½% in 1997) whereas it has fallen in the bottom group (from just over 12% to 9½%). The reduction in the unemployment gap, therefore, is entirely the result of a relative fall in participation in the latter group of regions rather than of a relative rise in employment. Moreover, the gap in GDP per head between the two



groups has widened slightly over the period rather than narrowing.

While, as in other countries, the pattern of relative employment rates across regions has not changed much over the years, especially over the 1990s, there are a few regions which have experienced a significant increase in employment as compared with others — especially North Yorkshire, regions in the South-West of England and the Highlands and Islands in Scotland, in all of which the rate was below average in 1990 and above in 1998. In none of these was there a commensurate fall in the relative rate of unemployment, though in most cases, there was a relative rise in GDP per head.

Spain

In Spain, the employment rate in all regions in 1998 was below the EU average, even in the Balearic Islands, Comunidad Foral de Navarra and Cataluña (both in the North-East of the country) where the rate was highest, but where it was still below 60%. The average in these regions (accounting for 20% of working-age population in the country), however, was some 16½ percentage points higher than in the region with the lowest rate, Andalucía in the South (also accounting for some 20% of working-age population), where it was only 41%. The regional disparity in employment, therefore, is slightly wider than in the UK but narrower than in Italy.

The regional disparity in unemployment is similarly wide and the pattern of relative rates across regions generally mirrors that in employment, though participation and, therefore, the rate of unemployment for any given level of employment, tends to be higher in the more urban areas (Cataluña,

Valencia and Madrid) than elsewhere. There is also a clear tendency for GDP per head to be higher in the high employment rate regions and *vice versa*, though in between the extremes, the relationship is not particularly close.

Both high employment rate and low employment rate regions have gained jobs since 1994, but the former by significantly more than the latter (from under 52% of working-age population to 58% in the top group and from 38% to just over 41% in the bottom group) (Graph 81). Since both sets of regions lost jobs at a similar rate during the recession years, it means that the employment rate in the top regions in 1998 was significantly above its level in 1990, whereas in the bottom group, it was still slightly below. There has, therefore, been a divergence in regional employment rates over the period. By contrast, during the growth years of the second half of the 1980s, the employment rate increased by more in the bottom group of regions than in the top group, and the regional disparity narrowed. This, however, followed a slight divergence of rates in the earlier part of the decade, so that overall, there was little change in the regional employment disparity over the 1980s.

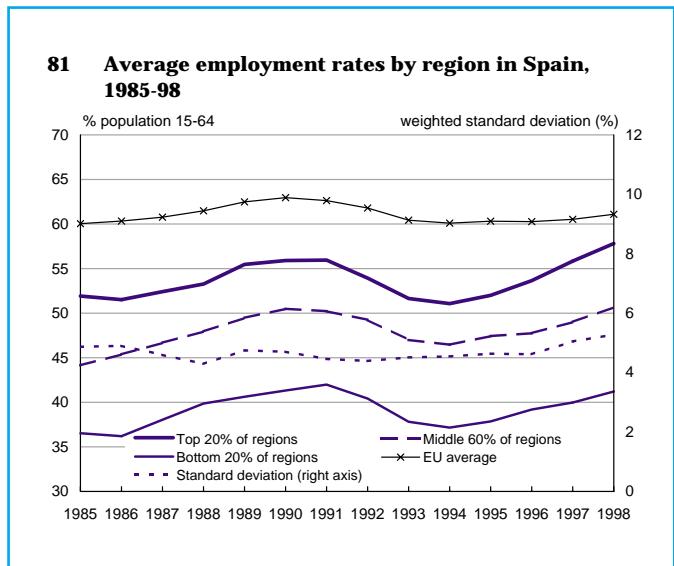
The pattern of change in employment disparities in Spain, therefore, seems to have altered between the 1980s and 1990s, with the top regions gaining more jobs than elsewhere in the present

recovery but fewer in the previous recovery period. Over the long-term, however, as in Italy and the UK, the gap between the top and bottom group of regions has widened a little.

Given the small increase in the employment rate in Spain during the 1990s relative to the EU average, there was some narrowing of the employment gap between even the bottom group of Spanish regions and the rest of the Union over the 1990s, though, of course, not as much as in the case of the top group of regions.

The disparity in unemployment across regions has widened much more than that in employment over the 1990s, suggesting a relative increase in participation in low employment rate regions where, especially among women, it has historically been very low.

At the same time, there is evidence of a greater change in the pattern of regional employment rates in Spain than in other countries over the past 15–20 years. In particular, two relatively industrialised regions, Cataluña, where the rate was only



around the national average in the early part of the 1980s, and País Vasco, where it was well below, have experienced a significant increase in employment in comparative terms. By contrast, Galicia and Principado de Asturias, in the North-West of the country, where it was well above, have suffered a substantial decline.

The relative changes which have occurred, however, do not reflect changes in GDP per head. Few of the regions where the employment rate has risen have experienced relative increases in GDP per head. Moreover, in Galicia and Principado de Asturias, where the employment rate fell during the 1990s, GDP per head rose slightly relative to the national average.

Netherlands

In the Netherlands, there is comparatively little difference in employment rates between regions, all having a higher rate than the Union average in 1998, though only slightly so in the case of the rural areas of Friesland and Groningen in the North of the country. The latter two regions have had the lowest levels of

employment since the mid-1980s, while the regions around Amsterdam, Den Haag and Rotterdam (Utrecht and Noord-Holland), have had the highest levels. Nevertheless, the gap between the regions with the highest rates and those with the lowest rates has narrowed significantly during the 1990s with the relatively high rate of net job creation which has occurred (Graph 82).

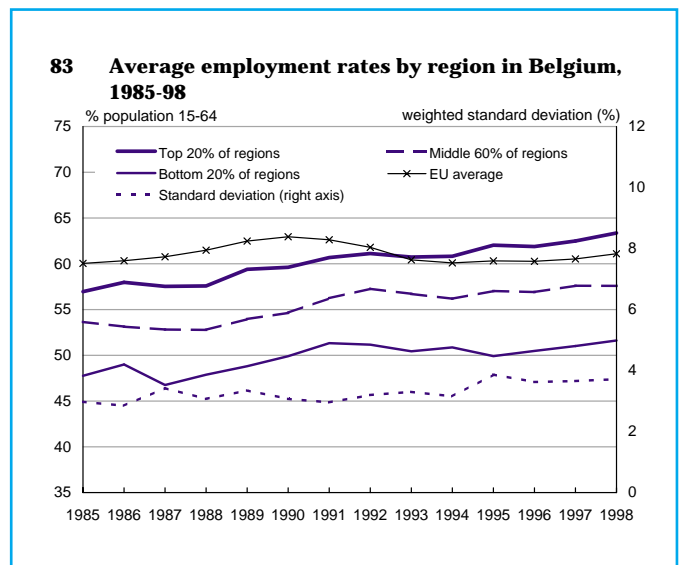
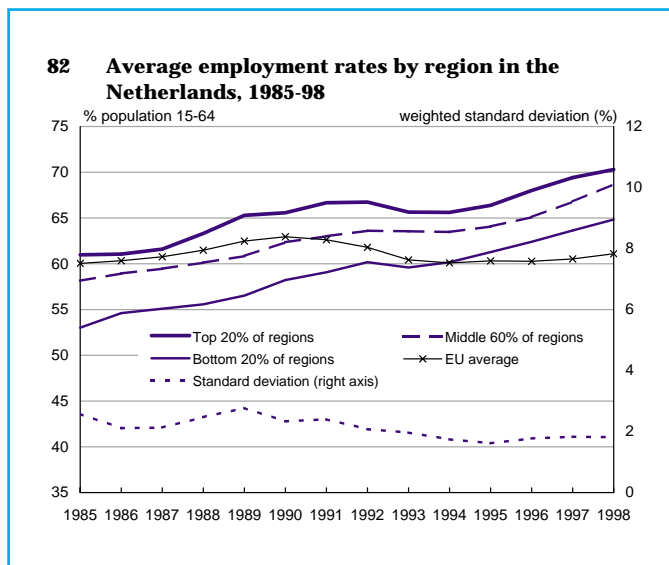
The reduction in disparities, moreover, has been achieved by a higher rate of employment growth in the bottom group of regions than in the top group, rather than by a larger decline in the top group as in Germany and France. The same occurred over the latter part of the 1980s. Between 1985 and 1998, therefore, the gap between the two groups narrowed from 8 percentage points to 5½ percentage points, less than in most other countries, while all regions experienced significant employment gains.

This convergence in employment rates across regions has been associated with a small reduction in the disparity in unemployment rates as well as in GDP per head. Generally, however, except for the regions with

the highest employment rates, there is comparatively little association between levels of employment and GDP. Indeed, Flevoland, which has a GDP per head so far below the EU average that it has Objective 1 status (25% below in 1996), had an employment rate above the national average (and accordingly well above the EU average), the coincidence of these two features reflecting the large number of people living in the region who commute to work outside (and so generate output elsewhere).

Belgium

In contrast to the Netherlands, Belgium has relatively wide regional disparities in employment, the gap between the regions with the highest (Vlaams-Brabant and West Vlaanderen in the Flemish-speaking West of the country) and lowest rates (Liege and Hainaut in the South) being almost 12% of working-age population in 1998, slightly wider than in France (Graph 83). In the former two regions, the employment rate is above the EU average, in the latter two well below. This gap is mirrored in differences in unemployment, indicating that participation rates vary comparatively little across



the country. On the other hand, there is relatively little difference in GDP per head (Vlaams-Brabant having much the same level as Liege).

Over the 1990s, the disparity in employment rates has widened significantly, with rates in Liege and Hainaut, as well as Brussels, where employment is also well below the national average, rising much less than in the Flemish regions. This follows a similar widening of disparities during the 1980s. Between 1985 and 1998, therefore, the gap in the average employment rate between the top and bottom regions widened by 2½ percentage points (and by a further 1½ percentage points between 1980 and 1985), as the high employment regions fared consistently better than the low employment ones.

This divergence was associated with an increase in the difference in both unemployment and GDP per head between regions.

Greece

Regional employment disparities are also relatively wide in Greece (slightly wider than in Belgium),

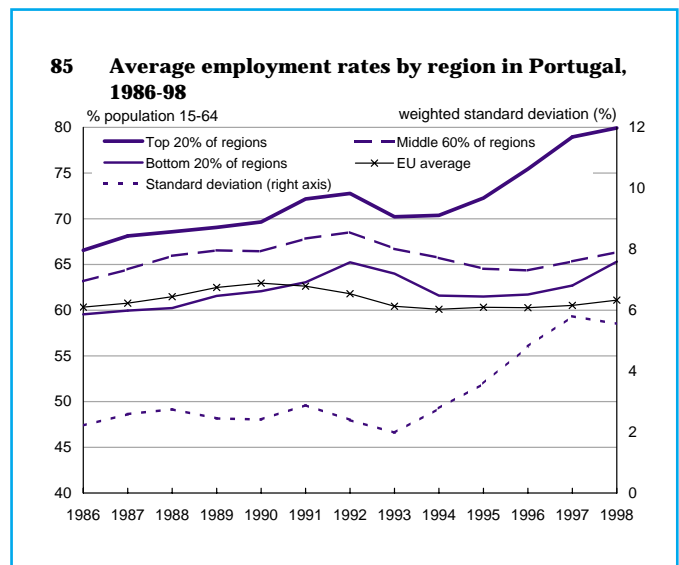
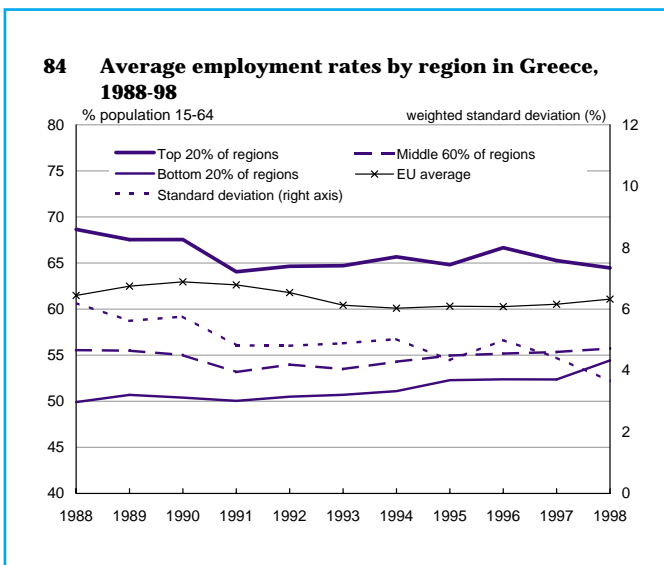
though here there has been a significant narrowing of the difference during the 1990s (Graph 84). This, however, is the result not so much of regions with low employment catching up with those with high employment but of the former experiencing a smaller decline in the number in work.

Virtually all regions in Greece suffered a significant fall in employment rates between 1990 and 1998, the main exception being Attiki, where Athens is located and which accounts for almost 40% of working-age population (and employment), where the rate went up equally significantly (from 50½% to 55%). The decline was particularly marked (8 percentage points or more) in Kriti (Crete), Ionia Nisia (the Western group of islands) and Ipeiros (on the Western mainland).

Given the relatively small rise in the national employment rate in Greece in relation to the EU average (almost entirely accounted for by Attiki), most regions in Greece have suffered a decline in employment as compared with other parts of the Union over the 1990s.

This pattern of change in employment rates is not at all reflected in relative changes in rates of unemployment, to the extent that data are available at the regional level. Indeed, unemployment rose relative to the national average in Attiki and fell in Kriti, which implies that there were pronounced changes in participation rates to match the change in employment (though it also poses serious questions about the nature of the Greek unemployment figures).

Nor is it reflected in relative changes in GDP per head. Although the level rose in Attiki relative to the national average between 1990 and 1994 (there are no regional data for GDP in Greece after 1994), it is also recorded as having risen slightly in Kriti and Ionia Nisia and to have fallen only marginally in Ipeiros. More surprisingly, the data on GDP per head indicate that in most Greek regions, the level in PPS terms rose significantly in relation to the Union average over the 1990s, despite GDP per head in real terms growing by less than the EU average (see Box).



Portugal

Regional disparities in Portugal are wider than in Greece and mainly arise from a division between Centro (which accounts for around 17% of working-age population), where the employment rate was some 83% in 1998, and the rest (the next highest rate being 68% in Norte — but see Box on data above). The gap in the rate between the top group of regions (mainly Centro) and the bottom group (which partly includes Lisboa e Vale do Tejo, where 35% of working-age population live, as well as three of the 7 regions in the country — Madeira, Alentejo and Açores) was some 16 percentage points, and, in contrast to Greece, it has widened substantially over the 1990s (Graph 85).

The widening in regional disparities, however, was largely due to the high rate of net job creation in Centro, which resulted in the average employment rate in the top group of regions rising by 11 percentage points between 1990 and 1998. By contrast, in the bottom group of regions, the rate increased by only 2½ percentage points (and by only ½ percentage point in the

Lisbon region). Moreover, the employment rate in Centro also rose significantly in the second half of the 1980s (by 7½ percentage points), whereas there was a much smaller increase elsewhere, so that the disparity between this region and the rest has widened markedly since the mid-1980s.

As in Greece, these relative changes in employment have not been accompanied by equivalent changes in unemployment. Remarkably, given the scale of increase in employment, the rate of unemployment rose in Centro between 1990 and 1998, if by less than in the rest of the country, suggesting that most of the net additional jobs were taken by new entrants to the labour force. In the Algarve, where there was also a large rise in employment during the 1990s (by over 6% of working-age population), unemployment went up by much more than the national average, while it fell in Madeira despite a fall in employment, implying an exodus from the labour force.

Equally, there is very little association between the change in employment and the change in GDP per head, the level of which declined in the Algarve relative to the national average and rose in Madeira, though it also increased significantly in Centro.

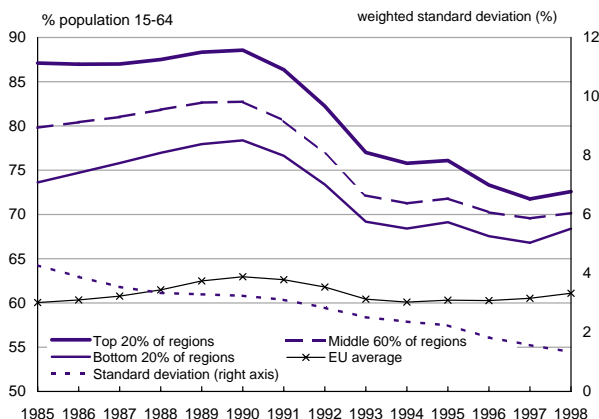
Sweden

Regional disparities in employment are

The change in GDP per head over the 1990s

Estimates of GDP per head in PPS terms produced by Eurostat show that the gap between the level in the poorer Member States and the Union average has narrowed appreciably since the reform of the Structural Funds in the late 1980s (see *Sixth Periodic Report on the EU regions*), by some 10 percentage points or so between 1988 and 1996 if allowance is made for the entry of the new Länder. However, only around half of this reduction is attributable to a higher growth of GDP per head than in the rest of the Union *per se*, the other half being due to the PPS adjustment itself — ie a smaller rise in the price level in these countries than elsewhere in the Union — which seems unusually large and which it is difficult to verify independently. The contribution of the PPS adjustment effect is particularly large for Greece, where GDP per head in real terms rose by less than the EU average, but the gap in GDP per head between Greece and the EU average was reduced in PPS terms by some 8 percentage points, or by 1 percentage point a year.

86 Average employment rates by region in Sweden, 1985-98



relatively narrow in Sweden, where the difference in the number employed between the top and bottom group was only 4½ percentage points in 1998 (Graph 86). While all regions have an employment rate well above the EU average, the rate throughout the country has declined markedly over the 1990s. The fall has been particularly marked in Stockholm, which had the highest employment rate in 1990, where it fell from 88% of working-age population to only just over 70% in 1998. In other regions, the rate either remained much the same or rose relative to the national average. Regional disparities in employment, therefore, narrowed over this period but predominantly because of the scale of the fall in Stockholm.

Once again, there is very little association between changes in employment and those in unemployment. In Stockholm, unemployment rose by much less than the national average despite the large relative fall in employment, implying a large reduction in participation, while it increased by more than the average in Västsverige, Övre Norland and Norra Mellansverige which experienced the smallest fall in the employment rate.

Nor is there much of a relationship between employment changes and those in GDP per head, the level of which rose relative to the national average in Stockholm but fell in Övre Norland and Norra Mellansverige (there are no data before 1994 for Västsverige).

Finland

In Finland, regional disparities in employment rates are wider than in Sweden, with Åland having a rate of almost 81% in 1998, the highest in the Union, and Ussimaa, one of

almost 72%, whereas in Itä-Suomi and Pohjois-Suomi, it was only around 59%, less than the EU average. Although there are no data available on regional employment before 1995, the difference between the former two regions and the latter two has widened slightly since then.

These relative rates of employment are associated with a significant, though smaller, gap in unemployment, reflecting the higher rate of participation in high employment regions. It is also mirrored in wide differences in GDP per head, the level of which was, on average some 60% higher in the two regions with the highest employment rates than in the two with the lowest rates.

Data on unemployment suggest that regional disparities have widened over the 1990s, though only slightly if Åland, where the rate has fallen markedly in relative terms, is excluded.

Austria

Regional disparities in employment are relatively narrow in Austria, the two regions with the highest levels (Salzburg and Oberösterreich) having rates of 71–72% as against rates of 68% in Steiermark and 65% in Kärnten, the two with the lowest rates. As for Finland, no data are available on employment before 1995 to assess the changes which have occurred over the 1990s. Unlike in Finland, however, the relationship between employment and unemployment rates across regions is not particularly close, with Wien having the highest rate of unemployment despite an above average employment rate, reflecting relatively high participation, and Burgenland, lower than average rates of both employment and unemployment.

Regional differences in GDP per head, however, are much wider than for employment, with Wien having an average level of well over twice that in Burgenland, but, as for unemployment, the relationship between the two is not very close.

Concluding remarks

The main conclusions to emerge from the above analysis are, first, that disparities in employment between regions have tended to widen over the 1990s, and indeed, over a longer period of time. This is the case both across the Union as a whole and in most Member States. Moreover, in those countries where disparities have narrowed over the 1990s — Germany, France (if only marginally), Sweden and Greece — the main reason is because of a relatively large decline in employment in the regions with the highest levels rather than an increase in the regions where employment is low. Only in the Netherlands have disparities narrowed as a result of low employment regions gaining jobs disproportionately. There is, therefore, little sign of any tendency for the distribution of net job creation between regions to become more balanced over time and some sign of it becoming more unbalanced. This could exercise a significant constraint on the conduct of monetary policy in the Union and make it difficult to achieve overall growth objectives.

Secondly, the pattern of employment rates between regions, as indeed across the Union as a whole, has not changed a great deal since 1980. Those regions which had the lowest rates 15–20 years ago still tend to have the lowest rates now. The implication is that there are structural problems of job creation in these regions which have not been greatly alleviated over this

period, which reflects their deep-seated nature as well as perhaps the lack of sufficient reform of labour, product and capital markets.

Thirdly, the above findings suggest that more analysis needs to be carried out on the linkage between the operation of the Structural Funds and job creation, whatever their effect in reducing disparities in income levels across the Union has been. In particular, the widening in disparities in employment rates between regions has been especially marked in Italy and Portugal and is also evident in Spain, if to a smaller extent. Moreover, in Greece, most regions apart from Attiki have experienced a decline in employment over the 1990s. These are all countries which have received substantial transfers from the EU Structural Funds with the aim of reducing disparities in economic performance. Indeed, estimates of GDP per head suggest that there has been a significant narrowing of the gap in GDP per head between all the Cohesion countries and the rest of the Union over this period as well as between the lagging regions in these and other countries and other parts of the EU. On the evidence presented here, however, this apparent convergence has not been accompanied by a similar convergence in employment.

Part II Section 1 Job creation in Europe and the US

It is well known that the US has been more successful over many years in achieving a higher employment — and lower unemployment — than the European Union. In the mid-1970s, however, the two economies were on a par in terms of providing work for their people and in the early 1970s, the employment rate in the Union was higher than in the US. Since then, there has been a growing divergence in employment performance between the two.

Between 1975 and 1998 total employment in the US grew on average by just under 2% a year, whereas in the Union it rose by under ½% a year. Much higher growth of population in the US provides part of the explanation for this differential, but it does not account for the larger number in work relative to working-age population. In 1975, the number employed in the Union amounted to some 64% of those aged 15 to 64, slightly higher than in the US, where the figure was 63%. By 1998, the employment rate in the US, defined in these terms, had risen to 75%, while in the EU, it had fallen to 61%.

The concern here is to examine the difference in employment rates between the two economies more closely, focusing on the respective changes in the sectoral division of economic activity and in the structure of occupations over the past 15–20 years, in order to identify the areas in which the additional jobs in the US have been created and the

kinds of job which these have been. In so doing, particular attention is paid to differences in experience between men and women.

The starting-point is the *Employment Rates Report 1998* (Com (98)572), published by the European Commission last year, which drew attention to the proportionately much larger number of jobs in services in the US than in Europe in

1997. The aim is to explore this finding in more detail and to examine the trends which have led up to it, using a detailed and reasonably comparable set of sectoral and occupational data specially compiled for this purpose (see Box). It should be noted in this context that the data used in the analysis differ in some cases from those used in the *Employment Rates Report*. This is because a more detailed, and

The data used in the analysis

For the analysis of the sectoral composition of employment and shifts in this over time, US data — based on the Standard Industrial Classification (SIC) — have been transformed to match those compiled in the Union, which are classified according to the Statistical Classification of Economic Activities (NACE Rev.1).

Analysis of changes in employment by occupation is more problematic since there is no satisfactory way of ensuring the data classified according to the US national system are fully compatible with those compiled according to the ISCO system in the EU, though this is equally a problem as between Member States in the Union, which classify data according to sometimes different interpretations of ISCO. In practice, the US classification system seems to be very similar to ISCO, but it is not possible to rule out differences in interpretation similar to those which exist within the Union even with a supposedly common classification. Because of such difficulties, the analysis is confined to comparisons of broad occupational groups, with the focus on changes over time, which ought to involve slightly fewer problems of comparability.

The data for the EU come the Union Labour Force Survey and for the US from the Current Population Survey, both of which are household based. The LFS data have been aligned to the Eurostat benchmark employment series, which is the most reliable indicator of changes in the total number employed over time. In practice, a reasonably complete set of data is available in both cases from around the mid-1980s. As the Community LFS was introduced fully in the early 1980s, all the analysis takes the mid-1980s as its starting point — from 1985 for the EU and 1983 for the US. These allow analysis of sectoral changes in employment over both growth and recession periods.

Changes in employment rates by broad sector, 1985 to 1997

The analysis in the *Employment Rates Report* identified inadequate development of jobs in services as the major feature of both low rates of net job creation and low levels of employment in the Union, the problem arising most especially in four of the five largest Member States, Germany, France, Italy and Spain. The low employment rate in services in these four economies seems to be an important reason why the number employed in the EU relative to working-age population is lower than in the US.

The analysis in the Report covered the period 1985 to 1997 and was based on ISIC data compiled by OECD. These, however, differ from the LFS data used here and are not necessarily consistent over time (the LFS data have been aligned to the benchmark series to try to ensure consistency). The table below shows the difference between the two sources in changes in employment rates over the period.

As compared with the figures in the *Employment Rates Report*, the LFS-based figures indicate that the employment rate in services in the Union rose by slightly more while that in industry fell by more. For most countries, however, the differences in the changes shown by the two series are very small. The main exceptions are:

- Germany, where employment in services on the LFS-based series increased by 4½% of working-age population instead of by 2½%, still less than the EU average, while employment in industry and agriculture fell by more;
- France, where the same is true, but the difference is less, service employment rising by 4½% of working-age population on the LFS series instead of by 3½%;
- Greece, where employment in agriculture and industry fell by more on the LFS-based data and employment in services rose by less.

Nevertheless, the same pattern of change is evident from the new data as described in the *Employment Rates Report*. Except in Finland and Sweden, where the number in work in the early 1990s fell markedly, employment in services rose throughout the Union relative to working-age population over the 12 years. In the Netherlands, it rose by over 10 percentage points and in Austria, Portugal and the UK by almost as much. In Germany, France and Italy, by contrast, the rise was below the EU average.

In 1985, the employment rate in both industry and services was similar in Germany to that in Austria. By 1997, industrial employment had fallen by slightly more in Austria, but this was more than compensated by a larger rise in services. While employment in services in Germany grew relatively slowly, in Austria the employment rate in distribution, hotels and restaurants and in business and financial services rose in each case by 3 percentage points. Similarly, in France, employment in services in 1985 was some 5% of working-age population less than in the UK. By 1997, the difference had widened to 9% of working-age population. Equally, the gap in the employment rate in services between France and the Netherlands widened from 1½ percentage points to 7½ percentage points over the 12 years.

Change in employment relative to working-age population, 1985-97

ISIC-based series	Percentage point change														
	B	DK	D	GR	E	F	IRL	I	NL	A	P	FIN	S	UK	E15
Agriculture	-0.3	-2.2	-0.8	-6.7	-4.0	-2.0	-2.2	-2.4	-0.2	-1.3	-4.9	-4.1	-1.9	-0.2	-1.9
Industry	-0.9	0.0	-3.0	-4.2	0.6	-3.4	1.4	-1.7	-1.1	-5.2	-0.5	-5.8	-6.3	-4.0	-2.3
Services	5.4	4.1	2.5	10.3	7.8	3.4	6.9	2.3	10.4	8.7	9.8	-0.3	-3.5	8.8	4.9
LFS-based series															
Agriculture	-0.4	-2.3	-1.4	-5.3	-3.1	-2.3	-2.2	-2.5	-0.6	-1.3	-4.7	-3.5	-1.3	-0.2	-1.9
Industry	-1.2	-1.2	-4.4	-2.0	0.4	-4.1	1.1	-1.5	-1.0	-4.9	-0.6	-6.4	-6.3	-3.9	-2.7
Services	5.7	3.6	4.6	6.7	7.1	4.6	7.5	2.3	10.6	9.2	9.4	-1.4	-4.3	8.8	5.4

comparable, dataset has been constructed than that which was available at the time. Nevertheless, the main conclusions reached in the Report about the slow development of services in some Member States, especially many of the larger ones, remain valid (see Box).

Employment rates by sector in 1997

The difference in 1997 in the overall employment rate between the US and the EU of some 13½% of working-age population is, in proximate terms, wholly explained by the higher employment in services in the former (Table 1). Whereas employment in agriculture and industry taken together was slightly higher in Europe than the US, employment in services amounted to 54½% of working-age population in the US as opposed to just under 40% in Europe.

Within services, employment in the US was higher than in Europe in relation to working-age population in every major service sector, except *public administration*. The differential is widest (2½–3 percentage points in each case) in *wholesale and retail trades* — mainly in *retailing* — *business services*, *health and social work* and *hotels and restaurants*. These, it should be noted, consist of both basic services and more advanced ones.

It is arguable that both the higher employment rates in the US and the difference in structure, with many more jobs in services, are in some sense a consequence of the more advanced nature of the US economy and the higher level of GDP per head than in Europe, that the US from this perspective provides an indication of future

employment developments in the latter. Although this argument may have an element of truth, in the sense that the greater prosperity of the US affects the pattern of demand and, therefore, of economic activity, it cannot be pushed too far, if only because of the very different institutional and cultural features of the two economies. Some indication of the strength and universal nature of broad trends can be gained by examining the equally large differences in sectoral employment rates which exist within Europe between Member States.

In the first place, there is no clear systematic relationship between the level of employment, or the employment rate, and the level of economic prosperity as measured by GDP per head (Table 1, in which Member States are ordered by GDP per head).

Secondly, there are, in general, significant differences between the composition of employment in most Member States and that in the US, even allowing for the higher overall level of employment in the latter. Moreover, those with GDP per head closest to the US level do not tend to have the most similar sectoral division of employment. Indeed, the UK has an employment structure which most resembles that in the US, but a GDP per head which is slightly below the EU average and lower than in most other Member States. It does, however, have the second highest employment rate in the Union (70½%) and one which is only slightly less than in the US. (The comparison of the division of employment by sector is carried out by summing the absolute differences in the share of each NACE 2-digit sector in total employment between individual Member States and the US.)

The Netherlands has the next most similar structure, but only the sixth highest GDP per head in the Union. On the other hand, the Member States for which the employment structure differs most from the US are Greece, Portugal and Spain (along with Luxembourg, which is too small to be comparable), which have the lowest levels of GDP per head in the EU.

In Denmark, the country with the highest employment rate in the Union and one which exceeds that in the US, the difference is attributable, not to services, but to larger numbers employed in agriculture and industry, mostly in manufacturing (over 2½% of working-age population higher in 1997) and within this in *food*, *fabricated metals* and *engineering and office machinery*. Moreover, while overall employment in services is similar to that in the US, there are marked differences in the composition of this, with the number employed in *health and social services* being some 4½% of working-age population higher than in the US and that in other sectors, apart from *public administration*, being lower.

A similar pattern of difference is also evident for Sweden, in which the overall employment rate was only slightly below that in the UK in 1997 and in which employment in *health and social services* is even higher than in Denmark (13½% of working-age population), but where in *retailing* it is only half the US level and in *hotels and restaurants* only a third.

For the Member States with employment rates furthest below the US, the gap, as might be expected, is widest for services. In Italy, Spain, Ireland and Greece, the employment rate in services was in each case less than 35% in 1997 as against around

50% or above in Denmark, the UK, the Netherlands and Sweden. (The employment rate in services is also relatively low, at 38%, in Portugal, but this is compensated by relatively high rates in industry and agriculture.) Within services, the main area of low employment is *health and social work* (in which the number employed is at least 5½% of working-age population below that in the US in all of these countries except Ireland), though there are also significant differences in *retailing, hotels and restaurants, business services and education* (all around 2–3% of working-age population lower) and, slightly less so, in *real estate, insurance and recreational activities* (all 1% of working-age population lower).

The one area of services in all Member States, apart from Ireland, where employment is higher than in the US is *public administration*, where, on average, the number employed was some 1½% of working-age population higher in the Union than in the US in 1997, and where in Germany, France and the Benelux countries, it was over 2 percentage points higher.

Men and women

The employment rate for men in the US, at around 81% of those of working age, was just over 10 percentage points higher than in the EU in 1997 (Table 2). As for total employment, this is due entirely to proportionately fewer men being employed in services (where the difference was some 12 percentage points), especially in the more basic activities within the sector — *retailing* (3 percentage points) and *hotels and restaurants* (2½ percentage points).

Much of the difference in the overall employment rate between the two

economies, however, is a result of fewer women being employed in Europe than in the US (Table 3). Whereas in the US, around two-thirds of women of working age were employed in 1997, in the EU, it was barely half. Again the difference is concentrated in services, which provided jobs for 58% of women of working age in the US and only just over 40% in the Union.

The same is true for Member States within the Union, rates for women varying from 71% in Denmark and 68% in Sweden to 34% in Spain, 36½% in Italy and 40% in Greece. This difference predominantly arises from the much lower levels of employment of women in services, which in the latter three countries amounted to only 25–27% of working-age population as opposed to some 59% in the former two. This, in turn, largely reflects the difference in employment in *health and social services*, which provided jobs for 22–24% of women aged 15 to 64 in Denmark and Sweden in 1997 but for only 3–4% in Italy, Greece and Spain. Although the difference with the US is less, it still amounted to around 10% of women of working age.

The gap in women's employment rates between the US and Europe is larger in health care than in any other area, but this reflects the lower level of overall employment in this sector. Indeed, the share of jobs performed by women as opposed to men was only slightly less in the Union in 1997 than in the US (around 75–80% in both cases). This similarity in the division of jobs between men and women applies in most sectors, but there are some interesting differences (Table 4).

Within services, some 70% jobs in *banking* were performed by women in the US in 1997 as against only

47% in the Union and only 31% in Italy and 27% in Spain, while in *insurance*, the difference was almost as wide (62% in the US, 46% in the EU). Similarly, in *computing*, 31% of jobs were carried out by women in the US, 25% in the EU and in *R&D*, the figures were 44% and 38%, respectively. On the other hand, in *retailing*, only just over half of those employed were women in the US, whereas in Europe, the proportion was around 58% and two-thirds in Germany and Austria.

Outside of services, the same kind of difference is evident in the more advanced manufacturing sectors, such as *electrical engineering and electronics*, in which 39% of those employed were women in the US in 1997, but only 29% in the Union, or *motor vehicles* (25% in the US, 15% in the EU). By contrast, in more basic industries, such as *textiles and clothing*, the proportion of women employed in the US is less than in Europe (71% in *clothing* in the US as against 76% in the EU and 85% in Portugal), as is also the case in *agriculture* (22% in the US, 35% in the EU and 53% in Portugal).

Employment by occupation

Although the precise degree of comparability of US and EU data on the structure of occupations is uncertain, as, indeed, it is between EU Member States, the two systems of classification seem sufficiently close, after some manipulation, to give meaningful results at least at a broad level. Nevertheless, not too much attention should be paid to small differences.

Just over a quarter of working-age population — equivalent to a third

of those in work — were employed in the highest skilled occupations (managers, professionals and technicians) in the US in 1997 (Table 5; because of possible classification problems, the main focus should be on the figures for the broad occupational groups). This was slightly more than the average for the European Union in relation to working-age population (just over 21%), though in terms of shares of the total in work, the figures are much the same (34–35%).

The average figure for Europe, however, is pulled down significantly by the low figures in the four Southern Member States, which in each case were 16% or less of working-age population and only 13% in Spain and Italy. These may in part be due to classification problems (the proportion of managers in Italy, in particular, seems implausibly low), but they also reflect the low employment rate in three of these countries, as they do in Ireland, where the group accounts for only 17% of working age population. Some 26–30% of those in work were, therefore managers, professionals and technicians in each of these Member States except Portugal, where the figure was only slightly less. This is still lower than elsewhere in the Union, which may reflect some tendency for the relative importance of the highest skilled occupational group to increase as economies develop.

In the North of the Union, the three Nordic Member States, the Netherlands and the UK all had shares of working-age population in this occupational group which were higher than in the US, though not markedly so except in the Netherlands (31%).

For the other occupational groups, the proportion of working-age

population employed in manual jobs was much the same in the US as in Europe (22–23%), as was the division between elementary and more skilled jobs (though there were slightly more in the former than the latter in the EU than in the US). In each case, however, this implies that the share of total employment in such jobs was higher in Europe than the US, given the lower employment rate. These jobs were particularly important in Greece and Portugal, where they accounted for around half of those in work.

The main difference between the US and the EU is in the less skilled non-manual occupations, in jobs for sales and service workers in particular. These accounted for some 16% of working-age population in the US (over 21% of the total employed) as against only around 8% in Europe (13½% of those employed). Indeed, even in Denmark and Sweden, the countries where employment in these jobs was highest, their relative scale (12% of working-age population) was still much smaller than in the US. For clerks and office workers, the difference between the US and EU was much smaller (just over 2% of working-age population), but only in the UK and Luxembourg was the relative number working in these jobs higher than in the US.

For men, the occupational structure of employment is similar in the Union to that for the total in work, though with proportionately more employed in the higher skilled occupations. In 1997, the number of men working as managers, professionals or technicians amounted to around 25% of those aged 15 to 64, much the same as in the US. A similar proportion of men of working age were also employed in manual jobs in the two economies (35–36% in each case),

though, unlike for the total, proportionately more were employed in Europe in the more skilled jobs than in the US. The main difference between the two economies once again was in the relative number working in the lower skilled non-manual jobs — only 11% of men aged 15–64 in Europe, almost 20% in the US. Within this group, the difference is concentrated in sales and service jobs which employed just 5½% of working-age men in the EU but 15% in the US.

Virtually the whole of the difference in the overall employment rate of men between the two economies is, therefore, attributable to this one occupational group. Moreover, except for Italy (9%), no Member State in the Union had more than 8% of its male population of working age employed in sales and service jobs in 1997 and in nearly all the proportion was less than half that in the US.

For women, there are more significant differences in the occupational pattern of employment between the two economies. This partly reflects the much lower overall employment rate in the EU than the US, though even allowing for this, a much smaller proportion of women in work in Europe are employed in non-manual jobs than in the US and correspondingly a much larger proportion in manual jobs. In 1997, some 11% of women of working age were employed in manual jobs in the EU as against 9% in the US, but the former represents 21½% of the total employed, the latter only 13%.

Conversely, the employment of women as managers, professionals and technicians in the Union amounted to 36% of the those in work, only slightly less than in the US (38%), but in terms of women of working age, the difference was

much more marked (18% as against 26%). Similarly, 43% of women in employment in the Union worked as clerks, office staff or in sales and service jobs, only slightly below the proportion in the US (49%), but this represented only 22% of those of working age as against 33% in the US. The figure was particularly low in Greece and Spain, only 12–13%, though largely because of the low employment rate of women (40% in the former, 34% in the latter).

In summary, the above findings are broadly consistent with the differences in the sectoral pattern of activity between Europe and the US noted earlier. The additional people in work in the US as compared with Europe are mainly engaged in medium or lower skilled non-manual jobs, working as clerks or office staff or in sales and service activities. This is the case for both men and women. For women, however, the much higher rate of employment means that there are also significantly more women working as managers, professionals or technicians in the US. At the same time, a significantly larger proportion of women in Europe

seem to be employed in unskilled manual jobs than in the US.

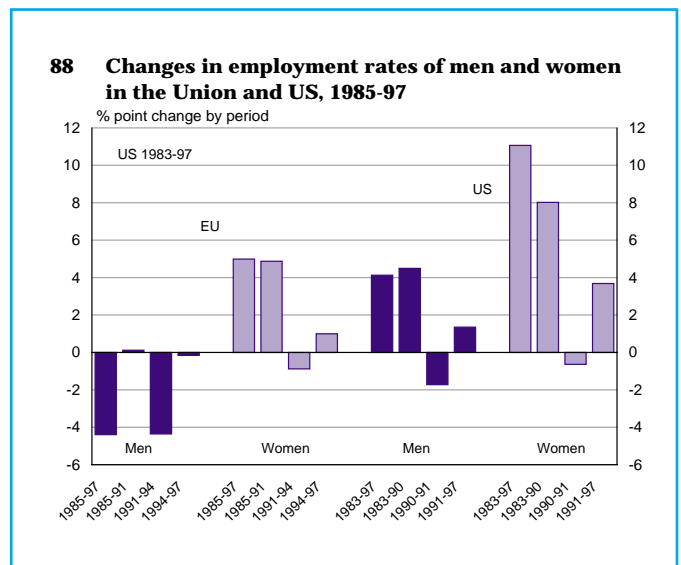
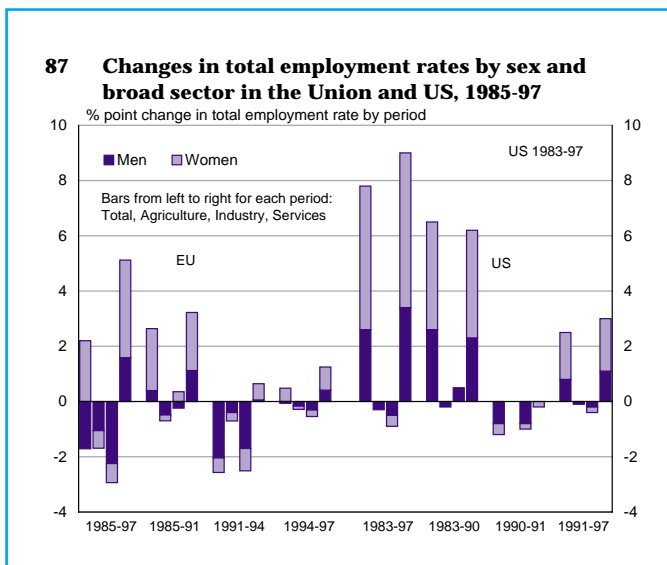
The implication is that, if Europe were to follow a similar development path as the US, it is in these jobs that a disproportionate increase in employment would occur. At the same time, it should be emphasised, as indicated in the previous section, it is questionable how far the development path is similar.

Changes in employment rates of men and women since the mid-1980s

Between 1985 and 1997, the employment rate in the Union increased by only around ½ percentage point, all of the rise being due to higher employment among women (pushing up the total employment rate by just over 2 percentage points) which offset a decline among men (in itself reducing the overall rate by over 1½ percentage points) (Graph 87). This decline was a result of heavy job losses in agriculture and industry

(which together reduced the overall employment rate by over 3 percentage points over the period), which was only partly offset by increased jobs for men in services. Women also experienced job losses in agriculture and industry, but less than half as many as men, and these were much more than compensated by strong growth in services (adding 3½ percentage points to the overall employment rate).

In contrast to Europe, in the US, there was not only an overall increase in the employment rate but also job growth for men as well as women. Nevertheless, some two-thirds of the net additional jobs created went to women. Moreover, while there were jobs losses in agriculture and industry, they were much smaller than in the EU (reducing the overall employment rate by only just over 1 percentage point) and were accompanied by a larger increase in service employment. Although the division of job gains between men and women in services were similar in the two economies, the beneficial effect on employment of men in the US was greater because of the larger overall increase.



In sum, the superior employment performance of the US relative to Europe has been due to larger net job gains in services, but equally importantly to smaller job losses in agriculture and industry. The latter partly explains why employment of men, who account disproportionately for jobs in these two sectors and who have, therefore, been affected more by the job losses, has fallen in Europe and risen in the US. It is also partly attributable, however, to the lower job growth in services than in the US, where, though it has benefited women much more than men, it has provided work for many more men than in Europe.

The overall effect of these changes on the employment rates of men and women is striking (Graph 88). For men in the Union, employment fell by 4½% of those of working age between 1985 and 1997, entirely because of job losses incurred during the recession 1991 to 1994. In other years, the employment rate hardly changed. For women, the relatively smaller decline in the employment rate during the recession was more than reversed after 1994. For men in the US, the pattern of employment change has been remarkably similar to that of women in the EU, with a significant increase occurring during the 1980s (4% of those of working age) and with very little rise during the 1990s. By contrast, the employment rate of women in the US rose markedly in both the 1980s and 1990s, by 11% of those of working age from 1983 to 1997, though with some slowdown after 1990.

Growth by detailed sector in the 1980s

Although both the US and Europe experienced high net job creation in

the second half of the 1980s, the pattern of growth differed in a number of respects (Table 6, where the change in employment in individual sectors is related to the total number employed in the economy at the beginning of the period in order to allow explicitly for the different sizes of sector; this, in effect, indicates the contribution of each to the overall change which occurred). In both, employment in agriculture declined, though in Europe the fall was much larger, reducing the total number in work by 1½% over the period. In both also, employment rose in manufacturing, but whereas for women the growth in jobs was the same in the two (equivalent to ½% of total employment), for men, the increase in the EU was only half that in the US (where it added almost 1% to the number in work). Moreover, in Europe, the gain in jobs was concentrated in Germany and in the engineering industry, in particular. Employment in mining fell in both economies, mainly, of course, affecting men, compensated by job growth in construction, which added almost 1% to total employment in the EU but 1½% in the US.

By far the largest job gains occurred in services, adding just over 8% to total employment in the EU and 15% in the US. In both, women accounted for some 62% of this increase.

In the US, job growth in *health and social services* and *business activities* each added around 2½% to total employment, with women accounting for 4 out of every 5 net additional jobs in the former. Women also took most of the extra jobs in education (adding just over 1% to total employment), while in *retailing* and *hotels and restaurants* (which added around 1½% to the total in each case), men and women

gained equally. Job growth in *public administration* also added significantly to total employment over the period (around 1%).

Comparisons with the EU at a detailed sectoral level are made difficult by the revision in the NACE system of classification in 1992 and the problems of aligning the old system with the new. In most cases, comparison is possible only for relatively broad sub-sectors and in one case — *business and personal services* — only by aggregating quite different activities, though business services represent by far the largest element of the combined sector. In the US, job growth in the combined sector added almost 4% to total employment over the period as against just over 2% in the EU. This implies, however, that the sector accounted for a slightly larger share of the overall growth which occurred in the EU (over 25%) than in the US.

The same problem applies to the *wholesale and retail trades*, which were responsible in the EU for increasing total employment by 1½% over the period as against 2½% in the US. Unlike in the US, however, most of the growth in the EU favoured women. By contrast, there were major differences in the contribution to job growth of *health and social services* and *education*, which together added only just over 1% to total employment in the EU, most of the additional jobs going to women, but just over 3½% in the US, around three times as much. (This difference is particularly significant given the often-repeated claim that job creation in the US is concentrated in the private sector, in Europe in the public sector. In practice, as demonstrated here, the pattern of job growth is very similar in the two economies, though communal services tend to be part of

the private sector in the US, part of the public sector in Europe. Equally, of course, the large job losses in agriculture and industry have pushed down private sector net job creation in the EU.)

Only for *membership organisations* — which added almost 1% to the total employed — was job growth in the Union higher than in the US, though *employment in private households* (ie cleaning) remained unchanged in the EU whereas it fell in the US. Moreover, the contribution to overall employment of *public administration* was much the same in the two economies (1%), which means that in terms of job growth, it was more important in Europe than the US.

Recession in the early 1990s

In 1991, total employment in the US fell by just under 1.1 million or by some 1% (Table 7). Although short-lived, the recession hit men working in *manufacturing* and *construction* especially hard, job losses amounting to over 1% of total employment. It also hit employment in *retailing* and *banking*, of both men and women, job losses amounting to ½% of the total in work. Virtually the only sector in which employment rose was *health and social services*, which alone almost fully offset the decline in *retailing* and *banking*.

The three years of recession in the Union between 1991 and 1994 had a similar effect. Employment of both men and women fell markedly in manufacturing and agriculture, reducing the total in work by 3½% and 1%, respectively, and giving rise to many more job losses than in the US, partly because of their larger size (employing 25% of the

total in work as against under 19%). In contrast to the US, however, employment in many service activities continued to expand (together adding 1½% to the total in work) and offsetting some of the fall elsewhere.

Although job losses occurred in *sales and repair of motor vehicles*, *road and rail transport*, and *insurance*, there was significant growth in *health and social services*, which alone added almost 1% to total employment, with women accounting for most of the additional jobs. Growth in other communal services, *education* and *public administration* — again mainly among women — added another ½%. At the same time, there was a large expansion of jobs in *business services*, on much the same scale as in *health and social services*.

Growth in the 1990s

Since the recession came to an end, the US has again been much more successful than the EU in creating new jobs (Table 8). Between 1991 and 1997, employment in the US increased by almost 2% a year, whereas in the Union it went up by only 1½% between 1994 and 1997, only ½% a year. The fall of employment in Germany over this period, however, is a major reason for the low growth. In the rest of the 14 Member States, the number employed increased by 1% a year, though still much less than during the second half of the 1980s.

Despite the overall growth, the Union still lost jobs in agriculture (reducing total employment by almost ½%) and manufacturing (reducing employment by over ½%). Job losses in the latter, however, were concentrated in Germany, where they reduced the total number in work by some 2½% over the

three years, around half the losses occurring in the traditionally strong industries of *mechanical engineering* and *chemicals*. In the other 14 Member States, there was a small net job gain in manufacturing.

Growth in services added over 2½% to the total employed in the EU as a whole, with continued large increases in *health and social services* and *business services*, these two together being responsible for much of the overall rise and expanding in Germany, where there was a decline in a number of other services, especially transport.

In the US, though employment increased in most parts of the economy, even in agriculture, around 90% of the net additional jobs created were in services. Job growth was particularly strong, as in the Union, in *health and social services* (adding almost 2% to employment) and *business activities* and *computing* (between them adding over 1½%), as well as in *education* and *recreational activities* (just under 1% in both cases), in which employment in the EU increased but by much less (together adding only around ½% to the total in work). Job growth was also pronounced in *retailing* (adding over 1% to the total), in which employment in the EU remained unchanged (though rising slightly outside Germany, where it fell). In addition, growth in *construction* (also adding some 1% to the total) more than compensated for the losses during the 1990–91 recession, as they did in Europe, though the scale of both fall and subsequent rise was much smaller.

Employment growth by occupation

During the 1990s, in both Europe and the US, there has been a clear shift in the structure of employment towards higher skilled occupations and away from lower skilled ones. Moreover, higher skilled jobs have continued to grow even when overall employment has fallen.

In the EU as a whole (here excluding Austria, Finland and Sweden, where no comparable data are available, and France, where the data are not consistent), the total number in work declined by ½% between 1992 and 1997 (Table 9). Employment of *managers, professionals and technicians*, however, increased, adding 3½% to the total employed, whereas for manual workers, especially the lower skilled, job losses reduced total employment by almost 4½%. Jobs for lower skilled non-manual workers expanded, but only slightly, with growth concentrated among *sales and services workers* and employment of *clerks and office workers* falling.

Much the same pattern is evident for the US. Here employment rose by 9% between 1990 and 1997 and job growth among *managers, professionals and technicians* added 6½% to the total, accounting for over 70% of the overall rise. Unlike in Europe, however, manual jobs did not decline, though they expanded only slightly, increasing total employment by just over ½%. The number of *sales and service workers* also rose, as they did in Europe, but by significantly more, adding almost 2½% to total employment. As in Europe too, there was a fall in *clerical and office jobs* and on a similar scale.

Within the EU, except for Portugal where the shift was the reverse of elsewhere, all countries experienced the same pattern of change. Moreover, in those Member States, notably Ireland and the Netherlands, which like the US experienced high overall growth in employment, there was an expansion of jobs in all occupational groups, even the manual ones, just as in the US. The growth of manual jobs was particularly marked in Ireland, adding some 5½% to total employment (the higher skilled occupations added over 8%), though the overall increase in the number in work, at almost 20% over the 5 years, was also much higher than elsewhere, including the US. In the Netherlands, where the overall rise in employment was only slightly less than in the US, an increase in manual jobs made much the same contribution to total net job creation (the growth in higher skilled jobs was similar, though it was less for *sales and service workers*).

The implication seems to be that if overall growth of employment is high enough, then additional jobs will be created for all workers, even those with relatively low skills, though those with higher skill levels will still tend to benefit most. If total employment increases only slightly or falls, however, jobs become vulnerable, among manual workers particularly but also among non-manual ones with lower skills. In Germany and Italy, therefore, where employment fell significantly between 1992 and 1997, there was a reduction in clerical and office jobs as well as, more substantially, in manual ones, the only Member States, apart from Portugal and Luxembourg (which is too small to be representative), where this was the case. In both countries, the number of people employed as *managers, professionals or technicians* increased.

Occupational changes in the 1980s

The same kinds of shift in the structure of occupations seem to have occurred in the 1980s, though the data for the Union for these years are not particularly reliable, are not comparable with those for later years and are limited to 8 Member States (those included above plus France, but excluding Denmark, Spain, Italy and Portugal). They should, therefore, be interpreted with caution.

Between 1983 and 1991 total employment grew by just over 1% a year in these 8 countries taken together (Table 10). The number employed in *managerial, professional and technical jobs* grew by just under 3% a year and in *clerical and sales jobs* by 1½% a year, while manual jobs declined by around ½% a year.

In the US, where total employment increased by about twice as much as in the EU over this period, the number of *managers, professionals and technicians* increased by just over 3½% a year, the number of *clerks and sales workers* by just over 2% a year and the number of *manual workers* by 1½% a year. As in the 1990s, therefore, the number of manual jobs went up in the US but fell in the Union.

Projections in the US of employment growth over the next few years suggest that the number of manual jobs will continue to grow, if only slightly, and that there will be a continuing shift towards higher skilled occupations, with most of the growth occurring in communal and business services (see Box).

Concluding remarks

The main conclusions to emerge from the above are that, first, much the same pattern of job growth is evident in the US and Europe over the past 10–15 years. Secondly, higher overall growth in the US has been associated with much smaller jobs losses in agriculture and industry than in the EU and this in turn has prevented large job losses occurring among manual workers as in Europe. It has also led to a larger increase of lower skilled non-manual jobs. Thirdly, the growth of the latter has occurred predominantly in services, where virtually all the net job creation has taken place, and has been associated, in particular, with increased employment of women, which is where the gap in the employment rate between the US and Europe is widest.

This emphasises the critical importance of achieving a high overall rate of net job creation, which from the experience of EU Member States which have succeeded in doing this, as well as from that of the US, is of particular benefit to lower skilled members of the work force on whom job losses have been concentrated. This does not mean that it is not equally important to improve the educational attainment and general skill levels of the work force, not only to accommodate the increase in the skill requirements of jobs which is likely to continue, but also to strengthen competitiveness and the prospects for growth on which higher overall rates of net job creation depend.

The prospects for employment growth by sector and occupation in the US up to 2006

The Bureau of Labour Statistics in the US has produced projections of employment by sector and occupation up to 2006, which may give an insight into the prospects for the pattern of job growth in Europe. They are based on the Current Employment Survey (CES), which, unlike the Current Population Survey (CPS) used for the analysis here, is a survey of establishments rather than households and, therefore, counts the number of jobs rather than the number of people in work.

The central projection is that the number of jobs in the US will increase by around 14% over the 10 years 1996 to 2006, less than over the preceding 10 years (almost 19%). Job losses (amounting to ½% of total employment over the period) are expected to be concentrated in *mining* (2½% a year) and to a lesser extent *manufacturing* (well under ½% a year). Within *manufacturing*, employment is forecast to fall in 13 of the 22 industries, most steeply in *iron and steel* and *clothing*.

Within services, *business services* and *health and social services* are forecast to account between them for half the total job growth in the economy, adding over 4% to total employment in the first case (*computing* adding 1% alone — a rise of 7½% a year in the sector) and 3½% in the second. Significant net job creation is also projected in *education* (adding 1½% to total employment) as well as in *hotels and restaurants* and *wholesale and retail trades*, where skill requirements are less demanding (together adding 3% to the total). Of the 25 service sectors, only *employment in private households* is expected to show job losses (of almost 2% a year).

In terms of occupations, the shift towards higher skilled jobs is expected to continue, though some growth is projected even for lower skilled manual workers (of just under 1% a year and accounting for almost 15% of the overall growth in jobs). Employment of medium and lower skilled non-manual workers is forecast to rise by just over 1% a year and that of *managers, professionals and technicians* by over 2% a year. Each, however, is expected to account for much the same share of total job growth.

Table 1 Total employment by sector relative to working-age population in Member States and the US, 1997

	US	E15	L	DK	B	A	D	NL	F	I	UK	IRL	FIN	S	E	GR	P
GDP per head (PPS)	27.8	19.1	31.2	22.2	21.5	21.4	20.9	20.0	19.9	19.6	19.0	18.7	18.7	18.5	14.8	13.0	12.9
	<i>% population, 15-64</i>																
Agriculture, fisheries, forestry	1.9	3.0	1.4	2.9	1.5	4.8	1.8	2.5	2.8	3.3	1.3	6.3	5.0	2.3	4.0	11.3	9.0
Mining, oil, natural gas	0.4	0.2	0.1	0.1	0.2	0.2	0.4	0.1	0.1	0.2	0.3	0.3	0.1	0.2	0.3	0.3	0.2
Manufacturing	11.9	12.3	7.9	14.6	11.3	14.4	14.7	10.6	11.3	11.5	13.3	11.1	12.8	13.4	9.2	8.2	14.1
Food, drink & tobacco	1.0	1.4	0.9	2.5	1.4	1.6	1.5	1.7	1.8	0.9	1.3	1.9	1.3	1.1	1.4	1.6	1.6
Textiles, clothing	1.0	1.3	0.2	0.5	1.0	1.1	0.7	0.4	0.9	2.4	1.2	1.0	0.7	0.4	1.3	2.0	4.7
Wood products, paper, publishing, printing	1.9	1.4	0.7	2.2	1.2	1.8	1.5	1.7	1.2	1.0	1.7	1.3	3.2	2.4	1.0	1.1	1.7
Chemicals, rubber, plastics	1.3	1.3	1.8	1.4	1.8	1.2	1.7	1.3	1.4	1.1	1.7	1.3	1.0	1.1	0.8	0.6	0.8
Basic metals	0.4	0.5	2.3	0.4	0.7	0.8	0.8	0.3	0.4	0.3	0.4	0.2	0.5	0.6	0.3	0.2	0.3
Fabricated metals	0.8	1.3	0.5	1.6	1.0	2.0	1.6	1.0	1.2	1.6	1.2	0.7	1.3	1.4	0.8	0.6	1.4
Machinery & equipment	0.8	1.3	0.6	2.2	0.8	1.4	2.1	1.0	0.8	1.3	1.3	0.7	1.5	1.8	0.7	0.4	0.5
Office machinery	0.6	0.2	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.2	0.4	0.9	0.1	0.1	0.1	0.0	0.0
Electrical machinery	0.8	0.5	0.1	0.8	0.4	0.3	0.8	0.2	0.4	0.6	0.6	0.6	0.5	0.5	0.2	0.1	0.4
Radio, TV, instrument engineering	0.7	0.7	0.2	0.6	0.6	1.2	0.9	0.8	0.8	0.4	0.8	0.9	1.1	1.2	0.2	0.1	0.2
Motor vehicles	0.7	0.8	0.1	0.2	1.0	0.5	1.3	0.3	0.8	0.5	0.8	0.1	0.2	1.3	0.7	0.0	0.5
Other transport equipment	0.6	0.3	0.0	0.4	0.2	0.3	0.3	0.3	0.4	0.2	0.6	0.2	0.4	0.4	0.3	0.2	0.3
Furniture, other manufacturing, recycling	1.1	1.2	0.7	1.8	1.1	2.0	1.3	1.6	1.0	1.0	1.1	1.2	0.8	1.0	1.3	1.1	1.8
Electricity, gas & water	0.7	0.5	0.4	0.6	0.5	0.8	0.6	0.4	0.6	0.5	0.5	0.5	0.7	0.6	0.3	0.6	0.6
Construction	4.7	4.7	5.8	5.1	3.8	5.4	5.7	4.1	4.0	4.0	5.0	4.7	3.9	3.6	4.8	3.7	6.0
Wholesale & retail trade	12.4	9.1	8.3	10.4	8.2	11.0	8.8	11.0	8.1	8.6	11.0	8.2	7.4	8.6	8.1	9.5	9.7
Sale & repair of motor vehicles	1.8	1.3	1.3	2.0	1.1	1.6	1.3	1.2	1.2	1.3	1.5	1.2	1.3	1.3	1.1	1.4	1.8
Wholesale trade	2.7	2.2	2.2	3.3	2.0	2.6	1.9	3.9	2.6	1.6	2.1	2.0	2.2	3.4	2.0	1.7	1.8
Retail trade	7.8	5.6	4.8	5.1	5.0	6.8	5.7	5.9	4.3	5.7	7.4	4.9	3.9	3.8	5.0	6.3	6.1
Hotels & restaurants	5.1	2.5	3.1	2.3	1.9	4.0	2.0	2.2	2.0	2.3	3.3	3.2	1.8	1.8	3.0	3.4	3.3
Transport, storage & communication	4.1	3.6	4.2	5.5	4.3	4.4	3.3	4.0	3.8	2.8	4.6	2.7	4.8	4.5	2.8	3.6	2.6
Land and water transport	2.1	1.7	2.2	2.4	2.0	2.3	1.1	2.0	1.8	1.6	1.8	1.5	2.7	2.1	1.8	2.0	1.3
Air transport	0.5	0.1	0.7	0.2	0.2	0.1	0.1	0.3	0.2	0.1	0.1	0.3	0.2	0.2	0.1	0.2	0.2
Travel related activities	0.3	0.7	0.3	1.1	0.7	0.8	1.1	0.7	0.6	0.3	1.2	0.2	0.7	0.8	0.4	0.9	0.6
Post and telecommunications	1.2	1.1	1.1	1.8	1.3	1.2	1.0	1.1	1.3	0.8	1.5	0.8	1.2	1.4	0.6	0.7	0.6
Financial services	3.4	2.1	6.2	2.6	2.3	2.7	2.2	2.4	1.9	1.7	3.1	2.1	1.7	1.6	1.3	1.4	1.8
Banking, financial services	2.1	1.6	5.7	1.9	1.7	1.9	1.6	1.8	1.4	1.3	2.8	1.6	1.1	1.2	0.9	1.1	1.4
Insurance	1.4	0.5	0.5	0.7	0.7	0.9	0.6	0.6	0.4	0.5	0.3	0.6	0.6	0.4	0.4	0.4	0.4
Business services & real estate	7.7	4.6	3.8	6.2	3.7	4.6	4.3	7.0	5.2	2.8	7.0	3.6	5.1	7.0	3.0	2.4	3.3
Real estate, rental of equipment	1.5	0.6	0.2	0.9	0.3	0.8	0.5	0.6	0.9	0.2	1.3	0.3	0.9	1.3	0.2	0.1	0.2
Computing	0.9	0.5	0.2	1.0	0.5	0.3	0.4	0.8	0.5	0.4	0.8	0.5	0.7	1.0	0.2	0.1	0.2
Research and development	0.4	0.2	0.1	0.3	0.1	0.2	0.3	0.3	0.4	0.1	0.3	0.1	0.3	0.4	0.1	0.1	0.2
Business activities	4.9	3.2	3.2	4.1	2.8	3.4	3.0	5.3	3.4	2.1	4.7	2.6	3.2	4.3	2.5	2.1	2.7
Public administration	3.3	4.6	5.9	4.8	5.6	4.7	5.5	5.3	5.6	3.9	4.2	3.0	3.4	3.8	3.2	4.1	4.5
Education	5.7	4.1	3.9	5.8	5.2	4.1	3.3	4.3	4.5	3.9	5.3	3.8	4.5	5.1	2.9	3.4	4.6
Health & social work	8.5	5.7	4.4	13.0	6.2	5.5	5.7	9.5	6.3	3.0	7.8	5.0	9.3	13.6	2.7	2.5	3.1
Other services	4.3	3.4	5.2	3.7	2.6	3.3	3.3	3.1	4.0	2.7	4.2	3.4	3.4	3.4	3.1	2.5	4.7
Membership organisations	0.8	0.6	0.3	1.0	0.4	0.7	0.7	0.6	0.8	0.3	0.6	0.5	0.8	1.1	0.2	0.2	0.3
Recreational activities	1.8	1.1	0.7	1.7	0.9	1.0	0.9	1.4	1.0	0.4	1.9	1.3	1.6	1.6	0.9	0.9	0.8
Waste disposal, other servs, ex-territ orgs	1.2	1.2	3.4	0.9	1.1	1.3	1.5	0.9	0.8	1.5	1.2	1.5	0.8	0.7	0.7	0.8	1.9
Employment in private households	0.5	0.6	0.9	0.1	0.1	0.3	0.2	0.3	1.4	0.5	0.4	0.0	0.1	0.0	1.3	0.6	1.6
TOTAL	74.0	60.5	60.6	77.5	57.3	69.9	61.8	66.7	60.1	51.3	70.8	57.8	63.9	69.5	48.6	56.7	67.5
Difference in structure relative to US (%)*		24.0	41.1	27.5	27.4	26.6	29.9	22.8	26.5	33.3	14.8	29.6	27.9	28.5	33.6	43.3	41.8

* Sum of absolute differences in the share of each sector in total employment between the economy and the US

Table 2 Employment of men by sector relative to men of working-age in Member States and the US, 1997

	<i>% men, 15-64</i>																
	US	E15	L	DK	B	A	D	NL	F	I	UK	IRL	FIN	S	E	GR	P
Agriculture, fisheries, forestry	3.0	4.0	2.3	4.6	2.1	5.0	2.3	3.6	3.8	4.5	2.0	11.0	6.7	3.3	6.0	13.4	9.0
Mining, oil, natural gas	0.6	0.4	0.1	0.1	0.3	0.3	0.7	0.2	0.2	0.4	0.5	0.5	0.2	0.3	0.5	0.5	0.5
Manufacturing	16.4	17.7	13.6	20.1	16.9	21.3	21.0	16.6	16.1	16.0	19.3	15.0	17.8	19.4	14.2	11.7	17.3
Food, drink & tobacco	1.4	1.8	1.3	3.0	2.0	2.1	1.6	2.3	2.2	1.2	1.8	2.7	1.5	1.3	2.0	2.2	2.0
Textiles, clothing	0.8	1.0	0.3	0.4	0.9	0.8	0.5	0.4	0.7	1.8	1.0	0.8	0.5	0.3	1.2	1.5	2.7
Wood products, paper, publishing, printing	2.6	2.0	1.0	3.2	1.8	2.6	2.0	2.5	1.6	1.5	2.4	1.9	4.6	3.5	1.6	1.8	2.9
Chemicals, rubber, plastics	1.7	1.9	3.2	1.5	2.6	1.7	2.3	2.1	1.9	1.6	2.4	1.8	1.3	1.3	1.3	0.8	1.1
Basic metals	0.7	0.8	4.4	0.5	1.3	1.4	1.3	0.6	0.7	0.6	0.8	0.4	0.8	1.0	0.6	0.3	0.6
Fabricated metals	1.2	2.2	0.9	2.7	1.7	3.4	2.6	1.7	2.1	2.7	1.9	1.2	2.1	2.2	1.5	1.2	2.5
Machinery & equipment	1.4	2.1	1.1	3.6	1.3	2.4	3.3	1.7	1.4	2.2	2.1	1.1	2.5	2.9	1.1	0.7	0.8
Office machinery	0.9	0.3	0.0	0.0	0.2	0.2	0.4	0.1	0.1	0.2	0.6	1.1	0.0	0.2	0.1	0.0	0.0
Electrical machinery	1.0	0.8	0.1	1.1	0.6	0.4	1.2	0.4	0.6	0.8	0.9	0.6	0.6	0.7	0.4	0.2	0.6
Radio, TV, instrument engineering	0.9	0.9	0.2	0.6	0.7	1.6	1.1	1.2	1.0	0.5	1.1	0.8	1.4	1.6	0.3	0.1	0.2
Motor vehicles	1.1	1.3	0.1	0.3	1.6	0.8	2.2	0.5	1.5	0.8	1.4	0.2	0.4	2.2	1.2	0.1	0.6
Other transport equipment	0.9	0.6	0.0	0.7	0.3	0.5	0.5	0.5	0.7	0.4	1.1	0.3	0.8	0.6	0.5	0.5	0.5
Furniture, other manufacturing, recycling	1.6	1.9	1.0	2.4	1.7	3.3	1.9	2.5	1.5	1.5	1.7	2.0	1.2	1.4	2.3	2.0	2.8
Electricity, gas & water	1.1	0.8	0.7	0.9	0.9	1.3	0.9	0.7	0.9	0.9	0.7	0.9	1.3	0.9	0.6	1.0	1.0
Construction	8.7	8.7	10.8	9.1	7.1	10.2	9.9	7.6	7.4	7.6	9.0	8.8	7.2	6.6	9.3	7.5	12.0
Wholesale & retail trade	14.6	10.0	8.6	12.2	8.9	10.3	8.1	12.4	9.2	11.3	11.2	9.1	8.0	9.6	9.4	12.5	12.1
Sale & repair of motor vehicles	3.0	2.2	2.1	3.0	1.9	2.6	2.0	1.9	2.0	2.2	2.4	2.1	2.2	2.0	2.0	2.5	3.5
Wholesale trade	3.8	3.0	3.0	4.6	2.8	3.2	2.3	5.8	3.6	2.4	3.0	2.9	2.9	4.8	2.9	2.7	2.7
Retail trade	7.7	4.8	3.5	4.6	4.2	4.4	3.8	4.7	3.5	6.7	5.8	4.2	3.0	2.8	4.5	7.3	5.9
Hotels & restaurants	4.8	2.4	3.0	1.8	2.0	3.0	1.7	2.1	2.0	2.4	2.7	2.7	1.2	1.5	3.5	4.0	3.3
Transport, storage & communication	5.9	5.5	6.6	8.1	6.8	7.3	4.8	6.2	5.6	4.6	6.9	4.3	6.8	6.2	4.9	6.6	4.2
Land and water transport	3.4	2.9	4.0	4.1	3.6	4.2	1.9	3.3	3.1	2.9	3.1	2.7	4.6	3.6	3.3	4.0	2.3
Air transport	0.6	0.2	1.0	0.3	0.3	0.1	0.2	0.4	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.2	0.2
Travel related activities	0.3	1.0	0.2	1.3	1.0	1.1	1.6	0.9	0.8	0.4	1.5	0.3	0.7	0.9	0.6	1.2	0.8
Post and telecommunications	1.5	1.4	1.4	2.4	1.9	1.9	1.2	1.5	1.4	1.2	2.1	1.0	1.3	1.6	0.8	1.1	0.8
Financial services	2.6	2.2	7.1	2.5	2.7	2.8	2.2	2.6	1.8	2.3	3.0	1.9	0.9	1.5	1.8	1.6	2.4
Banking, financial services	1.6	1.7	6.5	1.8	1.9	1.7	1.5	1.9	1.5	1.7	2.6	1.3	0.5	1.1	1.4	1.2	1.9
Insurance	1.0	0.5	0.6	0.7	0.7	1.1	0.7	0.7	0.3	0.5	0.3	0.6	0.4	0.5	0.4	0.4	0.5
Business services & real estate	8.4	5.1	4.1	7.6	4.2	4.5	4.4	8.3	5.6	3.4	8.1	4.1	5.8	8.0	3.2	3.0	3.9
Real estate, rental of equipment	1.7	0.7	0.3	1.2	0.4	0.5	0.6	0.8	0.9	0.3	1.4	0.4	1.3	1.7	0.3	0.1	0.3
Computing	1.2	0.7	0.3	1.5	0.7	0.5	0.6	1.3	0.7	0.6	1.2	0.6	1.0	1.4	0.3	0.1	0.4
Research and development	0.4	0.3	0.2	0.3	0.2	0.2	0.5	0.4	0.4	0.1	0.3	0.1	0.4	0.4	0.1	0.1	0.1
Business activities	5.1	3.4	3.3	4.6	3.0	3.3	2.8	5.9	3.6	2.4	5.2	2.9	3.0	4.4	2.5	2.7	3.1
Public administration	3.7	5.4	8.4	4.5	6.5	5.7	6.1	7.1	5.9	5.2	4.6	3.7	3.5	3.8	4.1	5.8	5.6
Education	3.6	2.8	3.4	4.6	3.5	2.8	2.3	4.2	3.2	2.3	3.2	2.8	2.9	3.2	2.2	2.7	2.2
Health & social work	3.7	2.7	2.2	4.3	3.2	2.8	2.7	4.0	3.3	2.7	2.8	2.3	1.9	3.7	1.6	2.0	1.5
Other services	3.7	2.8	1.7	3.5	2.2	3.0	2.7	2.6	2.5	2.6	3.7	3.1	2.8	3.2	2.2	2.5	2.2
Membership organisations	0.7	0.5	0.2	1.0	0.4	0.7	0.5	0.6	0.7	0.3	0.6	0.5	0.6	1.0	0.2	0.3	0.3
Recreational activities	2.0	1.2	0.9	1.9	1.1	1.5	1.0	1.4	1.2	0.5	2.0	1.6	1.6	1.7	1.2	1.2	1.1
Waste disposal, other servs, ex-territ orgs	0.9	1.0	3.6	0.6	1.0	0.9	1.3	0.6	0.6	1.6	1.0	1.0	0.5	0.5	0.5	0.8	0.9
Employment in private households	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.3	0.1	0.0
TOTAL	80.8	70.5	75.6	83.9	67.5	80.4	69.8	78.1	67.7	66.2	77.7	70.2	66.9	71.2	63.5	74.8	77.2
Difference in structure relative to US (%)*		25.0	49.5	28.8	31.6	33.9	36.3	28.3	26.5	30.8	20.8	32.4	35.7	28.4	31.8	39.6	42.2

* Sum of absolute differences in the share of each sector in total employment between the economy and the US

Table 3 Employment of women by sector relative to women of working-age in Member States and the US, 1997

	US	E15	L	DK	B	A	D	NL	F	I	UK	IRL	FIN	S	E	GR	P
	<i>% women, 15-64</i>																
Agriculture, fisheries, forestry	0.8	2.0	0.6	1.2	1.0	4.6	1.4	1.3	1.8	2.2	0.7	1.6	3.2	1.1	2.1	9.3	8.9
Mining, oil, natural gas	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Manufacturing	7.5	7.0	2.1	9.0	5.6	7.5	8.4	4.4	6.6	7.1	7.3	7.1	7.7	7.2	4.2	5.0	11.2
Food, drink & tobacco	0.7	1.0	0.5	2.0	0.9	1.0	1.4	1.0	1.3	0.5	0.9	1.0	1.2	0.9	0.8	1.1	1.2
Textiles, clothing	1.1	1.6	0.0	0.6	1.1	1.5	0.9	0.4	1.1	3.0	1.3	1.1	0.8	0.5	1.5	2.4	6.5
Wood products, paper, publishing, printing	1.2	0.8	0.4	1.2	0.7	1.0	1.1	0.9	0.7	0.5	1.1	0.7	1.9	1.3	0.4	0.5	0.7
Chemicals, rubber, plastics	0.9	0.8	0.3	1.2	0.9	0.8	1.0	0.4	1.0	0.5	1.0	0.9	0.8	0.9	0.4	0.4	0.5
Basic metals	0.1	0.1	0.1	0.3	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.1
Fabricated metals	0.4	0.4	0.1	0.5	0.2	0.7	0.7	0.2	0.4	0.6	0.4	0.2	0.5	0.5	0.1	0.1	0.4
Machinery & equipment	0.3	0.4	0.1	0.9	0.2	0.4	0.8	0.2	0.3	0.4	0.4	0.3	0.5	0.7	0.2	0.1	0.2
Office machinery	0.4	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.7	0.1	0.0	0.0	0.0	0.0
Electrical machinery	0.6	0.3	0.0	0.5	0.2	0.2	0.5	0.1	0.3	0.4	0.4	0.6	0.4	0.3	0.1	0.1	0.3
Radio, TV, instrument engineering	0.5	0.5	0.2	0.6	0.4	0.7	0.6	0.4	0.6	0.3	0.5	0.9	0.8	0.9	0.1	0.0	0.2
Motor vehicles	0.4	0.2	0.0	0.0	0.3	0.1	0.4	0.1	0.3	0.2	0.2	0.1	0.0	0.4	0.1	0.0	0.3
Other transport equipment	0.2	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1
Furniture, other manufacturing, recycling	0.7	0.6	0.3	1.1	0.5	0.7	0.7	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.3	0.4	0.8
Electricity, gas & water	0.3	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.3	0.1	0.2	0.1	0.2	0.3	0.1	0.2	0.2
Construction	0.9	0.8	0.8	1.1	0.4	0.6	1.4	0.6	0.7	0.5	0.9	0.5	0.6	0.5	0.4	0.1	0.4
Wholesale & retail trade	10.2	8.2	8.0	8.5	7.5	11.7	9.6	9.6	7.1	5.9	10.9	7.2	6.8	7.6	6.8	6.7	7.5
Sale & repair of motor vehicles	0.7	0.5	0.5	1.0	0.4	0.6	0.6	0.5	0.4	0.3	0.6	0.4	0.5	0.6	0.2	0.3	0.3
Wholesale trade	1.6	1.3	1.4	1.9	1.3	1.9	1.5	2.1	1.6	0.9	1.2	1.1	1.5	2.0	1.0	0.9	0.9
Retail trade	7.9	6.5	6.0	5.6	5.8	9.1	7.6	7.1	5.0	4.7	9.1	5.7	4.8	4.9	5.5	5.5	6.3
Hotels & restaurants	5.4	2.6	3.3	2.7	1.9	4.9	2.4	2.3	1.9	2.1	3.9	3.7	2.5	2.2	2.5	2.8	3.2
Transport, storage & communication	2.4	1.7	1.9	2.9	1.7	1.6	1.9	1.8	2.1	1.0	2.2	1.2	2.8	2.8	0.9	0.9	1.3
Land and water transport	0.7	0.4	0.4	0.8	0.4	0.5	0.4	0.6	0.5	0.3	0.4	0.3	0.7	0.7	0.3	0.1	0.3
Air transport	0.3	0.1	0.4	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.3	0.3	0.2	0.1	0.1	0.2
Travel related activities	0.3	0.5	0.4	0.9	0.4	0.6	0.6	0.5	0.3	0.2	0.8	0.1	0.7	0.7	0.2	0.5	0.3
Post and telecommunications	1.0	0.7	0.7	1.1	0.7	0.4	0.8	0.6	1.1	0.5	0.9	0.5	1.1	1.2	0.4	0.2	0.5
Financial services	4.2	2.0	5.4	2.7	2.0	2.7	2.3	2.1	1.9	1.2	3.3	2.3	2.5	1.6	0.8	1.2	1.3
Banking, financial services	2.5	1.5	4.9	2.1	1.4	2.0	1.7	1.7	1.4	0.8	3.0	1.8	1.8	1.3	0.5	0.9	0.9
Insurance	1.7	0.4	0.4	0.7	0.6	0.6	0.5	0.4	0.5	0.4	0.3	0.5	0.7	0.3	0.3	0.3	0.3
Business services & real estate	6.9	4.0	3.5	4.7	3.2	4.8	4.1	5.8	4.7	2.3	5.9	3.0	4.5	5.9	2.8	1.8	2.8
Real estate, rental of equipment	1.4	0.6	0.2	0.5	0.3	1.1	0.4	0.5	1.0	0.1	1.2	0.2	0.5	0.8	0.2	0.0	0.2
Computing	0.5	0.2	0.1	0.5	0.2	0.1	0.2	0.3	0.3	0.2	0.4	0.3	0.3	0.6	0.1	0.1	0.1
Research and development	0.3	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.1	0.2	0.1	0.3	0.3	0.1	0.0	0.2
Business activities	4.7	3.1	3.1	3.5	2.6	3.4	3.3	4.7	3.2	1.8	4.1	2.4	3.4	4.1	2.5	1.7	2.2
Public administration	2.9	3.8	3.3	5.0	4.7	3.6	4.8	3.5	5.2	2.6	3.8	2.3	3.2	3.8	2.2	2.6	3.5
Education	7.7	5.4	4.4	7.1	6.8	5.5	4.3	4.5	5.8	5.4	7.4	4.9	6.0	7.1	3.6	4.0	6.9
Health & social work	13.2	8.7	6.6	21.8	9.3	8.1	8.9	15.3	9.3	3.2	12.7	7.7	16.8	23.9	3.8	3.0	4.6
Other services	4.9	4.0	5.7	3.9	2.7	3.6	3.8	3.6	5.3	2.8	4.6	3.6	4.0	3.6	3.9	2.5	6.9
Membership organisations	0.8	0.6	0.3	1.1	0.3	0.6	0.8	0.5	1.0	0.3	0.6	0.4	1.1	1.2	0.2	0.1	0.4
Recreational activities	1.7	0.9	0.6	1.5	0.8	0.6	0.8	1.4	0.8	0.3	1.9	1.1	1.6	1.5	0.6	0.6	0.6
Waste disposal, other servs, ex-territ orgs	1.5	1.4	3.1	1.1	1.3	1.8	1.7	1.3	1.0	1.4	1.4	2.1	1.1	0.9	0.8	0.7	2.8
Employment in private households	0.9	1.1	1.7	0.2	0.2	0.5	0.4	0.5	2.5	0.9	0.6	0.0	0.2	0.0	2.2	1.1	3.1
TOTAL	67.4	50.5	45.5	71.0	46.9	59.4	53.6	54.9	52.7	36.6	63.9	45.2	60.8	67.7	33.9	40.1	58.6
Difference in structure relative to US (%)*		24.3	34.1	28.7	26.8	25.2	25.4	21.0	27.6	38.0	12.8	27.5	25.5	30.2	39.6	48.2	45.8

* Sum of absolute differences in the share of each sector in total employment between the economy and the US

	<i>% employed in each sector</i>																
	US	E15	L	DK	B	A	D	NL	F	I	UK	IRL	FIN	S	E	GR	P
Agriculture, fisheries, forestry	21.8	33.9	19.7	20.3	31.9	48.0	37.2	26.0	32.4	32.8	25.3	12.5	32.5	24.8	26.0	42.8	51.5
Mining, oil, natural gas	14.4	10.4	0.0	28.7	11.7	14.4	11.6	10.4	13.7	7.7	12.3	6.3	0.0	17.3	4.7	3.8	9.5
Manufacturing	32.1	28.4	13.2	30.6	24.7	26.0	28.1	20.6	29.7	31.3	27.1	31.9	30.1	26.3	23.1	31.9	41.2
Food, drink & tobacco	33.4	36.6	25.7	40.1	31.8	32.5	45.3	30.7	38.6	31.6	32.0	27.6	45.0	40.6	27.7	34.3	39.1
Textiles, clothing	59.0	61.7	12.3	57.0	54.8	64.5	62.8	49.2	61.9	62.6	56.2	57.2	61.0	63.4	57.3	62.9	72.5
Wood products, paper, publishing, printing	32.2	29.1	26.8	27.6	26.3	27.8	34.2	26.6	29.6	25.9	31.9	27.7	28.6	25.9	20.3	23.6	20.6
Chemicals, rubber, plastics	34.4	29.2	9.5	43.2	26.4	31.7	29.6	15.7	35.1	25.8	28.6	32.8	37.6	38.9	22.7	31.3	33.7
Basic metals	15.9	12.8	3.0	33.4	6.4	15.0	15.5	8.7	9.9	11.0	14.0	16.4	11.8	13.4	6.4	9.4	11.7
Fabricated metals	23.5	16.8	10.8	14.7	11.5	17.0	20.6	11.0	15.6	17.8	17.4	12.1	17.7	19.4	6.7	6.6	13.2
Machinery & equipment	16.4	17.0	7.0	19.7	14.4	15.6	18.3	11.7	17.9	15.2	16.5	20.4	17.0	18.4	14.9	10.1	21.2
Office machinery	32.0	26.6	0.0	0.0	23.1	30.6	22.4	36.7	36.8	26.6	23.9	40.0	83.7	0.3	36.9	18.3	32.6
Electrical machinery	39.1	29.0	13.4	30.9	24.6	34.0	27.5	14.4	29.8	32.0	31.1	49.1	36.4	25.4	17.7	23.8	33.3
Radio, TV, instrument engineering	39.1	34.7	50.3	49.4	33.4	32.4	35.9	25.4	38.0	34.6	31.1	52.1	36.5	35.5	28.6	27.0	47.2
Motor vehicles	24.7	15.3	19.2	12.2	14.9	9.4	16.5	10.4	15.5	18.4	13.1	29.5	5.8	14.6	9.5	8.4	35.7
Other transport equipment	21.3	11.5	0.0	11.6	6.8	2.7	12.9	8.7	14.4	11.8	10.9	9.8	5.5	16.4	7.2	6.4	15.7
Furniture, other manufacturing, recycling	30.7	23.1	22.8	30.8	21.9	17.3	25.3	16.9	24.3	27.0	25.5	18.3	31.0	26.1	13.4	16.5	24.0
Electricity, gas & water	21.9	17.8	13.8	18.2	13.3	10.9	18.3	11.9	24.1	13.3	22.3	14.0	12.4	22.2	10.6	18.1	15.4
Construction	9.4	8.4	6.9	10.3	5.4	5.9	12.5	6.9	9.2	6.5	8.8	5.4	7.1	7.2	3.7	1.4	3.9
Wholesale & retail trade	41.9	45.4	47.9	40.6	45.4	53.2	53.8	42.9	44.2	34.9	49.0	43.8	45.8	43.3	42.2	36.6	39.9
Sale & repair of motor vehicles	19.0	17.4	19.6	23.8	16.3	19.1	21.9	19.1	18.6	12.4	20.0	15.5	18.1	22.1	10.4	10.9	8.9
Wholesale trade	29.9	30.7	32.0	29.1	31.5	37.5	38.4	25.8	31.6	27.1	28.8	26.9	34.4	29.1	26.2	26.2	25.6
Retail trade	51.5	57.5	63.0	54.5	57.7	67.4	66.2	59.3	59.1	42.0	60.6	57.7	61.7	63.3	55.5	45.0	53.3
Hotels & restaurants	53.7	52.5	51.8	59.5	49.2	62.3	57.9	51.6	48.8	46.7	59.4	57.2	67.2	59.6	42.5	42.8	51.0
Transport, storage & communication	29.9	23.6	22.2	26.3	19.7	18.1	28.0	22.2	27.5	18.1	24.0	20.9	28.9	30.5	15.3	13.1	24.5
Land and water transport	17.8	12.1	8.8	15.4	9.3	10.4	17.4	14.1	14.1	9.7	11.7	10.7	12.6	15.4	7.5	1.8	12.7
Air transport	35.5	37.4	29.8	44.9	32.0	47.8	42.7	31.4	32.4	24.9	37.7	45.1	66.6	65.9	36.0	38.1	41.1
Travel related activities	51.2	30.9	67.4	39.9	30.1	37.0	26.4	33.4	30.0	32.5	35.1	28.2	47.9	42.1	22.4	29.9	30.0
Post and telecommunications	42.3	34.5	31.8	29.9	27.8	18.0	39.7	27.3	45.1	28.7	28.9	30.5	45.9	42.3	30.4	19.0	38.2
Financial services	62.2	47.0	42.9	52.0	42.3	48.6	50.2	44.3	51.6	35.3	52.4	55.0	73.1	50.9	30.9	45.0	36.2
Banking, financial services	62.1	47.3	43.0	52.6	41.6	54.4	52.8	46.7	48.7	32.1	52.9	57.8	77.4	54.5	27.2	44.0	35.1
Insurance	62.2	46.1	41.7	50.3	43.8	36.5	43.3	36.7	61.6	43.7	48.4	46.9	64.2	40.1	40.6	48.1	40.0
Business services & real estate	45.9	44.2	45.8	37.9	42.3	51.7	47.8	40.4	46.3	40.7	41.9	42.3	43.5	41.5	47.4	39.6	43.4
Real estate, rental of equipment	45.2	45.0	39.6	30.6	45.1	69.7	42.7	39.9	53.4	34.5	46.3	33.5	28.8	32.0	38.2	25.8	39.7
Computing	31.0	25.4	24.9	24.3	23.1	23.9	23.7	18.3	27.2	29.1	25.4	33.0	20.2	28.2	23.5	30.4	30.2
Research and development	44.3	38.1	37.0	39.8	30.1	41.0	31.9	33.6	42.2	41.7	37.9	52.0	42.1	41.8	45.2	39.3	70.0
Business activities	48.9	47.4	48.1	42.7	45.7	50.7	53.6	44.1	47.7	43.7	43.8	44.4	52.5	47.5	50.1	40.5	43.4
Public administration	44.5	41.7	28.3	52.2	41.6	38.8	43.5	32.2	47.7	34.1	45.0	37.9	47.8	49.4	35.0	32.6	40.2
Education	68.6	66.3	56.1	60.0	65.8	66.5	64.3	51.4	65.4	70.3	69.7	63.8	67.1	68.5	62.7	62.0	76.7
Health & social work	78.6	76.2	74.6	83.4	74.1	74.3	76.5	78.9	74.5	55.3	81.7	77.1	89.9	86.3	71.2	61.8	77.2
Other services	57.5	58.7	54.3	52.7	51.8	53.8	57.1	57.1	67.6	52.2	54.4	53.2	58.8	52.0	63.9	51.6	76.4
Membership organisations	53.7	55.3	54.1	52.8	45.7	48.0	59.2	44.2	59.8	51.2	53.2	46.1	65.6	54.8	48.7	22.7	56.9
Recreational activities	45.8	43.6	39.5	45.0	41.9	29.3	46.1	48.8	42.4	35.6	47.9	39.4	49.2	45.0	35.5	33.2	39.0
Waste disposal, other servs, ex-territ orgs	63.3	57.5	45.8	63.0	58.0	67.2	57.4	66.7	60.8	46.3	59.0	67.6	66.0	62.3	60.6	48.6	76.9
Employment in private households	90.9	89.7	100.0	88.0	82.8	92.5	94.5	96.6	95.1	82.3	73.0	0.0	83.1	100.0	88.5	90.7	99.6
TOTAL	46.2	41.8	37.4	45.4	40.7	42.6	42.9	40.6	44.5	36.1	44.8	39.0	47.4	47.9	35.2	36.7	45.0

Table 5 Employment by occupation relative to working-age population in Member States and the US, 1997

	<i>% population 15-64</i>																
Total	US	E15	DK	UK	A	S	P	NL	FIN	D	L	F	IRL	B	GR	I	E
Managers, professionals, technicians	25.3	21.1	28.4	27.5	21.5	28.1	16.4	31.2	26.6	23.6	23.1	21.2	17.3	22.5	15.8	13.3	13.9
1 Managers, senior officials	10.5	4.9	5.4	10.6	5.3	3.4	5.2	8.0	5.4	3.6	3.0	4.5	5.1	5.9	6.0	0.6	4.2
2 Professionals	11.0	7.6	9.5	10.8	6.9	10.6	4.5	11.5	11.4	7.7	10.2	6.3	9.9	11.0	6.6	5.3	5.5
3 Technicians, associate professionals	3.8	8.6	13.5	6.1	9.4	14.1	6.7	11.7	9.7	12.3	9.9	10.3	2.2	5.7	3.2	7.4	4.2
Clerks & sales workers	26.3	16.3	21.5	22.1	19.1	19.8	16.9	16.4	13.8	14.9	16.8	15.9	17.9	15.1	12.8	16.1	11.5
4 Clerks	10.5	8.2	9.5	11.6	9.9	7.7	7.2	8.0	5.9	7.9	10.7	8.6	7.9	9.1	6.2	7.8	4.9
5 Sales and service workers	15.8	8.1	12.0	10.5	9.2	12.1	9.7	8.4	7.9	7.0	6.1	7.3	10.0	6.0	6.6	8.3	6.6
Manual workers	22.4	23.0	27.6	21.3	29.3	21.6	34.3	19.1	23.5	23.2	20.7	23.1	22.6	19.7	28.2	21.9	23.2
6 Skilled agricultural and fishery workers	2.0	2.4	2.3	0.8	4.4	1.8	7.9	1.3	4.5	1.4	1.1	2.9	4.6	1.5	11.0	2.1	2.9
7 Craft and related trades workers	8.1	9.5	9.5	8.7	12.1	8.3	13.9	7.5	7.9	11.4	7.8	8.2	7.7	7.8	9.1	10.1	8.3
8 Plant and machine operators	7.6	5.3	6.0	5.7	6.3	7.6	4.8	4.7	6.0	4.6	5.2	6.5	5.1	4.4	4.2	4.8	5.0
9 Elementary occupations	4.7	5.5	9.6	5.7	6.3	3.7	7.2	5.2	4.8	5.4	6.5	4.8	5.2	5.4	3.3	5.0	6.8
Total	74.0	60.5	77.5	70.8	69.9	69.5	67.5	66.7	63.9	61.8	60.6	60.1	57.8	57.3	56.7	51.3	48.6
Men	US	E15	DK	UK	A	S	P	NL	FIN	D	L	F	IRL	B	GR	I	E
Managers, professionals, technicians	25.0	24.3	30.4	32.2	25.4	29.7	18.6	37.8	26.0	25.4	28.2	24.6	20.1	25.6	21.0	15.8	16.7
1 Managers, senior officials	11.9	6.8	8.2	13.9	7.6	4.9	7.3	12.5	8.3	5.3	4.4	6.1	7.2	8.2	9.8	1.0	5.8
2 Professionals	10.4	8.5	11.0	11.5	7.5	9.7	4.5	13.5	9.5	9.8	12.6	8.0	10.0	10.1	7.4	4.9	5.6
3 Technicians, associate professionals	2.7	8.9	11.2	6.7	10.2	15.0	6.8	11.7	8.2	10.4	11.1	10.5	3.0	7.3	3.8	9.9	5.3
Clerks & sales workers	19.5	11.0	11.6	12.3	13.0	8.9	13.3	10.4	5.9	8.5	14.8	7.9	12.4	11.3	12.4	16.4	10.6
4 Clerks	4.5	5.5	5.3	6.1	6.9	3.8	6.0	5.4	1.9	5.0	10.4	4.1	4.5	7.2	5.8	7.5	4.5
5 Sales and service workers	15.0	5.5	6.3	6.2	6.1	5.0	7.3	5.0	4.0	3.4	4.4	3.8	7.9	4.1	6.5	8.9	6.2
Manual workers	36.3	35.2	41.9	33.2	42.1	32.7	45.2	30.0	35.0	35.9	32.6	35.2	37.7	30.6	41.5	34.0	36.2
6 Skilled agricultural and fishery workers	3.3	3.2	3.9	1.4	4.6	2.8	8.0	1.8	5.9	1.8	2.2	4.1	8.6	2.1	13.0	2.9	4.4
7 Craft and related trades workers	14.9	17.1	17.8	15.9	22.0	14.9	21.7	13.8	14.3	20.4	15.6	15.3	12.4	14.1	16.1	17.2	15.5
8 Plant and machine operators	11.4	8.8	8.9	9.6	10.3	12.3	8.1	8.1	9.7	7.8	10.4	10.5	9.0	7.4	7.7	7.8	8.5
9 Elementary occupations	6.7	5.5	10.8	5.8	4.7	2.3	6.3	5.5	4.5	5.1	4.4	3.8	7.7	5.8	3.4	6.1	7.4
Total	80.8	70.5	83.9	77.7	80.4	71.2	77.2	78.1	66.9	69.8	75.6	67.7	70.2	67.5	74.8	66.2	63.5
Women	US	E15	DK	UK	A	S	P	NL	FIN	D	L	F	IRL	B	GR	I	E
Managers, professionals, technicians	25.7	18.0	26.4	22.7	17.7	26.5	14.3	24.4	27.2	21.8	18.4	17.9	14.4	19.4	10.9	10.8	11.1
1 Managers, senior officials	9.2	2.9	2.6	7.2	2.9	1.9	3.3	3.4	2.5	2.0	1.6	3.0	3.1	3.6	2.5	0.2	2.6
2 Professionals	11.6	6.8	7.9	10.0	6.3	11.5	4.4	9.5	13.4	5.6	8.0	4.6	9.9	11.8	5.8	5.7	5.4
3 Technicians, associate professionals	4.9	8.4	15.9	5.5	8.5	13.1	6.6	11.6	11.4	14.2	8.8	10.2	1.4	4.0	2.6	4.9	3.1
Clerks & sales workers	33.0	21.6	31.5	31.9	25.3	31.1	20.1	22.6	21.7	21.5	19.2	23.6	23.5	18.9	13.2	15.7	12.4
4 Clerks	16.3	11.0	13.8	17.2	13.0	11.6	8.3	10.6	10.0	10.9	11.2	12.9	11.3	11.0	6.6	8.0	5.3
5 Sales and service workers	16.7	10.6	17.8	14.7	12.2	19.5	11.8	12.0	11.7	10.6	8.0	10.7	12.2	7.9	6.6	7.7	7.0
Manual workers	8.8	10.8	13.1	9.2	16.5	10.1	24.2	7.9	11.9	10.3	8.8	11.2	7.4	8.7	15.9	10.1	10.4
6 Skilled agricultural and fishery workers	0.8	1.5	0.6	0.2	4.2	0.8	7.8	0.7	3.1	0.9	0.0	1.7	0.6	0.9	9.1	1.2	1.4
7 Craft and related trades workers	1.4	2.0	1.1	1.5	2.3	1.4	6.7	1.0	1.4	2.2	0.0	1.2	2.9	1.4	2.5	3.1	1.2
8 Plant and machine operators	4.0	1.8	3.0	1.9	2.2	2.8	1.7	1.2	2.2	1.4	0.0	2.6	1.2	1.4	0.9	1.9	1.5
9 Elementary occupations	2.7	5.4	8.4	5.7	7.8	5.2	8.0	4.8	5.2	5.7	8.8	5.6	2.7	5.0	3.3	3.9	6.3
Total	67.5	50.5	71.1	63.9	59.5	67.7	58.6	54.9	60.8	53.6	46.5	52.7	45.3	47.0	40.1	36.7	33.9

Table 6 Sectoral contribution to employment growth in the Union and US during the 1980s

Sector	EU (1985-91)			US (1983-90)		
	Total	Men	Women	Total	Men	Women
Agriculture, fisheries, forestry	-1.5	-0.9	-0.6	-0.2	-0.2	0.0
Mining, oil, natural gas	-0.3	-0.3	0.0	-0.2	-0.1	0.0
Manufacturing	0.5	0.2	0.3	1.4	1.0	0.4
Electricity, gas & water	0.0	0.0	0.0	0.1	0.0	0.0
Construction	0.8	0.7	0.1	1.6	1.5	0.2
Wholesale & retail trade	1.4	0.5	0.9	2.7	1.4	1.3
Hotels & restaurants	0.5	0.3	0.3	1.6	0.9	0.6
Transport & communications	0.5	0.2	0.2	1.0	0.5	0.5
Financial services	0.5	0.2	0.3	1.0	0.4	0.7
Business services	2.0	0.9	1.1	3.7	1.7	2.0
Public administration	0.8	0.3	0.6	0.9	0.4	0.5
Education	0.5	0.1	0.4	1.2	0.2	1.0
Health & social services & membership orgs	1.5	0.3	1.2	2.6	0.4	2.2
Health	0.6	0.1	0.5	2.4	0.4	2.0
Social work & membership organisations	0.9	0.2	0.7	0.2	0.0	0.2
Other services	0.6	0.3	0.3	0.6	0.3	0.2
Agriculture	-1.5	-0.9	-0.6	-0.2	-0.2	0.0
Industry	1.0	0.6	0.5	2.8	2.3	0.6
Services	8.3	3.0	5.2	15.2	6.2	8.9
TOTAL	7.8	2.7	5.1	17.8	8.4	9.5

Note: The figures for financial services, business services and other services for the EU involve some estimation

Table 7 Sectoral contribution to employment growth in the Union and US during recession of early 1990s

Sector	EU (1991-94)			US (1990-91)		
	Total	Men	Women	Total	Men	Women
Agriculture, fisheries, forestry	-1.1	-0.6	-0.5	0.0	0.0	0.0
Mining, oil, natural gas	-0.2	-0.2	0.0	0.0	0.0	0.0
Manufacturing	-3.2	-2.0	-1.1	-0.6	-0.5	-0.2
Electricity, gas & water	-0.1	-0.1	0.0	0.0	0.0	0.0
Construction	-0.2	-0.2	0.0	-0.5	-0.5	-0.1
Wholesale & retail trade	-0.3	-0.1	-0.2	-0.3	-0.1	-0.2
Hotels & restaurants	0.1	0.1	0.0	0.1	0.1	0.0
Transport & communications	-0.2	-0.2	0.0	0.0	0.0	0.0
Financial services	0.0	0.0	0.0	-0.2	-0.1	-0.1
Business Services	0.6	0.3	0.3	0.0	0.1	-0.1
Public administration	0.2	0.0	0.2	0.0	0.1	0.0
Education	0.2	0.1	0.2	0.0	0.0	0.1
Health & social services & membership orgs	0.8	0.2	0.6	0.4	0.1	0.3
Other services	0.1	0.1	0.0	0.0	0.0	0.0
Agriculture	-1.1	-0.6	-0.5	0.0	0.0	0.0
Industry	-3.7	-2.5	-1.2	-1.2	-1.0	-0.2
Services	1.6	0.4	1.1	0.2	0.2	0.0
TOTAL	-3.2	-2.8	-0.5	-0.9	-0.8	-0.2

Note: The figures for financial services, business services and other services for the EU involve some estimation

Table 8 Sectoral contribution to employment growth in the Union and US during recovery in the 1990s

Sector	EU (1994-97)			EU (ex. Germany) (1994-97)			US (1991-97)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Agriculture, fisheries, forestry	-0.4	-0.2	-0.2	-0.4	-0.3	-0.2	0.1	-0.1	0.1
Mining, oil, natural gas	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0
Manufacturing	-0.7	-0.4	-0.3	0.1	0.2	-0.1	0.2	0.3	0.0
Electricity, gas & water	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0
Construction	0.2	0.2	0.0	0.2	0.2	0.0	1.0	0.8	0.2
Wholesale & retail trade	0.1	0.1	0.1	0.2	0.1	0.1	1.7	0.9	0.8
Hotels & restaurants	0.4	0.2	0.2	0.3	0.2	0.2	0.6	0.3	0.3
Transport & communications	-0.1	-0.1	0.0	0.2	0.1	0.1	0.9	0.6	0.3
Financial services	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1	0.1
Business services	1.0	0.6	0.4	1.0	0.6	0.4	2.0	1.1	0.9
Public administration	-0.1	-0.1	0.0	0.0	0.0	0.1	0.1	-0.1	0.2
Education	0.2	0.0	0.2	0.3	0.1	0.2	0.9	0.2	0.7
Health & social services & member orgs	0.7	0.1	0.5	0.8	0.1	0.6	1.9	0.4	1.5
Health & social work	1.1	0.2	0.9	0.7	0.1	0.6	1.9	0.4	1.5
Membership organisations	-0.5	-0.1	-0.4	0.1	0.0	0.1	0.0	0.0	0.0
Other services	0.3	0.1	0.2	0.4	0.2	0.2	0.8	0.3	0.4
Agriculture	-0.4	-0.2	-0.2	-0.4	-0.3	-0.2	0.1	-0.1	0.1
Industry	-0.7	-0.3	-0.3	0.2	0.3	-0.1	1.0	1.0	0.1
Services	2.6	1.0	1.7	3.2	1.3	1.9	9.0	3.8	5.2
TOTAL	1.6	0.4	1.2	3.0	1.3	1.6	10.1	4.7	5.4

Table 9 Contribution of occupations to employment growth in Member States and the US, 1992-97

Total	E11	US	IRL	NL	GR	DK	UK	E	L	B	P	I	D
	Managers, professionals, technicians	3.5	6.5	8.2	6.4	2.7	3.1	3.6	8.7	11.7	4.0	-1.8	1.0
1 Managers, senior officials	0.6	3.1	2.2	1.7	1.2	0.6	1.5	1.2	-13.2	0.8	-1.2	-0.1	0.2
2 Professionals	1.3	2.9	5.1	2.8	0.9	0.8	1.1	2.6	8.2	1.0	0.0	0.1	1.5
3 Technicians, associate professionals	1.5	0.6	0.9	1.9	0.6	1.8	0.9	4.9	16.7	2.2	-0.6	0.9	1.3
Clerks & sales workers	0.4	1.9	5.8	0.5	3.9	1.1	1.8	0.1	-3.9	0.0	-0.3	-0.5	-0.4
4 Clerks	-0.4	-0.3	1.8	-0.4	2.4	-0.7	-0.1	-2.0	10.8	-1.8	-0.4	0.8	-1.1
5 Sales and service workers	0.9	2.3	4.1	0.9	1.5	1.7	2.0	2.1	-14.7	1.8	0.1	-1.4	0.8
Manual workers	-4.3	0.6	5.5	0.7	-1.8	-0.6	-2.1	-5.5	-5.2	-2.2	2.1	-4.4	-8.0
6 Skilled agricultural and fishery workers	-0.6	0.0	-1.2	-1.3	-1.3	-1.0	-0.1	-0.8	0.1	-0.3	2.2	-1.8	-0.2
7 Craft and related trades workers	-1.0	0.3	3.1	0.4	-1.6	0.8	-1.2	-2.0	-14.1	-3.3	-2.1	1.6	-2.0
8 Plant and machine operators	-0.6	0.2	2.4	0.2	-0.4	-0.1	-0.1	-0.4	-2.2	1.8	0.5	-1.2	-1.3
9 Elementary occupations	-1.9	0.0	2.0	1.2	0.9	-0.2	-0.6	-2.1	11.1	-0.3	1.3	-1.9	-4.4
Total	-0.4	9.1	19.5	7.6	4.7	3.6	3.3	3.2	2.7	1.8	0.0	-4.0	-5.3
Men	E11	US	IRL	NL	GR	DK	UK	E	L	B	P	I	D
Managers, professionals, technicians	1.5	2.3	4.0	2.6	1.5	0.6	1.6	4.3	6.4	2.2	-1.3	0.0	1.2
1 Managers, senior officials	0.4	1.2	1.0	1.0	1.0	0.0	0.9	0.8	-7.1	0.7	-0.8	-0.1	0.1
2 Professionals	0.5	1.1	2.6	1.2	0.4	0.3	0.3	1.1	4.0	0.3	-0.2	-0.3	0.8
3 Technicians, associate professionals	0.6	0.1	0.4	0.3	0.0	0.3	0.4	2.4	9.5	1.2	-0.3	0.4	0.3
Clerks & sales workers	-0.2	1.0	0.2	-0.4	0.7	1.1	0.8	-0.4	-2.5	-0.8	-0.6	-1.0	-0.3
4 Clerks	-0.3	0.0	0.1	-0.3	0.9	0.0	0.0	-1.1	5.2	-1.2	-0.2	0.1	-0.5
5 Sales and service workers	0.1	1.0	0.1	-0.1	-0.2	1.0	0.8	0.7	-7.7	0.4	-0.4	-1.1	0.2
Manual workers	-2.6	0.5	4.0	0.8	-1.1	0.6	-0.9	-4.1	-2.6	-1.7	0.4	-2.6	-5.1
6 Skilled agricultural and fishery workers	-0.4	-0.1	-1.2	-1.0	-1.0	-0.5	-0.1	-0.5	0.7	-0.2	0.8	-1.2	-0.2
7 Craft and related trades workers	-0.4	0.2	2.8	0.3	-0.8	0.9	-0.8	-0.9	-12.8	-2.6	-0.9	2.1	-1.5
8 Plant and machine operators	-0.4	0.4	2.0	0.3	-0.2	-0.1	0.1	-0.8	5.8	1.4	0.2	-1.2	-0.8
9 Elementary occupations	-1.0	-0.1	1.2	0.9	0.5	0.5	0.0	-1.6	3.8	-0.2	0.0	-1.3	-2.4
Total	-1.3	3.9	8.3	2.9	1.0	2.2	1.5	-0.1	1.2	-0.2	-1.5	-3.5	-4.2
Women	E11	US	IRL	NL	GR	DK	UK	E	L	B	P	I	D
Managers, professionals, technicians	2.0	4.2	4.2	3.8	1.2	2.5	2.0	4.3	5.4	1.8	-0.6	0.9	1.8
1 Managers, senior officials	0.3	1.9	1.2	0.7	0.2	0.6	0.6	0.4	-6.1	0.1	-0.4	0.0	0.1
2 Professionals	0.8	1.8	2.5	1.5	0.4	0.5	0.8	1.5	4.2	0.7	0.1	0.4	0.7
3 Technicians, associate professionals	0.9	0.5	0.4	1.6	0.6	1.5	0.6	2.4	7.3	1.0	-0.3	0.5	1.0
Clerks & sales workers	0.6	0.9	5.6	0.9	3.2	0.0	1.0	0.5	-1.4	0.8	0.3	0.4	0.0
4 Clerks	-0.2	-0.4	1.6	-0.1	1.5	-0.7	-0.1	-0.9	5.6	-0.6	-0.2	0.7	-0.7
5 Sales and service workers	0.8	1.3	3.9	1.0	1.7	0.7	1.2	1.4	-6.9	1.4	0.6	-0.3	0.6
Manual workers	-1.6	0.1	1.4	0.0	-0.7	-1.2	-1.2	-1.5	-2.6	-0.5	1.7	-1.9	-2.9
6 Skilled agricultural and fishery workers	-0.1	0.1	0.0	-0.3	-0.2	-0.5	0.0	-0.3	-0.6	-0.2	1.4	-0.6	0.1
7 Craft and related trades workers	-0.5	0.1	0.3	0.1	-0.8	-0.1	-0.4	-1.1	-1.2	-0.7	-1.3	-0.5	-0.5
8 Plant and machine operators	-0.1	-0.2	0.4	-0.1	-0.2	0.0	-0.2	0.4	-8.0	0.4	0.3	0.0	-0.5
9 Elementary occupations	-0.8	0.1	0.8	0.3	0.4	-0.6	-0.6	-0.5	7.3	-0.1	1.3	-0.6	-2.0
Total	1.0	5.2	11.2	4.6	3.7	1.3	1.8	3.3	1.4	2.1	1.5	-0.5	-1.1

Note: Figures for the US relate to 1990-97

Table 10 Change in employment by broad occupational group in the Union and US, 1983-91

E8	Contribution to employment growth (%)			Average annual growth (%)		
	Total	Men	Women	Total	Men	Women
Managerial, professionals & technicians	4.8	1.8	3.0	2.8	1.7	4.4
Clerical & service	5.4	1.2	3.8	1.6	0.9	1.8
Manual workers	-1.1	-0.3	-0.5	-0.4	-0.1	-0.9
Total	9.1	2.7	6.3	1.1	0.5	1.9
US	Total	Men	Women	Total	Men	Women
Managerial, professionals & technicians	8.1	3.1	5.1	3.7	2.6	5.0
Clerical & service	6.1	2.4	3.8	2.2	2.4	2.1
Manual workers	3.5	2.8	0.7	1.4	1.4	1.4
Total	17.8	8.3	9.6	2.4	2.0	2.9

Part II Section 2 Employment growth and job quality in the European Union

The *Employment Rates Report* of 1998 identified services as the area where the number of jobs is deficient in the Union, with some countries having managed successfully the transition to a service society and others still lagging, including three of the four largest ones — Germany, France and Italy. This conclusion led the Employment and Labour Market Committee to identify the need for further analysis in three broad areas: growing sectors and their dynamics, job quality and wages and the link to productivity and value added and changes in this. As indicated earlier in the Report, variations between Member States in the growth of value-added seems to be much less than in employment growth. The main difference, therefore, appears to be in the success in creating jobs in relation to a given growth of value-added (though there is a questionmark over the measurement of this and the treatment of quality improvements).

It is sometimes argued that the jobs that are missing in Europe are low quality jobs that may not even provide a decent income for the person performing them. This point was examined in the previous section. Here the concern is to examine occupational changes over recent years in detailed sectors across the Union, to see the nature of the shifts which have occurred in the kinds of job which people do and how far they are common between Member States with differing rates

of employment growth. It is also to examine the relationship between wages and employment, especially of lower skilled workers.

The pattern of job growth, 1994 to 1998

For the four years 1994 to 1998, which was generally a period of economic recovery and job growth in the Union, employment data by detailed sector and broad occupation are available for 13 Member States, excluding only Sweden and Finland. The data are analysed mainly in terms of the contribution of each sector and occupation to the change in total employment over the period, rather than simply in terms of percentage changes, in order to take account of the significance of the change in terms of the number of jobs involved (ie for the fact that an increase in employment from 2 million to 3 million in a sector is more significant than a change from 2 thousand to 3 thousand).

To make the analysis manageable, the sectoral analysis is conducted in terms of four groups of sectors, defined according to employment growth over the period 1994 to 1998. For a similar reason, as well as to reduce the possible effect on the results of classification differences between Member States, occupations are combined into five

groups, three non-manual occupational groups, defined as high, medium and lower skilled and two manual occupational groups, skilled and unskilled (see Box). These are generally in line with differences in education attainment levels, in the sense that those with university degrees and the equivalent tend to be disproportionately concentrated in the high skilled non-manual occupations, those with only a basic level of education in lower skilled non-manual and unskilled manual jobs. Equally, there is a relatively high share of those with upper secondary level education in the medium skilled non-manual and skilled manual occupations.

While the high skilled non-manual group accounts for the same share of both men and women in work, the two other non-manual groups each account for only 8% of men in employment as compared to 21–22% of women. On the other hand, many more men are employed as skilled manual workers (41% of men in work) than women (10½% of women employed), whereas almost 11% of women work in unskilled manual jobs as opposed to 8½% of men (just under 8% excluding the armed forces).

Across the Union as a whole, the total number in employment increased by slightly under 0.75% a year over the four years 1994 to 1998, all of the increase occurring

The data used in the analysis and division of occupations and sectors

The basic source of data is the EU LFS, which divides employment by sector and occupation. The division of employment from this source is applied to the Eurostat benchmark employment series, which is the most reliable indicator of changes in the total number employed over time, to give a consistent set of data for year-to-year changes by occupation and sector.

Data are only available for the Union on a reasonably consistent basis for the four years 1994 to 1998. Before then changes in both the NACE and ISCO classification systems mean that it is difficult to construct reliable series. For Finland and Sweden, no comparable occupational data are available at all for years before 1997. Even for this relatively short period, data are only available for Germany and Austria on the same classification basis from 1995 and for France, on a consistent basis, from the same year. For these countries, the 1995 occupational and sectoral division derived from the LFS is applied to the 1994 benchmark employment figures in order to make the data broadly comparable with those for other countries. This procedure, however, might mean that for these three countries, the occupational and sector shifts observed over the period are slightly less pronounced than for the other countries.

For purposes of analysis, occupations are combined into five groups, three non-manual occupational groups and two manual groups. The composition of the groups is as follows:

- high-skilled non-manual: managers, professionals and technicians (accounting for 35% of total EU employment);
- medium-skilled non-manual: clerks and office workers (13½% of EU employment);
- lower skilled non-manual: sales and service workers (13½% of EU employment);
- skilled manual: agricultural workers, crafts and related workers and plant and machine operators (28% of EU employment);
- unskilled manual: elementary workers (10% of EU employment — the few people classified in the LFS to the armed forces are also included in the group for the sake of completeness).

The 60 NACE 2-digit sectors are combined into four similar sized groups in terms of employment:

- fast growth sectors, in which the number employed increased by 1.5% a year or more over the 4 years 1994 to 1998; these include, for example, business services, health care, recreational activities, computing and the manufacture of office machinery;
- medium growth sectors, in which the number rose by over 0.5% a year; these include, for example, education, insurance, wholesaling and the manufacture of radio and televisions as well as precision instruments;
- slow growth sectors, in which the increase was less than 0.5% a year; these include, for instance, retailing, personal services, land and water transport, construction, printing and publishing and the manufacture of chemicals and pharmaceuticals;
- declining sectors, in which employment fell; these include, for example, public administration, banking, the textile and clothing industry, iron and steel production and agriculture.

in non-manual occupations, while the number working in manual jobs declined. Growth of high skilled non-manual occupations alone was responsible for increasing employment by the same amount and growth of lower skilled non-manual jobs by 0.25% a year (Graph 89). Employment in medium skilled non-manual jobs (office workers) increased only marginally, while the number employed in manual occupations fell, each reducing total employment by over 0.1%. (It is interesting to note that analysis of job growth in the US between 1989 and 1996 indicates that most of the job gains were in relatively well-paid and relatively low-paid occupations, with twice as many in the former than the latter. See previous section and Randy E. Lig, 'Assessing the 'quality' of employment growth', *Bureau of Labor Statistics, Monthly Labor Review*, June 1996.)

Given the distribution of employment between occupations, this means that both high and lower skilled non-manual jobs expanded by 2% a year over the period, while the number of clerks and office workers (medium skilled) increased only marginally. Those employed in skilled manual jobs declined at an annual rate of almost ½% a year and those in unskilled manual jobs by 1% a year.

The shift of employment towards non-manual occupations, and in particular towards those requiring high skill levels, was common to all Member States, except Portugal, though the scale of net job creation, or destruction, in the different occupations differed because of variations in the overall rate of employment growth. In Portugal, in contrast to other Member States, employment in high skilled non-manual jobs fell and an increase in the number of skilled

manual workers was responsible for most of the relatively large overall expansion in employment.

However employment in lower skilled non-manual jobs (sales and services workers) also grew in all 13 Member States.

Employment of skilled manual workers — in particular, of those in agriculture — fell in 9 Member States, providing the largest source of job losses in 7, though in Ireland, it contributed over 1½% a year to total net job creation and in Portugal, over 1%.

The growth of jobs by sector

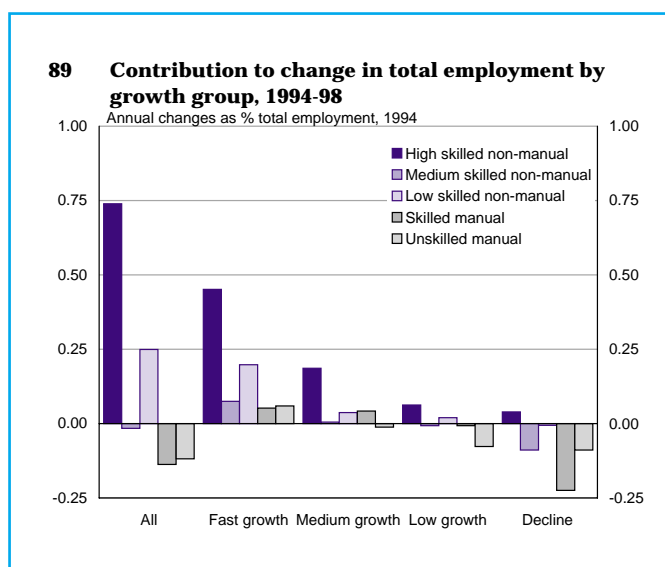
The broad pattern of employment change described above is generally repeated in individual sectors. High skilled non-manual occupations made the largest contribution to job growth between 1994 and 1998 in each of the sector groups, divided according to the change in employment over the period, including in the declining sectors. Their contribution, however, was particularly pronounced in the growing sectors. Job growth in lower skilled non-manual occupations made the second largest contribution to overall employment in the three growing sectors and, although such jobs fell in the declining sectors, the reduction was very small.

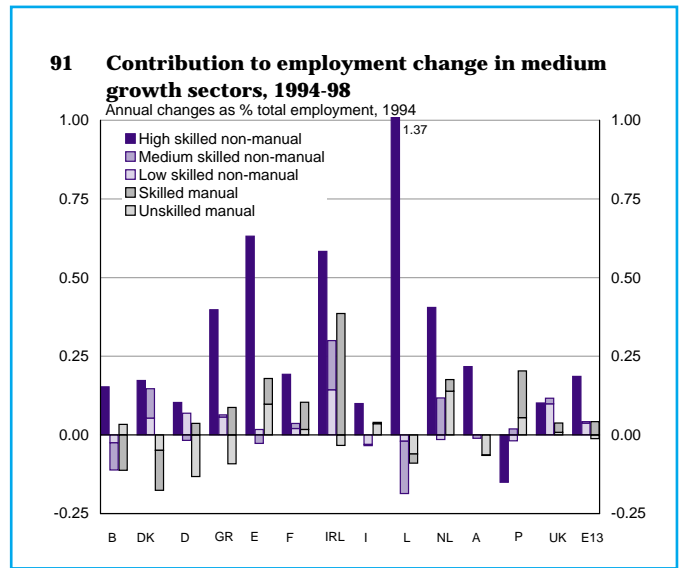
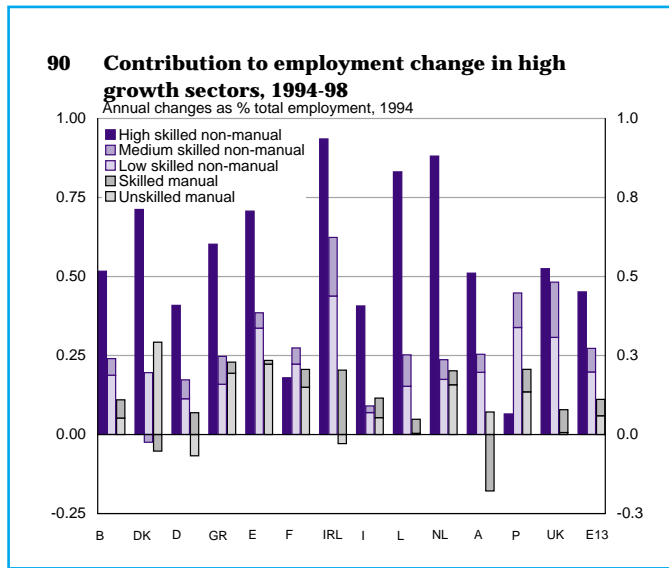
Moreover, in three of the four

sector groups, medium skilled non-manual occupations were a larger source of job growth, or a smaller source of decline, than the two manual groups, the only exception being the medium growth sectors, where skilled manual occupations made a larger contribution to the increase in employment. Nevertheless, in all the growing sectors, even the slowly growing ones, jobs for clerks and office workers increased by much less than for either managers, professionals and technicians (the high skilled group) or for sales and service workers (those in the lower skilled group).

The decline in employment in manual jobs is largely attributable to large-scale job losses among both skilled and unskilled workers in declining sectors (including agriculture in particular) and, to a lesser extent, of unskilled workers in slow growth sectors. In the growing sectors, there was an increase in the number of manual workers employed, though on a relatively small scale.

This pattern of change reflects to a significant extent the differing





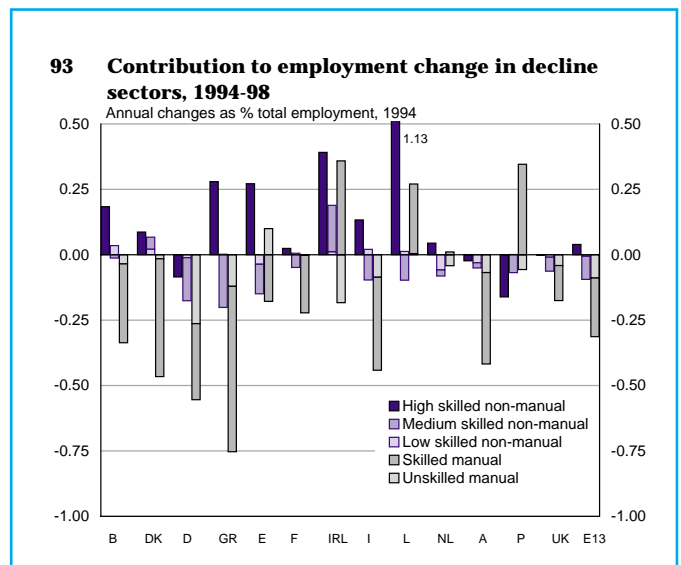
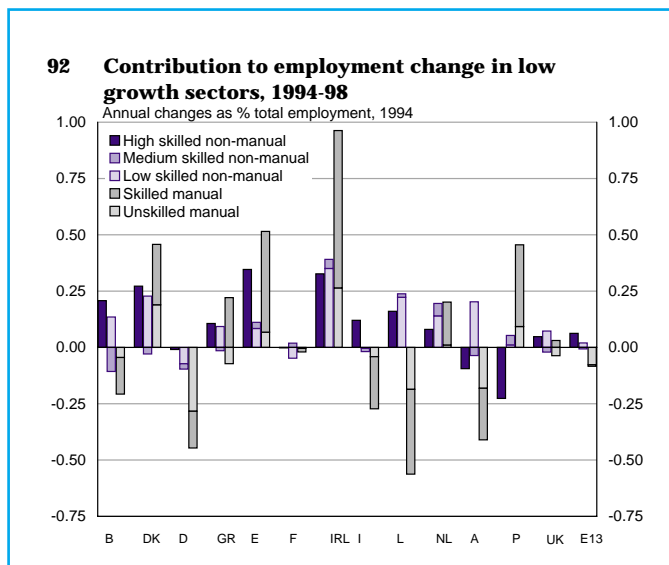
occupational structure of the sectors included in the four groups (the growth of business services and health care, for example, inherently entails a growth of high skilled jobs, while the decline of agriculture and many basic manufacturing industries means job losses for manual workers). It is, nevertheless, the case that throughout the European economy, non-manual jobs are expanding much more rapidly than manual jobs in all sectors (Graphs 90 to 93).

Fast growth sectors

Total employment in the sectors with the highest growth rates across the Union (over 1½% a year) increased on average by 3¼% a year between 1994 and 1998; within this group, health and social work accounted for a third of employment in 1998, business services for 20%, hotels and restaurants for 15%, recreational, cultural and sporting activities for 6%, while motor vehicle manufacture (a high growth industry during this period

but not necessarily over the long-term), was responsible for some 5% of the jobs.

Almost 45% of those employed in the group worked in high skilled non-manual jobs as defined here. Growth of such jobs, moreover (over 4% a year), was higher than for other occupations, though there was also a significant increase in the employment of lower skilled non-manual workers (just under 4% a year). Nevertheless, employment in skilled manual jobs also



increased (at an annual rate of just under 2%), largely in the manufacturing sectors included (office equipment, motor vehicle manufacture) but also in services, as well as in recycling, as did that in unskilled manual jobs (also by less than 2% a year). The increase in both, however, was considerably less than for other occupations, giving rise to a marked shift from manual to non-manual workers within this group of activities.

Given their size, it is not surprising that business services and health care and social work each account for over 25% of total employment growth in this group. In both of these employment rose most rapidly in high and lower skilled non-manual jobs, but jobs also increased for unskilled manual workers in business services, whereas in the health sector they declined.

Hotels and restaurants accounted for 9% of jobs created, practically all in lower skilled non-manual occupations. Recreational and cultural activities and computing — which had the highest rate of growth — each accounted for 8% of the overall increase in employment in the group, with net job creation concentrated, as might be expected, in high skilled non-manual occupations.

Medium growth sectors

In the medium growth group, where the number employed rose by between ½% and 1½% a year over this period, over 40% of employment was in education in 1998, with a further 16% in wholesaling, 11% instrument engineering and 6–7% in membership organisations and the manufacture of metal products. High skilled non-manual occupations accounted

for 47% of total jobs, more than in the high growth sectors, while skilled manual occupations, reflecting the higher employment in manufacturing industries, accounted for 27%.

Although the increase in employment in percentage terms was greatest for lower skilled non-manual workers (almost 3% a year as against an average rise of just over 1%) — largely employed in wholesaling and food and drink — because these accounted for only 6% of the total in work, their contribution to the overall expansion of jobs was less than for high skilled occupations (disproportionately concentrated in education), which increased by less than 2% a year. Nevertheless, there was a marked shift towards non-manual jobs and the number of unskilled manual workers employed in these sectors declined.

Slow growth sectors

Almost two-thirds of employment in the slow-growth sectors — those in which the number employed grew by under ½% a year — was in retailing (35%) and construction (29%) in 1998, with road and rail transport accounting for a further 10% and mechanical engineering for just under 8%. In this group, only 23% of employment was in high skilled non-manual jobs as against 41% in manual jobs and 19% in lower skilled non-manual ones.

The number employed rose only marginally over the period in the group as a whole and declined markedly (by almost 3½% a year), among unskilled manual workers, reducing total employment of the group by over 1% despite their comparatively small share of jobs (7%). By contrast, employment in high

skilled non-manual occupations increased by over 1% a year and in lower skilled non-manual jobs by almost ½% a year, while it remained broadly unchanged for the other two occupational groups. There was, therefore, a shift towards non-manual jobs even though total employment changed very little.

Declining sectors

The occupational structure of declining sectors was similar in some ways to that of slow growth sectors in 1998, with more employment (36%) in skilled manual jobs and less in high skilled non-manual ones (28%) than in the faster growing sectors. On the other hand, the mix of lower skilled (5% of the total) and medium skilled (20%) non-manual jobs is quite different. Public administration accounted for almost a third of total employment in the group, agriculture for around a fifth, banking for 9% and post and telecommunications for 7%, with none of the other sectors accounting for more than 4%.

The main difference in relation to the slow growth sectors lies in the high rate of job loss among skilled manual workers, which amounted to over 8% over the period and which was responsible for well over half of the overall reduction in employment. Much of this decline, however, occurred in agriculture (a 9% fall overall), where the number employed in all occupational groups, even the high skilled non-manual one, fell. Leaving aside agriculture, which accounted for a third of the total jobs lost, the number employed in high skilled non-manual occupations increased, even if marginally, though most of the growth was concentrated in public administration, banking and post and telecommunications,

while in lower skilled non-manual jobs, it remained broadly unchanged. Even excluding agriculture, however, job losses were disproportionately concentrated among skilled manual workers.

The general pattern to emerge across most sectors, therefore, irrespective of their overall rate of employment growth, is of a pronounced shift from manual jobs to non-manual jobs and in, particular, to high skilled non-manual jobs, which increased in nearly all parts of the economy. At the same time, there was also a significant increase in employment in lower skilled non-manual jobs in a great many sectors.

The German effect

Although the four years 1994 to 1998 were a period of employment growth in most parts of the Union, in Germany, the number in work declined by just over ½% a year. Given this difference in experience, it is possible that the structure of jobs also changed in a different way in Germany than in Member States where employment expanded. Given the weight of Germany in total EU employment (it accounts

for around a quarter), the average changes examined above and any general conclusions drawn, will be affected by the German influence.

Excluding Germany, the number employed in the Union increased by just over 1% a year (rather than just over ½%) over the period (Graph 94). Within this overall growth, the most striking difference from the above analysis is that instead of declining, the employment of lower skilled manual workers, which fell substantially in Germany, increased slightly over the period, adding just under 0.1% a year to the total in work. Accordingly, their contribution to job growth in the rest of the Union was greater than for medium skilled non-manual occupations. In addition, the growth of jobs for high skilled non-manual workers is also increased proportionately, while the fall in skilled manual jobs is reduced.

Men and women

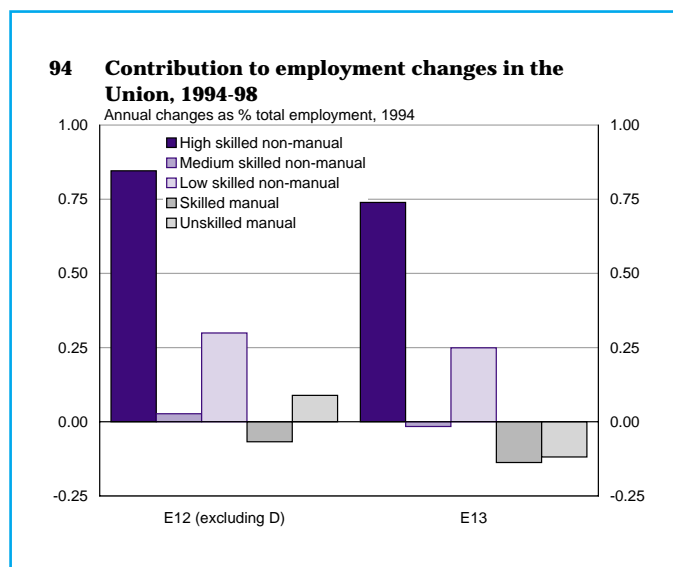
Employment of women went up by much more than that of men between 1994 and 1998, almost 65% of the net addition to jobs going

to women over this period. A large proportion of these jobs, as for men, were in high skilled non-manual occupations. The big difference is in the lower skilled non-manual jobs, where the number taken by women was substantially greater than those taken by men. While the increase of men employed in such jobs added only slightly to total employment (by only 0.2% over the period as a whole), the increase of women was significant (adding 0.8% to the total). Indeed, over 40% of the increased number of women in work went into lower skilled non-manual jobs and these accounted for over a quarter of overall job growth.

In most Member States, women took either a similar or a larger proportion of the net additional jobs created between 1994 and 1998. In four countries, in particular, — Belgium, Germany, Greece and Italy — all apart from Germany, countries where the number of women in work is relatively low, the net additional jobs went predominantly to women, or women lost out much less from the decline in employment which occurred.

In all four Member States, the pattern of change was similar. First, women did not suffer the same scale of job losses for manual workers, especially for skilled workers, as men because they account for a much smaller share of such jobs. Secondly, they gained a much larger share of medium and lower skilled non-manual jobs than men — indeed, there was a reduction of men in the former. Thirdly, the net additional high skilled non-manual jobs were fairly evenly divided between men and women.

Examination of employment changes in the sectoral groups distinguished above throws further light on the pattern of change. The relative increase of women in lower skilled non-manual jobs, which accounts for most of the difference in employment growth between men and women, was concentrated almost entirely in the fast and medium growth sectors between



1994 and 1998. In the slow growth and declining sectors, on the other hand, there was hardly any increase in these jobs and little difference between men and women, though it is important to note that men account for a much larger share of jobs overall in slow growth and declining sectors and, therefore, are more affected by the decline or slow growth than women.

The conclusion, therefore, is that while high skilled non-manual jobs are the main element in employment growth, women tend to fare better than men because most of the net additional lower skilled jobs which are created at the same time go to them, while they also gain by being more concentrated in the growing sectors. Equally, though less importantly, women also experienced some job growth in medium skilled non-manual occupations — ie in general office work — in all but the declining sectors while the number of men employed tended to decline.

Country analysis

A further insight into the pattern of job change can be gained by

comparing Member States with different overall employment performance over the period.

The pattern of employment growth in Member States which experienced a relatively high rate of net job creation was very similar, job gains being concentrated among high skilled non-manual workers and manual jobs expanding a little, especially for skilled workers and mostly for men, which tended to decline in other economies where employment growth was lower.

Denmark, however, is an exception. Job losses among skilled manual workers were greater than anywhere else in the Union apart from Germany, while, in contrast to most other countries, women made a smaller contribution to the overall increase in employment than men, mainly because of a reduction in those employed in skilled manual jobs and as clerks and office workers.

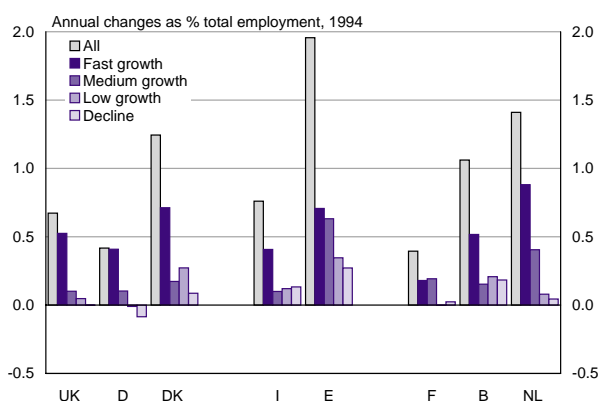
A comparison of similar countries gives a further insight into the pattern of job creation.

Germany versus the UK

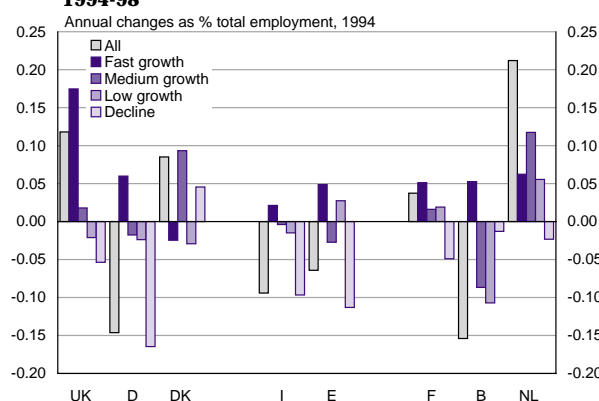
Whereas Germany experienced a decline in employment over these four years of just over ½% a year, in the UK, employment increased by over 1% a year. Here, growth was well above the Union average mainly because of a larger increase in lower skilled as well as, though to a lesser extent, in medium skilled non-manual jobs, combined with an absence of job losses for skilled manual workers. In Germany, growth of non-manual jobs was well below the EU average and there was a decline of medium skilled jobs within these, while the number of manual workers, especially unskilled, fell markedly (Graphs 95 to 99).

The difference in experience between the two economies over this period lies not so much in the net rate of creation of high skilled non-manual jobs, which in Germany was only slightly below that in the rest of the Union, but in the different experience in respect of manual jobs, especially the unskilled ones, which fell substantially in Germany, reflecting the decline in manufacturing. Women

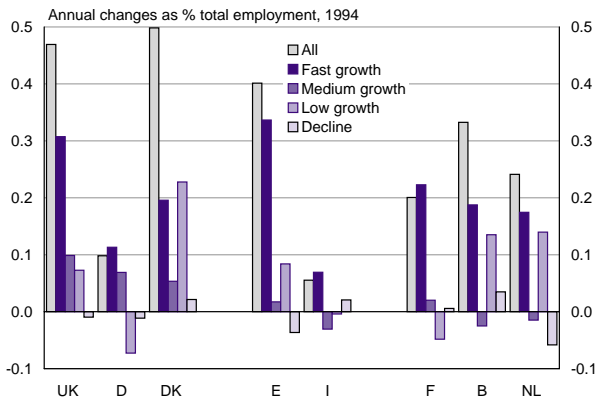
95 Contribution of high skilled non-manual workers to employment change by growth group, 1994-98



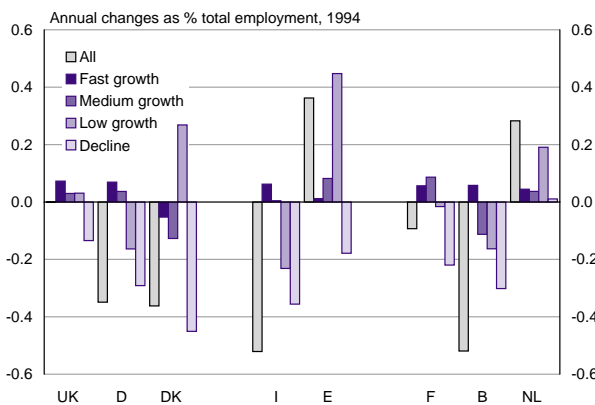
96 Contribution of medium skilled non-manual workers to employment change by growth group, 1994-98



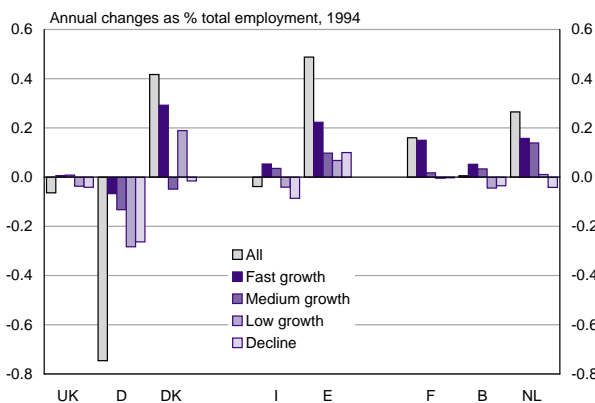
97 Contribution of low skilled non-manual workers to employment change by growth group, 1994-98



98 Contribution of skilled manual workers to employment change by growth group, 1994-98



99 Contribution of unskilled manual workers to employment change by growth group, 1994-98



fared better than men by gaining disproportionately in both high skilled and low skilled non-manual jobs and by being much less affected by the large-scale job losses among skilled manual workers.

Denmark versus Germany

Employment in Denmark increased by almost 2% a year between 1994 and 1998, around 2½% more a year than in Germany. The difference between the two economies is most marked in high skilled non-manual occupations, which contributed almost 1% a year more to total employment in Denmark than in Germany, and in unskilled manual jobs, which contributed over 1% a year more.

Higher job growth in Denmark was a feature of all sectors, but it was most evident in the fast growth ones, where employment in unskilled manual jobs fell in Germany. Indeed, most of the difference between Germany and the rest of the Union lies in the decline of manual jobs, especially unskilled ones, particularly in slow growth and declining sectors, where there was little increase in non-manual jobs either. By contrast, in Denmark, such jobs expanded even in these sectors, while the loss of manual jobs was limited.

Italy versus Spain

Low employment growth in Italy over the period resulted mainly from relatively large job losses among skilled manual workers combined with slow growth of high skilled non-manual jobs. Employment of women increased by only slightly less than the Union average, largely because of the growth of both medium and lower skilled non-manual jobs and smaller losses among skilled manual workers.

Employment growth was particularly high in Spain, almost 4% a year over the period. Job gains were fairly evenly distributed among men and women, which in this case, because of the low employment rate for women, were associated with women increasing their share of the work force. Much of the growth (around two-thirds) was concentrated in high skilled non-manual jobs, with other kinds of job, apart from those for office workers (medium skilled non-manual) which declined, increasing as well.

The growth in employment was marked not only in the fast growth sectors but also in medium and slow growth ones, at around 1% a year in both cases, which was above the Union average. Within these sectors, the increase as elsewhere in the economy was particularly large in high skilled non-manual jobs, though also in skilled manual occupations, if only among men. Conversely, Italy had the lowest employment growth in the fast growth sectors but also one of the smallest reductions in employment in the declining sectors.

Netherlands, Belgium and France

In the Netherlands, growth of employment of both men and women, which, at just under 10% over the four years, was well above the Union average, was concentrated in high skilled non-manual jobs, particularly in the growing sectors, while there was a smaller increase than elsewhere in lower skilled non-manual jobs in most sectors. At the same time, there were comparatively few job losses among manual workers.

In Belgium, employment growth was similar to the EU average and, as in the Netherlands, disproportionately concentrated in high

skilled non manual jobs, which increased by more than average, while the number of skilled manual workers declined.

In France, the overall growth in employment was much the same as in Belgium, though in contrast to the latter, it was distributed across all occupational groups, the number of people employed in high skilled non manual jobs increasing by less than the EU average.

Full-time equivalent employment

The above analysis has been conducted in terms of changes in the number of people in employment. A marked feature of employment growth during the 1990s, however, has been the increased importance of part-time working, among men as well as women. The question arises as to how far the conclusions reached above as regards occupational and sectoral shifts in employment are altered if allowance is made for this growth, or more generally for changes in working-time.

The overall effect at the Union level of adjusting employment to a full-time equivalent (FTE) basis is to reduce the increase in employment between 1994 and 1998 from just over ½% a year to just under.

While the contribution of high skilled jobs to the overall increase in employment is much the same as before (ie in terms of numbers of people), implying that most jobs of this kind created over the period were full-time, the contribution of lower skilled non-manual jobs is almost halved (adding only just over 0.1% a year to total employment). Since women filled most of the net additional jobs of this kind created over the period, the

implication is that many of these were employed part-time rather than full-time. In the other three occupational groups, the effect of adjusting to a FTE basis is similar — to reduce their contribution by very little, amounting to less than 0.2% of total employment over the four years as a whole.

After adjusting for variations in hours worked, therefore, the pattern of occupational change remains much the same as before, except that the growth of jobs for high skilled non-manual workers is even more pronounced over the period. Overall, the adjustment has, perhaps contrary to expectations, a larger effect on the growth of jobs for men than those for women, emphasising the marked shift to part-time working among men which occurred during these years. In the fast growth sectors, however, adjusting to a FTE basis reduces the contribution of women to employment growth more than that of men, whereas in the declining sectors, the fall in employment among men is increased significantly and for women there is little change.

The implication is that many of the jobs created in the fast growing sectors for women were part-time, while in the declining sectors, there was not only a reduction in the number of men in work, but also in average working hours of those remaining in employment.

Wages and employment

The issue of the link between wages and net job creation is one which has attracted a good deal of attention in recent years, with low employment growth in some countries being attributed to excessive labour costs.

The concern here is to see whether any systematic relationship is evident between relative wages and employment patterns, whether, in other words, the level of wages seems to affect the relative number of people employed in different sectors and occupations. The analysis focuses, in particular, on low skilled workers for whom wage levels would be expected to have the most direct impact on employment, since they tend to contribute less to value-added than higher skilled, and higher paid, workers. Whereas the wages that need to be paid may have a determining effect on whether to employ another shop assistant or office cleaner, for example, they are likely to have less influence on the decision to employ another computer programmer or laboratory technician.

The Structure of Earnings Survey (SES) provides data for 1995 on gross hourly wages by occupation and sectors, though, unfortunately, it does not cover the public sector, specifically health and social work, education and public administration, personal services or agriculture (see Sources for a description). At the time of writing, no data were available for Ireland or for the service sector in Greece and transport and business services in Germany. These data are used in conjunction with the LFS employment data for 1995 for the same occupations and sectors to examine the nature and strength of the relationship between the two.

A further important limitation of the data, which needs to be stressed, is that they relate only to gross earnings rather than to total labour costs, since they exclude employers' social contributions and other non-wage labour costs. As these are significant elements of labour costs (on average, adding around a third to gross earnings in the EU in 1996, which is only slightly more than in the US,

according to the Eurostat Labour Cost Survey) and vary markedly between countries (adding around half to gross earnings in Belgium, France and Italy, but around 20% in the UK and Ireland and 10% in Denmark), omitting them from the analysis might well distort the results. On the other hand, in most countries, the social contribution element of non-wage labour costs — the major part — tends to be proportionate to gross earnings up to a certain level (typically around 1½ times the average wage). The relationship between gross earnings of low paid workers and those on the average wage may, therefore, be a reasonable indicator of the extent of the difference in labour costs between the two groups.

The analysis here focuses on the four largest broad sectors covered by the survey — manufacturing, wholesaling and retailing, hotels and restaurants and business services — which together account for 76% of the unskilled manual workers covered by the SES and 96% of the lower skilled non-manual workers.

It has been argued that in the US, high rates of employment growth have been associated with widening pay disparities and, in particular, with wages being very low for low skilled workers. The aim here is to see whether differences in the pattern of employment between Member States reflect differences in relative pay levels for low skilled workers, whether in countries where pay is low more of such workers are employed, so increasing overall employment. (While higher employment of these workers may lead to more higher skilled workers being employed, if only to supervise them, the increase is still unlikely to be proportionate.)

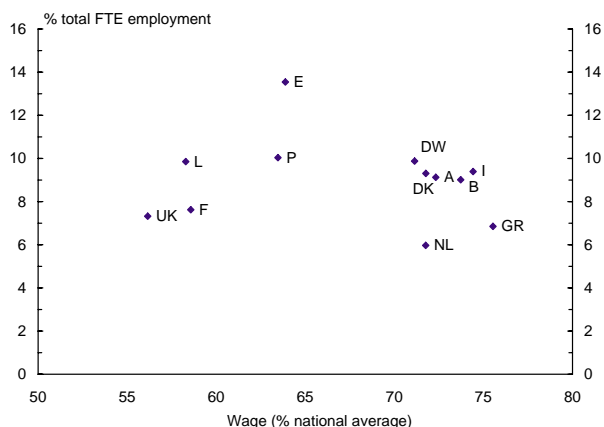
The relationship between pay and employment, however, is more

complicated than the simple view that lower pay leads to more jobs. Not only may pay not reflect the overall cost of employing someone, but the demand for labour is a derived one, depending on the demand for products or services which labour produces. Accordingly, the pattern of employment will tend to reflect not only the relative level of wages but also the structure of economic activity, which itself will reflect the composition of demand in the economy and the pattern of specialisation. Although these might be influenced by relative wage levels, they are also affected by a range of other factors, including social preferences and technical know-how. Moreover, the employment of low skilled labour is also likely to be affected by institutional factors, such as restrictions on hiring and firing, as well as by levels of taxation and social charges. All of these factors are liable to affect the observed relationship between relative wages and employment. Accordingly, the main concern here is not to see whether there is a relationship between the two, but whether it is sufficiently strong to outweigh the effect of these other influences, whether low wages are the main determinant or a necessary condition of the creation of low skilled jobs.

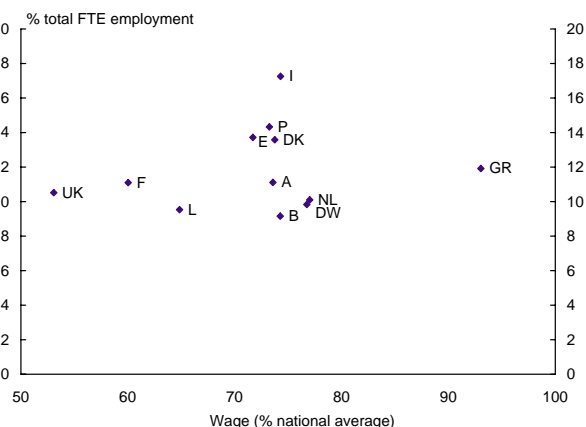
Three specific aspects of the relationship between wages and employment are examined:

- the average wages of lower skilled workers relative to those of all workers in the economy and their share in employment;
- the extent of dispersion of wages at the bottom end of the pay scale, as given by the wages of the bottom decile of low skilled workers (ie the wages of the lowest paid 10% of such workers) relative to the average wage in the economy and the share of

100 Earnings of unskilled manual workers and their share of total FTE employment, 1995



101 Earnings of low skilled non-manual workers and their share of total FTE employment, 1995



low skilled workers in employment;

- wages of women in low skilled jobs as compared with those of men and the share of women in employment.

The main findings are set out below.

Taking all sectors together, there is little sign of any systematic relationship between the average wages of those in low skilled jobs relative to the average for all workers and their

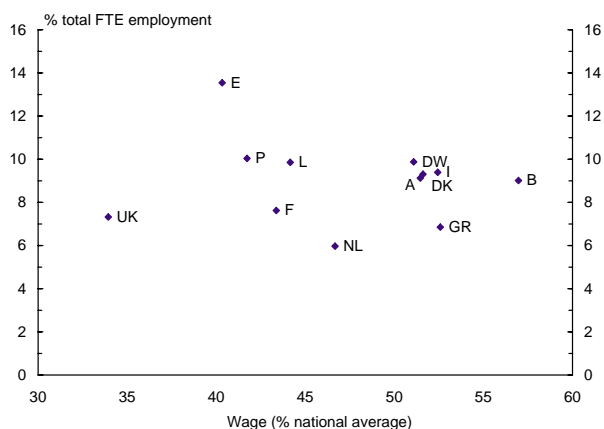
share of total employment. This is the case for both manual and non-manual workers (Graphs 100 and 101). Within particular sectors, there is some sign of a relationship for manual workers in hotels and restaurants and business services, where more of these tend to be employed in countries where their wages are relatively low. The numbers involved, however, are very small. On the other hand, in manufacturing and wholesaling and retailing, where many more such workers are employed, the reverse is the case,

with low wages being associated with low levels of employment rather than high levels.

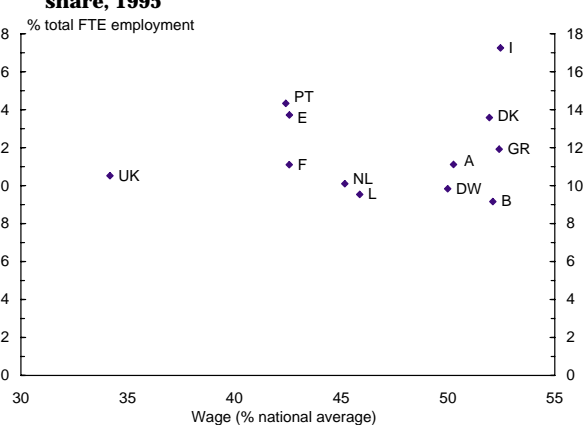
Most lower skilled non-manual workers tend to be employed in wholesaling and retailing and hotels and restaurants. In neither case, however, does there appear to be any systematic relationship between employment shares and relative wages.

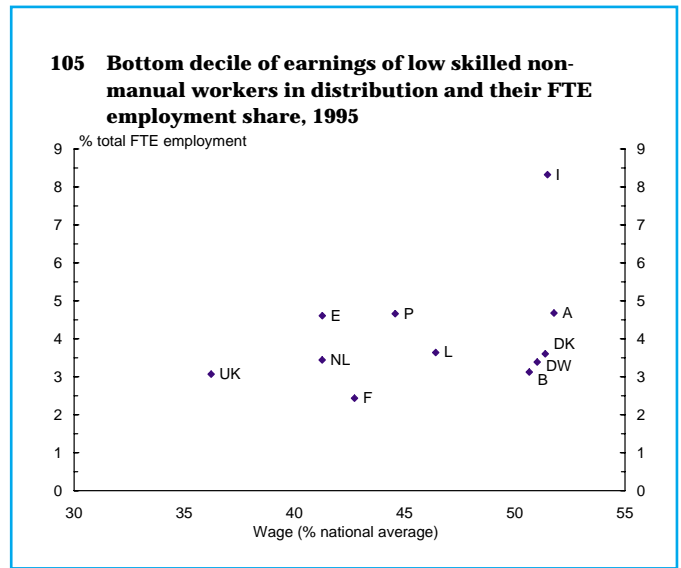
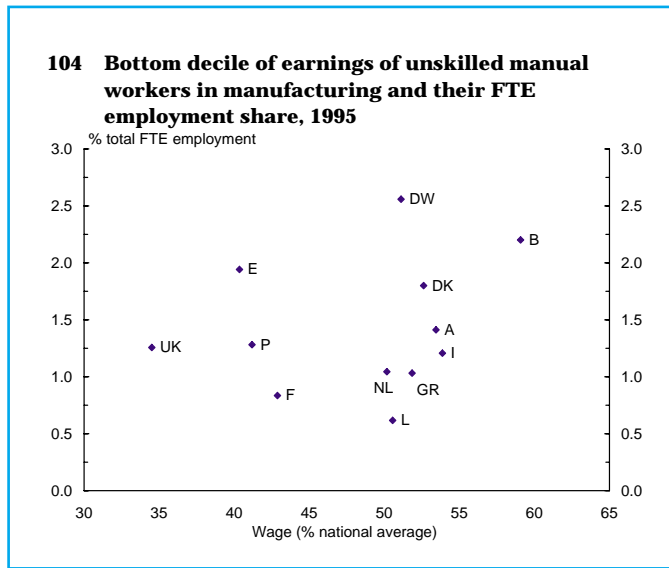
There is slightly more evidence of a link between employment shares

102 Bottom decile of earnings of unskilled manual workers and their FTE employment share, 1995



103 Bottom decile of earnings of low skilled non-manual workers and their FTE employment share, 1995





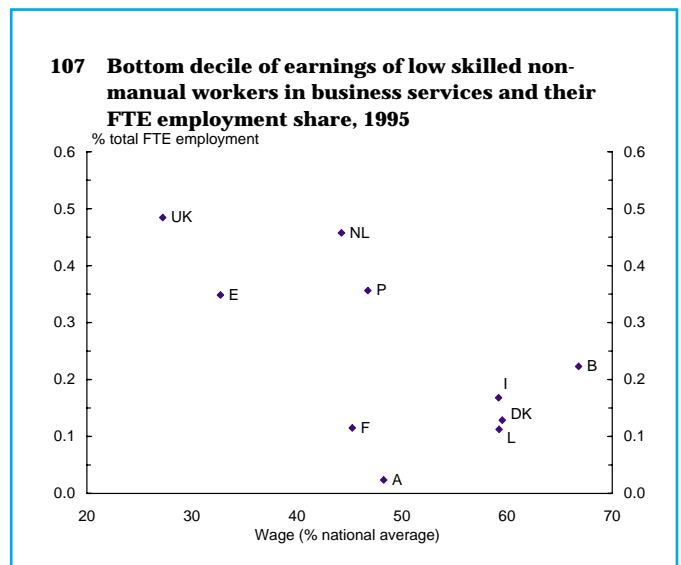
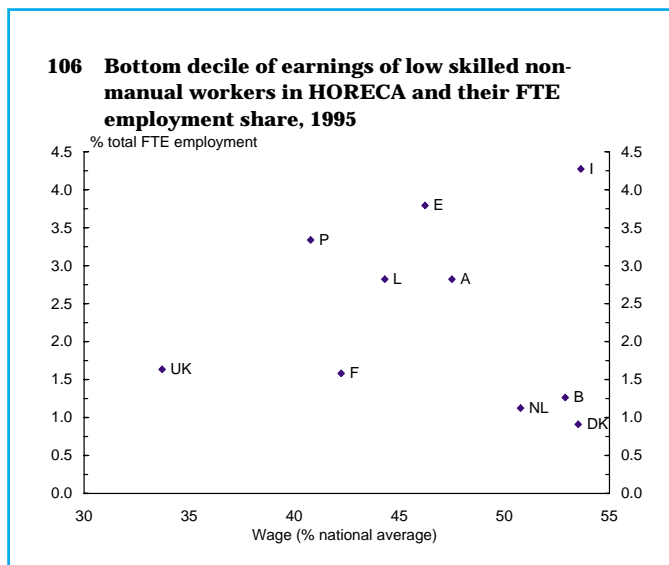
and the relative wages of the bottom 10% of lower skilled workers. For both manual and non-manual workers, the wages of the latter for the sectors covered by the SES taken together tend to be lower in Member States where the share of such workers in total employment is relatively high, though the strength of the relationship should not be overstated (Graphs 102 and 103).

The relationship, however, does not hold for individual sectors. In manufacturing and wholesaling and

retailing, no systematic association is evident for either manual or non-manual workers (Graphs 104 and 105). This is also the case for manual workers in hotels and restaurants (HORECA). In this sector, however, there seems to be some association between low wages at the bottom end of the scale and the relative number of non-manual workers employed, as there is in business services for both manual and non-manual employees (Graphs 106 and 107).

Wage differentials between men and women

Women are over-represented relative to men in lower skilled non-manual jobs in all Member States, as they are, to a lesser extent, in unskilled manual jobs in all countries, apart from Ireland and Denmark. There is some evidence that the wages paid to women relative to men influence the relative number of women employed in lower skilled jobs in a number of



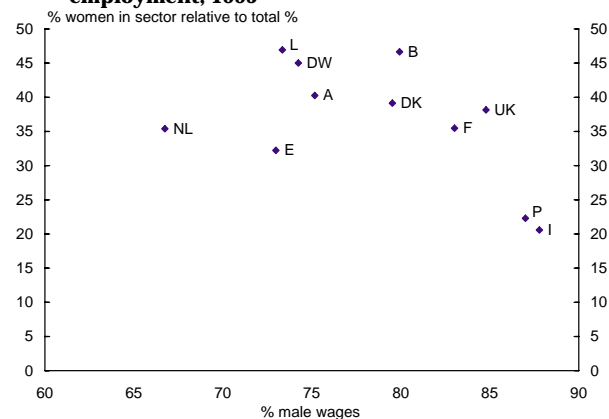
service sectors, though not in industry. If allowance is made for differences in the overall employment rate of women across the Union (by focussing on the share of women in lower skilled jobs in a sector relative to the average share of jobs filled by women in all the sectors covered by the SES), then in wholesaling and retailing, hotels and restaurants and business services, there is a positive, if weak, association between the extent of the wage differential and the number of women employed relative to men in lower skilled non-manual jobs. In each of these sectors, the countries where wages of women are lowest relative to men's tend on average to have the largest share of jobs filled by women (Graphs 108, 109 and 110). For manufacturing, on the other hand, there is no evidence of such a relationship.

Finally, there is also little sign of any marked association between the wage levels of less skilled workers and the growth of less skilled jobs over the period 1994 to 1998. This, however, is too short a period to test such a relationship properly. Nevertheless, the above analysis suggests that low wages *per se* are not a necessary condition for high rates of net job creation for the less skilled and that other factors play a significant role. In a number of countries, therefore, high rates of employment growth among such workers have been achieved despite them being paid higher wages than elsewhere.

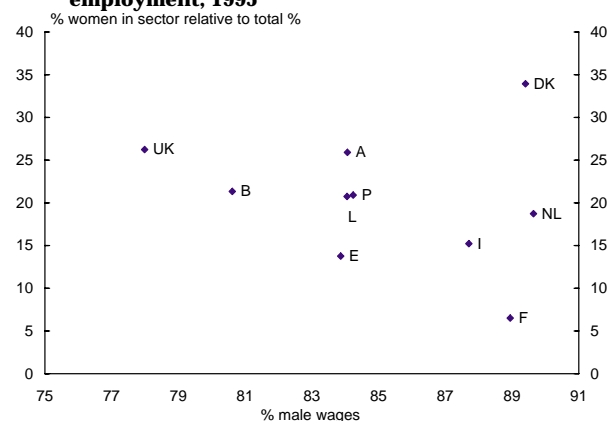
Concluding remarks

While it is clear that an expanding economy improves the employment prospects for everyone, the above analysis provides further insights into the changing demand for different skills.

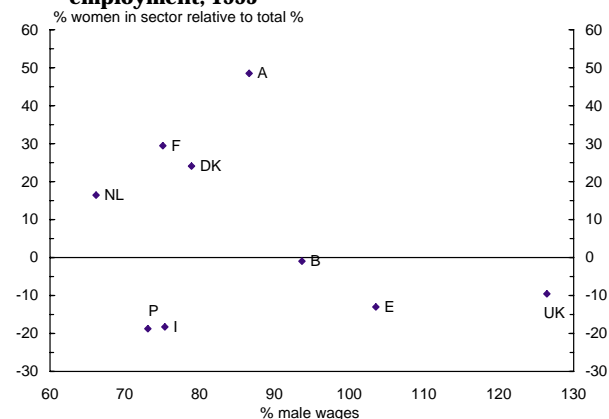
108 Earnings of women in low skilled non-manual jobs in distribution and their share of FTE employment, 1995



109 Earnings of women in low skilled non-manual jobs in HORECA and their share of FTE employment, 1995



110 Earnings of women in low skilled non-manual jobs in business services and their share of FTE employment, 1995



First, even between countries with similar rates of employment growth, the relative expansion of different sectors changes the kinds of skill for which demand increases and those for which it falls. Some countries, such as the Netherlands and Belgium, have seen a disproportionate increase in high skilled non manual jobs, while in others, such as Ireland or Denmark, employment growth has been more evenly distributed between different types of job.

It is unclear, however, in which direction causation runs, whether, for example, in the Netherlands, the large share of people employed in high skilled jobs reflects the pattern of consumer demand or obstacles to the creation of lower skilled jobs. This is an important issue since it determines whether the main problem is due to labour market rigidities or to forces affecting the demand for goods and services in the economy. The answer may differ across the Union. (Both possibilities, it should be noted, are addressed in the Employment Guidelines which encourage Member States to explore ways of reducing overhead costs and the fiscal pressure on labour costs, especially of low skilled workers, which inhibit the hiring of additional employees, and of developing conditions encouraging new job opportunities to be realised, especially in services.)

Secondly, some countries seem to adapt to change more quickly than others. For Member States at a similar stage of economic development, those in which growth sectors are expanding faster than elsewhere tend to have a better overall employment performance (Netherlands relative to Belgium, for example). This highlights the importance of training and the

ability of workers to move between sectors. (In the Employment Strategy, this issue is addressed by the guideline on lifelong learning, the importance of which was emphasised by the European Council in Vienna at the end of 1998.)

Thirdly, structural change affects different groups of people in different ways. In particular, women may have gained more of the new jobs than men and may be concentrated in growing sectors, but they also fill a disproportionate number of low skilled, low-paid jobs. This partly reflects the deeply-rooted, segregated nature of the labour market, since there is little evidence that women are less suited than men to fill more highly skilled, or more demanding, jobs. (The guidelines on equal opportunities address this aspect.)

Finally, it is clear from the above that the relationship between wages and employment is not as straightforward as often assumed and there is need for further and more detailed analysis of this, taking account of other factors influencing the creation of low skilled jobs.

Part II Section 3 The labour market implications of ageing

The slowdown in the birth rate coupled with more people living longer has led to an ageing of the population throughout the European Union. This trend is set to accelerate in the next 10–15 years, leading to a pronounced increase in the number of people of 65 and over as the post-war 'baby-boom' generation reaches this age. The prospect which is causing increasing concern in Member States is for a growing population living in retirement supported by a shrinking number of people of working age, giving rise to consequent strains for the funding of social protection systems, which have to meet not only increased pensions but also, in all probability, a mounting need for long-term care. This concern is reinforced by the increase in early retirement which has occurred over the past 10–15 years, particularly among men.

Equally the reduced number of young people coming of working-age and entering the labour force, coupled with the ageing of the labour force itself, has raised concern about the possible implications for the capacity of businesses to adapt to technological change and new methods of working. As a consequence, the need for businesses to provide training for their work force is likely to increase so pushing up costs.

At the same time, however, the shift to a service economy, along with the development of information technology and automated methods of working, on the one hand, and the continuing

improvements in the health of people in their 50s and 60s, on the other, mean that age in itself is ceasing to be a major determinant of the capacity to work. Although older workers may have more difficulty in picking up new techniques and understanding new technology than their younger counterparts, this may be more than outweighed by their experience and know-how.

These considerations, and, in particular, the costs of supporting a growing proportion of the population in retirement, are prompting a rethink of policy towards older workers. The aim here is to examine the various issues which are involved in postponing the effective age of retirement and maintaining a larger proportion of those in their 50s and early 60s in work. Specifically, it is:

- to document the scale of the prospective population trends and the implications of these for the burden imposed on those in work responsible for generating income;
- to consider the trend towards early retirement, the underlying reasons for this and the characteristics of older workers in terms of their education levels, the jobs that they do, the sectors in which they work, the wages they are paid and their difficulties of finding a new job if they lose their existing one;
- to review the policies in Member States towards older workers

and, in particular, towards both helping them to remain in employment and easing their transition from work into retirement.

Demographic trends

Over the past 15 years, declining birth rates have accompanied rising life expectancy, leading to both slowing population growth and an ageing population. Indeed, during the 1990s, population has continued to grow in a number of countries only because of net immigration, and across the Union as a whole this has been responsible for some two-thirds of the small overall growth (well under ½% a year). The scale of inward migration will be the major determinant of how long the number of people of working age in the Union will continue to grow in future years before the strong demographic trends cause the almost inevitable decline. Over the 1990s, the number of young people under 15 has fallen by around ½% a year, while the number of those aged 65 and over has risen by some 1½% a year.

These trends are set to continue, particularly the latter, as the post-war baby boom generation reaches 65. On current projections, the number of people of 65 and over — the age of retirement in most Member States — will increase from 16% of total population in 2000 to almost 18% in 2010 and 20½% in 2020. Moreover, almost half of these are likely to be 75 and over, which indicates the potential

pressure on the systems of health and long-term care.

This trend is common to all Member States, though to significantly varying degrees. It is particularly pronounced in the Southern Member States, the population of which was relatively young in 1990 but which is now ageing rapidly. The number of young people under 15 has fallen substantially throughout the 1990s and is set to continue to decline over the next 10 years, in contrast to a number of Northern countries — Germany, Sweden and the UK — where the number will increase over this period. After 2010, however, all Member States are likely to experience a reduction.

The potential problems of financing systems of social protection, given these trends, is reflected in the number of those aged 65 and over relative to the number of those of working age (15 to 64). This was 20% in 1985, 23% in 1995 and is expected to rise to 24% in 2000. By 2010, it is projected to jump to 27% and by 2020, to almost 32%, implying that there will be one person of 65 and over for every three of working-age on whom they depend for

support. The increase is likely to be especially marked in Belgium, Greece, Italy and Sweden.

Prospective changes in the labour force

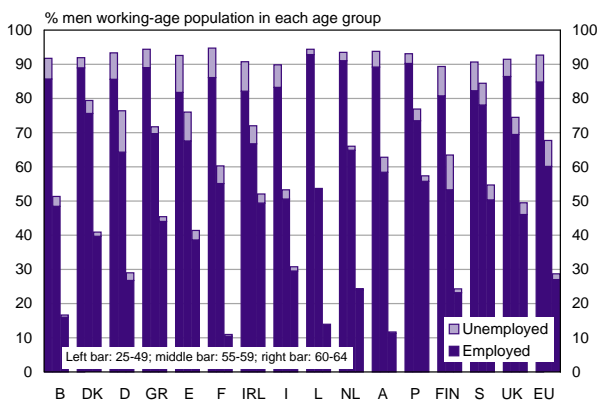
Although those aged 15 to 64 will form the labour force in future years on which the generation of income to support those in retirement depends, at present only slightly over two-thirds of those in this age group in the Union are either in work or actively seeking employment. Over the past 15 years, the effect of demographic trends has been reinforced by an increase in the proportion of men withdrawing from the work force before they reach the official age of retirement. In 1998, almost a third of men aged 55 to 59 in the Union were economically inactive, and almost half in Belgium, Italy and Luxembourg (Graph 111). For those aged 60 to 64, still under the official age of retirement in most countries, the figure for the Union was over 70% and for France and Austria, almost 90%. For women, under 40% of those aged 55 to 59 in the Union were still in the

labour force in 1998 and only just over 10% of those aged 60 to 64 (Graph 112).

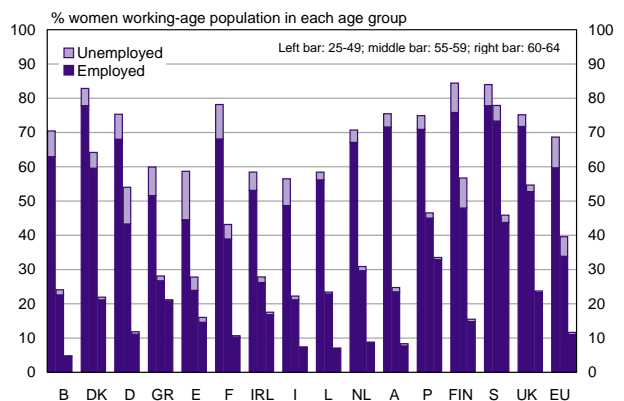
At present, those aged 55 to 64 represent around 16% of the population of working age. By 2010, the proportion is projected to rise to 18% and by 2020, to 22%. If participation trends of older people, men in particular, continue, or even if they are not reversed, this changing structure of working-age population will limit labour force growth. Indeed, it could more than offset the upward trend in the participation of women soon after 2010, so leading to a fall in the work force. On Eurostat projections, based on past trends continuing, labour force growth between 2000 and 2005 is likely to be around ½% a year, much the same as during the 1990s, but then to decline to zero by 2011, after which the work force is expected to fall.

Whether these projections are realised, however, is likely to depend critically on the rate of net job creation. The higher this is, the more will people, women especially, be attracted into the work force. The lower it is, the more will people be

111 Participation rates of men by age group in Member States, 1998



112 Participation rates of women by age group in Member States, 1998



discouraged from actively seeking employment.

A further consequence of demographic trends is that the labour force itself is ageing, giving rise to an increasing need for continuing training in order to update skills, especially as declining numbers of young people, who have most recently graduated from the education and training system, will be available for recruitment. At present, around 46% of the population of working age in the Union are 40 or over and in all Member States the proportion is under a half. By 2010, this proportion is projected to rise to 52%, with only Ireland and Portugal having figures of less than a half. By 2020, the proportion for the Union as a whole is expected to rise further to 54% and to exceed a half even in Ireland and Portugal; in Spain and Italy, it is projected to increase to 57–58%.

Effective versus hypothetical dependency rate

The rate of net job creation which it is possible to achieve holds the key to the scale of future problems of financing systems of social protection in the context of an ageing population. Although the willingness of those of working age to participate in the labour force is important, they can help generate income and wealth only if jobs are available to employ them. Over the past 25 years, employment growth in the Union has been insufficient to provide jobs for those who wanted to work, so reducing those contributing to output and income generation and adding to those dependent on social transfers.

In the Union as a whole, the number of people aged 15 and over

dependent on those in work — the effective rather than the hypothetical dependency rate — has risen over the 1990s from 96% to 104%. Under 40% of these are people of 65 and over, the rest, those aged 15 to 64, are unemployed or economically inactive (Graph 113). A much higher proportion of those who depend for financial support on those in employment, therefore, are under 65 than over, even leaving children to one side. How this, more tangible, dependency rate changes over future years will be determined just as much by the rate of net job creation as demographic trends.

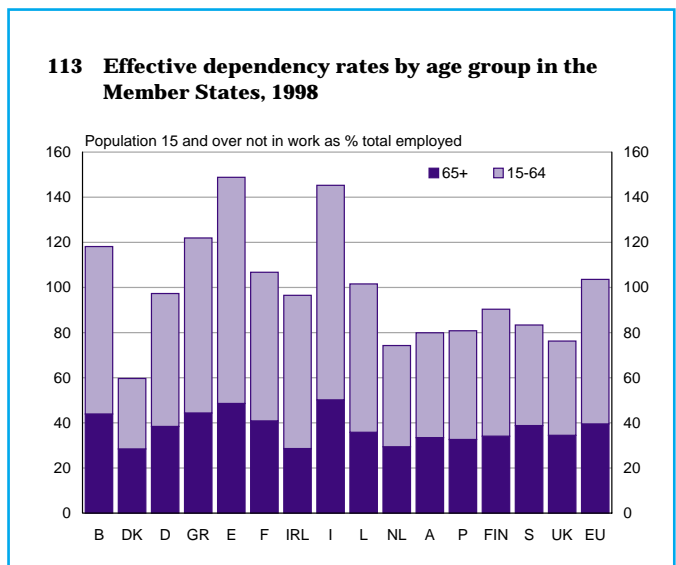
There are, moreover, far more pronounced differences across the Union in effective dependency rates than in hypothetical ones. In Spain, the effective rate in 1998 was around 150%, in Italy 145% and in Greece, just over 120%, indicating that there were many fewer people in employment than those of 15 and over requiring support and reflecting the large number of people unemployed and economically inactive. By contrast, in the Netherlands, Austria and the UK, the effective dependency rate was under 80% and in Denmark, with its high participation and low unemployment, under 60%.

In the three Member States in the South, where the rate of dependency is already high, the growth in the number of old people requiring support may well make

for acute difficulties. Although it can be argued that these are economies accustomed to having only a relatively small proportion in work to support the rest, the extended family system is gradually breaking down, posing new problems and giving rise to a growing need for social transfers and a more developed social protection system.

The characteristics of older people in the work force

The increase in early retirement which has occurred over the past 25 years across the Union is due to a number of different factors which have differing implications for any policy aimed at reversing the trend and keeping a higher proportion of those aged 55 and over in work. In the first place, it is partly a result of job shortages and the policy of employers and governments alike to concentrate redundancies on those in the older age groups who have relatively few years of their working lives remaining, so effectively freeing up jobs for younger workers and reducing the



unemployment figures. Secondly, it partly reflects the difficulty of those losing their jobs in declining sectors to find alternative employment because the skills they possess are no longer in demand or have become outdated. Thirdly, it could also in part be a consequence of an increased desire on the part of workers to retire early and enjoy the savings they may have accumulated during their working careers or the pension entitlement they may have built up.

The relative significance of these different factors — and, in particular, the extent to which the trend towards early retirement results from a voluntary decision on the part of those involved rather than one enforced by economic circumstances — is difficult to assess. It is, however, important to attempt to do so if an effective policy for postponing the age of retirement is to be formulated.

In this regard, it is of some relevance that although governments in most Member States have altered their policy towards early retirement in recent years, as noted below, participation in the work

force of those of 55 and older has continued to decline, even if at a slower rate (see Part I, Section 1 above).

To help answer the questions which are relevant for the formulation of policy, the characteristics of those remaining in employment, as well as those withdrawing from the labour force before reaching the official retirement age, are examined below.

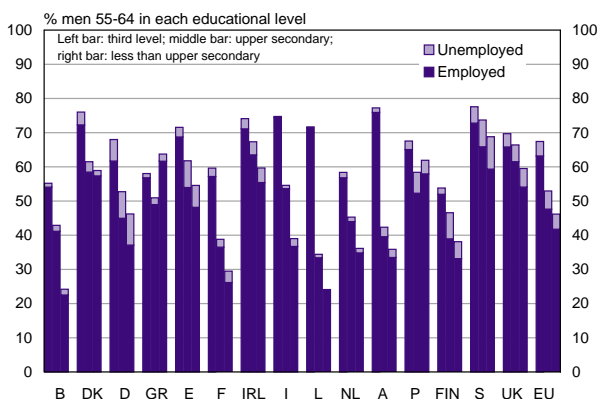
Participation rates by education level

Participation in the work force and whether a person is in work or not depends to a significant extent on their level of education attainment. This is particularly the case for women of all ages (see *Employment in Europe, 1998*, Part I, Section 5). For men, although education levels have a perceptible effect on participation rates for those of prime working age (96% of 25 to 49 year olds with university degrees or equivalent were in work or actively seeking work in the Union in 1997 as opposed to under 90% of those with only basic

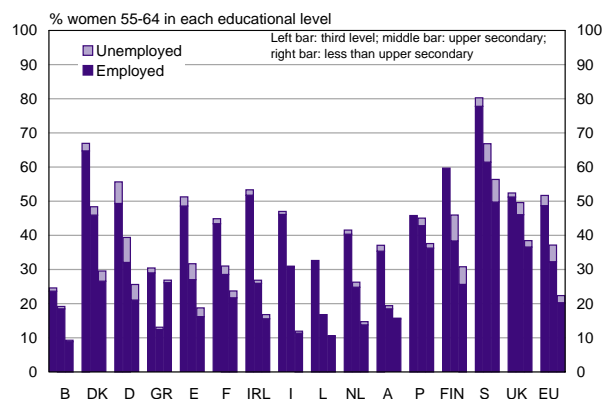
education), their influence becomes pronounced for men in their mid-50s and over. In 1997, only some 46% of men aged 55 to 64 in the Union with no qualifications beyond basic schooling were economically active as compared with 53% of those with upper secondary level education and 67½% of those with higher level education (Graph 114). This means, by implication, that some 54% of men in this age group with only basic education were no longer in the work force, most of whom, it can be assumed, had effectively taken early retirement.

In the Netherlands and Austria, only around 36% of men in this age group with only basic schooling were still in the work force, and in Italy and Finland, only around 38–39%, as against well over half of those with university education — in Austria and Italy, three quarters — and in Belgium, France and Luxembourg, under 30% as against 55% or more of the latter group (in Luxembourg, over 70%). Only in Greece and Portugal is there not a marked and systematic association between participation and education levels.

114 Participation rates of men aged 55-64 by educational attainment in Member States, 1997



115 Participation rates of women aged 55-64 by educational attainment in Member States, 1997



The same pattern is also evident for women. Only 22½% of those aged 55 to 64 in the Union with only basic schooling were still in the labour force in 1997 as opposed to almost 52% of those with university-level qualifications. As for men, participation rates were especially low (under 12%) for the less well-educated in Belgium, Italy and Luxembourg (Graph 115). In the case of women in this age group, however, a high proportion of those no longer in the work force in many countries had not been working before they reached their mid-50s, so the figures reflect not only early retirement but also low participation among women generally.

The small number of those no longer in the work force after their mid-50s in Belgium, France and Italy reflects the low official age of retirement in these three countries (60 in Belgium and France, from 57 in Italy), while in the Netherlands and Austria, they reflect the ease of early retirement. (In the Netherlands, they also reflect the large numbers receiving disability benefits, which in the past were effectively a form of early retirement

pension for those with difficulty finding a job.) Nevertheless, even in these countries, those taking early retirement are disproportionately those with lower education and, presumably, lower skill levels and lower levels of earnings, who accordingly may be less well-placed to opt for early retirement voluntarily.

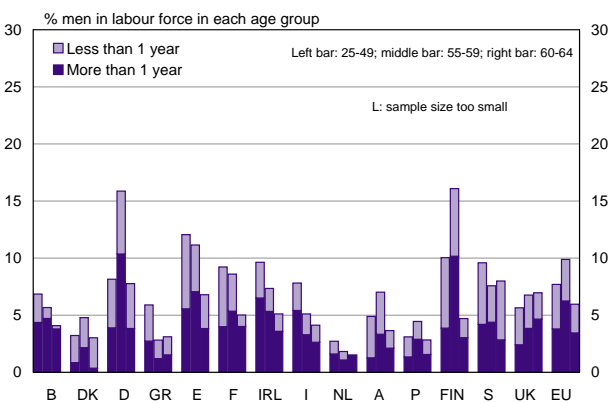
On the other hand, these are also people who are likely to have been in work for more years than those with higher education levels, since they would have left school and entered the labour market at an earlier age. They may, therefore, have built up a larger pension entitlement in relation to their wage or salary than those starting their working careers later in life, though they are less likely to have a supplementary, or occupational, pension than those with more qualifications. At the same time, a large proportion of them would have worked in physically-demanding jobs in agriculture or industry and, accordingly, might have been less able to continue working to an older age than those in service jobs, irrespective of whether the jobs continued to exist or not.

Unemployment among older workers

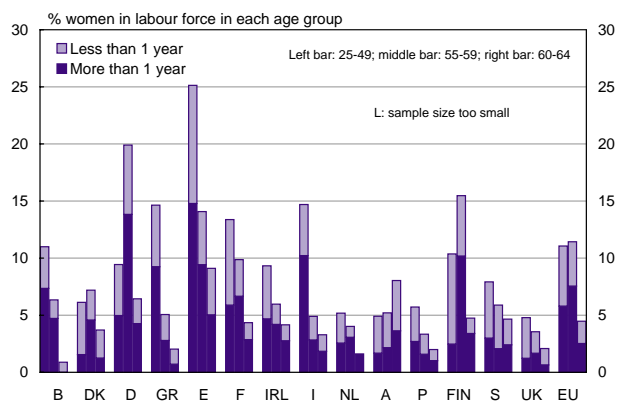
Participation in the labour force of those aged 55 and over is not only relatively low in many parts of the Union, but a relatively high proportion of those who remain economically active are unemployed. This is especially so for those with low education levels. In 1997, some 9½% of both men and women in the Union aged 55 to 64 with only basic schooling and remaining in the work force were unemployed (12% of those aged 55 to 59). This compares with only around 6% of those with university degrees or the equivalent in the same age group (8% of the 55 to 59 year olds).

Nevertheless, the main difference in unemployment rates between those of 55 and over and their younger counterparts relates not to those with only basic education but to those with higher levels. The rate of unemployment among 55 to 59 year old men with only basic schooling was much the same in 1997 as for those with the same education level aged 25 to 54 and for women, the rate was significantly lower

116 Total and long-term unemployment rate of men by age group in Member States, 1998



117 Total and long-term unemployment rate of women by age group in Member States, 1998



than for the younger age group. On the other hand, for men with university degrees or the equivalent, the unemployment rate was significantly higher for 55 to 59 year olds than for 25 to 54 year olds (8% as against 5%). For women, it was slightly lower for those with this level of education (just over 6½% as against 7½%), but markedly higher for those with upper secondary level education (17% as against just under 11½%). The latter was also true for men (12½% as against 8%). The chances of someone becoming unemployed as they grow older, therefore, increase by more for those with education beyond basic schooling than for those with only this level. For both men and women, unemployment rates for 55 to 59 year olds are particularly high for those with upper secondary level education (ie for many with vocational training qualifications)

The chances of becoming long-term unemployed once a person loses their job are significant for older workers irrespective of their education level. In 1998, the long-term unemployment rate of men aged 55 to 59 was over 6% across the Union as a whole as against under 4% for

those aged 25 to 49. Moreover, some two-thirds of the long-term unemployed in the older age group had been out of work for two years or more (Graph 116). In Germany, the rate of long-term unemployment of men aged 55 to 59 was almost 10½%, nearly three times higher than for those aged 25 to 54.

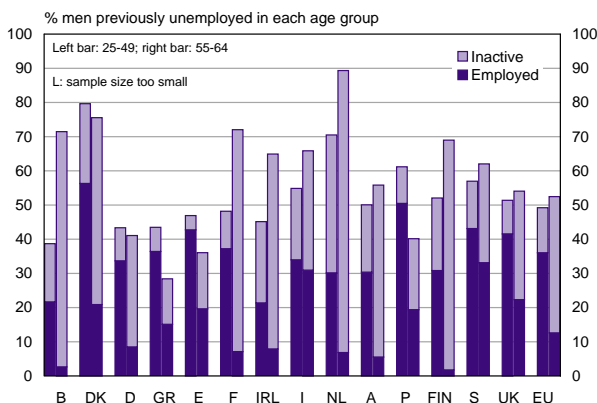
For women, the rate of long-term unemployment among 55 to 59 year olds in the Union is even higher than for men, at 7½% in 1998, and again higher than for those aged 25 to 49 (6%) (Graph 117). As for men, some two-thirds of the long-term unemployed in the older age group had been out of work for at least two years. Again as for men, the long-term unemployment rate in Germany for women aged 55 to 59 was higher than anywhere else in the Union at almost 14% of the work force.

The difficulty of finding a job once unemployed

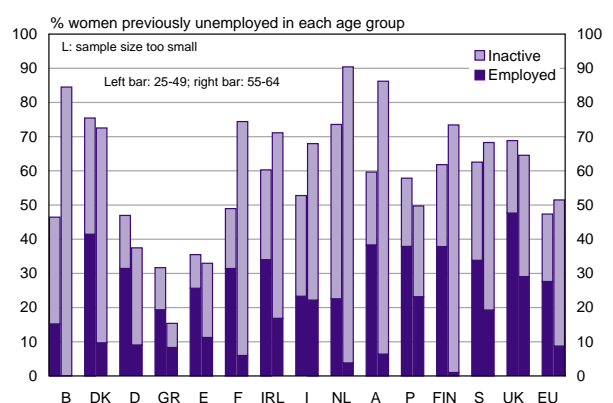
The figures for long-term unemployment only partly reveal the difficulties of those in their 50s finding a new job if they lose their existing

one. A large proportion withdraw from the work force and effectively retire, though in many cases only after a long period of looking for employment. In 1998, only some 12½% of men aged 55 to 64 in the Union unemployed a year before had found a job in the succeeding year, as compared with 36% of those aged 25 to 49, while 40% had withdrawn from the labour force (Graph 118). The rest, some 47½%, remained unemployed. In France, Austria and the Netherlands, 7% or less of the men aged 55 or over unemployed in 1997 had found a job a year later and in Belgium and Finland, only around 2%. In 4 of these 5 countries — all apart from Austria — 65% or more had withdrawn from the labour force. By contrast, in Italy and Sweden, over 30% of men unemployed had found a job during the year, and in the UK — over 20%. (The differences between countries in the figures for those remaining unemployed as opposed to becoming economically inactive need to be interpreted with caution insofar as they might be affected by the social protection system in operation. In Germany, in particular, those aged 55 and over without a job continue to be eligible

118 Flow of unemployed men to work and inactivity by age group in Member States, 1998



119 Flow of unemployed women to work and inactivity by age group in Member States, 1998



for unemployment benefit without needing to be actively looking for work. Whether these are treated in the LFS as being unemployed rather than inactive, as they should be, is an open question.)

The chances of women aged 55 to 64 who are unemployed finding a job are even smaller. In 1998, under 9% of those in the Union unemployed a year before had found work in the intervening year and 43% had withdrawn from the labour force, leaving almost half still unemployed (Graph 119). The variation between Member States in these proportions was very similar to that for men, with almost 30% finding work in the UK and around 20% in Italy and Sweden (as well as Portugal) but only around 6% or less in France, the Netherlands and Austria and 1% or less in Belgium and Finland. In Belgium, the Netherlands and Austria, some 80% or more had withdrawn from the labour force.

The education level of those in employment

Although the chances of a person remaining in employment once

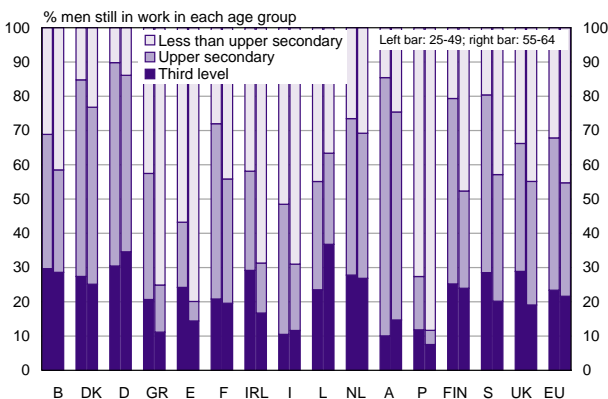
they pass their mid-50s are much greater for the better educated, it is still the case that the average level of educational attainment of those in work in this age group is significantly less than their younger counterparts. This reflects the increase in the education levels of the work force over time and the long-term tendency for rising numbers of young people to pursue their educational studies or vocational training beyond basic schooling.

In 1997, therefore, some 48% of those in employment in the Union aged 55 to 64 (45% of men, 53% of women) had no qualifications beyond basic schooling as opposed to only 31% of those aged 25 to 49 (Graphs 120 and 121). This pattern was repeated in all Member States. It was particularly marked in the South of the Union, in Spain, Greece and Portugal, in each of which well over 80% of those aged 55 and over still in work — almost 90% in the latter two countries — had only lower secondary education or less. Nevertheless, the difference in the average level of education between those of 55 and over and those aged 25 to 49 was also pronounced in a number of Northern

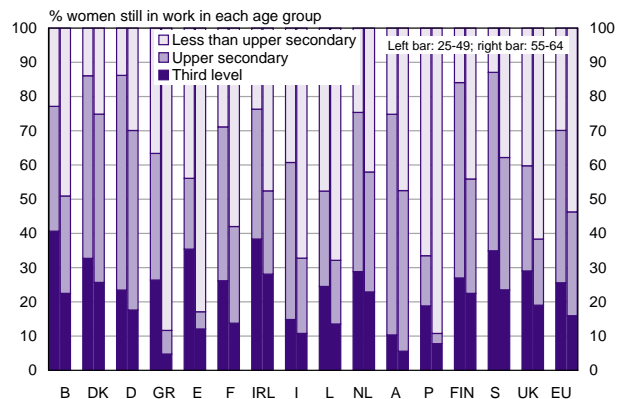
Member States (Belgium, France, Ireland, Finland and Sweden, where the difference in the proportion with only basic schooling between those aged 55 to 64 and those aged 25 to 49 was 25 percentage points or more).

There is no apparent relationship across the Union between the average level of educational attainment of those of 55 and over and their rate of participation in the work force. This is only to be expected given the differences in the level of economic development and, therefore, in the structure of economic activity which exists (with, in particular, many more older people being employed in agriculture in the South of the Union than in the North, as indicated below). It is also the case, however, between Member States with similar levels of economic development, such as between Sweden and the UK, on the one hand, and Belgium and France, on the other, or between Denmark and Austria. In both cases, the former countries have much higher rates of participation of those aged 55 to 59 (ie before the official age of retirement in Belgium and France), but similar

120 Men still in work by educational attainment and age group in Member-States, 1997



121 Women still in work by educational attainment and age group in Member-States, 1997



proportions of these with only basic schooling. The former countries, therefore, have succeeded better than the latter in keeping even the less well-educated older workers in employment.

The difficulty of moving between jobs

The difficulty of older workers finding a new job if they lose their existing one is reflected in the very small numbers who change jobs once they are in their 50s. This reflects in turn the reluctance of employers, for whatever reason, to take on older workers.

In the Union as a whole, only 6% of both men and women aged 55 to 59 in 1997 had been in their present job for less than 18 months or so and 7–8% of those aged 50 to 54, as compared with 10½% of men aged 35 to 49 and 13% of women (Graphs 122 and 123, which show the proportion of respondents to the LFS, conducted in Spring 1997, who had been in their present job since the beginning of 1996). These figures, of course, are partly explained by the growing desire of people for

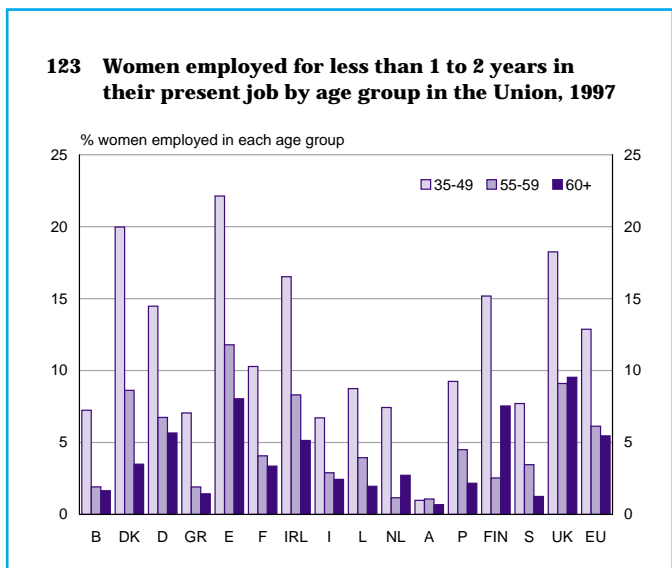
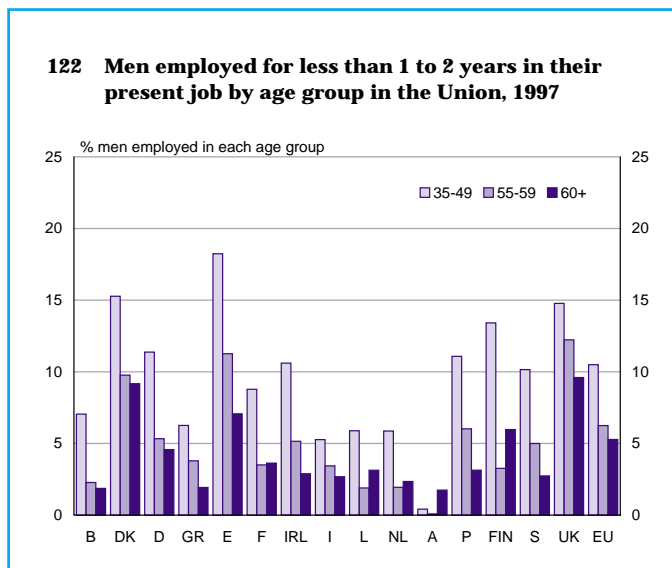
stability once they reach a certain age, together with the fact that they are probably settled in the job they are doing. The scale of movement among older workers, however, varies markedly across the Union, which is hard to explain simply in terms of a differential desire for stability or reluctance to move on the part of workers. To a significant extent, the variation reflects the relative ease or difficulty of moving between jobs.

The proportion of men aged 55 to 59 in their present jobs for less than 18 months was highest in the UK, at 12% (13½% for 50 to 54 year olds), not much lower than for those aged 35 to 49 (15%), implying that around one in 8 men in this age group moved into a new job in 1996 and the first part of 1997. The proportion was only slightly lower in Spain (almost 11½%) and Denmark (just under 10%), but in both cases significantly below the figure for younger age groups. By contrast, the proportion was under 4% — less than one in 25 — in Belgium, Italy, Luxembourg, the Netherlands, Greece, France and Finland, and indeed in the first four countries, less than 4% for those aged 50 to 54.

For women, the pattern of variation between countries is similar, though higher in Spain (almost 14% of 50 to 54 year olds and over 12% of 55 to 59 year olds) than in the UK (over 12% of 50 to 54 year olds, 9% of 55 to 59 year olds), but below 4% in all the latter countries.

In some degree, these variations reflect differences in the rate of net job creation between countries, but only to a small extent. While overall employment growth was much higher than average in 1996 and 1997 in the UK, Spain and Denmark, it was also relatively high in the three Benelux countries and Finland. Moreover, the differences which hold in 1997 are also evident in earlier years when the former three countries were not experiencing above average increases in employment.

For both men and women aged 60 and over, the scale of movement into jobs is even smaller, with only around 5½% being in their present job for under 18 months. For men and women in the UK and for men in Denmark, however, the figure was around 9½%, while in Finland (7½% for men, 6% for women), the



proportion was significantly higher than for those in their 50s.

The importance of self-employment

A marked difference between older people in employment and younger ones, and one which has important policy implications, is that a much larger proportion of the former tend to be self-employed — and, to a much lesser extent, family workers — rather than employees. In 1998, just over 30% of all men aged 55 to 64 in work were self-employed as against only 17% of those aged 25 to 49 (the figure was almost 39% for men aged 60 to 64) (Graph 124).

This feature is common to all Member States, but it is particularly pronounced in the Southern Member States and Ireland. In each of these, apart from Spain (where the figure was 36%), 47% or more of men aged 55 to 64 in work were self-employed. In Greece, almost two-thirds of men in this age group in work (75% of 60 to 64 year olds) were self-employed. This largely reflects the importance of agriculture which employs a large

proportion of older workers, mostly in small holdings.

For women, the same feature is evident, though the relative numbers of self-employed involved are much smaller than for men. In 1998, 17½% of women aged 55 to 64 in work were self-employed in the Union (25% of 60 to 64 year olds) as compared with under 9% of 25 to 49 year olds (Graph 125). At the same time, however, 6% of those employed aged 55 to 64 (9½% of those aged 60 to 64) were unpaid family workers as compared with only 2½% of women aged 25 to 49 in employment.

Again the relative number of women in work in the older age groups who are self-employed is larger in the South of the Union, in this case most markedly in Portugal, where over half of women aged 55 to 64 in work were self-employed in 1998; in the other three countries, the figure was 30% or more. Moreover, in Italy and, much more so, in Greece, a significant proportion of women in this age group in work were unpaid family workers — 12% in Italy and 40% in Greece. Only a small proportion of women

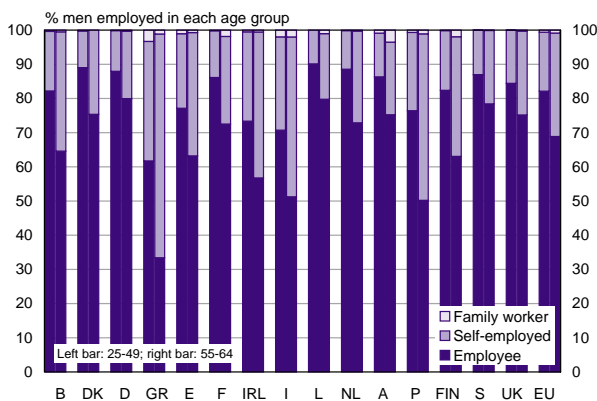
aged 55 and over in employment in Greece were, therefore, wage earners (only just over 20%).

The occupational structure of older workers

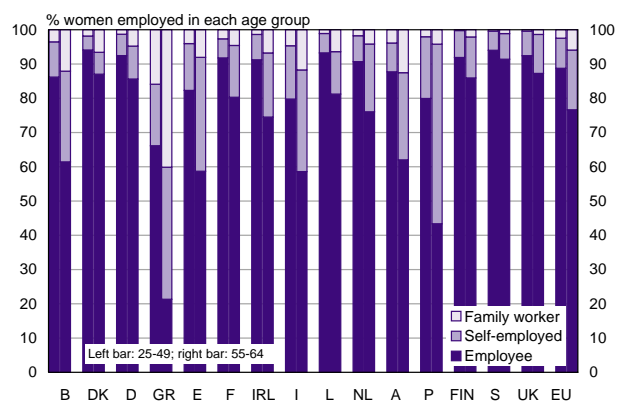
Policy towards older workers, of attempting to keep them in employment, needs also to take account of the jobs which they do. In practice, a comparison of the occupational distribution of those aged 55 and over with those in younger age groups shows, at least for men, two distinct and opposing features. First, as might be expected, a larger proportion of men and, to a lesser extent, women in older age groups in the Union are employed as managers than those aged 25 to 49. In 1998, around 14% of men aged 55 and over were classified to this occupation as against 10% of those aged 25 to 49, while for women the figures were 8% and 6% respectively (Graphs 126 and 127).

Secondly, and perhaps less expectedly, a larger proportion of men and women aged 55 and over work in unskilled manual jobs and

124 Men employed by professional status and age group in Member States, 1998



125 Women employed by professional status and age group in Member States, 1998



in agriculture than in the case of younger age groups. In 1998, 8% of men aged 55 to 59 in work and 9½% of those aged 60 to 64 were employed as elementary manual workers as opposed to 6½% of 25 to 49 year olds. For women, the tendency is even more pronounced, with 16% of those aged 55 to 59 in employment working in such jobs and 19% of 60 to 64 year olds as against under 10% of women aged 25 to 49. Equally, some 6% of men aged 55 to 59 in work were employed as agricultural workers and 11½% of those in the 60 to 64 age group as against only 3½% of 25 to 49 year olds. For women, the figures were similar.

For women also, however, there is a third feature, which is that a significantly smaller proportion of those of 55 and over work as professionals and technicians than is the case for younger workers. Whereas 33½% of women aged 25 to 49 in work were employed in these two occupational groups, the figure for those aged 55 to 59 was 27½% and for those aged 60 to 64, only 20½%.

Despite the tendency noted above for a larger proportion of men and

women with higher educational attainment levels to be in work, therefore, because of the lower educational qualifications of older workers than younger ones, particularly among women, more of them tend to be employed in less skilled jobs. Indeed, 41% of women aged 55 to 59 in work and half of those aged 60 to 64 were employed in low-skilled manual or non-manual jobs in 1998 (as elementary, agricultural or sales and service workers) as opposed to 31% of those aged 25 to 49. Although the difference is less for men, some 27% of those aged 60 to 64 in employment worked in such jobs and 19% of 55 to 59 year olds as against 17½% of those aged 25 to 49.

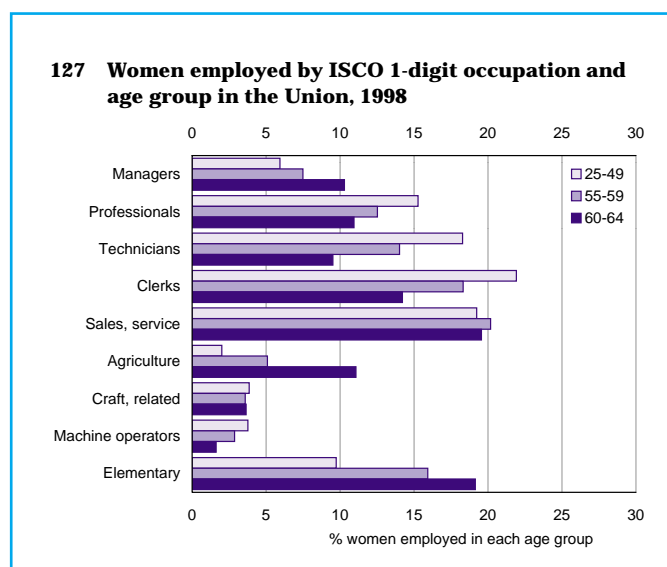
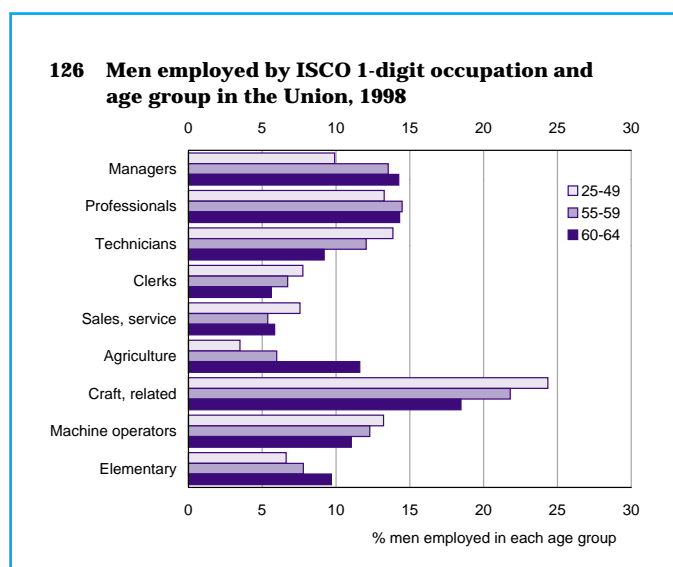
The sectoral distribution of older workers

The above difference in the occupational pattern of employment between older and younger workers is in some degree reflected in the distribution of the two between sectors. The most striking difference is in the proportion employed in agriculture. Whereas only 4½% of men and under 3% of women

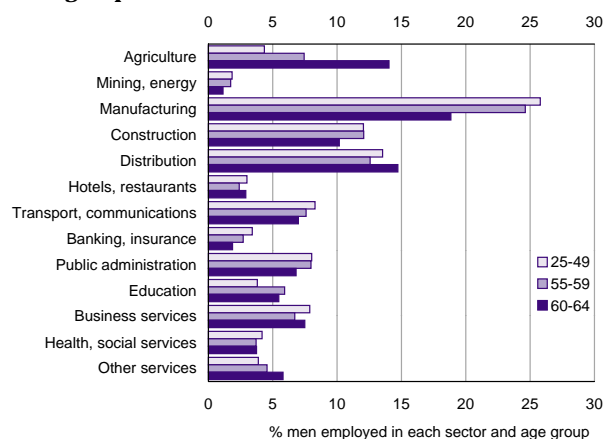
aged 25 to 49 in employment in the Union worked in agriculture in 1998, the figure for those aged 55 to 59 was 7½% for men and 7% for women and for those aged 60 to 64, 13½% for both men and women (Graphs 128 and 129). This is mirrored in a smaller proportion of those of 55 and over working in manufacturing, which in the past has been another declining sector in terms of employment. It is also mirrored in a smaller proportion being employed in business services, which has been a major source of net job creation in the Union in recent years.

It is accompanied by a larger proportion of women in employment in the older age groups working in basic services, in distribution and hotels and restaurants.

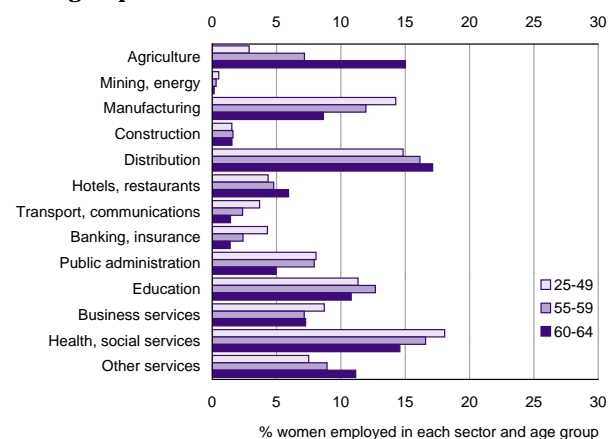
At the broad level, therefore, for men at least, except for agriculture, the distribution of older workers between basic and more advanced sectors does not seem to differ too much from that of younger workers. For women, however, a larger proportion of older workers seem to be employed in the more basic sectors.



128 Men employed by NACE 1-digit sector and age group in the Union, 1998



129 Women employed by NACE 1-digit sector and age group in the Union, 1998

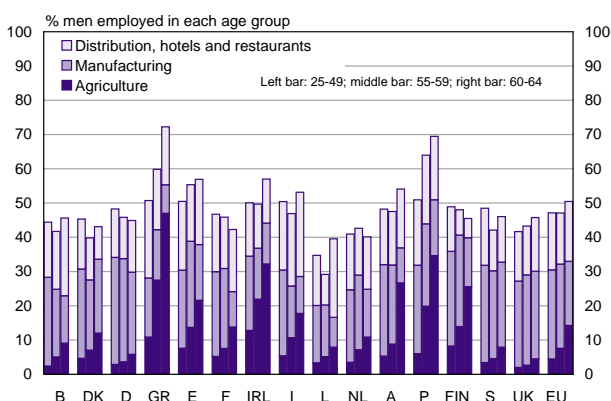


Nevertheless, there are significant differences in the sectoral pattern of employment between older and younger workers in a number of Member States. This is particularly the case in Greece and Portugal, where, in both countries, 60% or more of men aged 55 to 59 in work and around 70% or more of those aged 60 to 64 were employed in agriculture, manufacturing, distribution and hotels and restaurants in 1998 as compared with only 50% of the 25 to 49 age group (Graphs 130 and 131).

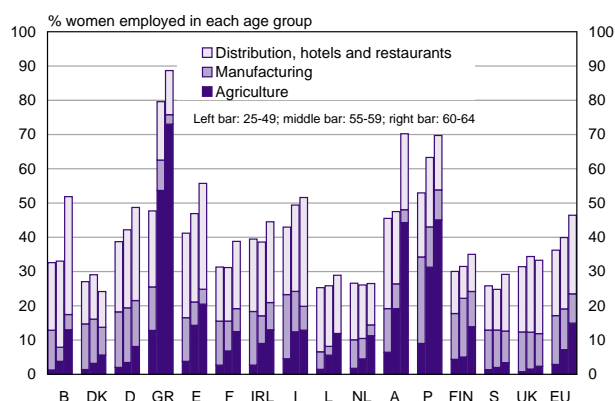
Moreover, more detailed examination (at the NACE 2-digit level) reveals that older workers tend to be slightly more concentrated in low growth and declining sectors than younger ones. Whereas some 49% of those aged 25 to 49 in work in the Union were employed in such sectors in 1998, the corresponding figure for those aged 55 to 59 was 52% and for those aged 60 to 64, 54%. (For the sectors included in these groups, see Part II, Section 2). This pattern is common to all Member States, except the UK,

where there is very little difference in the sectoral distribution of older and younger workers. It is particularly pronounced in Greece, where 72% of those aged 55 to 59 in work were employed in low growth or declining sectors (mainly agriculture) and over 80% of those aged 60 to 64, as compared with only 56% of those aged 25 to 49, and in Portugal, where the respective figures were 68% for 55 to 59 year olds, 74% for 60 to 64 year olds as against 58% for those aged 25 to 49 (Graph 132).

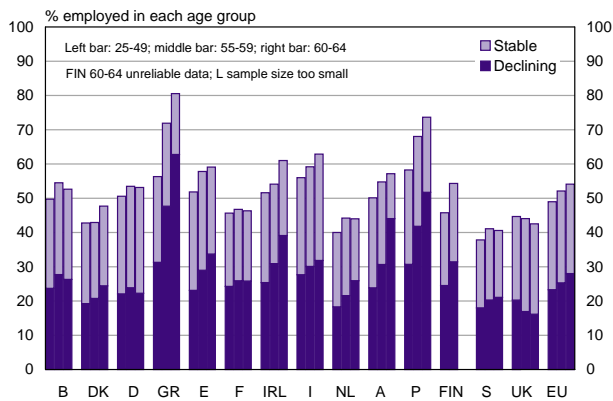
130 Men employed in selected sectors by age group in the Union, 1998



131 Women employed in selected sectors by age group in the Union, 1998



132 Employment in low growth and declining sectors by age group in Member-States, 1998



Earnings of older workers

Any policy aimed at keeping older workers in employment needs to take account not only of the sectors in which they are working and the kinds of job they are doing but also the wages they are receiving. The recent Structure of Earnings Survey provides an insight into this for 1995, though it excludes those employed in the public sector and agriculture. In practice, while earnings tend to increase with age in most Member States, the tendency is by no means universal and applies much more to those in higher skilled than in lower skilled jobs. Even in higher skilled jobs, the extent of the increase varies markedly between Member States, reflecting the relative weight given to age and years of service in the wage fixing process.

The main features of the earnings profiles are as follows (see Graphs 133 to 144):

- the tendency for wages (in this case monthly earnings) to rise

France, Italy, Austria and Portugal, in each of which those employed in the higher skilled jobs aged 55 and over earned on average twice as much as those aged 25 to 29; in the Scandinavian countries and the UK, peak earnings for this group of workers tend to be reached in the 45 to 54 age group, at around 50% above the average for 25 to 29 year olds, and earnings decline slightly above this age;

- in all Member States, the tendency for earnings of higher skilled workers to increase with age is stronger for men than for women;
- in most Member States, earnings of lower skilled workers tend to increase with age initially but reach a peak around 40 and then decline or, in some cases, remain unchanged;
- the difference in earnings of those of 55 and over between occupational groups is particularly pronounced in Italy, where average earnings of higher skilled workers were some 3 times higher than those of

with age is much more the case for managers, professional and technicians (ie the higher skilled occupations) in all countries than for lower skilled workers;

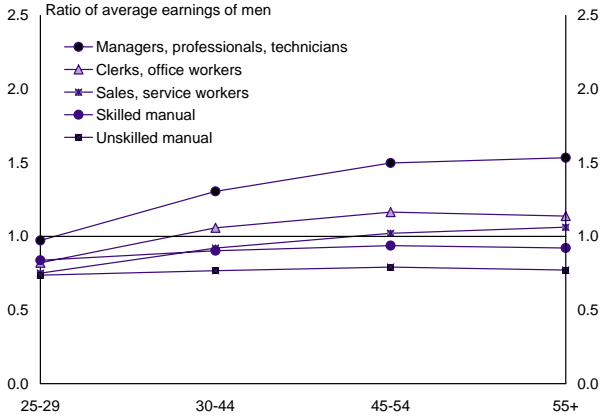
- the tendency is particularly pronounced in

unskilled manual workers in 1995, Portugal and, above all, France, in each of which the former was around 3½ times the latter; in Denmark and Sweden, the difference was only around 80% and in Finland, only some 65%;

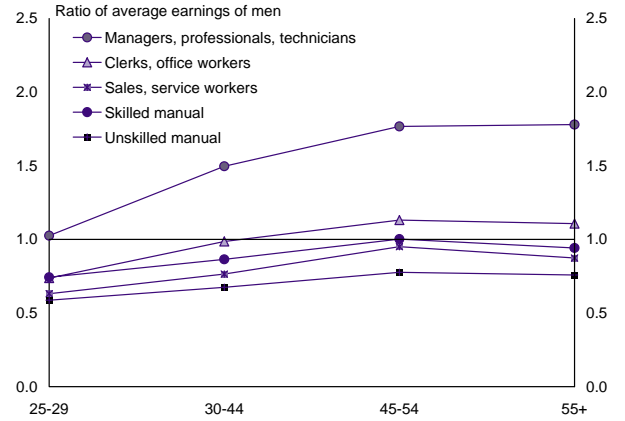
- the difference in earnings between occupational groups tends to be larger for men than for women;
- In France, the UK and Portugal, men aged 55 and over employed as unskilled manual workers (the lowest paid group in all countries) had average monthly earnings of only 62% of average earnings for all men employed in the sectors covered by the Survey (as against over 80% of the average in Belgium, Greece, Austria and Finland); in the UK, this was also the case for those employed as lower skilled non-annual workers (in sales and service jobs), who in other Member States had significantly higher earnings (in France and Portugal, they earned 85% of the average).

These differences imply that it is likely to be difficult to apply a uniform policy for maintaining older workers in employment not only across the Union but also within individual Member States. They also imply a need to consider the possible relationship between the earnings and the employment of older people. It is perhaps not entirely a coincidence that the countries in which average earnings of those aged 55 and over are relatively high also tend to have a relatively low proportion of older people in work (France, Italy and Austria, in particular). By contrast, in those where age seems to have less effect on earnings (such as

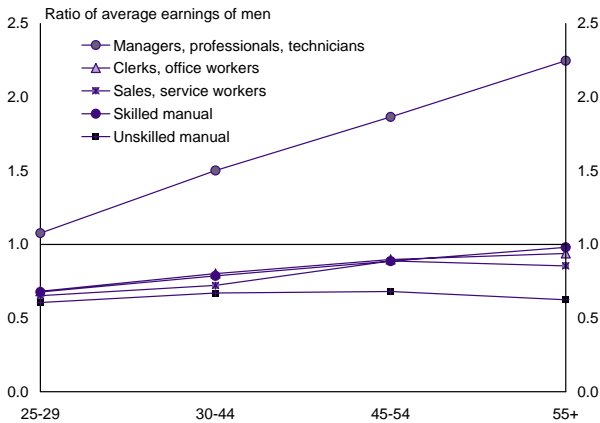
133 Monthly earnings for men in West Germany by occupation and age group, 1995



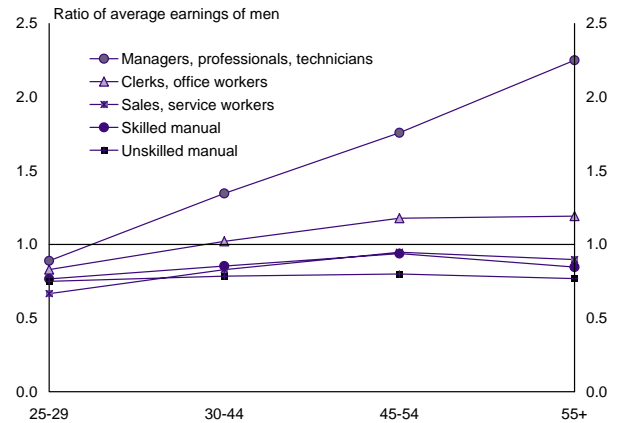
134 Monthly earnings for men in Spain, 1995



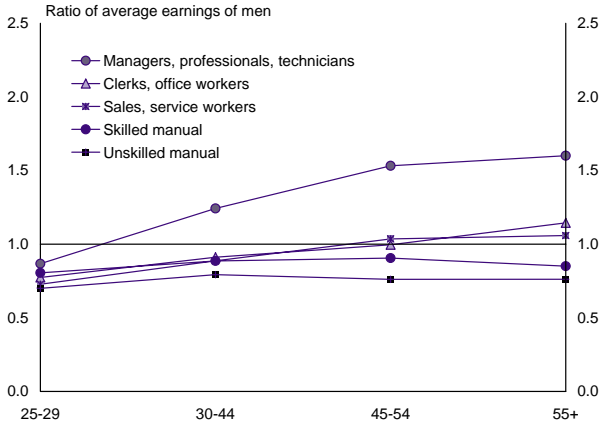
135 Monthly earnings for men in France, 1995



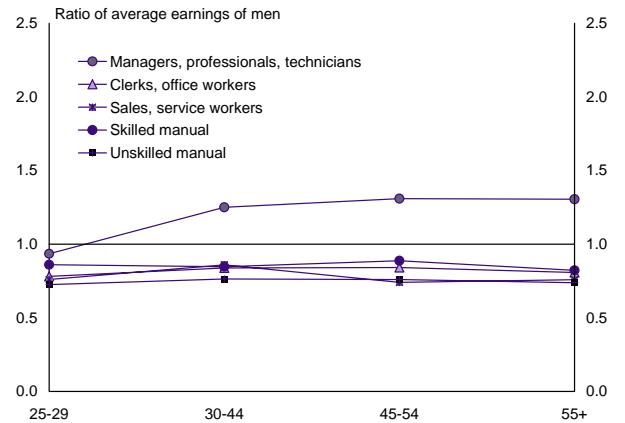
136 Monthly earnings for men in Italy, 1995



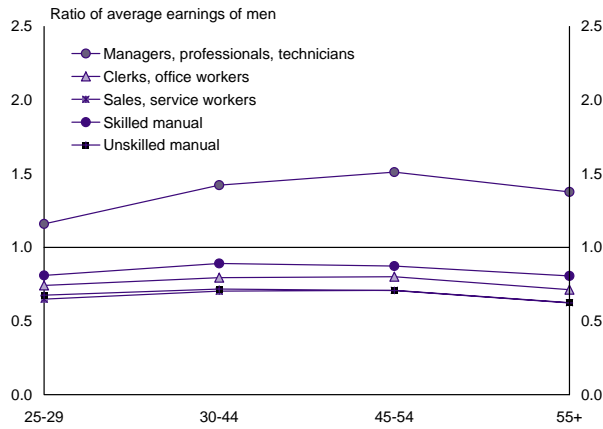
137 Monthly earnings for men in the Netherlands, 1995



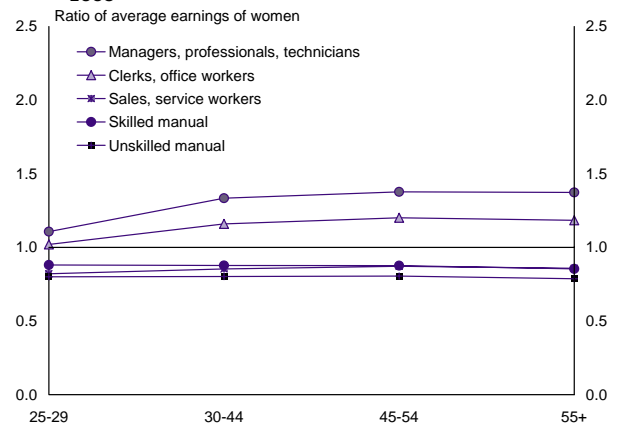
138 Monthly earnings for men in Sweden, 1995



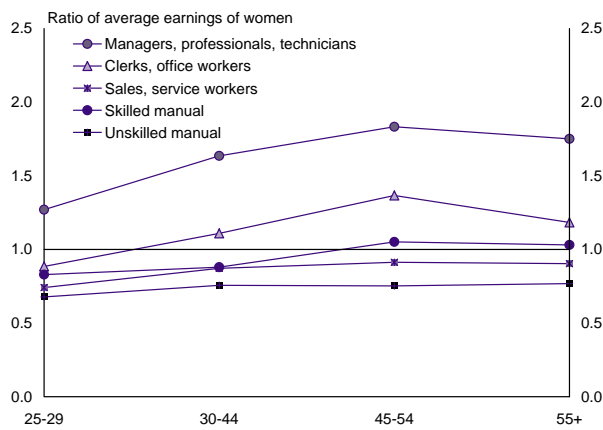
139 Monthly earnings for men in the UK, 1995



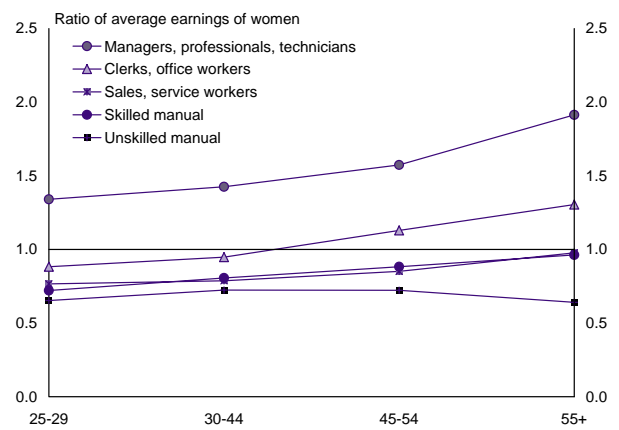
140 Monthly earnings for women in West Germany, 1995



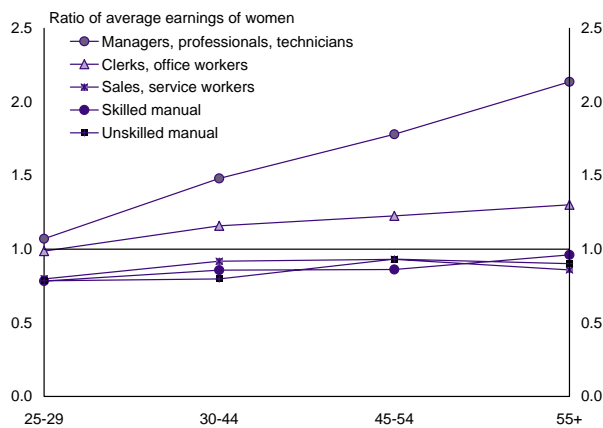
141 Monthly earnings for women in Spain, 1995



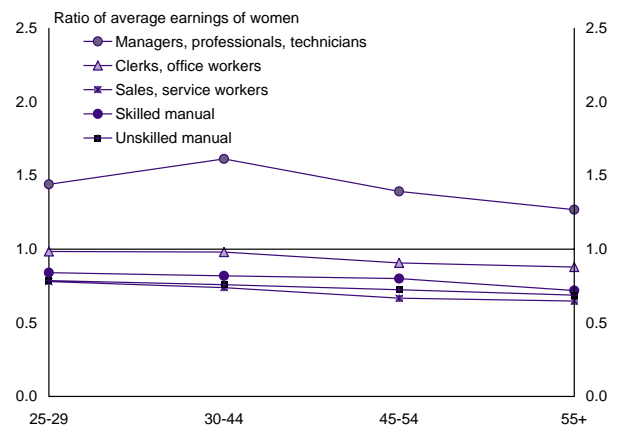
142 Monthly earnings for women in France, 1995



143 Monthly earnings for women in Italy, 1995



144 Monthly earnings for women in the UK, 1995



Denmark, Sweden or the UK), the employment rate tends to be significantly higher. In a number of countries in the former group, moreover, subsidies have been introduced to reduce the cost of employing older workers.

Part-time working

One possible means of maintaining, or even increasing, the number of older workers in employment is to encourage the development of part-time jobs. Indeed, in a number of Member States, as indicated below, partial retirement policies, under which those approaching retirement age are offered the chance to work part-time rather than full-time in return for a partial pension, have been introduced to this end.

In practice, however, although there is some tendency for the relative number working part-time to increase with age, comparatively few men in the Union are employed in part-time jobs even when they pass their mid-50s. In 1998, only 6% of men aged 55 to 59 worked part-time in the Union as against 3½% of those in the 25 to 49 age group (Graph 145,

in which Member States are ranked according to the employment rate of men aged 55 to 59 in order to give an indication of the relationship between this and part-time working). This proportion varies significantly across the Union — from almost 10% in France and the UK and 17½% in the Netherlands to under 4% in Belgium, Germany, Greece, Spain, Luxembourg and Austria. Nevertheless, there is no evident tendency for this variation to be related to the employment rate for men in this age group. In France, for example, where part-time working is among the highest in the Union, the employment rate is below average, while it is above average in three of the 6 countries where under 4% of those in work are employed part-time.

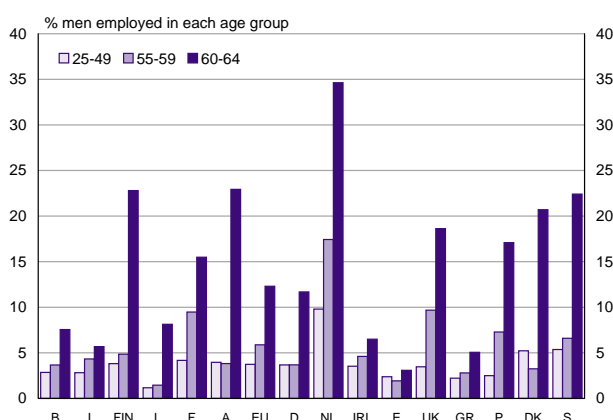
At the same time, this does not necessarily imply that part-time working has no effect on the employment rate. In France, in particular, a partial retirement policy was introduced in the late 1980s precisely to reduce the numbers withdrawing from the work force before they reached the official retirement age, and this seems to be reflected in the

relatively high proportion of men in this age group working part-time.

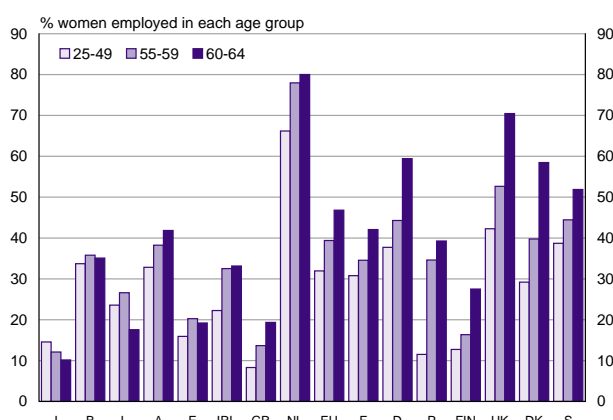
There is more evidence of an association between part-time working and the employment rate of men of 60 and over. In four of the 6 countries where the employment rate for this age group was significantly above average in 1998 — Denmark, Portugal, Sweden and the UK — the proportion working part-time was also well above average. The exceptions are Greece and Spain, where part-time working is much less developed generally than elsewhere in the Union and employment in agriculture is more important.

For women, almost 40% of those aged 55 to 59 in work were employed in part-time jobs in the Union in 1998, as against 32% of those aged 25 to 49 (Graph 146, in which Member States are ranked according to the employment rate for women aged 55 to 59). As for men, there is no uniform tendency for the employment rate for this age group to be higher in countries where part-time jobs are most prevalent. However, in the three countries where the employment rate for this age group was highest in

145 Men employed in part-time jobs by age group in Member States, 1998



146 Women employed in part-time jobs by age group in Member States, 1998



the Union — Denmark, Sweden and the UK — the proportion employed part-time was above average, though only slightly so in Denmark. Moreover, only in Finland is the employment rate for women aged 55 to 59 above average without a relatively high proportion of these working part-time.

For women aged 60 to 64, employment rates were below 20% in 1998 for all countries apart from Denmark, Greece, Portugal, Sweden and the UK. In all of these apart from Greece, the proportion in part-time jobs was also relatively high (around 40% or above — over 70% in the UK).

Part-time working, therefore, seems to make a significant contribution to keeping older workers in employment in many Member States. At the same time, a high level of part-time working alone does not guarantee a high employment rate.

The changing policy towards retirement in Member States

The challenge posed by the ageing of labour force has been commonly recognised across the Union. Accordingly, in the European Employment Strategy, the low employment rate of older workers is identified as a major problem requiring the development of measures aimed at maintaining their capacity to work productively and at promoting life-long learning and flexible working arrangements.

Three types of measure have been introduced in Member States in recent years to reduce the extent of early retirement and to encourage people to remain longer in work:

- increasing the official age of retirement or eligibility to a full pension;
- partial retirement schemes which enable older employees to work part-time while receiving a partial pension and so withdraw gradually from employment;
- incentives to encourage businesses to retain older employees in work for longer.

Raising the official retirement age

The effective age of retirement has declined over the long-term across the Union and, as noted above, is now around 60 for men in most Member States. (In 1980, around half of men aged 60 to 64 were in work; in 1998, the figures has fallen to a third.) A common response to this, as well as to the impending increase in the number of older people requiring income support, has been to increase the official age of retirement.

This has particularly been so in countries where rates of economic inactivity among men in their late 50s and early 60s have risen to high levels. Indeed, measures have been introduced to change pension systems in all 9 countries with the highest inactivity rates for men in this age group, either in the form of raising the official retirement age (as in Germany, Italy, Belgium, Spain and Finland) or to increase the number of years of contributions required to be eligible for a full pension (as in France and Austria) or to restrict access to early retirement (or invalidity) pensions (as in Luxembourg and the Netherlands — see *Social Protection in Europe, 1997*, Chapter 5 for details). Although such action in itself may

not reduce the number of people withdrawing prematurely from the work force — which depends on the policy followed by employers as well as alternative jobs being available — it does reduce the cost falling on social protection systems.

Partial retirement schemes

Introducing the possibility of older employees reducing their hours of work in return for a partial pension can potentially encourage them to remain in employment rather than withdraw from the labour force completely. In a context where job shortages remain a major problem, this can be seen as a compromise between keeping older workers in employment and increasing the chances of younger people being able to find a job. Indeed, in a number of countries, the scheme involves an obligation on employers to take on unemployed workers to fill the gap left by those switching to part-time work.

Schemes of this kind also serve to retain the services of older people longer so that they can both contribute to the productive process and pass on their know-how and experience to younger workers. The importance of this in practice, however, depends on the kinds of job that they do and the sectors of activity in which they work. As noted above, a disproportionate number are employed in declining sectors and are likely to have outdated skills.

Although such schemes are fairly widespread (see Box), their effect so far in reducing the outflow of older workers from the labour force has, except in France, been imperceptible and in most countries very few

of those eligible have opted for partial retirement.

In some countries, such as the UK, however, obstacles exist to the employment of those approaching retirement age on a part-time basis — in this case in the form of regulations which prevent someone drawing an occupational pension working part-time for the same employer as before.

Keeping older workers in employment

A number of Member States have special measures to encourage employers to retain or recruit older workers. This is the case in Germany and France, where there are age-related wage subsidies or reductions in social contributions to firms taking on those of 50 and over (or more recently, 45 and over in France) who have been unemployed for some time. These measures do not appear to have been very effective in either case. In both, employment rates of

those of 50 and over are relatively low and in Germany, unemployment rates are higher than anywhere else in the Union, though this clearly reflects the lack of net job creation over much of the 1990s.

In Finland, measures for the increasing the employability and well-being of those over 45 have been implemented since 1990, along with training programmes for older people aimed at improving their chances of finding a job, while in Austria, employers are relieved of social contributions if they employ someone over 50 and can be penalised if they dismiss someone of this age.

Partial retirement schemes in Member States

Belgium: a partial career break scheme introduced in 1985, entitles employees of 50 and over to work part-time for up to three years, and from 1993, from 55 on until they reach 60 and full retirement. Employers have to offer a job to someone unemployed in order to receive a subsidy.

Denmark: a partial retirement scheme was introduced in 1995, with the same conditions applying as for full early retirement and open to people in the same age group, 60 to 67.

Germany: the *Gradual transition to retirement Act* was introduced in 1996, enabling those of 55 and over to halve their working hours in return for a partial pension. Employers replacing those opting for the scheme by someone unemployed are entitled to a refund of social contributions.

France: partial retirement has been possible since 1985, the earnings of those of 55 and over opting to work part-time being subsidised. Since 1992, employers have been able to pay a levy rather than having to take on new workers. By 1995, the numbers opting for partial retirement exceeded those taking full early retirement.

Austria: a partial retirement scheme was introduced in 1993, though few have so far opted to take it up.

Finland: a partial pension scheme was introduced in 1987. In December 1997, agreement was reached between the social partners for employers to try to arrange part-time work for employees wishing to take partial retirement; the minimum age for eligibility was lowered to 56.

Sweden: the minimum age for entitlement to partial pension was raised from 60 to 61 in 1994, the pension reduced from 65% to 55% of previous earnings and the reduction in working hours limited to 25%.

In most Member States, however, while there is a general aim of keeping older workers in employment, no effective action has been taken to achieve this. In a number of cases, those nearing retirement age who are unemployed are still positively encouraged not to actively seek work. The issue of the access of older people to active labour market measures, notably in the form of training or retraining, is particularly problematic, notably in the case of manual workers with redundant skills who may lack the aptitude to develop new ones.

Concluding remarks

Demographic trends mean that the number of people above pensionable age is likely to increase significantly throughout the Union over the next 20 years. This is likely to pose growing strains on systems of social protection, particularly if early retirement continues to increase. These trends also mean that the average age of the labour force is likely to rise and there will be a growing proportion of people in work who are over 40 and who in most cases, therefore, completed their initial

education and vocational training at least 15–20 years earlier. This will inevitably lead to a growing need for continuing training to update skills, or for retraining.

While in most Member States the aim of policy has shifted from one of encouraging early retirement to free up jobs for younger workers to one of trying to keep older workers in employment, this so far does not seem to have had a major effect on participation trends. Such a policy aim, moreover, encounters a number of difficulties, principally that:

- a disproportionate number of older workers tend to be less well educated than their younger counterparts, a great many of them, especially in the Southern Member States, not having progressed beyond basic schooling;
- the policy of large companies at least is generally to concentrate redundancies on older worker and that those who try to remain in the work force after losing their job typically face serious difficulty in finding a new one.

There are, however, significant differences between Member States in the ease with which older people seem to be able to find a new job, which suggest that more could be done in many countries to pursue this policy aim.

Any policy aimed at keeping older people in work has also to take account of what they do, the sectors in which they work and the wages they earn:

- a significant proportion of those of who remain in work are self-employed or unpaid family helpers, especially in the South of the Union, and their

continued employment is, therefore, bound up with policies towards agriculture (where Union policy is to encourage withdrawal) or small businesses;

- a disproportionate number still work in low growth or declining sectors of activity despite the exodus from these sectors which has occurred in the past;
- while a disproportionate number of those who remain in employment over the age of 55 are managers, a higher proportion than for younger age groups are unskilled workers and, in the case of women, relatively low skilled sales and service workers;
- although those in higher skilled jobs tend to earn more than their younger counterparts, those in low skilled jobs earn less in many cases and in a number of Member States, considerably less than the average wage. Nevertheless, in some countries, earnings increase strongly with age, even for less skilled workers, which in itself could create difficulties in keeping older workers in employment.

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	1996	1997	1998
Total population (000)	332391	342153	348398	350307	366217	370888	373060	374061	374888
Population of working-age (15-64) (000)	206478	224122	229686	231408	242020	244180	245927	246284	247054
Total employment (000)	132584	133997	143740	144301	151622	146742	148280	149162	151009
Annual change in employment (%)	-	0.1	1.4	0.4	na	-1.1	0.4	0.6	1.2
Employment rate (% working-age population)	64.2	59.8	62.6	62.4	62.6	60.1	60.3	60.5	61.1
FTE employment rate (% working-age population)	na	55.7	57.9	57.6	58.1	55.4	55.2	55.3	55.7
Self-employed (% total employment)	15.8	15.2	15.4	15.3	14.7	14.9	15.0	14.9	14.7
Employed part-time (% total employment)	na	13.0	13.7	14.0	13.7	15.6	16.4	16.9	17.4
Employed on fixed term contracts (%)	na	8.4	10.3	10.3	10.4	11.0	11.8	12.2	12.8
Share of employment in agriculture (%)	11.1	8.4	6.7	6.3	6.4	5.5	5.1	5.0	4.8
Share of employment in industry (%)	39.5	34.2	33.2	32.8	33.2	30.6	29.8	29.5	29.5
Share of employment in services (%)	49.4	57.4	60.2	60.9	60.4	63.9	65.1	65.6	65.7
Activity rate (% working-age population)	66.7	66.4	67.8	67.8	68.3	67.6	67.7	67.8	68.0
Total unemployed (000)	5100	14759	12006	12677	13599	18428	18165	17937	16952
Unemployment rate (%)	3.7	9.9	7.7	8.1	8.2	11.1	10.8	10.6	10.0
Youth unemployed (% population 15-24)	na	12.0	8.4	8.5	8.5	10.7	10.3	9.9	9.3
Long-term unemployment rate (% labour force)	na	5.3	3.9	3.8	3.7	5.3	5.2	5.2	4.9
15-19 year olds in education/training (%)	na	na	na	na	na	82.1	82.5	83.2	na
20-24 year olds in education/training (%)	na	na	na	na	na	34.9	37.0	38.0	na
Men									
Total population (000)	161670	166349	169734	170773	178379	180961	182143	182701	183142
Population of working-age (15-64) (000)	101673	110521	114049	115070	120283	121781	122679	122896	123297
Total employment (000)	86072	82904	86645	86416	90265	86113	86418	86763	87673
Annual change in employment (%)	-	-0.4	0.9	-0.3	na	-1.6	-0.1	0.4	1.0
Employment rate (% working-age population)	84.7	75.0	76.0	75.1	75.0	70.7	70.4	70.6	71.1
FTE employment rate (% working-age population)	na	75.4	76.1	75.2	75.1	70.8	70.3	70.4	70.8
Self-employed (% total employment)	na	18.9	19.2	19.0	18.4	18.9	19.0	18.8	18.5
Employed part-time (% total employment)	na	3.7	4.0	4.2	3.9	4.8	5.4	5.7	5.9
Employed on fixed term contracts (%)	na	7.6	9.3	9.1	9.3	10.1	11.1	11.5	12.0
Share of employment in agriculture (%)	na	8.8	7.1	6.8	6.9	6.1	5.7	5.6	5.5
Share of employment in industry (%)	na	42.6	42.0	41.8	42.3	40.1	39.5	39.2	39.3
Share of employment in services (%)	na	48.6	50.8	51.4	50.8	53.8	54.8	55.1	55.2
Activity rate (% working-age population)	87.6	82.2	81.0	80.6	80.6	78.5	78.0	77.9	77.9
Total unemployed (000)	2969	7988	5782	6357	6725	9561	9275	9017	8364
Unemployment rate (%)	3.3	8.8	6.3	6.9	7.0	10.0	9.6	9.3	8.6
Youth unemployed (% population 15-24)	na	11.8	7.8	8.4	8.4	11.0	10.4	9.8	9.2
Long-term unemployment rate (% labour force)	na	4.7	3.1	3.1	3.0	4.6	4.4	4.4	4.1
15-19 year olds in education/training (%)	na	na	na	na	na	81.8	82.0	82.5	na
20-24 year olds in education/training (%)	na	na	na	na	na	34.5	35.7	36.4	na
Women									
Total population (000)	170720	175804	178664	179534	187838	189927	190917	191360	191746
Population of working-age (15-64) (000)	104805	113601	115636	116338	121737	122398	123258	123387	123753
Total employment (000)	46512	51093	57095	57884	61357	60629	61861	62399	63336
Annual change in employment (%)	-	0.9	2.2	1.4	na	-0.4	1.1	0.9	1.5
Employment rate (% working-age population)	44.4	45.0	49.4	49.8	50.4	49.5	50.2	50.6	51.2
FTE employment rate (% working-age population)	na	36.8	40.1	40.4	41.2	40.0	40.2	40.4	40.7
Self-employed (% total employment)	na	9.3	9.7	9.8	9.3	9.4	9.5	9.5	9.4
Employed part-time (% total employment)	na	27.9	28.5	28.7	26.7	29.6	30.4	31.2	31.8
Employed on fixed term contracts (%)	na	9.7	11.8	11.9	11.9	12.1	12.7	13.1	13.7
Share of employment in agriculture (%)	na	7.8	5.9	5.6	5.6	4.6	4.2	4.0	3.8
Share of employment in industry (%)	na	20.7	19.7	19.3	19.8	17.2	16.3	15.9	16.0
Share of employment in services (%)	na	71.5	74.3	75.1	74.6	78.2	79.5	80.1	80.2
Activity rate (% working-age population)	46.4	50.9	54.8	55.2	56.0	56.8	57.4	57.8	58.1
Total unemployed (000)	2131	6771	6224	6320	6875	8867	8890	8920	8588
Unemployment rate (%)	4.4	11.7	9.8	9.8	10.0	12.7	12.5	12.4	11.8
Youth unemployed (% population 15-24)	na	11.5	8.6	8.6	8.6	10.3	10.2	9.9	9.3
Long-term unemployment rate (% labour force)	na	6.3	5.1	4.9	4.7	6.2	6.3	6.3	5.8
15-19 year olds in education/training (%)	na	na	na	na	na	82.4	83.0	83.8	na
20-24 year olds in education/training (%)	na	na	na	na	na	35.4	38.2	39.6	na

Key employment indicators in Belgium

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	9795	9858	9967	10004	10116	10157	10181	10203
Population of working-age (15-64) (000)	6080	6610	6628	6625	6688	6695	6702	6703
Total employment (000)	3566	3512	3625	3719	3748	3791	3838	3857
Annual change in employment (%)	-	-0.2	0.6	2.6	0.3	-0.1	1.2	0.5
Employment rate (% working-age population)	58.7	53.1	54.7	56.1	56.0	56.6	57.3	57.5
FTE employment rate (% working-age population)	na	52.1	52.9	54.0	53.2	53.3	53.7	53.7
Self-employed (% total employment)	14.8	15.9	16.1	14.9	15.3	15.4	14.9	15.4
Employed part-time (% total employment)	na	8.6	10.9	11.8	12.8	14.0	14.7	15.7
Employed on fixed term contracts (%)	na	6.9	5.3	5.1	5.1	5.9	6.3	7.8
Share of employment in agriculture (%)	3.8	3.6	3.3	2.7	2.9	2.7	2.7	2.2
Share of employment in industry (%)	39.6	31.9	30.7	30.5	28.9	27.6	27.5	27.2
Share of employment in services (%)	56.5	64.5	66.0	66.8	68.2	69.6	69.8	70.5
Activity rate (% working-age population)	60.9	59.3	58.6	60.1	62.3	62.7	63.2	63.5
Total unemployed (000)	136.6	405.3	260.6	263.0	416.2	408.0	399.0	402.8
Unemployment rate (%)	3.8	10.3	6.7	6.6	10.0	9.7	9.4	9.5
Youth unemployed (% population 15-24)	na	9.7	5.5	5.5	8.7	7.8	7.6	7.4
Long-term unemployment rate (% labour force)	na	7.1	4.6	4.2	5.8	5.9	5.7	5.8
15-19 year olds in education/training (%)	na	na	na	na	92.6	93.8	94.2	na
20-24 year olds in education/training (%)	na	na	na	na	37.5	41.4	41.1	na
Men								
Total population (000)	4794	4812	4870	4890	4947	4965	4977	4988
Population of working-age (15-64) (000)	3035	3301	3314	3317	3367	3373	3375	3374
Total employment (000)	2447	2281	2267	2291	2253	2269	2277	2270
Annual change in employment (%)	-	-0.7	-0.1	1.0	-0.6	-0.2	0.4	-0.3
Employment rate (% working-age population)	80.6	69.1	68.4	69.1	66.9	67.3	67.4	67.3
FTE employment rate (% working-age population)	na	71.4	70.6	71.2	68.3	68.2	68.2	67.9
Self-employed (% total employment)	16.5	18.6	19.2	17.9	18.7	18.7	18.2	18.5
Employed part-time (% total employment)	na	1.8	2.0	2.1	2.5	3.0	3.3	3.5
Employed on fixed term contracts (%)	na	4.7	3.3	3.0	3.5	4.5	4.6	5.9
Share of employment in agriculture (%)	4.5	3.9	3.9	3.0	3.4	3.1	3.0	2.7
Share of employment in industry (%)	47.9	40.1	39.6	40.3	38.6	37.3	37.3	37.4
Share of employment in services (%)	47.6	56.0	56.6	56.7	58.0	59.6	59.6	59.9
Activity rate (% working-age population)	82.6	73.8	71.4	72.2	72.7	72.8	72.9	72.9
Total unemployed (000)	60.0	157.4	97.8	104.0	193.6	185.4	183.4	188.3
Unemployment rate (%)	2.4	6.5	4.1	4.3	7.9	7.6	7.5	7.7
Youth unemployed (% population 15-24)	na	7.2	4.1	4.5	8.6	7.0	6.9	7.2
Long-term unemployment rate (% labour force)	na	4.2	2.7	2.5	4.2	4.5	4.5	4.6
15-19 year olds in education/training (%)	na	na	na	na	92.0	93.1	93.5	na
20-24 year olds in education/training (%)	na	na	na	na	37.4	39.8	40.5	na
Women								
Total population (000)	5001	5046	5097	5115	5168	5191	5204	5215
Population of working-age (15-64) (000)	3045	3309	3314	3308	3321	3325	3327	3327
Total employment (000)	1120	1231	1358	1428	1495	1522	1561	1587
Annual change in employment (%)	-	1.0	2.0	5.2	1.5	0.2	2.6	1.6
Employment rate (% working-age population)	36.8	37.2	41.0	43.2	45.0	45.8	46.9	47.7
FTE employment rate (% working-age population)	na	32.9	35.3	36.9	37.8	38.3	39.0	39.3
Self-employed (% total employment)	10.8	10.9	10.8	10.2	10.2	10.4	10.1	10.9
Employed part-time (% total employment)	na	21.1	25.8	27.4	28.3	30.6	31.4	33.3
Employed on fixed term contracts (%)	na	10.9	8.6	8.3	7.5	8.0	8.6	10.4
Share of employment in agriculture (%)	2.6	3.1	2.3	2.2	2.1	2.2	2.1	1.6
Share of employment in industry (%)	23.7	16.7	15.9	14.8	14.2	13.3	13.3	12.8
Share of employment in services (%)	73.8	80.2	81.8	82.9	83.7	84.6	84.6	85.6
Activity rate (% working-age population)	39.3	44.7	45.9	48.0	51.7	52.5	53.4	54.1
Total unemployed (000)	76.7	247.9	162.8	159.0	222.6	222.6	215.6	214.5
Unemployment rate (%)	6.4	16.7	10.6	10.0	12.9	12.7	12.1	11.9
Youth unemployed (% population 15-24)	na	12.2	6.9	6.5	8.8	8.5	8.3	7.6
Long-term unemployment rate (% labour force)	na	12.1	7.5	6.5	8.1	8.0	7.5	7.6
15-19 year olds in education/training (%)	na	na	na	na	93.2	94.6	95.2	na
20-24 year olds in education/training (%)	na	na	na	na	37.5	43.0	41.7	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90. Working-age population and all employment details are from the Union LFS. See notes in Sources at the back of the report.

Key employment indicators in Denmark

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	5060	5114	5140	5154	5205	5262	5284	5301
Population of working-age (15-64) (000)	3212	3357	3445	3461	3478	3512	3511	3521
Total employment (000)	2332	2598	2674	2650	2585	2649	2720	2780
Annual change in employment (%)	-	1.1	0.6	-0.9	-0.8	1.2	2.7	2.2
Employment rate (% working-age population)	72.6	77.4	77.6	76.6	74.3	75.4	77.5	78.9
FTE employment rate (% working-age population)	na	67.4	68.2	67.7	66.4	67.2	68.7	69.9
Self-employed (% total employment)	13.9	9.9	9.5	9.0	8.4	8.3	8.3	8.4
Employed part-time (% total employment)	na	24.3	23.3	23.1	21.2	21.5	22.3	22.3
Employed on fixed term contracts (%)	na	12.3	10.8	11.9	12.0	11.2	11.1	10.1
Share of employment in agriculture (%)	9.8	6.7	5.6	5.7	5.0	3.9	3.8	3.7
Share of employment in industry (%)	31.5	27.9	27.4	27.6	26.5	26.4	26.2	26.5
Share of employment in services (%)	58.7	65.4	67.0	66.7	68.4	69.7	70.0	69.8
Activity rate (% working-age population)	75.5	83.2	84.0	83.6	80.9	80.9	82.0	83.0
Total unemployed (000)	92.5	194.6	221.0	242.9	228.8	192.1	159.3	144.3
Unemployment rate (%)	3.9	7.1	7.7	8.4	8.2	6.8	5.6	5.1
Youth unemployed (% population 15-24)	na	8.4	7.4	8.4	7.8	7.9	6.2	5.3
Long-term unemployment rate (% labour force)	na	2.7	2.5	2.9	2.6	1.8	1.5	1.4
15-19 year olds in education/training (%)	na	na	na	na	87.3	81.5	83.7	na
20-24 year olds in education/training (%)	na	na	na	na	43.8	48.5	51.4	na
Men								
Total population (000)	2506	2519	2533	2540	2568	2598	2610	2619
Population of working-age (15-64) (000)	1613	1689	1741	1749	1756	1774	1772	1782
Total employment (000)	1361	1442	1454	1438	1396	1444	1485	1504
Annual change in employment (%)	-	0.6	0.2	-1.1	-1.0	1.3	2.8	1.3
Employment rate (% working-age population)	84.4	85.4	83.5	82.2	79.5	81.4	83.8	84.4
FTE employment rate (% working-age population)	na	83.1	80.0	79.0	76.6	78.1	79.8	80.8
Self-employed (% total employment)	na	15.2	14.9	14.0	12.1	11.7	12.1	12.3
Employed part-time (% total employment)	na	8.4	10.4	10.5	10.0	10.8	12.1	10.9
Employed on fixed term contracts (%)	na	11.6	10.6	11.0	11.1	10.8	10.6	9.3
Share of employment in agriculture (%)	na	9.4	7.9	7.9	7.1	5.3	5.4	5.3
Share of employment in industry (%)	na	37.7	37.2	37.2	36.1	35.6	36.0	36.4
Share of employment in services (%)	na	52.9	54.9	54.9	56.8	59.1	58.6	58.3
Activity rate (% working-age population)	87.6	90.5	89.8	88.9	85.7	86.2	87.8	87.7
Total unemployed (000)	51.6	85.8	108.7	115.7	109.7	84.6	70.6	59.0
Unemployment rate (%)	3.7	5.8	7.0	7.5	7.3	5.5	4.6	3.9
Youth unemployed (% population 15-24)	na	7.8	8.6	8.3	7.7	6.8	5.3	5.0
Long-term unemployment rate (% labour force)	na	2.1	2.2	2.3	2.3	1.6	1.2	1.0
15-19 year olds in education/training (%)	na	na	na	na	88.5	82.0	84.0	na
20-24 year olds in education/training (%)	na	na	na	na	43.1	48.5	47.9	na
Women								
Total population (000)	2554	2595	2607	2614	2637	2664	2674	2682
Population of working-age (15-64) (000)	1600	1668	1704	1713	1722	1738	1739	1740
Total employment (000)	971	1156	1220	1212	1189	1205	1235	1276
Annual change in employment (%)	-	1.8	1.1	-0.7	-0.6	1.1	2.5	3.3
Employment rate (% working-age population)	60.7	69.3	71.6	70.8	69.0	69.3	71.0	73.3
FTE employment rate (% working-age population)	na	52.0	56.2	56.1	55.9	55.9	57.4	58.7
Self-employed (% total employment)	na	3.3	3.2	3.3	4.1	4.2	3.7	3.9
Employed part-time (% total employment)	na	43.9	38.4	37.8	34.4	34.6	34.5	35.8
Employed on fixed term contracts (%)	na	13.1	11.0	12.9	12.9	11.8	11.6	11.0
Share of employment in agriculture (%)	na	3.4	2.8	3.1	2.6	2.1	1.7	1.8
Share of employment in industry (%)	na	15.8	16.0	16.4	15.1	15.1	14.6	14.7
Share of employment in services (%)	na	80.8	81.2	80.5	82.3	82.8	83.8	83.5
Activity rate (% working-age population)	63.3	75.8	78.2	78.2	76.0	75.5	76.1	78.2
Total unemployed (000)	40.9	108.8	112.3	127.2	119.1	107.5	88.7	85.3
Unemployment rate (%)	4.0	8.6	8.4	9.5	9.3	8.3	6.8	6.5
Youth unemployed (% population 15-24)	na	8.9	8.1	8.6	7.8	8.9	7.3	5.7
Long-term unemployment rate (% labour force)	na	3.5	2.9	3.7	3.0	2.1	1.9	2.0
15-19 year olds in education/training (%)	na	na	na	na	85.9	81.0	84.0	na
20-24 year olds in education/training (%)	na	na	na	na	44.6	48.5	55.3	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90. Total employment is from register-based labour statistics. Working-age population and other employment details are from the Union LFS. See notes in Sources at the back of the report.

Key employment indicators in Germany

Total	Excl. the new German Länder				Incl. the new German Länder				
	1975	1985	1990	1991	1991	1994	1996	1997	1998
Total population (000)	61829	61024	63254	64074	79984	81422	81896	82061	82024
Population of working-age (15-64) (000)	39921	42002	43212	43478	54090	54936	55042	54943	55219
Total employment (000)	26020	26489	28479	29189	36510	34986	34423	33962	33970
Annual change in employment (%)	-	0.2	1.5	2.5	na	-1.4	-1.3	-1.3	0.0
Employment rate (% working-age population)	65.2	63.1	65.9	67.1	67.5	63.7	62.5	61.8	61.5
FTE employment rate (% working-age population)	na	58.9	60.5	61.5	62.6	58.5	56.9	55.8	55.2
Self-employed (% total employment)	9.4	9.2	8.9	9.2	8.2	9.3	9.6	9.9	10.0
Employed part-time (% total employment)	na	12.8	15.2	15.5	14.1	15.8	16.5	17.5	18.3
Employed on fixed term contracts (%)	na	10.0	10.5	9.5	10.1	10.3	11.1	11.7	12.3
Share of employment in agriculture (%)	6.8	5.2	3.7	3.5	4.2	3.3	2.9	2.9	2.8
Share of employment in industry (%)	45.4	41.0	40.1	40.1	40.3	37.0	35.3	34.7	34.4
Share of employment in services (%)	47.8	53.8	56.2	56.4	55.5	59.7	61.8	62.4	62.8
Activity rate (% working-age population)	67.5	67.9	69.3	70.1	71.6	69.7	68.9	68.9	68.2
Total unemployed (000)	915.1	2024.5	1453.4	1273.0	2195.2	3299.3	3475.5	3883.6	3699.2
Unemployment rate (%)	3.5	7.2	4.8	4.2	5.6	8.4	8.9	9.9	9.4
Youth unemployed (% population 15-24)	na	6.1	2.7	2.3	3.5	4.7	5.0	5.4	4.9
Long-term unemployment rate (% labour force)	na	3.4	2.2	1.9	1.7	3.7	4.3	5.0	4.9
15-19 year olds in education/training (%)	na	na	na	na	na	91.6	91.9	93.0	na
20-24 year olds in education/training (%)	na	na	na	na	na	34.7	37.0	38.5	na
Men									
Total population (000)	29499	29181	30569	31051	38658	39576	39888	39998	39992
Population of working-age (15-64) (000)	19515	20672	21744	21940	27153	27811	27765	27767	27884
Total employment (000)	16154	16154	16977	17343	21192	20301	19704	19395	19330
Annual change in employment (%)	-	0.0	1.0	2.2	na	-1.4	-2.1	-1.6	-0.3
Employment rate (% working-age population)	82.8	78.1	78.1	79.0	78.0	73.0	71.0	69.8	69.3
FTE employment rate (% working-age population)	na	78.3	77.9	78.8	78.0	72.6	70.5	69.2	68.5
Self-employed (% total employment)	12.6	11.7	11.3	11.5	10.5	11.8	12.3	12.6	12.7
Employed part-time (% total employment)	na	2.0	2.6	2.7	2.4	3.2	3.8	4.2	4.7
Employed on fixed term contracts (%)	na	9.2	9.8	8.8	9.4	9.8	11.0	11.5	12.1
Share of employment in agriculture (%)	5.3	4.5	3.5	3.4	4.2	3.4	3.2	3.2	3.1
Share of employment in industry (%)	54.7	50.8	50.1	50.3	50.7	48.5	47.1	46.5	46.1
Share of employment in services (%)	40.1	44.7	46.4	46.3	45.1	48.1	49.7	50.3	50.8
Activity rate (% working-age population)	85.4	83.2	81.4	82.1	81.8	78.8	77.5	69.8	69.3
Total unemployed (000)	513.6	1050.6	717.9	664.0	1031.2	1609.2	1825.7	2058.0	1965.7
Unemployment rate (%)	3.1	6.2	4.0	3.7	4.6	7.2	8.2	9.3	8.9
Youth unemployed (% population 15-24)	na	5.8	2.7	2.3	3.4	5.0	5.7	6.3	5.6
Long-term unemployment rate (% labour force)	na	3.1	2.0	1.8	1.6	3.0	3.6	4.4	4.4
15-19 year olds in education/training (%)	na	na	na	na	na	91.6	91.8	93.5	na
20-24 year olds in education/training (%)	na	na	na	na	na	36.7	38.0	38.8	na
Women									
Total population (000)	32330	31843	32685	33023	41327	41846	42008	42063	42032
Population of working-age (15-64) (000)	20406	21330	21468	21538	26937	27125	27277	27176	27335
Total employment (000)	9866	10335	11502	11846	15318	14685	14719	14567	14640
Annual change in employment (%)	-	0.5	2.2	3.0	na	-1.4	0.0	-1.0	0.5
Employment rate (% working-age population)	48.3	48.5	53.6	55.0	56.9	54.1	54.0	53.6	53.6
FTE employment rate (% working-age population)	na	40.2	43.1	44.1	47.2	44.0	42.9	42.1	41.6
Self-employed (% total employment)	4.4	5.4	5.4	5.7	5.0	5.8	6.2	6.4	6.3
Employed part-time (% total employment)	na	29.6	33.8	34.3	30.1	33.1	33.6	35.1	36.4
Employed on fixed term contracts (%)	na	11.1	11.6	10.4	10.9	11.0	11.2	12.1	12.5
Share of employment in agriculture (%)	9.3	6.3	4.1	3.7	4.2	3.1	2.6	2.6	2.3
Share of employment in industry (%)	30.5	25.6	25.2	25.1	25.9	21.1	19.5	18.9	18.9
Share of employment in services (%)	60.2	68.1	70.7	71.2	69.9	75.8	77.9	78.5	78.7
Activity rate (% working-age population)	50.3	53.0	57.0	57.8	61.2	60.4	60.0	60.3	59.9
Total unemployed (000)	401.5	973.9	735.5	609.0	1164.0	1690.1	1649.8	1825.6	1733.5
Unemployment rate (%)	3.9	8.7	5.9	4.9	7.0	10.1	9.8	10.7	10.2
Youth unemployed (% population 15-24)	na	6.3	2.7	2.2	3.7	4.5	4.4	4.6	4.2
Long-term unemployment rate (% labour force)	na	4.0	2.5	2.1	1.9	4.8	5.1	5.7	5.7
15-19 year olds in education/training (%)	na	na	na	na	na	91.6	92.1	92.6	na
20-24 year olds in education/training (%)	na	na	na	na	na	32.8	36.0	38.3	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90. Total employment is from national accounts; working-age population and other employment details are from the Union LFS. See notes in Sources at the back of the report.

Key employment indicators in Greece

Total	1977	1985	1990	1991	1994	1996	1997	1998
Total population (000)	9309	9934	10160	10247	10426	10476	10497	10522
Population of working-age (15-64) (000)	5671	6259	6571	6638	6769	6796	6792	6933
Total employment (000)	3289	3589	3719	3632	3786	3868	3853	3967
Annual change in employment (%)	-	1.1	0.7	-2.3	1.4	1.2	-0.4	3.0
Employment rate (% working-age population)	58.0	57.3	56.6	54.7	55.9	56.9	56.7	57.2
FTE employment rate (% working-age population)	na	55.9	55.4	53.6	54.7	55.6	55.4	56.2
Self-employed (% total employment)	37.7	36.0	34.8	35.2	34.4	33.7	33.3	32.5
Employed part-time (% total employment)	na	5.2	4.1	3.8	4.8	5.3	4.6	6.0
Employed on fixed term contracts (%)	na	21.1	16.5	14.7	10.3	11.0	10.9	13.0
Share of employment in agriculture (%)	33.2	28.9	23.9	22.2	20.8	20.3	19.8	17.7
Share of employment in industry (%)	29.2	25.7	25.9	25.7	23.6	22.9	22.5	23.0
Share of employment in services (%)	37.5	45.4	50.2	52.1	55.6	56.9	57.7	59.2
Activity rate (% working-age population)	58.9	61.6	60.5	58.9	61.4	63.0	63.0	64.6
Total unemployed (000)	50.1	268.5	254.7	276.3	369.5	410.8	427.7	512.7
Unemployment rate (%)	1.5	7.0	6.4	7.0	8.9	9.6	10.0	11.6
Youth unemployed (% population 15-24)	na	8.8	8.3	8.7	10.2	11.4	11.5	12.9
Long-term unemployment rate (% labour force)	na	3.2	3.3	3.4	4.5	5.4	5.6	6.4
15-19 year olds in education/training (%)	na	na	na	na	79.8	80.4	82.3	na
20-24 year olds in education/training (%)	na	na	na	na	30.5	30.2	31.9	na
Men								
Total population (000)	4558	4887	5003	5050	5148	5169	5178	5186
Population of working-age (15-64) (000)	2717	3002	3173	3221	3268	3271	3261	3387
Total employment (000)	2298	2371	2409	2406	2449	2467	2438	2504
Annual change in employment (%)	-	0.4	0.3	-0.1	0.6	0.7	-1.2	2.7
Employment rate (% working-age population)	84.6	79.0	75.9	74.7	74.9	75.4	74.8	73.9
FTE employment rate (% working-age population)	na	80.2	77.2	76.1	76.3	77.1	76.4	75.8
Self-employed (% total employment)	44.9	44.1	42.6	42.9	42.6	41.8	41.7	39.7
Employed part-time (% total employment)	na	2.8	2.2	2.2	3.1	3.3	2.6	3.3
Employed on fixed term contracts (%)	na	21.8	16.9	14.8	10.2	10.5	10.2	12.0
Share of employment in agriculture (%)	26.8	24.3	20.5	19.9	18.6	18.2	18.0	16.3
Share of employment in industry (%)	33.9	30.4	30.5	29.9	28.8	28.1	27.7	29.3
Share of employment in services (%)	39.3	45.3	49.0	50.2	52.6	53.7	54.3	54.4
Activity rate (% working-age population)	85.5	83.1	79.0	78.2	79.7	80.3	80.0	80.1
Total unemployed (000)	25.1	124.9	98.7	110.7	157.0	158.8	170.6	210.2
Unemployment rate (%)	1.1	5.0	3.9	4.4	6.0	6.1	6.5	7.8
Youth unemployed (% population 15-24)	na	7.7	6.4	6.9	8.2	8.6	9.0	10.0
Long-term unemployment rate (% labour force)	na	1.8	1.7	1.7	2.5	2.9	2.9	3.5
15-19 year olds in education/training (%)	na	na	na	na	80.4	81.8	82.4	na
20-24 year olds in education/training (%)	na	na	na	na	30.2	28.7	30.8	na
Women								
Total population (000)	4751	5047	5157	5197	5278	5307	5320	5336
Population of working-age (15-64) (000)	2954	3257	3397	3417	3501	3527	3531	3545
Total employment (000)	991	1218	1310	1226	1337	1401	1415	1463
Annual change in employment (%)	-	2.6	1.5	-6.4	2.9	2.2	1.0	3.4
Employment rate (% working-age population)	33.6	37.4	38.5	35.9	38.2	39.7	40.1	41.3
FTE employment rate (% working-age population)	na	33.5	34.9	32.6	34.5	35.7	35.9	37.3
Self-employed (% total employment)	22.3	20.0	20.3	20.1	19.5	19.4	18.7	20.0
Employed part-time (% total employment)	na	10.0	7.6	7.2	8.0	8.9	8.1	10.6
Employed on fixed term contracts (%)	na	19.6	15.9	14.6	10.5	11.9	11.9	14.7
Share of employment in agriculture (%)	48.1	37.9	30.3	26.7	24.8	23.9	23.1	20.3
Share of employment in industry (%)	18.4	16.5	17.3	17.5	14.1	13.7	13.4	12.3
Share of employment in services (%)	33.5	45.6	52.4	55.8	61.0	62.4	63.5	67.4
Activity rate (% working-age population)	34.4	41.8	43.1	40.7	44.3	46.9	47.4	49.8
Total unemployed (000)	25.0	143.6	156.0	165.6	212.5	252.0	257.1	302.5
Unemployment rate (%)	2.5	10.6	10.8	11.8	13.7	15.2	15.3	17.4
Youth unemployed (% population 15-24)	na	9.7	10.1	10.3	12.0	13.8	13.7	15.8
Long-term unemployment rate (% labour force)	na	5.8	6.2	6.5	7.9	9.5	9.5	10.7
15-19 year olds in education/training (%)	na	na	na	na	79.1	79.1	82.3	na
20-24 year olds in education/training (%)	na	na	na	na	30.6	31.4	32.9	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90. Working-age population and all employment details are from the Union LFS. See notes in Sources at the back of the report. Data for 1975 not available.

Key employment indicators in Spain

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	35515	38420	38851	38920	39149	39270	39323	39371
Population of working-age (15-64) (000)	21517	24102	25289	25359	25770	26253	26282	26302
Total employment (000)	12439	10641	12579	12609	11730	12396	12765	13205
Annual change in employment (%)	-	-1.5	3.4	0.2	-2.4	2.9	3.0	3.4
Employment rate (% working-age population)	57.8	44.1	49.7	49.7	45.5	47.2	48.6	50.2
FTE employment rate (% working-age population)	na	42.8	48.4	48.4	43.7	45.1	46.3	47.9
Self-employed (% total employment)*	21.0	22.6	20.9	20.4	22.1	21.5	20.9	20.2
Employed part-time (% total employment)+	na	5.8	4.9	4.7	6.9	8.0	8.2	8.1
Employed on fixed term contracts (%)+	na	15.6	29.8	32.2	33.7	33.6	33.6	32.9
Share of employment in agriculture (%)*	22.1	16.2	12.0	10.9	9.9	8.6	8.3	7.9
Share of employment in industry (%)*	38.3	31.9	33.6	33.0	30.1	29.4	29.9	30.4
Share of employment in services (%)*	39.7	52.0	54.5	56.1	60.0	62.0	61.8	61.7
Activity rate (% working-age population)	60.5	56.3	59.4	59.5	60.0	60.7	61.3	61.8
Total unemployed (000)	579.5	2940.2	2435.5	2476.4	3732.0	3529.4	3357.9	3056.4
Unemployment rate (%)	4.4	21.6	16.2	16.4	24.1	22.2	20.8	18.8
Youth unemployed (% population 15-24)	na	22.0	15.3	14.2	19.4	17.2	16.1	14.6
Long-term unemployment rate (% labour force)*	na	12.6	8.9	8.5	12.7	11.7	10.8	9.4
15-19 year olds in education/training (%)	na	na	na	na	78.4	80.7	80.8	na
20-24 year olds in education/training (%)	na	na	na	na	39.7	44.6	45.0	na
Men								
Total population (000)	17381	18851	19032	19060	19165	19215	19235	19253
Population of working-age (15-64) (000)	10561	11830	12421	12467	12757	12977	13020	12993
Total employment (000)	8985	7553	8576	8531	7740	8069	8267	8524
Annual change in employment (%)	-	-1.7	2.6	-0.5	-3.2	2.3	2.5	3.1
Employment rate (% working-age population)	85.1	63.8	69.0	68.4	60.7	62.2	63.5	65.6
FTE employment rate (% working-age population)	na	63.9	69.3	68.7	60.6	62.0	63.4	65.6
Self-employed (% total employment)*	23.0	24.7	23.2	22.7	24.9	24.1	23.6	22.9
Employed part-time (% total employment)+	na	2.4	1.6	1.6	2.6	3.1	3.2	3.0
Employed on fixed term contracts (%)+	na	14.4	27.8	29.3	31.4	31.9	32.4	32.1
Share of employment in agriculture (%)*	22.7	17.2	12.8	11.7	11.0	9.8	9.5	9.2
Share of employment in industry (%)*	42.6	38.1	41.0	40.9	38.2	37.9	38.7	39.5
Share of employment in services (%)*	34.7	44.7	46.3	47.4	50.8	52.3	51.8	51.3
Activity rate (% working-age population)	89.5	80.0	78.4	78.0	75.6	75.4	75.6	76.1
Total unemployed (000)	470.3	1906.7	1161.8	1197.4	1908.7	1721.9	1582.1	1362.2
Unemployment rate (%)	5.0	20.2	11.9	12.3	19.8	17.6	16.1	13.8
Youth unemployed (% population 15-24)	na	24.3	13.7	13.1	19.3	16.1	14.9	13.1
Long-term unemployment rate (% labour force)*	na	0.0	5.6	5.3	9.2	8.1	7.4	6.1
15-19 year olds in education/training (%)	na	na	na	na	75.9	78.5	78.2	na
20-24 year olds in education/training (%)	na	na	na	na	35.5	39.1	40.8	na
Women								
Total population (000)	18134	19568	19820	19860	19984	20055	20088	20118
Population of working-age (15-64) (000)	10956	12272	12868	12892	13013	13276	13262	13309
Total employment (000)	3454	3088	4003	4078	3990	4327	4498	4681
Annual change in employment (%)	-	-1.1	5.3	1.9	-0.7	4.2	4.0	4.1
Employment rate (% working-age population)	31.5	25.2	31.1	31.6	30.7	32.6	33.9	35.2
FTE employment rate (% working-age population)	na	22.6	28.1	28.8	27.2	28.6	29.6	30.6
Self-employed (% total employment)*	15.8	17.5	16.0	15.6	16.7	16.7	15.8	15.2
Employed part-time (% total employment)+	na	13.9	12.1	11.2	15.2	17.0	17.4	17.2
Employed on fixed term contracts (%)+	na	18.4	34.2	38.2	37.9	36.7	35.8	34.4
Share of employment in agriculture (%)*	20.5	13.9	10.2	9.2	7.9	6.4	6.1	5.6
Share of employment in industry (%)*	26.8	16.8	17.7	16.6	14.4	13.6	13.6	13.8
Share of employment in services (%)*	52.7	69.3	72.1	74.2	77.7	79.9	80.3	80.7
Activity rate (% working-age population)	32.5	33.6	41.0	41.6	44.7	46.2	47.3	47.9
Total unemployed (000)	109.2	1033.5	1273.7	1279.0	1823.3	1807.5	1775.8	1694.2
Unemployment rate (%)	3.1	25.1	24.1	23.9	31.4	29.5	28.3	26.6
Youth unemployed (% population 15-24)	na	19.7	16.8	15.4	19.5	18.3	17.3	16.2
Long-term unemployment rate (% labour force)*	na	16.2	14.8	14.4	18.7	17.6	16.2	14.5
15-19 year olds in education/training (%)	na	na	na	na	80.9	83.0	83.5	na
20-24 year olds in education/training (%)	na	na	na	na	44.1	50.2	49.3	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90.

Total employment is an average of quarterly Labour Force Survey data; working-age population and other employment details are from the Union LFS. See notes in Sources at the back of the report.

* 1985 data relate to 1986. + 1985 data relate to 1987.

Key employment indicators in France

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	52699	55284	56735	57055	57900	58375	58607	58847
Population of working-age (15-64) (000)	31047	34825	35733	36304	36677	36968	37126	37300
Total employment (000)	21409	21608	22478	22502	22063	22337	22392	22680
Annual change in employment (%)	-	0.1	0.8	0.1	-0.7	0.2	0.2	1.3
Employment rate (% working-age population)	69.0	62.0	62.9	62.0	60.2	60.4	60.3	60.8
FTE employment rate (% working-age population)	na	59.6	60.0	59.1	57.0	57.1	57.0	57.4
Self-employed (% total employment)	14.4	12.6	12.9	12.6	11.8	11.3	11.2	10.9
Employed part-time (% total employment)	na	10.9	11.9	12.1	14.9	16.0	16.8	17.3
Employed on fixed term contracts (%)	na	4.7	10.5	10.2	11.0	12.6	13.1	13.9
Share of employment in agriculture (%)	10.3	8.2	6.4	6.0	5.2	4.8	4.6	4.4
Share of employment in industry (%)	38.6	32.4	30.4	30.0	26.9	26.5	26.6	26.4
Share of employment in services (%)	51.1	59.4	63.2	63.9	67.9	68.6	68.8	69.2
Activity rate (% working-age population)	71.7	68.9	68.9	68.4	68.5	68.9	68.7	68.8
Total unemployed (000)	862.9	2394.1	2152.7	2323.3	3049.9	3129.4	3121.3	2975.2
Unemployment rate (%)	3.9	10.1	8.9	9.5	12.3	12.4	12.3	11.7
Youth unemployed (% labour force 15-24)	na	13.0	8.4	8.7	10.7	10.4	10.1	9.1
Long-term unemployment rate (% labour force)	na	4.7	4.0	4.1	4.6	4.7	4.9	4.9
15-19 year olds in education/training (%)	na	na	na	na	92.5	92.9	92.9	na
20-24 year olds in education/training (%)	na	na	na	na	40.9	42.4	43.9	na
Men								
Total population (000)	25807	26946	27623	27783	28195	28423	28535	28654
Population of working-age (15-64) (000)	15270	17088	17592	17868	18057	18207	18296	18389
Total employment (000)	13337	12621	12932	12805	12302	12409	12431	12551
Annual change in employment (%)	-	-0.6	0.5	-1.0	-1.3	0.0	0.2	1.0
Employment rate (% working-age population)	87.3	73.9	73.5	71.7	68.1	68.2	67.9	68.3
FTE employment rate (% working-age population)	na	75.7	75.2	73.2	69.8	69.5	69.7	69.9
Self-employed (% total employment)	na	17.1	17.0	16.4	15.8	15.1	14.9	14.6
Employed part-time (% total employment)	na	3.2	3.3	3.4	4.6	5.2	5.5	5.7
Employed on fixed term contracts (%)	na	4.8	9.4	8.7	9.7	11.5	12.1	13.0
Share of employment in agriculture (%)	na	8.9	7.3	6.8	6.2	5.9	5.7	5.5
Share of employment in industry (%)	na	41.7	39.8	39.7	36.1	36.2	36.3	36.0
Share of employment in services (%)	na	49.4	52.9	53.5	57.7	57.9	58.0	58.5
Activity rate (% working-age population)	89.8	80.4	78.7	77.3	76.0	76.1	75.9	75.7
Total unemployed (000)	372.6	1124.1	907.5	1004.1	1416.6	1453.7	1462.6	1364.1
Unemployment rate (%)	2.7	8.3	6.7	7.4	10.4	10.6	10.6	9.9
Youth unemployed (% population 15-24)	na	12.1	7.3	7.7	10.0	10.0	9.8	8.8
Long-term unemployment rate (% labour force)	na	3.5	2.9	3.0	3.8	3.9	4.0	4.1
15-19 year olds in education/training (%)	na	na	na	na	92.4	92.2	92.2	na
20-24 year olds in education/training (%)	na	na	na	na	39.4	40.9	42.3	na
Women								
Total population (000)	26892	28338	29112	29272	29704	29952	30072	30193
Population of working-age (15-64) (000)	15776	17736	18141	18436	18620	18763	18830	18913
Total employment (000)	8072	8987	9546	9697	9761	9928	9961	10129
Annual change in employment (%)	-	1.1	1.2	1.6	0.2	0.5	0.3	1.7
Employment rate (% working-age population)	51.2	50.7	52.6	52.6	52.4	52.9	52.9	53.6
FTE employment rate (% working-age population)	na	44.0	45.3	45.4	44.7	45.0	44.8	45.4
Self-employed (% total employment)	na	6.4	7.2	7.5	6.8	6.6	6.5	6.3
Employed part-time (% total employment)	na	21.8	23.6	23.5	27.8	29.5	30.9	31.6
Employed on fixed term contracts (%)	na	4.6	12.0	12.0	12.4	13.9	14.3	15.0
Share of employment in agriculture (%)	na	7.1	5.2	5.0	4.0	3.5	3.4	3.1
Share of employment in industry (%)	na	19.3	17.8	17.3	15.2	14.4	14.5	14.4
Share of employment in services (%)	na	73.6	77.0	77.7	80.8	82.0	82.2	82.5
Activity rate (% working-age population)	54.3	57.8	59.5	59.8	61.2	61.8	61.7	62.1
Total unemployed (000)	490.3	1270.0	1245.2	1319.2	1633.3	1675.7	1658.7	1611.1
Unemployment rate (%)	5.7	12.5	11.8	12.2	14.5	14.5	14.4	13.8
Youth unemployed (% population 15-24)	na	13.9	9.5	9.7	11.4	10.8	10.3	9.4
Long-term unemployment rate (% labour force)	na	6.3	5.4	5.5	5.5	5.8	5.9	5.8
15-19 year olds in education/training (%)	na	na	na	na	92.6	93.6	93.7	na
20-24 year olds in education/training (%)	na	na	na	na	42.3	43.7	45.5	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90. Total employment is from national accounts; working-age population and other employment details are from the Union LFS. See notes in Sources at the back of the report.

Key employment indicators in Ireland

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	3177	3540	3506	3526	3586	3626	3673	3719
Population of working-age (15-64) (000)	1807	2079	2120	2152	2236	2324	2378	2427
Total employment (000)	1061	1069	1135	1134	1207	1308	1373	1468
Annual change in employment (%)	-	0.1	1.2	-0.1	2.1	3.6	5.0	6.9
Employment rate (% working-age population)	58.7	51.4	53.5	52.7	54.0	56.3	57.7	60.5
FTE employment rate (% working-age population)	na	49.3	50.8	49.9	50.6	52.4	54.0	na
Self-employed (% total employment)	24.4	21.5	22.6	21.5	21.0	19.8	19.5	na
Employed part-time (% total employment)	na	6.5	8.1	8.4	11.4	11.6	12.3	na
Employed on fixed term contracts (%)	na	7.3	8.5	8.3	9.5	9.2	9.4	na
Share of employment in agriculture (%)	22.4	16.5	15.3	14.0	12.6	11.2	10.8	na
Share of employment in industry (%)	31.8	29.9	28.8	29.0	27.9	27.3	28.5	na
Share of employment in services (%)	45.8	53.6	55.9	57.0	59.6	61.5	60.7	na
Activity rate (% working-age population)	63.3	61.9	61.8	61.9	63.0	63.7	64.1	65.7
Total unemployed (000)	83.0	217.2	175.7	197.5	202.2	173.2	151.9	126.0
Unemployment rate (%)	7.3	16.9	13.4	14.8	14.3	11.6	9.8	7.8
Youth unemployed (% population 15-24)	na	13.9	9.6	10.8	10.6	8.0	7.1	5.7
Long-term unemployment rate (% labour force)	na	10.8	8.9	9.3	9.2	6.9	5.5	na
15-19 year olds in education/training (%)	na	na	na	na	80.8	82.2	81.2	na
20-24 year olds in education/training (%)	na	na	na	na	25.4	28.0	28.5	na
Men								
Total population (000)	1597	1771	1743	1753	1783	1800	1823	1846
Population of working-age (15-64) (000)	920	1053	1079	1091	1120	1168	1194	1219
Total employment (000)	769	739	758	751	758	807	838	896
Annual change in employment (%)	-	-0.4	0.5	-1.0	0.3	2.4	3.8	6.9
Employment rate (% working-age population)	83.6	70.2	70.3	68.8	67.7	69.1	70.2	73.5
FTE employment rate (% working-age population)	na	72.9	72.6	70.9	69.6	70.7	72.5	na
Self-employed (% total employment)	na	27.8	29.8	28.5	28.9	27.0	27.0	na
Employed part-time (% total employment)	na	2.3	3.4	3.6	5.1	5.0	5.4	na
Employed on fixed term contracts (%)	na	5.5	6.6	6.1	8.0	7.1	7.1	na
Share of employment in agriculture (%)	na	20.6	20.6	19.2	17.9	15.9	15.7	na
Share of employment in industry (%)	na	34.7	33.6	34.5	34.1	34.2	35.8	na
Share of employment in services (%)	na	44.6	45.8	46.3	48.0	49.9	48.6	na
Activity rate (% working-age population)	89.7	83.7	80.6	80.2	78.9	78.1	77.9	79.9
Total unemployed (000)	55.9	141.8	111.3	124.4	125.2	105.5	92.5	77.7
Unemployment rate (%)	6.8	16.1	12.8	14.2	14.1	11.5	9.8	8.0
Youth unemployed (% population 15-24)	na	15.7	10.9	12.3	12.2	9.0	7.9	6.2
Long-term unemployment rate (% labour force)	na	11.1	9.2	9.5	9.7	7.4	6.2	na
15-19 year olds in education/training (%)	na	na	na	na	78.1	79.6	78.5	na
20-24 year olds in education/training (%)	na	na	na	na	26.2	27.5	27.4	na
Women								
Total population (000)	1580	1769	1763	1772	1803	1826	1850	1873
Population of working-age (15-64) (000)	888	1026	1041	1061	1115	1156	1184	1208
Total employment (000)	292	330	377	383	449	501	535	572
Annual change in employment (%)	-	1.2	2.7	1.8	5.4	5.7	6.8	6.9
Employment rate (% working-age population)	32.9	32.1	36.2	36.1	40.3	43.3	45.2	47.4
FTE employment rate (% working-age population)	na	25.8	28.7	28.6	31.5	33.9	35.3	na
Self-employed (% total employment)	na	7.4	8.0	7.8	8.0	8.2	7.5	na
Employed part-time (% total employment)	na	15.5	17.6	17.8	21.8	22.2	23.2	na
Employed on fixed term contracts (%)	na	10.6	11.3	11.5	11.4	11.8	12.1	na
Share of employment in agriculture (%)	na	7.1	4.7	3.8	3.8	3.8	3.6	na
Share of employment in industry (%)	na	19.1	19.0	18.4	17.2	16.2	17.2	na
Share of employment in services (%)	na	73.8	76.4	77.8	79.0	80.0	79.2	na
Activity rate (% working-age population)	35.9	39.5	42.4	43.0	47.2	49.2	50.2	51.4
Total unemployed (000)	27.1	75.4	64.4	73.1	77.0	67.7	59.4	48.3
Unemployment rate (%)	8.5	18.5	14.6	15.9	14.6	11.8	9.8	7.6
Youth unemployed (% population 15-24)	na	12.0	8.3	9.2	8.9	7.0	6.2	5.0
Long-term unemployment rate (% labour force)	na	10.0	8.3	8.5	8.4	6.1	4.6	na
15-19 year olds in education/training (%)	na	na	na	na	83.7	85.0	84.1	na
20-24 year olds in education/training (%)	na	na	na	na	24.5	28.6	29.7	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90.

Working-age population and all employment details are from the Union LFS.

No LFS data for 1998 are yet available for Ireland. Working-age population for 1998 is estimated.

See notes in Sources at the back of the report.

Key employment indicators in Italy

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	55441	56593	56719	56751	57204	57397	57496	57588
Population of working-age (15-64) (000)	35058	38048	38642	39088	38751	38978	39071	38956
Total employment (000)	19293	20179	20726	21006	20024	20037	20044	20154
Annual change in employment (%)	-	0.5	0.5	1.4	-1.6	0.5	0.0	0.5
Employment rate (% working-age population)	55.0	53.0	53.6	53.7	51.7	51.4	51.3	51.7
FTE employment rate (% working-age population)	na	51.0	51.5	51.5	50.5	50.1	49.8	50.2
Self-employed (% total employment)	29.5	24.1	24.3	24.3	24.1	24.8	24.5	24.4
Employed part-time (% total employment)	na	5.3	4.9	5.5	6.2	6.6	7.1	7.3
Employed on fixed term contracts (%)	na	4.8	5.2	5.4	7.3	7.5	8.2	8.6
Share of employment in agriculture (%)	15.8	11.0	9.0	8.5	7.7	6.7	6.5	6.4
Share of employment in industry (%)	38.5	33.5	32.4	32.2	32.1	32.2	31.7	31.6
Share of employment in services (%)	45.7	55.5	58.6	59.3	60.2	61.1	61.8	61.9
Activity rate (% working-age population)	57.8	58.0	59.1	59.0	58.3	58.4	58.4	58.9
Total unemployed (000)	979.2	1906.2	2125.5	2065.8	2569.4	2731.2	2760.1	2809.9
Unemployment rate (%)	4.8	8.5	9.1	8.8	11.4	12.0	12.1	12.2
Youth unemployed (% population 15-24)	na	13.6	12.4	11.3	12.8	12.8	12.6	12.9
Long-term unemployment rate (% labour force)	na	5.6	6.4	6.1	7.0	7.9	8.0	8.3
15-19 year olds in education/training (%)	na	na	na	na	73.6	74.9	76.7	na
20-24 year olds in education/training (%)	na	na	na	na	32.9	35.3	35.8	na
Men								
Total population (000)	27072	27501	27538	27548	27765	27855	27917	27959
Population of working-age (15-64) (000)	17112	18601	19000	19282	19139	19310	19352	19263
Total employment (000)	13784	13681	13637	13706	12960	12844	12818	12811
Annual change in employment (%)	-	-0.1	-0.1	0.5	-1.8	-0.2	-0.2	0.0
Employment rate (% working-age population)	80.6	73.5	71.8	71.1	67.7	66.5	66.2	66.5
FTE employment rate (% working-age population)	na	74.1	72.3	71.5	69.3	68.1	67.8	68.0
Self-employed (% total employment)	29.3	28.0	28.3	28.3	28.4	29.2	28.9	28.9
Employed part-time (% total employment)	na	3.0	2.4	2.9	2.8	3.1	3.3	3.4
Employed on fixed term contracts (%)	na	3.6	3.9	4.0	6.1	6.6	7.3	7.5
Share of employment in agriculture (%)	14.4	10.7	8.8	8.3	7.7	6.8	6.9	6.8
Share of employment in industry (%)	42.8	37.8	37.2	37.5	37.7	38.1	37.5	37.7
Share of employment in services (%)	42.8	51.5	54.0	54.2	54.6	55.1	55.6	55.6
Activity rate (% working-age population)	83.3	78.2	76.8	75.9	74.3	73.4	73.1	73.4
Total unemployed (000)	461.9	857.3	955.5	934.9	1259.4	1329.2	1323.4	1332.5
Unemployment rate (%)	3.2	5.8	6.4	6.2	8.8	9.4	9.4	9.4
Youth unemployed (% population 15-24)	na	12.7	11.7	10.9	12.9	12.5	12.1	12.7
Long-term unemployment rate (% labour force)	na	3.6	4.4	4.2	5.3	6.0	6.3	6.3
15-19 year olds in education/training (%)	na	na	na	na	72.8	73.8	75.5	na
20-24 year olds in education/training (%)	na	na	na	na	31.2	32.6	32.8	na
Women								
Total population (000)	28369	29092	29182	29203	29439	29542	29579	29629
Population of working-age (15-64) (000)	17945	19447	19643	19806	19612	19668	19719	19693
Total employment (000)	5508	6498	7089	7300	7064	7193	7226	7342
Annual change in employment (%)	-	1.7	1.8	3.0	-1.1	1.7	0.5	1.6
Employment rate (% working-age population)	30.7	33.4	36.1	36.9	36.0	36.6	36.6	37.3
FTE employment rate (% working-age population)	na	29.3	31.6	32.1	32.1	32.5	32.2	32.8
Self-employed (% total employment)	30.2	15.8	16.5	16.9	16.3	16.9	16.7	16.5
Employed part-time (% total employment)	na	10.1	9.6	10.4	12.4	12.7	13.7	14.1
Employed on fixed term contracts (%)	na	7.0	7.6	7.7	9.3	8.9	9.7	10.3
Share of employment in agriculture (%)	18.1	11.5	9.4	8.8	7.9	6.4	5.9	5.9
Share of employment in industry (%)	28.5	24.5	23.2	22.2	21.8	21.7	21.4	21.1
Share of employment in services (%)	53.3	64.0	67.4	69.0	70.4	72.0	72.7	73.0
Activity rate (% working-age population)	33.6	38.8	42.0	42.6	42.7	43.7	43.9	44.8
Total unemployed (000)	517.3	1048.9	1170.0	1130.9	1310.0	1402.0	1436.7	1477.4
Unemployment rate (%)	8.6	13.5	13.8	13.2	15.7	16.4	16.6	16.8
Youth unemployed (% population 15-24)	na	14.5	13.2	11.7	12.6	13.2	13.0	13.1
Long-term unemployment rate (% labour force)	na	9.2	9.9	9.3	9.9	11.0	11.0	11.5
15-19 year olds in education/training (%)	na	na	na	na	74.3	76.0	78.0	na
20-24 year olds in education/training (%)	na	na	na	na	34.5	37.9	38.7	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90.

Total employment is the average of quarterly Labour Force Survey data; working-age population and other employment details are from the Union LFS. See notes in Sources at the back of the report.

Key employment indicators in Luxembourg

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	359	367	382	387	404	416	421	426
Population of working-age (15-64) (000)	234	250	264	266	272	277	280	282
Total employment (000)	158	160	187	195	208	219	227	236
Annual change in employment (%)	-	0.2	3.2	4.1	2.3	2.5	3.4	4.3
Employment rate (% working-age population)	59.5	58.0	57.7	57.8	60.6	59.6	57.5	58.6
FTE employment rate (% working-age population)	na	56.1	55.7	55.6	58.2	57.6	55.8	56.2
Self-employed (% total employment)	15.8	9.4	9.5	9.2	9.7	9.1	8.3	8.8
Employed part-time (% total employment)	na	7.2	7.0	7.5	7.9	7.9	8.3	9.4
Employed on fixed term contracts (%)	na	4.7	3.4	3.3	2.9	2.6	2.1	2.9
Share of employment in agriculture (%)	6.8	4.6	3.7	3.5	3.1	2.4	2.4	2.9
Share of employment in industry (%)	43.6	32.0	29.4	28.9	27.0	23.0	23.2	21.8
Share of employment in services (%)	49.6	63.5	66.9	67.6	69.9	74.5	74.4	75.3
Activity rate (% working-age population)	59.8	59.8	58.7	58.9	62.6	61.4	59.2	60.3
Total unemployed (000)	0.6	4.5	2.7	2.8	5.4	5.1	4.8	4.9
Unemployment rate (%)	1.1	2.9	1.7	1.7	3.2	3.0	2.8	2.8
Youth unemployed (% population 15-24)	na	4.0	1.8	1.6	3.3	3.3	3.1	2.5
Long-term unemployment rate (% labour force)	na	na	na	na	na	na	na	na
15-19 year olds in education/training (%)	na	na	na	na	85.7	88.3	92.7	na
20-24 year olds in education/training (%)	na	na	na	na	28.1	34.2	34.9	na
Men								
Total population (000)	178	178	187	190	198	204	207	210
Population of working-age (15-64) (000)	117	124	134	135	138	140	141	142
Total employment (000)	112	106	123	126	131	139	142	148
Annual change in employment (%)	-	-0.6	3.0	2.7	1.4	1.0	1.7	4.3
Employment rate (% working-age population)	85.2	79.3	75.3	73.8	76.0	75.0	73.6	73.2
FTE employment rate (% working-age population)	na	80.2	76.2	74.7	77.4	77.0	75.8	75.2
Self-employed (% total employment)	na	11.0	10.8	10.5	10.6	10.5	9.5	10.8
Employed part-time (% total employment)	na	2.6	1.9	1.9	1.0	1.9	0.9	1.9
Employed on fixed term contracts (%)	na	3.5	2.6	2.3	2.0	2.4	1.8	2.4
Share of employment in agriculture (%)	na	4.9	3.9	3.8	2.9	2.9	2.9	3.8
Share of employment in industry (%)	na	43.4	40.3	39.4	37.9	32.4	33.3	30.2
Share of employment in services (%)	na	51.7	55.7	56.9	59.2	64.8	63.8	66.0
Activity rate (% working-age population)	85.5	81.1	76.3	74.9	78.0	76.7	75.1	74.7
Total unemployed (000)	0.4	2.2	1.3	1.4	2.8	2.4	2.2	2.1
Unemployment rate (%)	0.3	2.2	1.2	1.3	2.7	2.2	2.0	2.0
Youth unemployed (% population 15-24)	na	4.0	1.6	1.9	3.8	3.6	2.9	2.5
Long-term unemployment rate (% labour force)	na	na	na	na	na	na	na	na
15-19 year olds in education/training (%)	na	na	na	na	85.5	89.4	91.3	na
20-24 year olds in education/training (%)	na	na	na	na	32.2	37.5	38.2	na
Women								
Total population (000)	181	188	195	197	205	212	214	217
Population of working-age (15-64) (000)	117	126	130	131	134	137	139	140
Total employment (000)	45	55	65	69	77	80	85	89
Annual change in employment (%)	-	1.9	3.4	6.8	3.8	5.3	6.4	4.5
Employment rate (% working-age population)	30.7	37.5	39.4	41.0	40.5	44.4	42.5	43.7
FTE employment rate (% working-age population)	na	33.4	34.9	36.0	34.8	38.5	36.6	36.9
Self-employed (% total employment)	na	6.3	7.4	7.0	8.2	6.7	6.3	5.6
Employed part-time (% total employment)	na	16.0	16.7	17.9	19.7	18.3	20.6	22.2
Employed on fixed term contracts (%)	na	7.0	4.9	4.9	4.4	3.1	2.7	3.7
Share of employment in agriculture (%)	na	3.8	3.3	2.9	3.3	1.7	1.6	1.6
Share of employment in industry (%)	na	10.1	8.6	9.9	8.2	6.7	6.3	6.3
Share of employment in services (%)	na	86.1	88.1	87.2	88.5	91.7	92.1	92.1
Activity rate (% working-age population)	31.0	39.4	40.5	42.1	42.5	46.4	44.4	45.7
Total unemployed (000)	0.3	2.3	1.4	1.4	2.6	2.7	2.6	2.8
Unemployment rate (%)	0.6	4.4	2.5	2.3	4.1	4.3	4.0	4.2
Youth unemployed (% population 15-24)	na	3.9	2.1	1.6	2.9	3.3	3.5	2.1
Long-term unemployment rate (% labour force)	na	na	na	na	na	na	na	na
15-19 year olds in education/training (%)	na	na	na	na	86.0	87.2	94.1	na
20-24 year olds in education/training (%)	na	na	na	na	24.0	30.9	34.4	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90.

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 Union LFS.

See notes in Sources at the back of the report.

NB: total employment from national accounts but other related information uses LFS total employment (that is for employment rate, FTE employment rate and activity rate)

Key employment indicators in the Netherlands

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	13666	14492	14952	15070	15383	15531	15609	15706
Population of working-age (15-64) (000)	8561	9744	10157	10234	10427	10509	10552	10593
Total employment (000)	5250	5621	6315	6443	6594	6846	7037	7230
Annual change in employment (%)	-	0.7	2.4	2.0	0.8	2.1	2.8	2.7
Employment rate (% working-age population)	61.3	57.7	62.2	63.0	63.2	65.1	66.7	68.3
FTE employment rate (% working-age population)	na	47.3	50.1	50.8	50.4	51.4	52.8	54.0
Self-employed (% total employment)	10.3	9.1	10.0	9.8	11.1	11.2	11.3	10.8
Employed part-time (% total employment)*	na	29.4	31.7	32.5	36.4	38.1	38.0	38.8
Employed on fixed term contracts (%)	na	7.5	7.6	7.7	10.9	12.0	11.4	12.7
Share of employment in agriculture (%)	5.7	5.3	4.7	4.4	4.0	3.8	3.7	3.5
Share of employment in industry (%)	34.9	28.2	26.3	25.6	23.3	23.2	22.9	22.8
Share of employment in services (%)	59.4	66.5	69.1	70.1	72.7	73.1	73.4	73.8
Activity rate (% working-age population)	63.7	62.5	66.2	66.8	68.2	69.6	70.4	71.1
Total unemployed (000)	205.9	467.3	413.2	395.1	516.3	468.3	395.7	305.3
Unemployment rate (%)	4.3	8.3	6.2	5.8	7.1	6.3	5.2	4.0
Youth unemployed (% population 15-24)	na	6.0	5.0	4.9	6.9	7.2	6.1	5.1
Long-term unemployment rate (% labour force)	na	4.9	2.9	2.5	3.5	3.1	2.6	1.9
15-19 year olds in education/training (%)	na	na	na	na	91.1	81.3	80.7	na
20-24 year olds in education/training (%)	na	na	na	na	48.3	48.4	49.4	na
Men								
Total population (000)	6804	7167	7389	7450	7607	7680	7717	7765
Population of working-age (15-64) (000)	4312	4907	5121	5169	5279	5331	5352	5370
Total employment (000)	3840	3712	3946	3974	3975	4091	4181	4275
Annual change in employment (%)	-	-0.3	1.2	0.7	0.0	1.5	2.2	2.3
Employment rate (% working-age population)	89.0	75.6	77.1	76.9	75.3	76.7	78.1	79.6
FTE employment rate (% working-age population)	na	69.9	70.4	70.2	69.5	70.4	71.7	72.8
Self-employed (% total employment)	na	11.6	11.3	11.0	12.9	13.2	13.4	12.9
Employed part-time (% total employment)*	na	13.7	14.9	15.5	16.1	17.0	17.0	18.1
Employed on fixed term contracts (%)	na	5.9	6.1	5.9	7.9	9.1	8.8	10.2
Share of employment in agriculture (%)	na	6.4	5.4	5.2	5.0	4.8	4.6	4.2
Share of employment in industry (%)	na	36.7	35.6	34.8	32.7	32.1	32.1	31.6
Share of employment in services (%)	na	56.9	59.0	60.0	62.3	63.1	63.2	64.1
Activity rate (% working-age population)	92.5	80.8	80.5	80.1	80.4	80.8	81.3	82.1
Total unemployed (000)	149.3	253.2	176.2	168.3	267.9	214.6	170.8	135.5
Unemployment rate (%)	3.7	6.9	4.3	4.1	6.3	5.0	3.9	3.0
Youth unemployed (% population 15-24)	na	5.7	4.4	4.4	7.4	6.8	5.3	5.1
Long-term unemployment rate (% labour force)	na	4.2	2.3	2.1	3.2	2.7	1.9	1.5
15-19 year olds in education/training (%)	na	na	na	na	91.5	81.1	80.8	na
20-24 year olds in education/training (%)	na	na	na	na	52.6	52.0	51.6	na
Women								
Total population (000)	6862	7325	7563	7620	7776	7851	7891	7940
Population of working-age (15-64) (000)	4248	4837	5036	5065	5148	5178	5201	5223
Total employment (000)	1411	1909	2369	2469	2619	2755	2856	2955
Annual change in employment (%)	-	3.1	4.4	4.2	2.0	3.1	3.7	3.5
Employment rate (% working-age population)	33.2	39.5	47.0	48.7	50.9	53.2	54.9	56.6
FTE employment rate (% working-age population)	na	25.0	29.6	30.9	31.2	32.2	33.8	35.0
Self-employed (% total employment)	na	4.3	7.7	7.8	8.5	8.2	8.3	7.8
Employed part-time (% total employment)*	na	57.5	59.5	59.8	66.0	68.5	67.9	67.9
Employed on fixed term contracts (%)	na	10.8	10.2	10.6	15.0	15.9	14.9	16.1
Share of employment in agriculture (%)	na	3.1	3.4	3.0	2.5	2.3	2.4	2.4
Share of employment in industry (%)	na	11.9	11.1	10.8	9.5	9.6	9.4	10.0
Share of employment in services (%)	na	85.0	85.5	86.1	87.9	88.1	88.3	87.6
Activity rate (% working-age population)	34.5	43.9	51.8	53.2	55.7	58.1	59.2	59.8
Total unemployed (000)	56.6	214.1	237.0	226.8	248.4	253.7	224.9	169.8
Unemployment rate (%)	3.9	10.8	9.1	8.4	8.3	8.1	7.0	5.2
Youth unemployed (% population 15-24)	na	6.3	5.6	5.4	6.4	7.6	6.9	5.2
Long-term unemployment rate (% labour force)	na	5.9	3.9	3.1	4.1	3.7	3.4	2.4
15-19 year olds in education/training (%)	na	na	na	na	90.8	81.5	80.6	na
20-24 year olds in education/training (%)	na	na	na	na	43.9	44.8	47.1	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90. Total employment is from the labour accounts; working-age population and other employment details are from the Union LFS.

See notes in Sources at the back of the report.

* 1985 data relate to 1987

Key employment indicators in Austria

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	7579	7578	7729	7813	8030	8059	8072	8079
Population of working-age (15-64) (000)	4627	5042	5130	5218	5306	5314	5320	5331
Total employment (000)	3087	3392	3578	3644	3742	3710	3719	3737
Annual change in employment (%)	-	0.9	1.1	1.9	0.9	-1.3	0.2	0.5
Employment rate (% working-age population)	66.7	67.3	69.7	69.8	70.5	69.8	69.9	70.1
FTE employment rate (% working-age population)	na	63.5	65.8	65.9	66.5	65.1	65.2	65.0
Self-employed (% total employment)	13.7	11.3	11.3	11.0	10.8	10.8	10.8	11.0
Employed part-time (% total employment)	na	11.1	13.3	12.9	13.9	14.9	14.7	15.8
Employed on fixed term contracts (%)*	na	na	na	na	6.0	8.0	7.8	7.8
Share of employment in agriculture (%)	12.5	9.6	7.9	7.8	7.4	7.4	6.9	6.5
Share of employment in industry (%)	40.9	38.0	36.8	37.2	34.5	30.3	29.6	29.6
Share of employment in services (%)	46.5	52.3	55.3	55.0	58.0	62.3	63.5	64.0
Activity rate (% working-age population)	67.8	69.7	72.0	72.3	73.3	72.9	73.1	73.4
Total unemployed (000)	52.0	121.0	114.0	130.0	146.0	164.4	167.9	177.8
Unemployment rate (%)	1.7	3.6	3.2	3.4	3.8	4.3	4.4	4.7
Youth unemployed (% population 15-24)	na	na	na	3.3	3.3	3.7	3.9	3.8
Long-term unemployment rate (% labour force)*	na	na	na	na	1.1	1.1	1.3	1.4
15-19 year olds in education/training (%)	na	na	na	na	na	81.6	82.8	na
20-24 year olds in education/training (%)	na	na	na	na	na	32.3	31.7	na
Men								
Total population (000)	3581	3599	3711	3763	3892	3910	3917	3920
Population of working-age (15-64) (000)	2265	2471	2553	2612	2655	2659	2657	2661
Total employment (000)	1903	2053	2118	2151	2147	2131	2132	2132
Annual change in employment (%)	-	0.8	0.6	1.6	-0.1	-1.5	0.0	0.0
Employment rate (% working-age population)	84.0	83.1	83.0	82.3	80.9	80.1	80.2	80.1
FTE employment rate (% working-age population)	na	83.2	83.1	82.5	81.0	79.3	79.4	79.5
Self-employed (% total employment)	na	12.4	13.1	12.5	12.3	12.4	12.6	12.8
Employed part-time (% total employment)	na	3.4	4.3	4.0	4.0	4.2	4.0	4.4
Employed on fixed term contracts (%)*	na	na	na	na	5.7	8.1	7.3	8.0
Share of employment in agriculture (%)	na	8.4	6.9	7.1	7.3	6.5	6.2	5.9
Share of employment in industry (%)	na	48.5	48.3	48.4	46.0	41.6	41.2	41.5
Share of employment in services (%)	na	43.2	44.8	44.6	46.7	51.9	52.6	52.6
Activity rate (% working-age population)	85.2	86.1	85.4	84.4	83.3	83.0	83.2	83.3
Total unemployed (000)	26.0	74.0	63.0	53.1	63.6	77.2	78.4	83.4
Unemployment rate (%)	1.3	3.5	2.9	2.4	2.9	3.6	3.7	3.9
Youth unemployed (% population 15-24)	na	na	na	2.5	2.7	3.2	3.4	3.2
Long-term unemployment rate (% labour force)*	na	na	na	na	0.8	0.8	1.1	1.1
15-19 year olds in education/training (%)	na	na	na	na	na	83.7	84.3	na
20-24 year olds in education/training (%)	na	na	na	na	na	35.3	33.0	na
Women								
Total population (000)	3998	3979	4018	4050	4138	4149	4154	4159
Population of working-age (15-64) (000)	2362	2571	2577	2606	2651	2656	2663	2669
Total employment (000)	1184	1339	1460	1494	1595	1579	1587	1605
Annual change in employment (%)	-	1.2	1.7	2.3	2.2	-1.1	0.5	1.1
Employment rate (% working-age population)	50.1	52.1	56.7	57.3	60.2	59.5	59.6	60.1
FTE employment rate (% working-age population)	na	45.1	49.1	49.6	52.1	51.0	51.1	50.8
Self-employed (% total employment)	na	9.7	8.9	9.0	8.8	8.8	8.4	8.7
Employed part-time (% total employment)	na	23.1	25.4	24.9	26.9	28.8	29.0	30.3
Employed on fixed term contracts (%)*	na	na	na	na	6.3	7.9	8.4	7.7
Share of employment in agriculture (%)	na	10.6	9.3	8.7	7.6	8.6	7.8	7.2
Share of employment in industry (%)	na	22.4	21.3	22.3	19.7	15.6	14.6	14.3
Share of employment in services (%)	na	66.9	69.3	68.9	72.7	75.8	77.6	78.5
Activity rate (% working-age population)	51.2	53.9	58.6	60.3	63.3	62.7	63.0	63.7
Total unemployed (000)	26.0	47.0	51.0	76.9	82.4	87.2	89.5	94.4
Unemployment rate (%)	2.1	3.4	3.4	4.9	4.9	5.3	5.4	5.6
Youth unemployed (% population 15-24)	na	na	na	4.3	4.0	4.1	4.4	4.5
Long-term unemployment rate (% labour force)*	na	na	na	na	1.6	1.5	1.5	1.8
15-19 year olds in education/training (%)	na	na	na	na	na	79.4	81.3	na
20-24 year olds in education/training (%)	na	na	na	na	na	29.3	30.6	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90.

Total employment is from the Union LFS from 1995 and from the micro-census for earlier years. 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.

See notes in Sources at the back of the report.

* 1994 data relate to 1995

Key employment indicators in Portugal

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	9094	10011	9896	9867	9902	9927	9946	9968
Population of working-age (15-64) (000)	5857	6537	6781	6814	6750	6728	6706	6741
Total employment (000)	3845	4149	4490	4616	4444	4443	4529	4642
Annual change in employment (%)	-	0.8	1.6	2.8	-1.3	0.7	1.9	2.5
Employment rate (% working-age population)	65.6	63.5	66.2	67.7	65.8	66.0	67.5	68.9
FTE employment rate (% working-age population)	na	62.0	64.7	66.0	63.6	63.9	64.8	64.9
Self-employed (% total employment)*	27.7	26.2	25.8	26.4	25.3	26.8	26.9	26.1
Employed part-time (% total employment)*	na	6.0	5.9	7.0	8.0	8.7	9.9	11.1
Employed on fixed term contracts (%)*	na	14.4	18.3	16.4	9.4	10.6	12.2	17.3
Share of employment in agriculture (%)*	33.9	21.6	18.1	17.4	11.8	12.2	13.3	13.7
Share of employment in industry (%)*	33.8	33.9	34.1	34.0	32.5	31.3	31.0	36.0
Share of employment in services (%)*	32.3	44.5	47.8	48.6	55.8	56.5	55.7	50.2
Activity rate (% working-age population)	68.7	69.5	69.4	70.5	70.8	71.2	72.4	72.6
Total unemployed (000)	179.1	394.0	213.2	190.9	332.6	348.7	328.6	254.0
Unemployment rate (%)	4.4	8.7	4.6	4.0	7.0	7.3	6.8	5.1
Youth unemployed (% population 15-24)	na	12.5	5.5	4.6	6.8	7.2	6.7	5.1
Long-term unemployment rate (% labour force)*	na	4.9	2.2	1.6	3.0	3.9	3.8	2.2
15-19 year olds in education/training (%)	na	na	na	na	71.4	76.2	73.8	na
20-24 year olds in education/training (%)	na	na	na	na	37.1	40.5	40.5	na
Men								
Total population (000)	4306	4828	4771	4756	4769	4781	4789	4800
Population of working-age (15-64) (000)	2813	3140	3259	3270	3233	3247	3231	3289
Total employment (000)	2377	2510	2609	2644	2481	2461	2492	2576
Annual change in employment (%)	-	0.5	0.8	1.3	-2.1	0.7	1.2	3.4
Employment rate (% working-age population)	84.5	79.9	80.1	80.9	76.7	75.8	77.1	78.3
FTE employment rate (% working-age population)	na	82.0	82.0	82.7	78.5	77.8	78.5	77.9
Self-employed (% total employment)*	na	25.9	25.7	26.5	27.0	28.9	28.3	28.0
Employed part-time (% total employment)*	na	3.4	3.4	4.0	4.7	5.1	5.7	6.2
Employed on fixed term contracts (%)*	na	13.5	16.8	14.8	8.5	10.2	11.7	16.2
Share of employment in agriculture (%)*	na	18.6	15.8	14.8	10.8	11.2	11.7	12.4
Share of employment in industry (%)*	na	40.2	40.2	40.9	39.4	38.7	39.8	44.9
Share of employment in services (%)*	na	41.2	44.1	44.3	49.9	50.1	48.5	42.7
Activity rate (% working-age population)	88.1	85.5	82.7	83.2	81.7	81.0	82.1	81.7
Total unemployed (000)	102.6	174.1	85.7	75.4	160.7	169.7	160.1	111.1
Unemployment rate (%)	4.1	6.6	3.2	2.8	6.1	6.5	6.0	4.1
Youth unemployed (% population 15-24)	na	11.4	5.0	3.9	6.6	6.7	5.8	4.3
Long-term unemployment rate (% labour force)*	na	0.0	1.3	0.9	2.6	3.3	3.2	1.7
15-19 year olds in education/training (%)	na	na	na	na	70.8	74.3	72.4	na
20-24 year olds in education/training (%)	na	na	na	na	32.9	35.5	36.7	na
Women								
Total population (000)	4788	5183	5125	5110	5133	5147	5157	5168
Population of working-age (15-64) (000)	3044	3397	3522	3544	3517	3482	3475	3451
Total employment (000)	1468	1639	1881	1972	1963	1982	2037	2066
Annual change in employment (%)	-	1.1	2.8	4.8	-0.2	0.6	2.8	1.4
Employment rate (% working-age population)	48.2	48.2	53.4	55.6	55.8	56.9	58.6	59.9
FTE employment rate (% working-age population)	na	43.9	48.7	50.6	49.9	50.9	52.1	52.5
Self-employed (% total employment)*	na	26.6	25.9	26.1	23.1	24.2	25.1	23.8
Employed part-time (% total employment)*	na	9.9	9.4	11.0	12.1	13.1	15.0	17.4
Employed on fixed term contracts (%)*	na	15.9	20.5	18.6	10.5	11.1	12.9	18.6
Share of employment in agriculture (%)*	na	25.9	21.4	20.9	13.0	13.5	15.2	15.4
Share of employment in industry (%)*	na	24.5	25.8	24.9	23.9	22.0	20.3	25.0
Share of employment in services (%)*	na	49.6	52.9	54.2	63.1	64.5	64.5	59.6
Activity rate (% working-age population)	50.7	54.7	57.0	58.9	60.7	62.1	63.5	64.0
Total unemployed (000)	76.6	219.9	127.5	115.5	171.9	179.0	168.5	142.9
Unemployment rate (%)	5.0	11.7	6.2	5.4	8.0	8.3	7.7	6.4
Youth unemployed (% population 15-24)	na	13.6	6.0	5.3	7.0	7.6	7.6	5.9
Long-term unemployment rate (% labour force)*	na	7.1	3.2	2.3	3.5	4.5	4.4	2.7
15-19 year olds in education/training (%)	na	na	na	na	72.0	78.2	75.2	na
20-24 year olds in education/training (%)	na	na	na	na	41.2	45.5	44.4	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90.

Total employment is an average of quarterly Labour Force Survey data, except for 1998, where because of the discontinuity, it is based on the change in the national accounts data 1997-98. Working-age population and other employment details are from the Union LFS.

Note that there is a break in the LFS series between 1997 and 1998 - see Sources.

* 1985 data relate to 1986.

Key employment indicators in Finland

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	4711	4902	4986	5014	5088	5125	5140	5153
Population of working-age (15-64) (000)	3104	3266	3282	3305	3331	3384	3400	3415
Total employment (000)	2237	2456	2486	2358	2040	2112	2170	2222
Annual change in employment (%)	-	0.9	0.2	-5.1	-4.7	1.4	2.7	2.4
Employment rate (% working-age population)	72.1	75.2	75.7	71.4	61.2	62.4	63.8	65.1
FTE employment rate (% working-age population)	na	70.4	70.9	66.8	57.3	58.7	60.5	61.5
Self-employed (% total employment)	na	14.7	14.1	14.1	15.0	15.1	14.4	14.0
Employed part-time (% total employment)	na	11.5	9.5	10.3	11.8	11.6	11.4	11.7
Employed on fixed term contracts (%)*	na	10.5	na	12.0	16.5	17.3	17.1	17.7
Share of employment in agriculture (%)	14.9	11.3	8.2	8.2	8.1	7.9	7.8	7.1
Share of employment in industry (%)	36.1	31.8	30.9	29.5	26.4	27.1	27.4	28.2
Share of employment in services (%)	49.0	56.9	60.9	62.3	65.4	65.0	64.8	64.6
Activity rate (% working-age population)	73.9	79.9	78.2	76.5	73.5	73.2	73.1	73.4
Total unemployed (000)	57.0	152.4	81.8	168.7	409.2	363.6	315.2	286.0
Unemployment rate (%)	2.4	6.0	3.2	6.6	16.6	14.6	12.7	11.4
Youth unemployed (% population 15-24)	na	5.5	5.3	9.4	14.3	12.1	11.6	11.2
Long-term unemployment rate (% labour force)*	na	na	na	na	5.7	5.2	3.8	3.2
15-19 year olds in education/training (%)	na	na	na	na	na	86.7	90.2	na
20-24 year olds in education/training (%)	na	na	na	na	na	49.2	50.5	na
Men								
Total population (000)	2278	2374	2419	2435	2476	2496	2505	2513
Population of working-age (15-64) (000)	1540	1624	1643	1655	1669	1707	1707	1713
Total employment (000)	1191	1270	1299	1219	1049	1102	1142	1169
Annual change in employment (%)	-	0.6	0.5	-6.2	-4.9	2.6	3.6	2.4
Employment rate (% working-age population)	77.3	78.2	79.1	73.6	62.9	64.6	66.9	68.2
FTE employment rate (% working-age population)	na	77.1	78.0	72.6	62.0	63.9	67.1	68.2
Self-employed (% total employment)	na	16.7	17.7	18.1	19.6	19.9	19.6	19.1
Employed part-time (% total employment)	na	6.2	5.8	7.0	8.1	7.9	7.6	6.9
Employed on fixed term contracts (%)*	na	9.6	na	9.8	13.4	14.1	15.3	13.3
Share of employment in agriculture (%)	15.4	13.6	10.1	10.2	10.5	9.9	10.0	9.4
Share of employment in industry (%)	48.0	43.1	43.4	41.9	37.7	39.2	39.6	40.1
Share of employment in services (%)	36.6	43.3	46.5	47.9	51.8	51.0	50.4	50.6
Activity rate (% working-age population)	79.3	83.1	82.1	80.0	76.9	75.5	76.2	76.6
Total unemployed (000)	29.9	79.2	48.5	105.8	234.3	186.0	160.1	142.7
Unemployment rate (%)	2.4	6.1	3.6	8.0	18.1	14.3	12.3	10.8
Youth unemployed (% population 15-24)	na	5.5	5.9	10.9	16.0	13.3	12.2	11.3
Long-term unemployment rate (% labour force)*	na	na	na	na	6.6	5.8	3.9	3.6
15-19 year olds in education/training (%)	na	na	na	na	na	87.8	89.7	na
20-24 year olds in education/training (%)	na	na	na	na	na	46.5	47.0	na
Women								
Total population (000)	2433	2529	2567	2579	2612	2628	2635	2641
Population of working-age (15-64) (000)	1564	1641	1640	1649	1663	1677	1693	1701
Total employment (000)	1046	1186	1187	1139	990	1010	1028	1054
Annual change in employment (%)	-	1.3	0.0	-4.0	-4.6	0.0	1.8	2.5
Employment rate (% working-age population)	66.9	72.3	72.4	69.1	59.6	60.2	60.7	62.0
FTE employment rate (% working-age population)	na	63.8	64.0	61.0	52.6	53.4	53.9	54.7
Self-employed (% total employment)	na	12.3	10.2	9.9	10.2	9.8	8.7	8.4
Employed part-time (% total employment)	na	17.2	13.5	13.9	15.7	15.7	15.7	16.9
Employed on fixed term contracts (%)*	na	11.3	na	14.2	19.5	20.5	18.9	21.9
Share of employment in agriculture (%)	14.3	8.8	6.0	6.1	5.6	5.7	5.3	4.7
Share of employment in industry (%)	22.5	19.7	17.3	16.2	14.5	13.9	13.9	15.1
Share of employment in services (%)	63.2	71.5	76.7	77.7	79.9	80.3	80.8	80.2
Activity rate (% working-age population)	68.6	76.7	74.4	72.9	70.1	70.8	69.9	70.4
Total unemployed (000)	27.1	73.3	33.3	62.9	174.9	177.6	155.1	143.3
Unemployment rate (%)	2.5	6.0	2.7	5.2	14.9	14.9	13.1	12.0
Youth unemployed (% population 15-24)	na	5.5	4.7	7.8	12.6	10.8	11.1	11.1
Long-term unemployment rate (% labour force)*	na	na	na	na	4.8	4.6	3.6	2.8
15-19 year olds in education/training (%)	na	na	na	na	na	85.6	91.3	na
20-24 year olds in education/training (%)	na	na	na	na	na	52.1	53.9	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90.

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.

See notes in Sources at the back of the report.

*1994 data relate to 1995.

Key employment indicators in Sweden

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	8193	8350	8559	8617	8781	8841	8846	8851
Population of working-age (15-64) (000)	5163	5295	5415	5434	5502	5636	5647	5660
Total employment (000)	3996	4252	4486	4396	3928	3963	3922	3978
Annual change in employment (%)	-	0.6	1.1	-2.0	-3.7	-0.6	-1.0	1.4
Employment rate (% working-age population)	77.4	80.3	82.8	80.9	71.4	70.3	69.4	70.3
FTE employment rate (% working-age population)	na	71.4	73.7	71.9	63.5	62.3	61.8	62.8
Self-employed (% total employment)*	7.2	9.5	9.3	9.2	11.1	11.7	11.2	10.9
Employed part-time (% total employment)*	na	25.3	23.6	23.8	25.0	24.5	24.4	23.9
Employed on fixed term contracts (%)*	na	na	10.0	9.8	12.5	11.8	12.1	12.9
Share of employment in agriculture (%)*	6.4	na	3.7	3.6	3.3	3.3	3.2	3.1
Share of employment in industry (%)*	36.5	na	28.9	28.0	25.8	25.9	25.6	25.9
Share of employment in services (%)*	57.1	na	67.3	68.3	71.0	70.9	71.2	71.0
Activity rate (% working-age population)	78.8	82.7	84.3	83.5	78.9	77.9	77.2	76.7
Total unemployed (000)	71.6	127.9	79.9	143.0	411.8	425.6	437.1	365.1
Unemployment rate (%)	1.7	2.9	1.7	3.1	9.4	9.6	9.9	8.3
Youth unemployed (% population 15-24)	na	4.2	3.0	4.9	11.7	9.4	9.3	7.5
Long-term unemployment rate (% labour force)	na	0.3	0.1	0.1	1.9	1.8	3.4	3.1
15-19 year olds in education/training (%)	na	na	na	na	na	76.2	76.2	na
20-24 year olds in education/training (%)	na	na	na	na	na	27.7	30.7	na
Men								
Total population (000)	4075	4124	4228	4257	4339	4368	4371	4374
Population of working-age (15-64) (000)	2616	2684	2748	2759	2794	2864	2870	2875
Total employment (000)	2304	2239	2333	2278	2017	2058	2041	2105
Annual change in employment (%)	-	-0.3	0.8	-2.3	-4.0	-0.1	-0.8	3.1
Employment rate (% working-age population)	88.1	83.4	84.9	82.6	72.2	71.9	71.1	73.2
FTE employment rate (% working-age population)	na	80.5	81.9	79.7	69.7	68.8	68.2	70.0
Self-employed (% total employment)*	10.4	13.3	13.4	13.5	16.2	16.9	16.0	15.2
Employed part-time (% total employment)*	na	6.8	7.4	7.6	9.1	8.9	9.3	9.2
Employed on fixed term contracts (%)*	na	na	7.3	7.4	10.5	10.1	10.1	10.6
Share of employment in agriculture (%)*	8.2	na	5.5	5.3	4.8	4.7	4.7	4.5
Share of employment in industry (%)*	49.3	na	42.8	41.9	38.9	38.8	38.2	37.7
Share of employment in services (%)*	42.4	na	51.7	52.8	56.3	56.5	57.1	57.8
Activity rate (% working-age population)	89.4	86.0	86.4	85.6	81.1	80.1	79.4	80.2
Total unemployed (000)	34.6	70.1	42.1	82.6	247.9	235.8	238.2	199.8
Unemployment rate (%)	1.5	3.0	1.7	3.4	10.8	10.1	10.2	8.6
Youth unemployed (% population 15-24)	na	4.3	3.1	5.4	13.3	9.9	9.7	8.0
Long-term unemployment rate (% labour force)	na	0.3	0.1	0.1	1.3	2.2	3.6	3.5
15-19 year olds in education/training (%)	na	na	na	na	na	76.6	78.0	na
20-24 year olds in education/training (%)	na	na	na	na	na	26.7	26.1	na
Women								
Total population (000)	4118	4227	4331	4360	4442	4473	4475	4477
Population of working-age (15-64) (000)	2547	2611	2667	2675	2708	2773	2778	2785
Total employment (000)	1692	2013	2153	2118	1911	1905	1880	1873
Annual change in employment (%)	-	1.8	1.4	-1.6	-3.4	-1.0	-1.3	-0.4
Employment rate (% working-age population)	66.4	77.1	80.7	79.2	70.6	68.7	67.7	67.2
FTE employment rate (% working-age population)	na	62.3	65.2	63.9	57.0	55.7	55.2	55.3
Self-employed (% total employment)*	2.8	5.2	4.8	4.6	5.8	6.1	6.0	6.0
Employed part-time (% total employment)*	na	45.5	41.8	41.8	42.2	41.8	41.4	40.7
Employed on fixed term contracts (%)*	na	na	12.7	12.2	14.4	13.4	14.0	15.2
Share of employment in agriculture (%)*	4.0	na	1.8	1.9	1.6	1.7	1.7	1.5
Share of employment in industry (%)*	19.0	na	13.8	13.0	11.6	12.1	11.7	12.7
Share of employment in services (%)*	77.1	na	84.3	85.1	86.8	86.2	86.6	85.8
Activity rate (% working-age population)	67.9	79.3	82.1	81.4	76.6	75.5	74.9	73.2
Total unemployed (000)	36.9	57.8	37.8	60.4	163.9	189.8	198.9	165.3
Unemployment rate (%)	2.1	2.8	1.7	2.8	7.8	9.0	9.5	8.0
Youth unemployed (% population 15-24)	na	4.0	2.9	4.4	10.0	8.9	8.8	7.1
Long-term unemployment rate (% labour force)	na	0.3	0.1	0.1	0.7	1.4	3.1	2.7
15-19 year olds in education/training (%)	na	na	na	na	na	75.8	74.6	na
20-24 year olds in education/training (%)	na	na	na	na	na	28.7	35.4	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90.

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.

See notes in Sources at the back of the report.

* 1985 data relate to 1987.

Key employment indicators in the United Kingdom

Total	1975	1985	1990	1991	1994	1996	1997	1998
Total population (000)	56226	56685	57561	57808	58293	58704	58905	59128
Population of working-age (15-64) (000)	34767	36706	37018	37033	37286	37511	37572	37671
Total employment (000)	24667	24282	26783	26207	25657	26177	26612	26883
Annual change in employment (%)	-	-0.2	2.0	-2.2	-0.7	0.9	1.7	1.0
Employment rate (% working-age population)	71.0	66.2	72.4	70.8	68.8	69.8	70.8	71.4
FTE employment rate (% working-age population)	na	58.1	63.3	61.6	58.9	59.5	60.3	60.9
Self-employed (% total employment)	8.1	11.4	13.4	13.1	12.9	12.6	12.4	12.1
Employed part-time (% total employment)	na	21.2	21.7	22.2	23.8	24.6	24.9	24.9
Employed on fixed term contracts (%)	na	7.0	5.2	5.3	6.5	7.1	7.4	7.1
Share of employment in agriculture (%)	2.8	2.4	2.2	2.3	2.1	2.0	1.9	1.7
Share of employment in industry (%)	40.4	34.7	32.3	31.2	27.8	27.4	26.9	26.7
Share of employment in services (%)	56.8	63.0	65.5	66.5	70.1	70.6	71.2	71.6
Activity rate (% working-age population)	73.3	74.7	77.8	77.6	76.2	76.0	76.2	76.2
Total unemployed (000)	817.3	3141.3	2022.4	2528.4	2739.6	2339.9	2026.7	1831.9
Unemployment rate (%)	3.2	11.5	7.0	8.8	9.6	8.2	7.0	6.3
Youth unemployed (% population 15-24)	na	12.8	7.7	9.9	11.2	10.2	9.4	9.1
Long-term unemployment rate (% labour force)	na	5.5	2.5	2.6	4.4	3.3	2.7	2.1
15-19 year olds in education/training (%)	na	na	na	na	71.2	70.9	70.6	na
20-24 year olds in education/training (%)	na	na	na	na	23.6	23.8	24.3	na
Men								
Total population (000)	27361	27611	28118	28246	28533	28792	28923	29063
Population of working-age (15-64) (000)	17337	18333	18529	18536	18740	18886	18899	18956
Total employment (000)	15252	14172	15207	14753	14153	14423	14685	14879
Annual change in employment (%)	-	-0.7	1.4	-3.0	-1.4	0.5	1.8	1.3
Employment rate (% working-age population)	88.0	77.3	82.1	79.6	75.5	76.4	77.7	78.5
FTE employment rate (% working-age population)	na	78.4	82.5	79.9	74.9	75.4	76.3	77.0
Self-employed (% total employment)	10.6	14.7	18.0	17.7	17.6	17.1	16.9	16.1
Employed part-time (% total employment)	na	4.4	5.3	5.5	7.1	8.1	8.8	8.8
Employed on fixed term contracts (%)	na	5.7	3.7	3.9	5.5	6.0	6.5	6.0
Share of employment in agriculture (%)	3.6	3.1	3.0	3.2	2.9	2.6	2.5	2.4
Share of employment in industry (%)	49.8	45.5	43.7	42.5	38.8	38.5	38.0	37.7
Share of employment in services (%)	46.5	51.4	53.3	54.3	58.3	58.9	59.5	59.9
Activity rate (% working-age population)	91.5	87.6	88.6	88.3	85.2	84.4	84.4	84.4
Total unemployed (000)	605.0	1886.6	1206.4	1615.6	1804.5	1524.6	1263.8	1129.4
Unemployment rate (%)	3.8	11.8	7.4	9.9	11.2	9.5	7.9	7.0
Youth unemployed (% population 15-24)	na	14.8	9.0	12.3	13.8	12.5	11.2	10.7
Long-term unemployment rate (% labour force)	na	6.5	3.2	3.4	5.7	4.4	3.5	2.7
15-19 year olds in education/training (%)	na	na	na	na	72.6	71.9	70.5	na
20-24 year olds in education/training (%)	na	na	na	na	24.9	24.7	25.0	na
Women								
Total population (000)	28865	29074	29443	29562	29760	29912	29982	30065
Population of working-age (15-64) (000)	17430	18372	18489	18498	18547	18625	18673	18714
Total employment (000)	9415	10110	11576	11454	11504	11754	11927	12005
Annual change in employment (%)	-	0.7	2.7	-1.1	0.1	1.5	1.5	0.7
Employment rate (% working-age population)	54.0	55.0	62.6	61.9	62.0	63.1	63.9	64.1
FTE employment rate (% working-age population)	na	38.2	44.2	43.4	42.7	43.5	44.2	44.4
Self-employed (% total employment)	4.1	6.9	7.5	7.2	7.2	7.0	7.2	7.2
Employed part-time (% total employment)	na	44.8	43.2	43.7	44.4	44.8	44.9	44.8
Employed on fixed term contracts (%)	na	8.8	7.0	7.0	7.5	8.2	8.4	8.3
Share of employment in agriculture (%)	1.5	1.3	1.1	1.1	1.2	1.2	1.1	0.9
Share of employment in industry (%)	25.5	19.5	17.3	16.7	14.2	13.9	13.2	13.0
Share of employment in services (%)	73.1	79.2	81.5	82.2	84.6	85.0	85.7	86.1
Activity rate (% working-age population)	55.2	61.9	67.0	66.9	67.1	67.5	68.0	67.9
Total unemployed (000)	212.3	1254.7	816.0	912.8	935.1	815.3	762.9	702.5
Unemployment rate (%)	2.2	11.0	6.6	7.4	7.5	6.5	6.0	5.5
Youth unemployed (% population 15-24)	na	10.8	6.4	7.5	8.5	7.7	7.6	7.3
Long-term unemployment rate (% labour force)	na	4.0	1.5	1.6	2.5	1.8	1.7	1.3
15-19 year olds in education/training (%)	na	na	na	na	69.8	69.8	70.7	na
20-24 year olds in education/training (%)	na	na	na	na	22.2	22.8	23.6	na

Notes: The annual change in employment for 1985 relates to the average change 1975-85 and for 1990 to the average change 1985-90. Total employment is an average of quarterly Labour Force Survey data; working-age population and other employment details are from the Union LFS. See notes in Sources at the back of the report.

Macroeconomic indicators: output, employment, productivity and labour costs

Annual average % change

European Union	1975-85	1985-90	1990-98	1990-94	1994-98	1994-95	1995-96	1996-97	1997-98
GDP	2.3	3.2	1.8	1.3	2.4	2.3	1.8	2.6	2.9
Number employed	0.1	1.4	0.0	-0.7	0.7	0.7	0.4	0.6	1.2
Average hours worked	-	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1	-0.2	-0.3
GDP/number employed	2.1	1.8	1.8	2.0	1.7	1.6	1.4	2.0	1.7
GDP/total hours worked	-	2.0	2.0	2.1	1.9	1.8	1.5	2.3	1.9
Consumer prices	10.1	4.3	3.2	4.1	2.3	3.0	2.5	2.1	1.7
Average earnings	11.5	6.5	4.4	5.5	3.2	3.5	3.6	3.2	2.5
Average real earnings	1.3	2.1	1.1	1.4	0.8	0.5	1.1	1.1	0.8
Average real labour costs	1.4	1.6	1.0	1.4	0.8	0.5	1.2	1.3	0.6
Real unit labour costs	-1.2	-0.8	-0.9	-0.8	-1.0	-1.3	-0.5	-1.0	-1.2
Belgium									
GDP	1.9	3.0	1.7	1.0	2.4	2.3	1.3	3.0	2.9
Number employed	-0.2	0.6	0.8	0.8	0.7	1.2	-0.1	1.2	0.5
Average hours worked	-	-0.7	-0.3	-0.8	0.3	0.2	-0.5	0.2	1.2
GDP/number employed	2.1	2.4	0.9	0.2	1.7	1.1	1.3	1.7	2.4
GDP/total hours worked	-	3.1	1.2	1.0	1.4	0.9	1.9	1.6	1.2
Consumer prices	6.7	2.1	2.1	2.7	1.5	1.5	2.0	1.6	1.0
Average earnings	7.9	3.8	3.9	5.5	2.2	2.5	1.5	2.4	2.5
Average real earnings	1.2	1.6	1.7	2.8	0.7	1.0	-0.5	0.7	1.5
Average real labour costs	2.1	0.6	1.4	2.2	0.6	0.8	-0.1	0.9	0.9
Real unit labour costs	-0.2	-1.3	-0.2	0.6	-1.0	-0.8	-1.0	-1.4	-0.8
Denmark									
GDP	2.6	1.3	2.7	2.3	3.1	3.2	3.2	3.3	2.7
Number employed	1.1	0.6	0.5	-0.8	1.8	1.2	1.2	2.7	2.2
Average hours worked	-	-0.7	-0.0	0.4	-0.5	-1.1	-0.3	-0.6	-0.0
GDP/number employed	1.5	0.7	2.2	3.2	1.3	2.0	1.9	0.6	0.5
GDP/total hours worked	-	1.4	2.3	2.7	1.8	3.1	2.3	1.2	0.6
Consumer prices	9.2	3.9	2.0	1.9	2.1	2.1	2.1	2.2	1.9
Average earnings	8.9	5.1	3.5	3.5	3.6	3.3	3.0	3.8	4.3
Average real earnings	-0.2	1.1	1.5	1.5	1.5	1.2	0.8	1.5	2.4
Average real labour costs	0.7	0.8	1.5	1.5	1.6	1.2	1.0	1.8	2.1
Real unit labour costs	-1.1	-0.2	-0.5	-1.3	0.3	-0.2	-0.9	0.8	1.7
Germany									
GDP	2.2	3.4	2.0	2.2	1.9	1.2	1.3	2.2	2.8
Number employed	0.2	1.5	-0.6	-0.4	-0.7	-0.4	-1.3	-1.3	0.0
Average hours worked	-	-0.9	-0.4	-0.5	-0.3	-0.5	0.5	-0.5	-0.7
GDP/number employed	2.0	1.9	2.6	2.6	2.6	1.6	2.6	3.6	2.8
GDP/total hours worked	-	2.8	3.1	3.2	2.9	2.0	2.1	4.1	3.5
Consumer prices	4.0	1.4	2.7	4.0	1.5	1.8	1.5	1.8	0.9
Average earnings	5.1	3.5	4.2	6.1	2.4	3.9	2.5	1.9	1.5
Average real earnings	1.1	2.1	1.5	2.0	0.9	2.0	1.0	0.1	0.6
Average real labour costs	1.4	1.0	1.6	2.0	1.2	1.6	1.4	1.2	0.7
Real unit labour costs	-0.6	-0.8	-1.0	-0.6	-1.4	0.0	-1.1	-2.3	-2.2
Greece									
GDP	2.1	1.2	1.9	1.0	2.8	2.1	2.4	3.2	3.7
Number employed	1.1	0.7	0.8	0.4	1.2	0.9	1.2	-0.4	3.0
Average hours worked	-	-0.4	-0.0	-0.1	0.0	-0.4	0.1	-0.7	1.1
GDP/number employed	1.0	0.5	1.1	0.6	1.7	1.2	1.2	3.6	0.7
GDP/total hours worked	-	0.9	1.2	0.7	1.6	1.6	1.0	4.3	-0.4
Consumer prices	18.5	17.4	11.0	15.1	7.0	9.3	8.5	5.5	4.8
Average earnings	21.8	16.8	11.2	11.9	10.4	12.9	11.8	11.0	6.2
Average real earnings	2.8	-0.5	0.2	-2.8	3.2	3.3	3.0	5.2	1.4
Average real labour costs	3.3	0.3	-0.0	-2.7	2.7	3.5	3.0	3.8	0.7
Real unit labour costs	1.2	-0.8	-1.4	-3.2	0.5	1.6	2.5	0.2	-2.3
Spain									
GDP	1.7	4.5	2.1	1.0	3.1	2.7	2.4	3.5	3.8
Number employed	-1.5	3.4	0.6	-1.7	3.0	2.7	2.9	3.0	3.4
Average hours worked	-	0.0	-0.2	-0.2	-0.1	-0.3	-0.5	0.1	0.2
GDP/number employed	3.3	1.1	1.4	2.8	0.1	0.1	-0.5	0.5	0.3
GDP/total hours worked	-	1.0	1.6	3.0	0.2	0.3	0.0	0.5	0.1
Consumer prices	15.3	6.5	4.1	5.3	3.0	4.7	3.6	2.0	1.8
Average earnings	17.2	8.0	5.0	7.3	2.7	2.9	3.9	2.3	1.8
Average real earnings	1.7	1.4	0.8	2.0	-0.3	-1.7	0.3	0.3	-0.0
Average real labour costs	2.1	0.5	0.7	1.7	-0.3	-1.8	0.7	0.3	-0.5
Real unit labour costs	-1.1	-0.7	-0.7	-0.4	-1.1	-2.7	-0.2	-0.5	-0.9

Macroeconomic indicators: output, employment, productivity and labour costs

Annual average % change

	1975-85	1985-90	1990-98	1990-94	1994-98	1994-95	1995-96	1996-97	1997-98
France									
GDP	2.3	3.2	1.6	0.8	2.3	2.1	1.6	2.3	3.2
Number employed	0.1	0.8	0.1	-0.5	0.7	1.0	0.2	0.2	1.3
Average hours worked	-	-0.3	-0.1	0.2	-0.3	-0.6	-0.3	-0.2	-0.2
GDP/number employed	2.2	2.4	1.5	1.3	1.6	1.1	1.3	2.1	1.9
GDP/total hours worked	-	2.7	1.5	1.1	1.9	1.7	1.6	2.2	2.1
Consumer prices	10.0	3.1	1.9	2.3	1.4	1.7	2.0	1.2	0.7
Average earnings	11.9	4.3	2.9	3.4	2.4	2.5	2.9	2.1	2.0
Average real earnings	1.7	1.1	1.0	1.0	1.0	0.8	0.8	0.8	1.3
Average real labour costs	1.9	0.8	1.1	1.0	1.2	1.0	1.7	1.0	1.0
Real unit labour costs	-0.3	-1.6	-0.4	-0.3	-0.4	-0.1	0.4	-1.0	-0.7
Ireland									
GDP	3.5	4.6	7.7	4.8	10.6	11.8	8.3	10.6	11.9
Number employed	0.1	1.2	3.3	1.5	5.0	4.6	3.6	5.0	6.9
Average hours worked	-	0.5	-0.5	-0.6	-0.3	-0.2	-0.2	-0.9	0.0
GDP/number employed	3.4	3.3	4.3	3.2	5.4	6.9	4.4	5.4	4.6
GDP/total hours worked	-	2.8	4.8	3.9	5.7	7.1	4.6	6.4	4.6
Consumer prices	13.2	3.3	2.2	2.5	2.0	2.6	1.7	1.5	2.2
Average earnings	15.5	5.6	4.8	5.2	4.5	1.7	3.2	6.4	6.8
Average real earnings	2.0	2.2	2.5	2.6	2.5	-0.9	1.5	4.8	4.5
Average real labour costs	2.4	2.3	2.6	2.7	2.5	1.2	1.6	4.1	3.3
Real unit labour costs	-1.1	-1.1	-2.2	-0.9	-3.5	-4.9	-2.5	-2.9	-3.6
Italy									
GDP	3.0	3.0	1.2	0.7	1.6	2.9	0.7	1.5	1.4
Number employed	0.5	0.5	-0.3	-0.9	0.2	-0.4	0.5	0.0	0.5
Average hours worked	-	-0.1	0.2	0.5	-0.1	-0.3	0.3	-0.5	-0.0
GDP/number employed	2.5	2.4	1.5	1.5	1.5	3.4	0.2	1.5	0.9
GDP/total hours worked	-	2.5	1.3	1.1	1.6	3.6	-0.1	2.0	0.9
Consumer prices	15.2	5.7	4.1	5.0	3.3	5.2	3.9	2.1	1.9
Average earnings	17.5	8.8	4.4	5.3	3.5	4.5	6.1	4.7	-1.3
Average real earnings	2.1	2.9	0.2	0.3	0.2	-0.6	2.2	2.5	-3.2
Average real labour costs	1.4	1.7	-0.0	0.2	-0.3	-0.5	1.1	2.0	-3.7
Real unit labour costs	-0.6	-0.6	-1.8	-1.6	-2.0	-3.6	0.5	0.3	-5.1
Luxembourg									
GDP	2.4	6.4	5.0	5.9	4.0	3.8	3.0	3.7	5.7
Number employed	0.2	3.2	3.0	2.7	3.2	2.6	2.5	3.4	4.3
Average hours worked	-	0.0	-0.4	-0.2	-0.6	0.2	-0.8	-0.6	-1.0
GDP/number employed	2.2	3.2	1.9	3.1	0.8	1.1	0.5	0.3	1.3
GDP/total hours worked	-	3.1	2.3	3.3	1.4	0.9	1.3	0.9	2.3
Consumer prices	6.7	1.7	2.2	3.0	1.4	1.9	1.4	1.4	0.9
Average earnings	7.6	5.3	3.7	5.2	2.3	2.2	1.7	3.8	1.4
Average real earnings	0.9	3.5	1.5	2.1	0.9	0.3	0.4	2.4	0.5
Average real labour costs	1.1	3.0	1.6	2.2	1.0	1.5	1.7	1.4	-0.7
Real unit labour costs	-1.1	-0.2	-0.4	-0.9	-0.0	0.2	1.6	-0.2	-1.6
Netherlands									
GDP	1.9	3.1	2.6	2.1	3.2	2.3	3.1	3.6	3.7
Number employed	0.7	2.4	1.7	1.1	2.3	1.7	2.1	2.8	2.7
Average hours worked	-	-1.5	-0.3	-0.3	-0.4	-0.5	-0.4	0.0	-0.7
GDP/number employed	1.2	0.7	0.9	1.0	0.8	0.6	1.0	0.8	0.9
GDP/total hours worked	-	2.3	1.2	1.3	1.2	1.1	1.4	0.8	1.6
Consumer prices	5.1	0.8	2.6	3.1	2.1	1.9	2.1	2.3	2.0
Average earnings	5.1	1.7	3.0	3.8	2.2	1.9	1.9	2.1	3.1
Average real earnings	-0.0	0.8	0.4	0.7	0.2	-0.1	-0.2	-0.1	1.1
Average real labour costs	0.5	0.8	0.9	1.5	0.4	0.0	0.4	-0.1	1.2
Real unit labour costs	-1.5	-0.3	-0.4	-0.1	-0.7	-0.8	-0.8	-1.1	-0.2
Austria									
GDP	2.4	3.2	2.1	1.9	2.4	1.7	2.0	2.5	3.3
Number employed	0.9	1.1	0.5	1.1	-0.0	0.5	-1.3	0.2	0.5
Average hours worked	-	-0.3	-0.3	-0.4	-0.1	0.0	-0.5	0.4	-0.2
GDP/number employed	1.4	2.1	1.6	0.8	2.4	1.2	3.3	2.3	2.8
GDP/total hours worked	-	2.5	1.9	1.2	2.5	1.2	3.8	1.9	3.1
Consumer prices	5.1	2.2	2.5	3.5	1.6	2.2	1.9	1.3	1.0
Average earnings	7.4	4.5	3.4	5.0	1.9	2.9	1.7	0.7	2.3
Average real earnings	2.2	2.3	0.9	1.5	0.3	0.7	-0.2	-0.5	1.3
Average real labour costs	2.4	2.0	0.9	1.6	0.2	0.8	-0.4	-0.8	1.2
Real unit labour costs	0.1	-0.4	-0.9	0.0	-1.9	-0.9	-2.4	-2.9	-1.4

Macroeconomic indicators: output, employment, productivity and labour costs**Annual average % change**

	1975-85	1985-90	1990-98	1990-94	1994-98	1994-95	1995-96	1996-97	1997-98
Portugal									
GDP	3.0	5.5	2.4	1.5	3.3	2.9	3.2	3.1	4.0
Number employed	0.8	1.6	0.4	-0.3	1.1	-0.7	0.7	1.9	2.5
Average hours worked	-	0.4	-0.9	-0.9	-0.9	0.6	-0.1	-2.2	-2.0
GDP/number employed	2.2	3.8	2.0	1.7	2.2	3.6	2.5	1.2	1.4
GDP/total hours worked	-	3.4	2.9	2.7	3.1	3.0	2.6	3.5	3.5
Consumer prices	22.7	11.3	5.4	7.9	3.0	4.1	3.1	1.8	2.8
Average earnings	22.0	16.6	8.6	11.4	5.9	7.2	6.3	5.5	4.7
Average real earnings	-0.6	4.8	3.0	3.2	2.9	2.9	3.1	3.6	1.8
Average real labour costs	0.5	2.9	2.3	2.4	2.2	2.0	3.4	2.6	1.0
Real unit labour costs	-2.7	-1.4	-0.2	0.4	-0.7	-1.6	0.8	-1.4	-0.6
Finland									
GDP	2.8	3.4	1.5	-1.6	4.7	4.0	4.1	5.6	4.9
Number employed	0.9	0.2	-1.4	-4.8	2.2	2.2	1.4	2.7	2.4
Average hours worked	-	-0.3	0.3	-0.1	0.7	0.0	1.2	2.1	-0.6
GDP/number employed	1.9	3.1	2.9	3.4	2.4	1.8	2.7	2.8	2.5
GDP/total hours worked	-	3.4	2.6	3.5	1.8	1.8	1.5	0.6	3.1
Consumer prices	9.6	5.0	1.8	2.6	1.0	1.0	0.6	1.2	1.4
Average earnings	11.0	8.8	3.4	3.2	3.6	4.2	2.9	2.1	5.0
Average real earnings	1.3	3.7	1.5	0.5	2.5	3.2	2.3	0.9	3.6
Average real labour costs	1.6	3.0	1.6	1.4	1.8	1.7	2.1	-0.1	3.5
Real unit labour costs	-0.8	-0.2	-1.6	-2.0	-1.1	-1.6	-0.5	-2.5	0.3
Sweden									
GDP	1.5	2.3	1.0	-0.4	2.5	3.9	1.3	1.8	2.9
Number employed	0.6	1.1	-1.5	-3.3	0.3	1.5	-0.6	-1.0	1.4
Average hours worked	-	0.0	0.1	0.0	0.1	0.0	-0.3	0.9	-0.0
GDP/number employed	0.9	1.2	2.6	3.0	2.1	2.4	1.8	2.8	1.4
GDP/total hours worked	-	1.2	2.5	3.0	2.0	2.4	2.2	1.9	1.4
Consumer prices	9.7	6.2	2.7	4.6	0.8	2.5	0.5	0.5	-0.2
Average earnings	9.9	9.2	4.8	5.0	4.6	2.9	6.5	4.0	5.1
Average real earnings	0.1	2.8	2.0	0.4	3.7	0.3	6.0	3.4	5.3
Average real labour costs	0.5	2.0	2.1	1.5	2.7	-0.8	5.4	2.7	3.6
Real unit labour costs	-0.5	0.8	-0.3	-1.2	0.7	-3.1	3.5	-0.2	2.5
UK									
GDP	1.9	3.3	2.0	1.3	2.8	2.8	2.6	3.5	2.3
Number employed	-0.2	2.0	0.0	-1.1	1.2	1.1	0.9	1.7	1.0
Average hours worked	-	0.3	-0.2	-0.3	-0.1	0.5	-0.6	0.1	-0.3
GDP/number employed	2.1	1.3	2.0	2.4	1.6	1.7	1.6	1.8	1.3
GDP/total hours worked	-	1.0	2.2	2.7	1.7	1.2	2.2	1.7	1.6
Consumer prices	10.7	5.9	3.3	3.4	3.1	3.4	2.4	3.2	3.4
Average earnings	11.8	8.4	4.7	5.5	4.0	2.6	3.4	4.6	5.2
Average real earnings	0.9	2.4	1.5	2.1	0.8	-0.7	1.0	1.4	1.7
Average real labour costs	0.8	2.7	1.4	1.5	1.2	0.2	0.4	1.9	2.4
Real unit labour costs	-1.2	0.9	-0.5	-0.8	-0.1	-1.1	-1.2	0.3	1.5

Key employment indicators in the CEE countries

Bulgaria	1994	1995	1996	1997	1998
Total					
Population (000s)	8427	8385	8341	8285	-
Working-age population, 15-64 (000s)	5626	5638	5631	5594	5585
Employment (000s)	2981	3038	3137	3090	-
Employment rate (% population 15-64)	53.0	53.9	55.7	55.2	-
Share of employment in agriculture (%)	9.6	10.2	10.1	11.6	-
Share of employment in industry (%)	37.4	37.2	36.9	36.6	-
Share of employment in services (%)	52.9	52.6	53.0	51.7	-
Unemployment rate (%)	20.5	14.7	13.7	15.0	16.0
Youth unemployment (% unemployed)	29.0	30.2	26.5	26.1	25.7
Long-term unemployment (% unemployed)	59.1	64.6	58.3	56.3	-
Men					
Working-age population, 15-64 (000s)	-	2957	-	2934	-
Employment (000s)	1604	1604	1658	1643	-
Employment rate (% population 15-64)	-	54.3	-	56.0	-
Unemployment rate (%)	19.7	14.4	13.5	14.5	-
Women					
Working-age population, 15-64 (000s)	-	2681	-	2660	-
Employment (000s)	1377	1434	1479	1448	-
Employment rate (% population 15-64)	-	53.5	-	54.4	-
Unemployment rate (%)	20.2	14.9	13.6	15.0	-
Czech Republic					
Total					
Population (000s)	10333	10321	10309	10299	-
Working-age population, 15-64 (000s)	6981	7051	7077	7096	7116
Employment (000s)	5020	4891	4916	4884	4818
Employment rate (% population 15-64)	71.9	69.4	69.5	68.8	67.7
Share of employment in agriculture (%)	6.7	6.6	5.9	5.7	-
Share of employment in industry (%)	42.4	42.1	41.7	41.3	-
Share of employment in services (%)	50.9	51.3	52.4	53.1	-
Unemployment rate (%)	3.8	4.1	3.9	4.8	6.5
Youth unemployment (% unemployed)	-	-	30.2	28.6	30.4
Long-term unemployment (% unemployed)	25.4	33.9	28.7	31.5	-
Men					
Working-age population, 15-64 (000s)	3483	3521	3539	3550	-
Employment (000s)	2697	2727	2757	2738	-
Employment rate (% population 15-64)	77.4	77.5	77.9	77.1	-
Unemployment rate (%)	4.1	3.5	3.7	4.5	-
Women					
Working-age population, 15-64 (000s)	3498	3529	3538	3546	-
Employment (000s)	2323	2164	2159	2146	-
Employment rate (% population 15-64)	66.4	61.3	61.0	60.5	-
Unemployment rate (%)	4.2	4.0	4.2	5.2	-
Hungary					
Total					
Population (000s)	10246	10212	10174	10135	-
Working-age population, 15-64 (000s)	6834	6852	6838	6837	6837
Employment (000s)	3752	3679	3648	3646	3698
Employment rate (% population 15-64)	54.9	53.7	53.3	53.3	54.1
Share of employment in agriculture (%)	8.7	7.9	8.2	7.8	-
Share of employment in industry (%)	33.1	32.7	32.7	33.2	-
Share of employment in services (%)	58.3	59.4	59.1	58.9	-
Unemployment rate (%)	10.7	10.2	9.9	8.7	7.8
Youth unemployment (% unemployed)	-	-	26.6	27.5	28.0
Long-term unemployment (% unemployed)	46.6	56.0	60.0	55.3	-
Men					
Working-age population, 15-64 (000s)	3317	3333	3319	3318	-
Employment (000s)	2029	2025	2021	2035	-
Employment rate (% population 15-64)	61.2	60.8	60.9	61.3	-
Unemployment rate (%)	10.5	9.7	9.4	8.2	-
Women					
Working-age population, 15-64 (000s)	3517	3519	3519	3519	-
Employment (000s)	1723	1654	1627	1611	-
Employment rate (% population 15-64)	49.0	47.0	46.2	45.8	-
Unemployment rate (%)	11.0	10.8	10.4	9.4	-

Key employment indicators in the CEE countries

Poland	1994	1995	1996	1997	1998
Total					
Population (000s)	38581	38609	38639	38660	-
Working-age population, 15-64 (000s)	24602	24748	24981	25190	25401
Employment (000s)	14661	14793	14968	15180	15361
Employment rate (% population 15-64)	59.6	59.8	59.9	60.3	60.5
Share of employment in agriculture (%)	23.0	22.0	21.3	19.9	-
Share of employment in industry (%)	31.9	32.3	32.1	32.2	-
Share of employment in services (%)	45.1	45.7	46.6	48.0	-
Unemployment rate (%)	16.5	15.2	14.3	11.5	10.6
Youth unemployment (% unemployed)	-	-	28.4	27.5	26.7
Long-term unemployment (% unemployed)	43.8	43.1	42.0	34.1	-
Men					
Working-age population, 15-64 (000s)	12097	12169	12301	12407	-
Employment (000s)	8016	8084	8196	8417	-
Employment rate (% population 15-64)	66.3	66.4	66.6	67.8	-
Unemployment rate (%)	14.1	12.8	11.9	10.7	-
Women					
Working-age population, 15-64 (000s)	12505	12579	12680	12783	-
Employment (000s)	6645	6709	6772	6763	-
Employment rate (% population 15-64)	53.1	53.3	53.4	52.9	-
Unemployment rate (%)	14.9	14.0	12.8	12.0	-
Romania	1994	1995	1996	1997	1998
Total					
Population (000s)	22712	22656	22582	22526	-
Working-age population, 15-64 (000s)	15271	15249	15201	15154	15106
Employment (000s)	10914	11152	10936	11050	10845
Employment rate (% population 15-64)	71.5	73.1	71.9	72.9	71.8
Share of employment in agriculture (%)	39.0	40.3	38.0	39.0	-
Share of employment in industry (%)	32.9	31.0	31.5	30.5	-
Share of employment in services (%)	28.1	28.7	30.5	30.5	-
Unemployment rate (%)	8.2	8.0	6.7	6.0	6.3
Youth unemployment (% unemployed)	-	-	48.4	46.5	43.0
Long-term unemployment (% unemployed)	49.1	51.0	55.7	51.8	-
Men					
Working-age population, 15-64 (000s)	7597	7666	-	7457	-
Employment (000s)	5872	6026	-	5882	-
Employment rate (% population 15-64)	77.3	78.6	-	78.9	-
Unemployment rate (%)	8.1	7.7	-	5.9	-
Women					
Working-age population, 15-64 (000s)	7674	7583	-	7696	-
Employment (000s)	5042	5126	-	5168	-
Employment rate (% population 15-64)	65.7	67.6	-	67.2	-
Unemployment rate (%)	8.3	8.3	-	6.1	-
Slovakia					
Total					
Population (000s)	5356	5368	5379	5388	-
Working-age population, 15-64 (000s)	3552	3585	3617	3649	3681
Employment (000s)	2103	2147	2218	2194	2167
Employment rate (% population 15-64)	59.2	59.9	61.3	60.1	58.9
Share of employment in agriculture (%)	10.2	9.2	8.9	8.6	-
Share of employment in industry (%)	39.7	38.9	39.5	39.2	-
Share of employment in services (%)	50.1	51.9	51.6	52.2	-
Unemployment rate (%)	13.7	13.1	11.1	11.6	11.9
Youth unemployment (% unemployed)	-	-	31.3	31.9	33.8
Long-term unemployment (% unemployed)	48.0	60.6	59.6	57.6	-
Men					
Working-age population, 15-64 (000s)	1757	1775	1792	1809	-
Employment (000s)	1171	1193	1231	1207	-
Employment rate (% population 15-64)	66.6	67.2	68.7	66.7	-
Unemployment rate (%)	13.1	12.4	10.6	11.0	-
Women					
Working-age population, 15-64 (000s)	1795	1810	1825	1840	-
Employment (000s)	932	954	987	987	-
Employment rate (% population 15-64)	51.9	52.7	54.1	53.6	-
Unemployment rate (%)	14.4	14.1	11.8	12.2	-

Key employment indicators in the CEE countries

Slovenia	1994	1995	1996	1997	1998
Total					
Population (000s)	1989	1990	1987	1985	-
Working-age population, 15-64 (000s)	1380	1376	1392	1388	1384
Employment (000s)	851	882	878	906	901
Employment rate (% population 15-64)	61.7	64.1	63.1	65.3	65.1
Share of employment in agriculture (%)	9.9	9.1	8.8	10.2	-
Share of employment in industry (%)	43.1	43.9	42.9	41.6	-
Share of employment in services (%)	47.1	46.9	48.3	48.2	-
Unemployment rate (%)	9.0	7.4	7.3	7.1	7.7
Youth unemployment (% unemployed)	-	-	-	-	-
Long-term unemployment (% unemployed)	59.0	58.3	53.8	54.9	-
Men					
Working-age population, 15-64 (000s)	689	687	694	701	-
Employment (000s)	454	473	468	486	-
Employment rate (% population 15-64)	65.9	68.9	67.4	69.4	-
Unemployment rate (%)	9.0	7.1	7.2	6.9	-
Women					
Working-age population, 15-64 (000s)	691	689	698	687	-
Employment (000s)	397	409	410	420	-
Employment rate (% population 15-64)	57.5	59.4	58.7	61.1	-
Unemployment rate (%)	9.1	7.6	7.4	7.3	-
Estonia					
Total					
Population (000s)	1492	1476	1462	1454	-
Working-age population, 15-64 (000s)	961	953	944	938	931
Employment (000s)	693	656	646	648	643
Employment rate (% population 15-64)	72.1	68.8	68.4	69.1	69.1
Share of employment in agriculture (%)	14.4	10.6	10.0	10.0	-
Share of employment in industry (%)	32.5	34.2	33.7	33.5	-
Share of employment in services (%)	53.1	55.3	56.3	56.5	-
Unemployment rate (%)	7.6	9.7	10.0	9.7	9.6
Youth unemployment (% unemployed)	-	-	23.2	19.9	-
Long-term unemployment (% unemployed)	45.7	36.2	63.4	45.8	-
Men					
Working-age population, 15-64 (000s)	460	456	451	448	-
Employment (000s)	367	342	335	316	-
Employment rate (% population 15-64)	79.8	75.2	74.3	70.7	-
Unemployment rate (%)	7.6	9.7	10.1	10.3	-
Women					
Working-age population, 15-64 (000s)	501	497	493	490	-
Employment (000s)	326	314	311	332	-
Employment rate (% population 15-64)	65.1	63.0	63.0	67.7	-
Unemployment rate (%)	7.5	9.8	9.9	9.1	-
Latvia	1994	1995	1996	1997	1998
Total					
Population (000s)	2530	2502	2480	2458	-
Working-age population, 15-64 (000s)	1867	1840	1822	1810	1798
Employment (000s)	1008	973	966	1015	1007
Employment rate (% population 15-64)	54.0	52.9	53.0	56.1	56.0
Share of employment in agriculture (%)	-	17.5	17.9	20.6	-
Share of employment in industry (%)	-	28.2	26.7	26.8	-
Share of employment in services (%)	-	54.4	55.4	52.6	-
Unemployment rate (%)	-	18.9	18.3	14.4	13.8
Youth unemployment (% unemployed)	-	-	21.9	22.1	-
Long-term unemployment (% unemployed)	-	62.1	62.9	-	-
Men					
Working-age population, 15-64 (000s)	989	973	963	956	-
Employment (000s)	534	515	510	536	-
Employment rate (% population 15-64)	54.0	52.9	53.0	56.1	-
Unemployment rate (%)	-	18.6	18.3	14.3	-
Women					
Working-age population, 15-64 (000s)	878	867	859	853	-
Employment (000s)	474	458	455	479	-
Employment rate (% population 15-64)	54.0	52.9	53.0	56.1	-
Unemployment rate (%)	-	19.2	18.4	14.6	-

Key employment indicators in the CEE countries

Lithuania	1994	1995	1996	1997	1998
Total					
Population (000s)	3718	3712	3707	3705	-
Working-age population, 15-64 (000s)	2466	2462	2460	2460	2461
Employment (000s)	1656	1632	1620	1564	1588
Employment rate (% population 15-64)	67.1	66.3	65.9	63.6	64.5
Share of employment in agriculture (%)	22.9	21.0	21.0	20.5	-
Share of employment in industry (%)	21.0	20.9	20.7	21.5	-
Share of employment in services (%)	56.1	58.1	58.3	58.0	-
Unemployment rate (%)	17.4	17.1	16.4	14.1	13.5
Youth unemployment (% unemployed)	-	-	-	26.0	21.8
Long-term unemployment (% unemployed)	-	-	-	25.2	-
Men					
Working-age population, 15-64 (000s)	-	-	-	-	-
Employment (000s)	-	864	847	805	-
Employment rate (% population 15-64)	-	-	-	-	-
Unemployment rate (%)	-	-	-	-	-
Women					
Working-age population, 15-64 (000s)	-	-	-	-	-
Employment (000s)	-	768	773	758	-
Employment rate (% population 15-64)	-	-	-	-	-
Unemployment rate (%)	-	-	-	-	-

Source: The data in these tables come mainly from Eurostat and are derived principally from the labour force surveys in each of the countries, using definitions and a system of classification which are similar to those used for the Union LFS. The data should therefore be comparable in most cases to those included above for EU Member States. Data on the same basis for 1998 are not yet available from Eurostat for a number of key indicators. The intention is to extend the indicators included in these tables as data become available so that they have the same coverage as for the Union.

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 Union 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.

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.

The source of the total number employed is the 'benchmark' employment series, which has been compiled by Eurostat to include the series which statisticians in each of the Member States regard as the most satisfactory national indicator of employment. The footnotes to the Tables indicate the source used in each case. The benchmark series for years before 1985 has been constructed, where possible from the same source as for more recent years, or where the data are not available from the nearest comparable source.

The data used in the analysis of Part I, Sections 1 and 2 are taken mainly from the Community LFS, constrained where appropriate to equal the benchmark employment series, as well as from the Eurostat comparable unemployment statistics.

Data used in the analysis of Central and Eastern European countries in Part I, Section 3 and in the Tables on these countries were supplied by Eurostat and, where possible, come from the labour force surveys of the countries concerned as well as from national statistical offices. Data for GDP growth in 1998 come in a number of cases from national statistical offices (see Box at the beginning of the section).

Data for the analysis of regional disparities in employment in Part I, Section 4 come mainly from the Union LFS, supplemented by data from the regional accounts. A more detailed account of the data is given in the Box at the beginning of the section.

Data for Part II, Section 1 come mainly from the Union LFS, the benchmark employment series and the Current Population Survey for the US. Again a more detailed account is given in the Box at the beginning of the section.

Data for Part II, Section 2 come mainly from the LFS, the benchmark employment series and the Eurostat, Structure of Earnings Survey for 1995 (see below). As for the previous two sections, more details of the data used are contained in the Box at the beginning of the section.

Data for Part II, Section 3 come mainly from the LFS and Eurostat demographic and labour force projections.

Full-time equivalent employment

Full-time equivalent employment (FTE) is calculated as the total hours usually worked by those employed, including in second jobs, divided by the average hours worked by those employed full-time. The latter includes both men and women even in the calculation of FTE figures for men and women separately, in order to ensure that the figures sum to the total and to avoid a shift in a job between the two causing a change in FTE employment. These figures are related to working-age population to calculate FTE employment rates.

Structure of Earnings Survey

The Structure of Earnings Survey (SES), conducted by Eurostat for 1995 (1994 for France) contains details of gross earnings by gender and age group for ISCO occupation groups and NACE sectors. It excludes agriculture, non-market services and personal

services as well as those employed in establishments with under 10 employees. In addition, the data for Greece are restricted to industry and for Germany exclude all services, except the distributive trades and financial services.

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 in most cases 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.

Ireland

LFS data for 1998 were not available for Ireland at the time of completing this Report (July 1999). To avoid having to exclude Ireland from the analysis completely, estimates for 1998 were produced by applying data from the 1997 LFS to the 1998 benchmark figure for total employment. This assumes, of course, that there was no change in the division of employment between men and women, full-time and part-time, sectors of activity and so on, but it enables the change in these up to 1997 to be incorporated in the analysis.

Portugal

The LFS data for 1998 for Portugal are not comparable with those for earlier years because of a change in the method of sampling households (to include more rural ones) and of weighting the results (to allow explicitly for the gender and age composition of the population). While this affects all the 1998 data, the effect is especially pronounced on the sectoral division of employment (more employed in agriculture and industry relative to services), the proportion employed part-time and the importance of temporary jobs (both of which are increased). In order not to distort the analysis of changes over time, in these particular cases, LFS data for 1997 have been applied to the 1998 benchmark employment figure to produce an estimate for 1998 on the former basis. In the tables at the back of the Report for Portugal and the EU, however, the actual figures derived from the 1998 LFS are shown.

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.

The source of data for each graph is shown below.

Sources of data in the Tables of employment indicators

Total employment comes from the Eurostat benchmark series as described above. The precise source in each Member State is given in the notes to each of the country tables. Working-age population and other employment details are from the Community Labour Force Survey (LFS). 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 (see above). Total unemployed and youth unemployed are harmonised Eurostat figures; the latter is applied to LFS data on population aged 15 to 24. The long-term unemployment rate is calculated by applying the proportion of unemployed out of work for a year or more to the comparable unemployment rates. Education/training data include employed and unemployed receiving education/training but exclude those receiving only workplace training.

Sources of data in the Tables of macroeconomic indicators

GDP growth is from national accounts statistics, as given in the DGII, AMECO database, March 1999; 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; average earnings relate to average compensation per employee as derived from national accounts statistics; 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 of employees to the self-employed — the employment figures in this case are from the national accounts in order to be consistent with the series for earnings).

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

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Sources of graphs and maps

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II	Eurostat benchmark employment series, LFS and US and Japan labour force statistics
III	Eurostat LFS adjusted to be consistent with benchmark employment series
IV	Eurostat comparable unemployment rates
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