# Employment in Europe 1996 Analysis of key issues

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# Employment & social affairs



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# **Employment in Europe 1996**

# Analysis of key issues



Employment and labour market

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

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# Employment in Europe 1996 — Analysis of key issues

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# **Employment-intensity of growth**

There is growing policy emphasis across the Union on the need to increase employment. This has led to a concern not only to achieve and sustain higher rates of economic growth but also to ensure that growth is translated into jobs. As noted in the Commission White Paper, *Growth, competitiveness, employment*, since 1975, 'the Community has failed to match the substantial increase in generated wealth with parallel improvements in job opportunities' (p.16). Moreover, Member States which have achieved similar rates of growth have often experienced significantly different rates of employment creation and unemployment. This indicates that growth in itself is not sufficient and needs to be accompanied by action to create jobs.

The form of this action, however, and the relative weight given to measures to stimulate growth, on the one hand, and to increase the job content of growth, on the other, will tend to vary between countries according to their economic, social and institutional characteristics. As the White Paper emphasises, 'it is not necessary, nor would it be wise, to seek to lay down in advance what precise combination of growth and of greater employment content of growth should be achieved' (pp.58–59). At the same time, it also recognises that the scope for progress in one direction rather than the other is likely to differ significantly according to circumstances.

In particular, raising the employment content of growth is tantamount to lowering the growth of output per person employed, which unless it is accompanied by a reduction in average working time (more people supplying a given level of labour input), implies reducing the growth of labour productivity. This, in turn, has implications both for the costs of production — and, therefore, for cost competitiveness — insofar as it is not offset by increases in the productivity of other factors of production, such as capital in particular, and for real wages, the growth of which is effectively constrained by the increase in productivity.

Accordingly, as again recognised in the White Paper, there are likely to be important trade-offs between increasing the job content — or employment-intensity — of growth and raising the rate of growth itself. A lower rate of productivity increase is liable to reduce the rate of growth of output which can be achieved by pushing up prices and, therefore, depressing the growth of demand. On the other hand, while trying to maximise the rate of output growth by focusing policy on raising productivity could reduce the rate of job creation.

Nevertheless, the two are not necessarily in conflict. A higher rate of output growth and the additional real income

associated with this may make it easier to increase employment-intensity since people are more likely to accept sacrificing some of the growth in their real income for more jobs. Similarly, encouraging the development of labour-intensive activities, such as various personal and local services, leisure or cultural pursuits or improving the environment, may itself open up new growth opportunities. Indeed, as argued in the White Paper:

there is no contradiction between calls for increased productivity growth in all sectors open to international competition and at the same time calling for measures which increase the weight of sectors where productivity increases are low. In fact, the process whereby the increased productivity emanating from the highproductivity sectors feeds through to all sectors of the economy is at the heart of the development model. Productivity must increase to guarantee the international competitiveness of a country and to increase the amount of material wealth distributable among the whole community. At the same time, as the wealth of a country increases, so can the relative importance of certain sectors, with usually a high labour content, which help to distribute the wealth so created and at the same time improve the conditions for additional increases in this wealth. (p.57)

In practice, for analytical purposes, the distinction made between high and low productivity growth sectors can, to a large extent, be interpreted as distinguishing between manufacturing, which tends to be open for the most part to international competition, and services, where the possibility of productivity gains are usually more limited and competition is often more local than international (though this is not to deny that many and increasing parts of the service sector are open to international competition). This is very much the approach followed here.

# **Outline of analysis**

The concern here is largely an empirical one of examining growth and employment in the European Union and elsewhere over the long-term and the changes which have occurred, to identify differences and similarities in the relationship between the two in different countries during particular periods of time and, therefore, in the development path and implicit employment policies followed and to try to assess the relative success or failure of one approach rather than another in achieving job creation objectives. The focus is on differences between sectors, in particular, between manufacturing and services — which differ, among other things, in their degree of openness to international competition — as well as on the relationship between output and employment, on the one hand, and between productivity and wage developments, on the other.

More specifically, the first part of the analysis examines developments in the European Union, the US and Japan in terms of output growth, employment, labour productivity and wages. The second part considers differences in these developments within Europe and the extent to which the approach to employment creation and the results achieved have varied between Member States. The purpose of the exercise is essentially to identify the main features of the relationships concerned at a very aggregate level, though it distinguishes between developments in broad sectors, especially between those in manufacturing and services (or non-manufacturing for the years before 1975), which is arguably essential to form any proper understanding of what has been happening. It does not seek to explain, except very superficially, why these features arise or why differences between countries exist. As such, it is intended to pave the way for a more detailed and extensive analysis of the process of employment creation within the service sector in which job growth is now largely concentrated.

An important point to be emphasised at the outset is that the relationships between the variables being considered are complex ones. Not only are all the variables interrelated, but the direction of causation in most cases can run both ways. For example, higher output can potentially lead to higher labour productivity, just as the latter, through lower prices, can induce a rise in the former. Similarly, lowering labour productivity for any given rate of output growth may increase the number employed but, by pushing up prices and depressing demand - or by depressing profits and, therefore, investment --- may reduce output at the next round, so perhaps undoing any beneficial effects on employment. Equally, lowering wage rises may encourage employers to take on more labour, so increasing employment but also reducing productivity. On the other hand, however, any observed relationship between productivity growth and wage rises could reflect the reverse direction of causation, a fall in the former causing employers to reduce the latter in order to maintain profit margins. These complexities are often neglected in policy proposals for achieving higher levels of employment.

# **Measurement** problems

The data used for the analysis are largely national accounts statistics covering the years 1965 to 1994 (though, in practice, comparable figures by sector for the period before 1970 are available only for a few Member States). These divide changes in output or value-added between volume changes, on the one hand, and price changes, on the other, so that growth is measured in real terms and employment developments can be related to changes in the volume of production rather than to its value. Although such a division is often taken for granted, in practice, it is far from straight-forward. This is increasingly so as service activities become more important and, more specifically, as less tangible kinds of activity expand relative to others.

While it is often difficult to measure changes in the volume of manufacturing production and to take due account of improvements in the quality of what is produced, these problems are minor compared with those encountered in many parts of the service sector. This is particularly true of public or communal services, such as education or health care, where there is often no price as such or where the price charged bears little relation to the cost of supply and where the indicators of output which exist tend to be relatively crude (the number of students taught, patients examined or operations performed) and difficult to aggregate. But it is also true of many business and financial services (such as accounting or management advice, marketing and promotion or the development of computer software systems tailored to individual requirements), where distinguishing between inputs (in terms of labour time, for example) and outputs (in terms of what is produced from the inputs) is especially problematic. 'Prices' in these cases are often synonymous with wages and output often measured in terms of inputs, so that productivity growth is assumed to be non-existent or to follow an arbitrary trend.

Measurement difficulties have almost certainly become more significant as the weight in GDP of more sophisticated services, such as those listed above, has increased relative to basic services, such as transport or distribution, where problems are less acute. Accordingly, the potential margin of error attached to figures for real GDP and value-added is likely to have risen in recent years. Though it might be expected that methods used to estimate the volume of output should have improved over time, the problems involved are conceptual as well as practical. At the same time, expenditure on the collection and compilation of statistics has tended to be reduced rather than expanded in most countries as public budget constraints have tightened.

As noted below, such measurement problems are one of the possible explanations for both the slowdown in GDP growth which has occurred in most developed countries since the mid-1970s and the difference in productivity growth between the US and European countries. The very nature of these problems, however, means that these possibilities are difficult to verify. (A recent report prepared by Prof Michael Boskin for the US Senate concluded that, largely because of a failure to take due account of quality improvements, consumer price inflation has been over-estimated by around 1%a year over the past 20 years and the rate of real growth correspondingly under-estimated by an equivalent amount. It also concluded that the problem has got worse over time because improvements in the quality of services are much harder to measure — see the Financial Times, 5 December 1996.)

1965-73DFIDKFINEURSUSJapanTotal economySUP per person employed0.10.80.20.80.40.42.21.4CDP per person employee4.44.15.32.73.64.51.8 <t< th=""><th></th><th></th><th></th><th>*</th><th></th><th colspan="8">(annual average % change)</th></t<>				*		(annual average % change)							
Total economy         Total economy           GDP         4.0         5.2         5.3         3.7         5.0         4.7         3.5         9.7           Numbers employed         0.1         0.8         0.2         0.8         0.4         0.4         2.2         1.4           GDP perceon employee         4.4         4.1         5.3         2.7         3.6         4.5         1.8         8.0           Real labour costs per employee         5.4         4.3         5.7         3.0         5.0         2.5         8.3           Consumer price deflator         3.8         5.4         5.1         7.5         6.3         4.8         1.8         1.2           Manufacturing	<b>1965–7</b> 3	D	F	I	DK	FIN	EUR5	US	Japan				
Numbers employed       0.1       0.8       0.2       0.8       0.4       0.4       2.2       1.4         GDP per person employee       3.9       4.4       5.1       2.9       4.6       4.3       1.3       8.2         Real labour costs per employee       5.4       4.3       5.7       3.0       5.0       5.0       2.5       8.3         Consumer price deflator       3.8       5.4       5.1       7.5       6.3       4.8       6.1         Manufacturing       Gross value-added       4.5       7.6       8.1       4.4       7.0       6.1       3.8       1.3       2.9         Value-added per person employed       5.4       6.6       8.0       4.4       2.1       6.2       3.4       1.5       1.3       2.9         Value-added per person employee       5.4       6.6       8.0       4.4       2.1       6.2       3.4       1.3       2.9         Manufacturing price deflator       3.8       3.1       3.7       6.5       7.6       3.7       2.6       3.5       0.9       7.8         Real compensation per employee       5.4       4.3       3.4       8.7       3.6       4.5       1.3       7.1 <th>Total economy GDP</th> <th>4.0</th> <th>5.2</th> <th>5.3</th> <th>3.7</th> <th>5.0</th> <th>4.7</th> <th>3.5</th> <th>9.7</th>	Total economy GDP	4.0	5.2	5.3	3.7	5.0	4.7	3.5	9.7				
GDP per person employed       3.9       4.4       5.1       2.9       4.6       4.3       1.13       8.2         Real tabour costs per employee       4.4       4.1       5.3       2.7       3.6       4.5       1.8       8.0         Real compensation per employee       5.4       4.5       5.5       7.9       7.7       5.4       4.8       6.3         Consume price deflator       4.8       5.5       5.5       7.9       7.7       5.4       4.8       6.3         Manufacturing       -       -       -       -       -       -       -       3.8       1.3       2.9         Value-added per person employed       5.4       6.6       8.0       4.4       2.1       6.2       3.4       1.0       1.2       0.2       3.4       1.0       1.2       0.2       3.4       1.0       Real abour costs per employee       5.4       4.6       8.0       4.4       2.1       6.2       3.4       1.0       Real abour costs per employee       5.4       4.3       6.5       3.4       3.1       1.9       Nomeanal abour costs per employee       5.4       4.3       6.5       7.4       3.6       4.5       1.9       9.0       9       7.8	Numbers employed	0.1	0.8	0.2	0.8	0.4	0.4	2.2	1.4				
Real labour costs per employee       4.4       4.1       5.3       2.7       3.6       4.5       1.8       8.0         Beal compensation per employee       5.4       4.3       5.7       3.0       5.0       5.5       8.3         GDP price deflator       3.8       5.4       5.1       7.5       6.3       4.8       6.3         Consumer price deflator       3.8       5.4       5.1       7.5       6.3       4.8       4.1       6.0         Manufacturing	GDP per person employed	3.9	4.4	5.1	2.9	4.6	4.3	1.3	8.2				
Real compensation per employee       5.4       4.3       5.7       3.0       5.0       5.0       2.5       8.3         GDP price deflator       4.8       5.5       5.5       7.9       7.7       5.4       4.8       6.3         Gonsumer price deflator       3.8       5.4       5.1       7.5       6.3       4.8       4.1       6.0         Manufacturing       Gross value-added       4.5       7.6       8.1       4.4       7.0       6.1       3.8       13.2         Value-added per person employee       5.4       6.6       8.4       4.2       1.0       6.2       3.0       0.5       1.3       2.9         Value-added per person employee       5.4       6.6       8.4       4.3       6.5       3.4       3.4       1.1       1.9       8.9         Manufacturing price deflator       3.8       3.1       3.7       6.6       3.7       2.6       3.8       3.6       7.6       3.7       2.6       3.8       3.6       3.7       2.6       3.8       3.7       2.6       3.8       3.7       3.8       3.7       3.8       3.7       3.8       3.7       3.8       3.7       3.8       3.7       3.8       3.8<	Real labour costs per employee	4.4	4.1	5.3	2.7	3.6	4.5	1.8	8.0				
GDP price deflator       4.8       5.5       5.5       7.9       7.7       5.4       4.8       6.3         Consumer price deflator       3.8       5.4       5.1       7.5       6.3       4.8       4.1       6.0         Manufacturing       Gross value-added       4.5       7.6       8.1       4.4       7.0       6.1       3.8       13.2         Value-added per person employed       4.7       6.4       6.8       4.6       3.9       5.6       2.4       10.0         Real tabour costs per employee       5.4       6.6       8.0       4.4       2.1       6.2       3.4       11.9       8.9         Manufacturing price deflator       3.8       3.1       3.7       6.5       7.6       3.7       2.6       3.6         Non-manufacturing       Gross value-added       0.3       0.7       0.2       1.1       0.4       0.3       2.5       0.9       7.8         Real labour costs per employee       3.8       4.3       5.3       2.7       5.0       4.9       2.8       8.1       7.0         Value-added per person employee       5.3       6.2       5.7       8.2       7.6       5.9       5.6       7.0	Real compensation per employee	5.4	4.3	5.7	3.0	5.0	5.0	2.5	8.3				
Consumer price deflator         3.8         5.4         5.1         7.5         6.3         4.8         4.1         6.0           Manufacturing Gross value-added         4.5         7.6         8.1         4.4         7.0         6.1         3.8         13.2           Numbers employed         0.2         1.0         1.2         0.2         3.0         0.5         1.3         2.9           Value-added per person employee         5.4         6.6         8.0         4.4         2.1         6.2         3.4         1.15           Real compensation per employee         5.4         4.3         6.5         7.6         8.7         7.6         8.8         3.7         6.5         7.6         3.7         2.6         8.8           Non-manufacturing         Time         State         4.7         3.6         4.5         4.3         3.4         8.7         9.3         9.9         9.7         7.8           Real labour costs per employee         5.3         4.3         5.3         2.7         5.0         4.9         2.8         8.1           Non-manufacturing         Circ cost per employee         5.3         4.3         5.3         2.7         5.0         4.9         2.8	GDP price deflator	4.8	5.5	5.5	7.9	7.7	5.4	4.8	6.3				
Manufacturing         Gross value-added       4.5       7.6       8.1       4.4       7.0       6.1       3.8       13.2         Numbers employed       -0.2       1.0       1.2       -0.2       3.0       0.5       1.3       2.9         Value-added per person employee       5.4       6.6       8.0       4.4       2.1       6.2       3.4       10.5         Real labour costs per employee       5.4       4.3       6.5       3.4       3.4       5.1       1.9       8.9         Manufacturing price deflator       3.8       3.1       3.7       6.5       7.6       3.7       2.6       3.6         Non-manufacturing price deflator       3.8       3.7       -0.2       1.1       -0.4       3.2       5.0         Value-added per person employee       3.8       3.5       4.7       2.1       3.7       3.8       1.3       7.1         Numbers employee       5.3       4.3       5.3       2.7       7.6       5.9       5.6       7.0         1975-94       24       2.2       2.5       1.9       2.4       2.7       3.7       1.6         GDP per person employee       1.2       1.4       1.3	Consumer price deflator	3.8	5.4	5.1	7.5	6.3	4.8	4.1	6.0				
Numbers employed       -0.2       1.0       1.2       -0.2       3.0       0.5       1.3       2.9         Value-added per person employee       5.4       6.6       8.0       4.4       2.1       6.2       3.4       1.0         Real labour costs per employee       5.4       6.6       8.0       4.4       2.1       6.2       3.4       1.0         Real compensation per employee       5.4       4.3       6.5       3.4       3.4       5.1       1.9       8.9         Manufacturing price deflator       3.8       3.1       3.7       6.5       7.6       3.7       2.6       3.6         Non-manufacturing       "       "       "       0.4       3.1       8.4       8.7       7.6       3.9       0.9       7.8         Value-added per person employee       3.8       3.5       4.7       2.1       3.7       3.8       1.3       7.1         Real labour costs per employee       5.3       4.2       5.7       8.2       7.6       5.9       5.6       7.0         I/375-94       "       "       2.4       2.2       2.5       2.1       1.9       2.4       2.7       3.7         Numbers employed	<i>Manufacturing</i> Gross value-added	4.5	7.6	8.1	4.4	7.0	6.1	3.8	13.2				
Yalue-added per person employed       4.7       6.4       6.8       4.6       3.9       5.6       2.4       10.0         Real labour costs per employee       5.4       6.6       8.0       4.4       2.1       6.2       3.4       11.5         Real compensation per employee       5.4       4.3       6.5       3.4       5.1       1.9       8.9         Manufacturing       Gross value-added       3.8       3.1       3.7       6.5       7.6       3.7       2.6       3.6         Non-manufacturing       Gross value-added       3.8       4.5       4.7       3.6       4.5       4.3       3.4       8.7         Value-added per person employed       3.4       3.8       4.9       2.5       4.9       3.9       0.9       7.8         Real labour costs per employee       3.3       6.2       5.7       8.2       7.6       5.9       5.6       7.0         1975-94       Total economy       Total economy       Total economy       9       2.8       2.1       1.9       2.4       2.7       3.7         GDP per person employed       1.9       2.1       2.1       1.8       2.8       2.0       0.8       2.6         Real	Numbers employed	-0.2	1.0	1.2	-0.2	3.0	0.5	1.3	2.9				
Real labour costs per employee       5.4       6.6       8.0       4.4       2.1       6.2       3.4       11.5         Real compensation per employee       5.4       4.3       6.5       3.4       3.4       5.1       1.9       8.9         Manufacturing price deflator       3.8       3.1       3.7       6.5       7.6       3.7       2.6       8.6         Non-manufacturing	Value-added per person employed	4.7	6.4	6.8	4.6	3.9	5.6	2.4	10.0				
Real compensation per employee       5.4       4.3       6.5       3.4       3.4       5.1       1.9       8.9         Manufacturing price deflator       3.8       3.1       3.7       6.5       7.6       3.7       2.6       3.6         Non-manufacturing	Real labour costs per employee	5.4	6.6	8.0	4.4	2.1	6.2	3.4	11.5				
Manufacturing price deflator       3.8       3.1       3.7       6.5       7.6       3.7       2.6       3.6         Non-manufacturing	Real compensation per employee	5.4	4.3	<b>6</b> .5	3.4	3.4	5.1	1.9	<b>8.9</b>				
Non-manufacturing         Second State         Second S	Manufacturing price deflator	3.8	3.1	3.7	6.5	7.6	3.7	2.6	3.6				
Numbers employed         0.3         0.7         -0.2         1.1         -0.4         0.3         2.5         0.9           Value-added per person employee         3.8         3.5         4.7         2.1         3.7         3.8         1.3         7.1           Real labour costs per employee         5.3         6.2         5.7         8.2         7.6         5.9         5.6         7.0           J975-94         7         5.0         5.6         7.0         1.9         2.4         2.7         3.7         3.8         2.7         5.0         5.6         7.0           J975-94         7         5.0         5.6         7.0         1.9         2.4         2.7         3.7           Numbers employed         0.5         0.2         0.4         0.3         -0.8         0.3         1.9         1.0           GDP per person employee         1.2         1.4         1.3         0.9         1.3         0.8         2.1           Real labour costs per employee         1.3         1.4         1.6         0.7         1.7         1.4         0.6         1.6           GDP price deflator         3.3         6.5         10.7         6.0         6.9 <t< th=""><th><i>Non-manufacturing</i> Gross value-added</th><th>3.8</th><th>4.5</th><th>4.7</th><th>3.6</th><th>4.5</th><th>4.3</th><th>3.4</th><th>8.7</th></t<>	<i>Non-manufacturing</i> Gross value-added	3.8	4.5	4.7	3.6	4.5	4.3	3.4	8.7				
Value-added per person employed       3.4       3.8       4.9       2.5       4.9       3.9       0.9       7.8         Real labour costs per employee       3.8       3.5       4.7       2.1       3.7       3.8       1.3       7.1         Real compensation per employee       5.3       4.3       5.3       2.7       5.0       4.9       2.8       8.1         Non-manufacturing price deflator       5.3       6.2       5.7       8.2       7.6       5.9       5.6       7.0         J975-94        7.4       2.2       2.5       2.1       1.9       2.4       2.7       3.7         Numbers employed       0.5       0.2       0.4       0.3       0.8       0.3       1.9       1.0         GDP per person employed       1.9       2.1       2.1       1.8       2.8       2.0       0.8       2.6         Real labour costs per employee       1.2       1.4       1.3       0.9       1.9       1.3       0.8       2.1         Real compensation per employee       1.3       1.4       1.6       0.7       1.7       1.4       0.6       1.6         GDP price deflator       3.3       6.5       10.7	Numbers employed	0.3	0.7	-0.2	1.1	-0.4	0.3	2.5	0.9				
Real labour costs per employee       3.8       3.5       4.7       2.1       3.7       3.8       1.3       7.1         Real compensation per employee       5.3       4.3       5.3       2.7       5.0       4.9       2.8       8.1         Non-manufacturing price deflator       5.3       6.2       5.7       8.2       7.6       5.9       5.6       7.0         J975-94       T       7.1       8.2       7.6       5.9       5.6       7.3         GDP       2.4       2.2       2.5       2.1       1.9       2.4       2.7       3.7         Numbers employed       0.5       0.2       0.4       0.3       -0.8       0.3       1.9       1.0         GDP per person employed       1.9       2.1       2.1       1.8       2.8       2.0       0.8       2.6         Real compensation per employee       1.2       1.4       1.3       0.9       1.9       1.3       0.8       2.1         Real compensation per employee       1.3       1.4       1.6       0.7       1.7       1.4       0.6       1.6         GDP price deflator       3.3       6.5       11.1       5.7       6.7       6.2       4.	Value-added per person employed	3.4	3.8	4.9	2.5	4.9	3.9	0.9	7.8				
Real compensation per employee       5.3       4.3       5.3       2.7       5.0       4.9       2.8       8.1         Non-manufacturing price deflator       5.3       6.2       5.7       8.2       7.6       5.9       5.6       7.0 <i>J975-94</i>	Real labour costs per employee	3.8	3.5	4.7	2.1	3.7	3.8	1.3	7.1				
Non-manufacturing price deflator         5.3         6.2         5.7         8.2         7.6         5.9         5.6         7.0 <i>Ig75-94 Total economy Total economy State of the st</i>	Real compensation per employee	5.3	4.3	5.3	2.7	5.0	4.9	2.8	8.1				
1975-94         Total economy       24       2.2       2.5       2.1       1.9       2.4       2.7       3.7         Numbers employed       0.5       0.2       0.4       0.3       -0.8       0.3       1.9       1.0         GDP per person employed       1.9       2.1       2.1       1.8       2.8       2.0       0.8       2.6         Real labour costs per employee       1.2       1.4       1.3       0.9       1.9       1.3       0.8       2.1         Real compensation per employee       1.3       1.4       1.6       0.7       1.7       1.4       0.6       1.6         GDP price deflator       3.3       6.5       11.1       5.7       6.7       6.2       4.9       2.5         Consumer price deflator       3.1       6.5       10.7       6.0       6.9       6.1       5.2       3.0         Manufacturing       C       C       7.7       1.4       0.6       1.6       9       9.1       3.0       1.4       1.6       0.6       3.1       1.4       9       1.7       1.4       1.4       1.4       1.4       1.4       1.5       1.5       0.1       0.4       2	Non-manufacturing price deflator	5.3	6.2	5.7	8.2	7.6	5.9	5.6	7.0				
Total economy GDP       2.4       2.2       2.5       2.1       1.9       2.4       2.7       3.7         Numbers employed       0.5       0.2       0.4       0.3       -0.8       0.3       1.9       1.0         GDP per person employed       1.9       2.1       2.1       1.8       2.8       2.0       0.8       2.6         Real labour costs per employee       1.2       1.4       1.3       0.9       1.9       1.3       0.8       2.1         Real compensation per employee       1.3       1.4       1.6       0.7       1.7       1.4       0.6       1.6         GDP price deflator       3.3       6.5       11.1       5.7       6.7       6.2       4.9       2.5         Consumer price deflator       3.1       6.5       10.7       6.0       6.9       6.1       5.2       3.0         Manufacturing	1975–94												
GDP       2.4       2.2       2.5       2.1       1.9       2.4       2.7       3.7         Numbers employed       0.5       0.2       0.4       0.3       -0.8       0.3       1.9       1.0         GDP per person employed       1.9       2.1       0.4       0.3       -0.8       0.3       1.9       1.0         GDP per person employee       1.2       1.4       1.3       0.9       1.9       1.3       0.8       2.1         Real compensation per employee       1.3       1.4       1.6       0.7       1.7       1.4       0.6       1.6         GDP price deflator       3.3       6.5       11.1       5.7       6.7       6.2       4.9       2.5         Consumer price deflator       3.1       6.5       10.7       6.0       6.9       6.1       5.2       3.0         Manufacturing       Consumer price deflator       2.0       3.1       4.5       1.8       5.3       3.3       2.7       4.5         Real labour costs per employee       2.4       2.6       3.8       0.6       4.0       2.8       2.2       4.3         Real labour costs per employee       2.1       1.8       1.6       0.6 <th>Total economy</th> <th><b>.</b> .</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Total economy	<b>.</b> .											
Numbers employed       0.5       0.2       0.4       0.3       -0.8       0.3       1.9       1.0         GDP per person employed       1.9       2.1       2.1       2.1       1.8       2.8       2.0       0.8       2.6         Real labour costs per employee       1.2       1.4       1.3       0.9       1.9       1.3       0.8       2.1         Real compensation per employee       1.3       1.4       1.6       0.7       1.7       1.4       0.6       1.6         GDP price deflator       3.3       6.5       11.1       5.7       6.7       6.2       4.9       2.5         Consumer price deflator       3.1       6.5       10.7       6.0       6.9       6.1       5.2       3.0         Manufacturing       Consumer price deflator       3.1       1.3       3.3       1.5       3.1       1.8       2.8       4.9         Numbers employed       -0.7       -1.8       -1.1       -0.3       -2.1       -1.5       0.1       0.4         Value-added per person employee       2.4       2.6       3.8       0.6       4.0       2.8       2.2       4.3         Real labour costs per employee       2.1		2.4	2.2	2.5	2.1	1.9	2.4	2.7	3.7				
GDP per person employed       1.9       2.1       2.1       1.8       2.8       2.0       0.8       2.6         Real labour costs per employee       1.2       1.4       1.3       0.9       1.9       1.3       0.8       2.1         Real compensation per employee       1.3       1.4       1.6       0.7       1.7       1.4       0.6       1.6         GDP price deflator       3.3       6.5       11.1       5.7       6.7       6.2       4.9       2.5         Consumer price deflator       3.1       6.5       10.7       6.0       6.9       6.1       5.2       3.0         Manufacturing       Gross value-added       1.3       1.3       3.3       1.5       3.1       1.8       2.8       4.9         Numbers employed       -0.7       -1.8       -1.1       -0.3       -2.1       -1.5       0.1       0.4         Value-added per person employed       2.0       3.1       4.5       1.8       5.3       3.3       2.7       4.5         Real labour costs per employee       2.4       2.6       3.8       0.6       4.0       2.8       2.2       4.3         Real compensation per employee       2.1       1.8	Numbers employed	0.5	0.2	0.4	0.3	-0.8	0.3	1.9	1.0				
Real habour costs per employee1.21.41.30.91.91.30.82.1Real compensation per employee1.31.41.60.71.71.40.61.6GDP price deflator3.36.511.15.76.76.24.92.5Consumer price deflator3.16.510.76.06.96.15.23.0Manufacturing	GDP per person employed	1.9	2.1	2.1	1.8	2.8	2.0	0.8	2.6				
Real compensation per employee       1.3       1.4       1.6       0.7       1.7       1.4       0.3       1.5         GDP price deflator       3.3       6.5       11.1       5.7       6.7       6.2       4.9       2.5         Consumer price deflator       3.1       6.5       10.7       6.0       6.9       6.1       5.2       3.0         Manufacturing       60.9       1.3       1.3       3.3       1.5       3.1       1.8       2.8       4.9         Value-added per person employed       0.7       -1.8       -1.1       -0.3       -2.1       -1.5       0.1       0.4         Value-added per person employee       2.4       2.6       3.8       0.6       4.0       2.8       2.2       4.3         Real compensation per employee       2.1       1.8       1.6       0.6       3.0       1.9       1.3       1.9         Manufacturing price deflator       2.9       5.8       8.4       6.0       4.9       4.9       3.7       1.8         Non-manufacturing       6       2.2       1.6       2.6       2.7       3.2         Numbers employed       1.1       0.7       0.9       0.4       -0.4	Real compensation per employee	1.2	1.4	1.5	0.9	1.9	1.0	0.6	4.1 1.6				
Consumer price deflator3.05.011.15.76.16.24.52.5Consumer price deflator3.16.510.76.06.96.15.23.0Manufacturing2.5Gross value-added1.31.33.31.53.11.82.84.9Numbers employedValue-added per person employed2.03.14.51.85.33.32.74.5Real labour costs per employee2.42.63.80.64.02.82.24.3Real compensation per employee2.11.81.60.63.01.91.31.9Manufacturing price deflator2.95.88.46.04.94.93.71.8Non-manufacturingGross value-added2.92.52.32.21.62.62.73.2Numbers employed1.10.70.90.4-0.40.82.41.2Value-added per person employed1.81.71.51.82.11.70.42.0Real labour costs per employee0.71.20.71.01.20.90.51.4Real compensation per employee1.01.41.70.7 <t< th=""><th>CDP price deflator</th><th>33</th><th>65</th><th>11.0</th><th>57</th><th>1.7 67</th><th>1.4 6.9</th><th>0.0 1 Q</th><th>25</th></t<>	CDP price deflator	33	65	11.0	57	1.7 67	1.4 6.9	0.0 1 Q	25				
Manufacturing       0.1       0.0	Consumer price deflator	3.1	6.5	10.7	6.0	6.9	6.1		2.0				
ManufacturingGross value-added1.31.33.31.53.11.82.84.9Numbers employed-0.7-1.8-1.1-0.3-2.1-1.50.10.4Value-added per person employed2.03.14.51.85.33.32.74.5Real labour costs per employee2.42.63.80.64.02.82.24.3Real compensation per employee2.11.81.60.63.01.91.31.9Manufacturing price deflator2.95.88.46.04.94.93.71.8Non-manufacturing Gross value-added2.92.52.32.21.62.62.73.2Numbers employed1.10.70.90.4-0.40.82.41.2Value-added per person employed1.81.71.51.82.11.70.42.0Real labour costs per employee0.71.20.71.01.20.90.51.4Real compensation per employee1.01.41.70.71.51.30.61.4Non-manufacturing price deflator3.46.711.95.77.26.65.33.1	Manufacturing	0.1	0.0	10.1	0.0	0.0	0.1	0.1	0.0				
Numbers employed-0.7-1.8-1.1-0.3-2.1-1.50.10.4Value-added per person employed2.03.14.51.85.33.32.74.5Real labour costs per employee2.42.63.80.64.02.82.24.3Real compensation per employee2.11.81.60.63.01.91.31.9Manufacturing price deflator2.95.88.46.04.94.93.71.8Non-manufacturing Gross value-added2.92.52.32.21.62.62.73.2Numbers employed1.10.70.90.4-0.40.82.41.2Value-added per person employed1.81.71.51.82.11.70.42.0Real labour costs per employee0.71.20.71.01.20.90.51.4Real compensation per employee1.01.41.70.71.51.30.61.4Non-manufacturing price deflator3.46.711.95.77.26.65.33.1	Gross value-added	1.3	1.3	3.3	1.5	3.1	1.8	2.8	4.9				
Value-added per person employed2.03.14.51.85.33.32.74.5Real labour costs per employee2.42.63.80.64.02.82.24.3Real compensation per employee2.11.81.60.63.01.91.31.9Manufacturing price deflator2.95.88.46.04.94.93.71.8Non-manufacturing Gross value-added2.92.52.32.21.62.62.73.2Numbers employed1.10.70.90.4-0.40.82.41.2Value-added per person employee0.71.20.71.01.20.90.51.4Real labour costs per employee1.01.41.70.71.51.30.61.4Non-manufacturing price deflator3.46.711.95.77.26.65.33.1	Numbers employed	-0.7	-1.8	-1.1	-0.3	-2.1	-1.5	0.1	0.4				
Real labour costs per employee2.42.63.80.64.02.82.24.3Real compensation per employee2.11.81.60.63.01.91.31.9Manufacturing price deflator2.95.88.46.04.94.93.71.8Non-manufacturing Gross value-added2.92.52.32.21.62.62.73.2Numbers employed1.10.70.90.4-0.40.82.41.2Value-added per person employed1.81.71.51.82.11.70.42.0Real labour costs per employee0.71.20.71.01.20.90.51.4Real compensation per employee1.01.41.70.71.51.30.61.4Non-manufacturing price deflator3.46.711.95.77.26.65.33.1	Value-added per person employed	2.0	3.1	4.5	1.8	5.3	<b>3</b> .3	2.7	4.5				
Real compensation per employee2.11.81.60.63.01.91.31.9Manufacturing price deflator2.95.88.46.04.94.93.71.8Non-manufacturing Gross value-added2.92.52.32.21.62.62.73.2Numbers employed1.10.70.90.4-0.40.82.41.2Value-added per person employed1.81.71.51.82.11.70.42.0Real labour costs per employee0.71.20.71.01.20.90.51.4Real compensation per employee1.01.41.70.71.51.30.61.4Non-manufacturing price deflator3.46.711.95.77.26.65.33.1	Real labour costs per employee	2.4	2.6	3.8	0.6	4.0	2.8	2.2	4.3				
Manufacturing price deflator2.95.88.46.04.94.93.71.8Non-manufacturing Gross value-added2.92.52.32.21.62.62.73.2Numbers employed1.10.70.90.4-0.40.82.41.2Value-added per person employed1.81.71.51.82.11.70.42.0Real labour costs per employee0.71.20.71.01.20.90.51.4Real compensation per employee1.01.41.70.71.51.30.61.4Non-manufacturing price deflator3.46.711.95.77.26.65.33.1	Real compensation per employee	2.1	1.8	1.6	0.6	3.0	1.9	1.3	1.9				
Non-manufacturing Gross value-added2.92.52.32.21.62.62.73.2Numbers employed1.10.70.90.4-0.40.82.41.2Value-added per person employed1.81.71.51.82.11.70.42.0Real labour costs per employee0.71.20.71.01.20.90.51.4Real compensation per employee1.01.41.70.71.51.30.61.4Non-manufacturing price deflator3.46.711.95.77.26.65.33.1	Manufacturing price deflator	2.9	5.8	8.4	6.0	4.9	4.9	3.7	1.8				
Numbers employed       1.1       0.7       0.9       0.4       -0.4       0.8       2.4       1.2         Value-added per person employed       1.8       1.7       1.5       1.8       2.1       1.7       0.4       2.0         Real labour costs per employee       0.7       1.2       0.7       1.0       1.2       0.9       0.5       1.4         Real compensation per employee       1.0       1.4       1.7       0.7       1.5       1.3       0.6       1.4         Non-manufacturing price deflator       3.4       6.7       11.9       5.7       7.2       6.6       5.3       3.1	Non-manufacturing Gross value-added	29	2.5	2.3	2.2	16	26	27	32				
Value-added per person employed       1.8       1.7       1.5       1.8       2.1       1.7       0.4       2.0         Real labour costs per employee       0.7       1.2       0.7       1.0       1.2       0.9       0.5       1.4         Real compensation per employee       1.0       1.4       1.7       0.7       1.5       1.3       0.6       1.4         Non-manufacturing price deflator       3.4       6.7       11.9       5.7       7.2       6.6       5.3       3.1	Numbers employed	1.1	0.7	0.9	0.4	-0 4	0.8	2.4	1.2				
Real labour costs per employee       0.7       1.2       0.7       1.0       1.2       0.9       0.5       1.4         Real compensation per employee       1.0       1.4       1.7       0.7       1.5       1.3       0.6       1.4         Non-manufacturing price deflator       3.4       6.7       11.9       5.7       7.2       6.6       5.3       3.1	Value-added per person employed	1.8	1.7	1.5	1.8	2.1	1.7	0.4	2.0				
Real compensation per employee         1.0         1.4         1.7         0.7         1.5         1.3         0.6         1.4           Non-manufacturing price deflator         3.4         6.7         11.9         5.7         7.2         6.6         5.3         3.1	Real labour costs per employee	0.7	1.2	0.7	1.0	1.2	0.9	0.5	1.4				
Non-manufacturing price deflator 3.4 6.7 11.9 5.7 7.2 6.6 5.3 3.1	Real compensation per employee	1.0	1.4	1.7	0.7	1.5	1.3	0.6	1.4				
	Non-manufacturing price deflator	3.4	6.7	11.9	5.7	7.2	6.6	5.3	3.1				

Notes: D excludes new Länder throughout. Real labour costs are nominal compensation per employees deflated by the implicit value-added deflator for the sector in question.

Real compensation per employee is nominal compensation per employee deflated by the consumer expenditure deflator. The value-added deflator is derived from the double deflation method (ie from subtracting deflated inputs from deflated gross output and relating the result to current-price value-added). This means that it reflects both the change in the price of gross output and its relationship to the price of inputs.



2 Growth of value-added and numbers employed in manufacturing in Europe, US and Japan, 1965-73







# Growth and employment in Europe and elsewhere 1965–73

Before 1973 and the first oil crisis, growth of GDP averaged between 4% and 5% in most European Union Member States. The rate of increase in GDP per person employed, however, was very similar, so that the number in employment went up by under  $\frac{1}{2}$ % a year (Graph 1).

For the five Member States for which detailed national accounts data for the 1960s are available on a reasonably comparable basis (Germany, France, Italy, Denmark and Finland, which together accounted for 60% of Union GDP in 1975 and 54% of employment), GDP grew on average by 4.7% a year between 1965 and 1973, while the number employed rose by 0.4%, giving a growth of GDP per person employed of just under  $4^{1/2}$ % a year (Table 1). Though GDP growth varied somewhat between these five countries, being higher in France, Italy and Finland (5% a year or more) than in Germany or Denmark (4% a year or less), the growth in employment was in each case under 1% a year. Only in Denmark was the rise in GDP per person employed much under 4% a year.

By contrast, in the US, despite GDP growth being lower than in Europe at  $3^{1}/_{2}$ % a year, the number in employment increased by significantly more, by over 2% a year, and GDP per person employed rose at an annual rate of under  $1^{1}/_{2}$ %. On the other hand, in Japan, growth of GDP averaged almost 10% a year and while the number employed went up by more than in Europe, the increase was still less than in the US.

In all three economies, growth of both value-added and output per person employed was higher in manufacturing than in other sectors over this period (Graphs 2 and 3). (Insufficient data are available for the European economies to distinguish developments in services from those in other non-manufacturing sectors. Though services in each case account for the major part of non-manufacturing, they tend to show higher growth of value-added and employment than the latter and lower growth of output per person employed.) This was also the case in each of the European countries considered individually, with the exception of Finland (where agriculture was much more important than elsewhere and where the rise in output per person employed was higher in other sectors than in manufacturing). The increase in employment was also higher in manufacturing than in other sectors in Europe and Japan, though in the US, the reverse was the case (as it was in Germany and Denmark).

In all three economies also, real labour costs per employee (compensation per employee adjusted for the change in the GDP deflator) went up broadly in line with output per person employed between 1965 and 1973. Since consumer prices generally rose by less than the GDP deflator, real compensation per employee, or real wages, increased by slightly more than this in all the economies, including in the European countries taken separately. Real labour costs per employee in manufacturing, however, (compensation per employee adjusted for the increase in implied manufacturing prices) went up by more than output per person employed in all three economies (though, within Europe, not in Denmark or Finland), and by more than real wages because of the lower rise in manufacturing prices than in consumer prices. Keeping the rise in real wages below the rise in output per person employed, therefore, was not sufficient to prevent labour costs increasing relative to value-added and the share of profits from falling.

In non-manufacturing, average labour costs and value-added per person employed rose at much the same rate, so maintaining the share of profits in value-added. Because consumer prices increased by less than prices of non-manufacturing goods and services, this was consistent with a significant rise in real wages per employee.

## 1975-94

Since the world oil crisis of 1973–74, economic growth has slowed down dramatically, in Europe and Japan especially. In the European Union, growth of GDP has averaged only  $2-2^{1}/_{2}\%$  a year, only half the rate in the preceding 20 years, while in Japan, growth fell by even more to only around a third of its pre-1973 rate. Growth also declined in the US, though the fall was less marked. Indeed, in the 20 years since 1975, growth has averaged  $2^{1}/_{2}\%$  a year, marginally higher than in Europe.

Nevertheless, despite the substantial slowdown in growth, employment in Europe has increased at a similar rate since 1975 as before, which means only slowly. In consequence, growth of output per person employed has declined by even more than GDP growth, to only around 2% a year (Graph 4). Indeed, if this slowdown had not occurred, employment would have fallen by almost 2% a year over the past 20 years.

In both the US and Japan also, employment has risen at much the same rate since 1975 as previously, in the former by around 2% a year, in the latter by  $1-1^{1}/_{2}$ % a year, again despite the decline in GDP growth (Graphs 5 and 6). In both these two economies, therefore, as in Europe the rate of growth of output per person employed has slowed down since 1975, the fall being only  $^{1}/_{2}-1$ % a year in the US (still a decline of a third or so in the rate), but 5–6% a year in Japan (a decline of some two-thirds).

The similarity in the growth of employment in the period after 1975 to the period before has led some to conclude that economic growth in itself is not a key determinant of job creation. In Europe, in particular, it has prompted the notion of 'jobless growth', that even if GDP growth had been higher over the past 20 years (as it had been over the preceding 20), this would not necessarily have resulted in significantly more people in work. This view has been reinforced by the observation that countries where output has increased by most have not always experienced the largest rises in employment or lowest levels of unemployment and, therefore, that growth alone is not sufficient to ensure adequate rates of job creation.

The view, however, fails to take account of the fact that since 1975, as before, the annual rate of employment growth in both Europe and the US, though less so in Japan, has been closely related to the growth of GDP. Growth of GDP above the average rate of just over 2% a year has invariably been followed by a higher than average rise in employment, while growth of less than this has usually been followed by a reduction. This has been equally true in European countries considered individually (Graphs 7 to 10, which show the four largest Union Member States).

Within individual countries, therefore, there is a clear and relatively close association between growth and employment creation. Nevertheless, in all developed countries, there was an equally clear downward shift in the rate of economic growth around the period of the first oil crisis in 1973–74, which was accompanied by a comparable reduction in the rate of growth of output per person employed, or labour productivity of which this is an approximate measure ('approximate' because it does not take account of changes in the average amount of time each person works).

Just why this downward shift occurred is not well understood, though a number of possible explanations have been proposed (including a change in the international economic environment, problems in managing the debt created by the oil price rise, the onset of inflation and the effect on production of more expensive energy as well as the measurement problems noted above). Whatever the explanation, the fact is that output and productivity growth have tended to move in parallel, that the latter — or its mirror image, the employment-intensity of growth — has tended to accommodate to the marked change in economic circumstances, from a situation where labour





5

Annual change (%) 14 14 - GDP - Employment 12 12 10 10 8 8 6 6 4 4 2 2 0 0 2 2 4 -4 1965 1967 1969 1971 1973 1975 1977 1979 1981 1983 1985 1987 1989 1991 1993 1995

Growth of GDP and employment in the US, 1965-95

#### 7 Growth of GDP and employment in Germany, 1965-95



9 Growth of GDP and employment in Italy, 1965-95



6 Growth of GDP and employment in Japan, 1965-95



## 8 Growth of GDP and employment in France, 1965-95



#### 10 Growth of GDP and employment in the UK, 1965-95



- 10 -

scarcity was more of a problem than job shortages to one where the reverse has been true.

The slowdown in labour productivity growth has, therefore, been just as pronounced — indeed, slightly more so — as that in output growth, despite the apparent acceleration in the pace of technical change which has occurred with the information technology revolution, the spread of automation and the seeming increase in the rate of diffusion of new products and new ways of producing. This contradiction between our perception of the pace of change and the statistics on output and employment remains to be satisfactorily resolved. However, it is worth highlighting, in this regard, the often neglected difference between advances in best-practice techniques, which tend to determine our perception of the pace of change, and the diffusion of these techniques across the production process, which inter alia depends on the rate of investment and, accordingly, on profitability and market growth.

Nevertheless, in Europe, the fall in output per person, though large, has not matched the growth in the labour supply which has occurred over this period as increasing numbers of women have entered the work force to add to the natural growth of working-age population (and to offset the decline in participation of men). Unemployment has, therefore, risen.

## Sectoral developments, 1975–94

The slowdown in the growth of output has been particularly pronounced in manufacturing in Europe. Since 1975, the annual growth rate of manufacturing value-added for the 5 European Union Member States for which data are available for 1965 to 1973 has averaged less than 30% of the rate experienced in the years before 1973 (under 2% a year as opposed to over 6% a year). The slowdown has been general to all countries and has been particularly marked in France, where the long-term growth rate of manufacturing since 1975 has been well under  $1^{1}/_{2}\%$  a year as against over  $7^{1}/_{2}\%$  between 1965 and 1973, though it also been below  $1^{1}/_{2}$ % a year in Germany, the strongest industrial economy in Europe (Table 1). While the decline in growth has been less pronounced in the other three countries, the average rate between 1975 and 1994 was still well under half what it had been in the 1960s and early 1970s.

The slowdown in manufacturing growth has also been substantial in Japan, where the rate averaged under 5% a year in the years 1975 to 1994 as compared with over 13% in the earlier period. In the US, in contrast, the rate declined by much less, from just under 4% a year to just under 3%.

In both these economies, the slowdown in the growth of non-manufacturing output since 1975 has been similar to that of manufacturing — considerable in Japan, relatively small in the US. In Europe, however, the decline in nonmanufacturing growth has been much less marked than for manufacturing — between 1975 and 1994, the rate averaged 2.6% a year, 60% of the average between 1965 and 1973 (4.3%). The difference in experience was again particularly pronounced in Germany and France, where value-added in non-manufacturing in real terms has grown at twice the rate of that in manufacturing since 1975 having grown at a significantly lower rate before the mid-1970s. Only in Finland of the 5 European countries was the slowdown in growth in manufacturing between 1975 and 1994 less than in the rest of the economy. On the other hand, in Italy as well as Finland, manufacturing output has continued to expand at a faster rate than the economy as a whole.

The pattern of employment growth has changed by even more than that of output growth. Whereas manufacturing was a major contributor to net job creation before the mid-1970s in Europe as in the US and Japan, since then it has been the source of substantial job losses. Between 1975 and 1994, the number employed in the sector in the 5 European Member States taken together declined by an average of just over 1% a year. The fall was common to all of the countries, averaging over 2% a year in Finland and only just under 2% a year in France. In the US, by contrast, the number employed in manufacturing was slightly higher in 1994 than in 1975, while in Japan, it was significantly so (having grown by almost  $\frac{1}{2}$ % a year over the period). This, together with the large job losses in agriculture — which here serve to depress the growth of employment in non-manufacturing - represents a major difference in employment developments between Europe and the other two economies.

In non-manufacturing, on the other hand, the rate of employment growth in Europe has increased markedly since 1975. Between 1975 and 1994, the number employed in the 5 Member States rose by just under 1% a year as compared with well under  $1/_2$ % a year between 1965 and 1973. The increase, however, was not common to all countries. In Denmark, employment rose at a slower rate than before, while in Finland, it actually fell as it did before 1975, reflecting a marked reduction in jobs in agriculture combined with relatively slow growth in service employment.

In Japan, employment in non-manufacturing has also expanded at a faster rate since 1975 than before, whereas in the US, the rate of increase has been much the same — around  $2^{1}/_{2}\%$  a year. In these two economies, therefore, the rate of growth of output per person employed in non-manufacturing has declined significantly, so offsetting the effect on employment of the lower growth of value-added.

The average cost of labour to employers went up by less than value-added per person employed between 1975 and 1994 in all 5 European countries. This was particularly so in the second half of the period when there was a difference of around 1% a year in the rate of increase in every case. The difference was especially marked in non-manufacturing, where in all countries, average labour costs rose by much less than labour productivity over the period as a whole (whereas in Germany, in manufacturing, the reverse was true). This was also the case in Japan, but less so in the US, where the difference between the two sectors was relatively small over the period as a whole. In the US, the relatively small rate of increase in real wages in manufacturing helped to keep the rise in labour costs well below the increase in value-added per person employed between 1975 and 1994 (though not over the first half of the period). In nonmanufacturing, by contrast, labour costs went up by slightly more than productivity.

The result is, therefore, that in the US labour costs have been contained more in manufacturing than in the rest of the economy, especially since 1985, both through relatively large productivity gains and through relatively low pay increases. Though average real wage growth in non-manufacturing sectors has also been relatively low in comparison with other countries — under 1% a year as against just under  $1^{4}/_{2}$ % a year in both Europe and Japan — it has, nevertheless, been associated with a slightly faster rate of increase in labour costs than in labour productivity. The view of job creation in the US being encouraged by low wage increases, therefore, seems more applicable to the other two economies than to the US, as discussed in more detail below.

It should be noted, however, that the view of the US as a low pay rise economy usually encompasses other aspects of wage behaviour as compared with other economies, in particular, the wider dispersion of wage levels, especially at the bottom end of the scale, and the tendency for wages at this end for low-skilled workers to fall significantly relative to those for higher skilled workers. Both of these aspects are held to have been responsible for its higher employment growth than in Europe.

In the remainder of the analysis, the coverage is extended to include all European Union Member States (or all for which sufficient data are available), the period 1975 to 1994 is divided into two sub-periods and services, where almost all the employment growth has occurred since 1975, are distinguished from other non-manufacturing sectors.

#### GDP and employment growth in Europe

#### and elsewhere, 1975-85 and 1985-94

The average rate of GDP growth in the European Union over the 10-year period 1975-85 and the 9-year period 1985-94 was the same - 2.3% a year. (The European Union in this rest of the analysis covers 11 Member States for which a complete set of data is available both for the economy as a whole and for manufacturing and services taken separately. The countries not included are Greece, Ireland, Austria and Portugal. Since these together account for only 61/2% of total Union GDP, though 9% of employment, the aggregate figures are affected only marginally by their exclusion.) The growth in the number employed was also similar, but higher in the second period (0.4% a year) than in the first (0.1% a or the minimum required to bring about any rise in employment at all - therefore, fell slightly between these two periods from just over 2% a year to just under 2% (Graphs 11 and 12).

Growth of GDP in the US was also the same in the two periods and only marginally higher than in Europe, at 2.5% a year. (It should be noted that the earlier period starts in 1977 rather than 1975 because of lack of data for services before then; for the period 1975 to 1985, GDP growth averaged 2.9% rather than 2.5%.) Despite the similarity in growth rates, however, the number in employment increased at a much higher rate than in Europe, as noted above, by 2% a year in the first period and just over  $1^{3}/_{2}$ % a year in the second. The growth of output per person employed was, therefore, significantly lower than in Europe in both periods, even if slightly higher in the second than in the first (just under 1% as opposed to  $\frac{3}{2}$ %).



12 Value-added and numbers employed in manufacturing and services in Europe, US and



The difference in employment growth between the two economies seems to have nothing to do with changes in average working time. Average hours worked per person employed seem to have fallen by much the same in Europe as in the US (by 0.2% a year, though the basis of measurement differs between the two — in Europe, it is usual hours worked per week, in the US, hours worked per year) between 1985 and 1994 (no comparable data are available for the earlier period). The difference in apparent labour productivity, therefore, remains unchanged after taking account of working time developments, output per hour worked going up by just over 2% a year in Europe over this period, just over 1% in the US. The number in employment in Japan, on the other hand, seems to have been boosted significantly by a reduction in average hours worked (of around 1% a year).

In Japan, in contrast, GDP growth was lower between 1985 and 1994 than over the preceding 10 years. Nevertheless, as in Europe, the number in employment increased by more in the later period than in the earlier one (by almost  $1^{1}/_{2}\%$  a year instead of just under 1%), so that the growth rate of output per person employed fell significantly between the two periods (from 3% to 2%).

In both the US and Japan, the consequence of the growth in employment which occurred was that unemployment was broadly the same in the mid-1990s as it had been in the early 1970s before the first oil shock (in 1994, the rate was 6% in the US, as against 5% in 1973, and 3% in Japan, against  $1^{1}/_{2}$ % in 1973). In the European Union, the average rate was  $2^{1}/_{2}$ % in the earlier year, 11% in the later one. In some sense, therefore, the relationship between GDP and net job creation changed after 1973 in both the former two economies, especially in Japan, with the effect of keeping down the level of unemployment. In Europe, though the relationship changed, it was not sufficient to prevent unemployment from rising markedly.

# Output and employment growth

# by broad sector, 1975–94

While the low rate of labour productivity growth over the economy as a whole in the US can superficially be regarded as the proximate cause of its much higher rate of net job creation than in Europe, it is hazardous to infer any policy conclusions from this. Because of the inter-relationship between output and productivity growth, it cannot be concluded that employment in Europe would now be higher if productivity growth had been more similar to that in the US. Moreover, because of the complex set of underlying factors, the existence of the relationship in itself provides no guide to the kind of policy to be followed to increase employment in Europe.

Examination of sectoral developments reveals more subtle differences between the two economies. In the first place, over the period since 1975 as a whole, growth of labour productivity in manufacturing has been lower than in Europe and output growth has been higher, so that job losses have not occurred on anything like the same scale. Whereas the number employed in the sector declined by  $1^{1}/_{2}\%$  a year in Europe over the period 1975 to 1994, in the US, employment was actually higher in the latter year than 19 years earlier (though lower than in 1977). Moreover, in Europe, output growth in manufacturing was significantly less in the second part of the period than in the first. The rate of labour productivity growth, however, was lower still (output per person rising by 2.7% a year as opposed to 4% — perhaps contributing to the slowdown in output growth), so that the number employed fell by slightly less after 1985 than before, though still by almost  $1^{1}/_{2}\%$  a year. In the US, on the other hand, manufacturing value-added grew at a faster rate in the second part of the period than the first. This was associated with an increased rate of productivity growth (up to 3% a year in terms of hours worked — higher than in Europe), with the result that employment fell, but by much less than in Europe. (It is worth noting that average hours worked increased in the US in this sector by much the same as the number employed fell.)

Since 1985, therefore, the better record of the US than of Europe in maintaining jobs in manufacturing has involved both much higher output growth (3% a year as opposed to  $1^{1}/_{2}$ %) and higher gains in labour productivity. This is also true of Japan, where productivity growth was similar to that in the US between 1985 and 1994 (though well down on the rate in the previous 10 years — over  $5^{1}/_{2}$ % a year), but output growth was higher so allowing some rise in employment.

In agriculture, output also rose by more in the US than in Europe, though in this case, the boost to jobs which this entails was reinforced by lower growth of productivity, especially in the period 1985 to 1994, when it averaged only just over 2% a year as compared with over  $4^{1}/_{2}\%$  in Europe. This was sufficient to maintain the level of employment after 1985, whereas in Europe, it declined by over  $3^{1}/_{2}\%$  a year. (This almost certainly reflects the substantial gap in the level of productivity between the US and Europe, which the significant gains made in the latter were partly designed to reduce and which would have made it difficult for productivity growth to have been kept down as low as in the US.)

The differential rate of job loss in manufacturing and agriculture in Europe and the US has been the major source of the disparity in overall employment growth between the two economies over the past decade (as well as between Europe and Japan). It has been reinforced by the higher employment growth in services in the US, which has been achieved with much the same rate of growth of value-added in the sector as in Europe. Consequently, value-added per person employed in services in the US has consistently risen at only around  $\frac{1}{2}$ % a year since 1975 as compared with just over 1% a year in Europe. Moreover, since average hours worked in services seem to have declined at a similar rate, the difference appears to reflect a genuinely lower rate of labour productivity growth in the US than in Europe (assuming away any problems of measuring output, which we return to below).

While in Europe and the US, labour productivity growth in services was much the same before and after 1985, in Japan, it declined markedly in the later period as output fell. As a result, employment grew at the same rate after 1985 as before (just over 2% a year).

### Real labour costs and productivity, 1975-94

In all three economies, real wages — or, more precisely, real compensation per employee — in services have risen comparatively little since 1975. In Europe, the increase averaged only just over 1% a year, slightly less than in Japan (just under  $1^{1}/_{2}$ %) but slightly more than in the US (Graph 13). In both Europe and Japan, this was some  $\frac{1}{2}$  percentage point or so lower than the rise in manufacturing, whereas in the US (where real wages in the latter sector went up by only some  $\frac{1}{2}$ % a year), the rise was marginally higher.

In all three economies, the relatively small increases in real wages had the effect of keeping the rise in labour costs in manufacturing below the growth of productivity, though in Japan the difference was very small over the period as a whole, as it was in Europe after 1985. Profit margins, therefore, tended to increase over the period, even in Europe, where there has been little growth of output since 1985.

In services, average real labour costs in the US increased at much the same rate as value-added per person employed between 1975 and 1994. In Europe and Japan, they went up by less. Indeed, in Europe, unlike in the other two economies, average labour costs rose at a markedly lower rate than labour productivity in the second part of the period (by only 0.3% a year as opposed to 1.2%), implying a significant fall relative to value-added and an equally large rise in profits. The low rate of increase in the average costs of employment, however, was not accompanied by any rise in the rate of job creation, which was the same over the period 1985 to 1994 as over the preceding 10 years when labour costs went up by much more and only slightly less than the rise in productivity.

The decline in labour costs in relation to value-added in services is the main proximate cause of the overall reduction in the share of wages in GDP and the associated rise in profits, which has been a marked feature of the period since 1980, in particular. Whereas in the US, the wage share (adjusted to allow for self-employment) was only slightly less in 1994 than in the early 1980s, in Europe, it was some 7% of GDP lower (Graph 14). As a result, the average wage share across Europe was lower than in the US in 1994 (by around 5% of GDP) and even further below the level in Japan (by 9% of GDP), where it also fell over the 1980s (and where the high level is partly due to substantial subsidisation of wages in agriculture), though by less than in Europe. As shown below, the decline in wage share is common to all European countries, with the exception of the UK.

The movement of the wage share in services, because of their high and increasing importance, dictates both the long-term trend in the economy as a whole and the behaviour over the cycle. In contrast to manufacturing, there is little discernible tendency in services, especially in more recent years and especially in Europe, for the wage share to rise during recession and to fall during economic upturns (Graph 15). In some degree, this reflects the greater stability of service output over the cycle, but it is also the apparent consequence of producers in services being more able to vary labour costs — or essentially their work force — in line with variations in output than in manufacturing, where a higher proportion of wage costs are fixed by the production process, at least in the short-term.

In manufacturing, there is less sign of any downward trend in the share of wages in value-added in Europe over the past two decades, as indeed is the case for other sectors (Graph 16). In 1993, at the bottom of the recession, the wage share was



#### 14 Adjusted wage share in total economy in Europe, US and Japan, 1975-94



only slightly lower than in the early 1980s and higher than the level in the US and substantially above the level in Japan. Moreover, though there seems to have been some moderation in the cyclical behaviour of the wage share in manufacturing over the past two decades, perhaps because of a decline in the importance of heavy industries where fixed labour costs tend to be relatively significant, a distinct cyclical pattern remains evident. In 1993, the wage share in manufacturing in Europe was over four percentage points higher than at the peak of the cycle in 1990.

#### Comparative levels of employment

#### per unit of output

There are substantial difficulties in comparing levels of labour productivity or, more relevantly in the present context, the inverse of this, employment per unit of output — or valueadded — across countries. These arise because there is no straight-forward means of measuring value-added or output in different countries which is meaningful in comparative terms. Simply taking its value converted to a common currency (ECU or dollars, for example) at any one point in time implicitly assumes that the prevailing configuration of exchange rates satisfactorily reflects the true relative value of what is produced.

In practice, however, exchange rates have fluctuated so much in recent years that the comparative levels of output computed for different countries — and Europe, the US and Japan, in particular — depend to a major extent on when the comparison is carried out. Between 1975 and 1985, for example, the ECU depreciated against the dollar by just under 39%; over the next nine years, it appreciated by 56%. The value of GDP in Europe relative to that in the US changed in a similar way when measured in terms of a common currency. Although, as noted above, the average growth of GDP was only slightly different in Europe and the US over these two periods, in 1975, the value of GDP measured in ECU (or dollars) was around 8% lower in the European Union (the 15 countries less the former East Germany) than in the US. In 1985, it was 33% lower and in 1994, 13% higher.

As is well known, because they are affected by many different factors (the balance of trade, economic policy, the prospects for growth and inflation, and so on) exchange rates are seldom an accurate reflection of relative price levels in different countries, even when they fluctuate by less than in recent years. This is why systems of purchasing power parities (or standards) have been developed to give a more accurate measure of relative price levels and of what a given income, or sum of money, is worth in terms of what it can buy. Such systems, however, are based on comparing the cost of a basket of goods and services in the different countries and are, therefore, more appropriate for measuring comparative levels of domestic expenditure (and real income) rather than output. While they give a much more meaningful measure of differences in the latter across countries, they are not ideal, partly because imports are included and exports excluded from PPPs whereas the reverse is true of GDP.

They are even less satisfactory for comparing output in different sectors across countries. Use of a common conversion factor would imply that price differentials between, for example, Europe and the US were the same in, say, services as in manufacturing, which is unlikely to be the case in reality. Although PPPs are available for *final* expenditure on different product groups, because of intermediate goods and services, distribution and transport costs and indirect taxes as well as international trade, the value of what is produced in an economy and what is purchased by final consumers can be very different (see Dirk Pilat, 'Labour productivity levels in OECD countries; estimates for manufacturing and selected service sectors', *Economics Department Working Papers*, *No. 169*, OECD, 1996 for a discussion of the problems).



#### 15 Adjusted wage share in services in Europe, US and Japan, 1975-94

#### 16 Adjusted wage share in manufacturing in Europe, US and Japan, 1975-94



For what they are worth, comparisons of labour productivity per hour worked using PPPs as conversion factors shows that the level of productivity was still some 14% lower in 1994 in Europe than in the US over the economy as a whole, contrary to comparisons based on the prevailing exchange rate (Graph 17). On the basis of PPPs calculated for the total economy, productivity in manufacturing was 21% lower in Europe than in the US in the same year and in services 16% lower. (It should be noted that value-added in each sector as reported in the national accounts database used does not sum to total GDP and that, therefore, the weighted sum of productivity in each sector differs from GDP per person employed.)

More relevantly perhaps, given the difficulties of measuring output across countries, while value-added per hour in services was less than in manufacturing in the US in 1994, in Europe, it was higher. Although the difference between the two sectors was not large in either case, it, nevertheless, indicates that there was more labour used per unit of valueadded in the US in services relative to the position in manufacturing than in Europe. The difference, moreover, was much more significant in terms of the number of employed per unit of value-added, which in the US was some 20% more in services than in manufacturing because of lower average hours worked, whereas in Europe, it was much the same.

In Europe, therefore, unlike the US, there is no apparent gain to the number of jobs, in any 'static' sense, from shifting economic activity from manufacturing — or even more so from agriculture — to services. Any gain comes over time from employment per unit of output increasing by more in services (productivity growth being less) than in other parts of the economy.

There is, however, an apparent gain to profit margins from shifting employment from manufacturing to services. As noted above, the share of wages in value-added in services (adjusted for self-employment, which is the same as compen-



#### 17 Value-added per hour worked and per person employed in EU, US and Japan, 1994

sation per hour worked relative to hourly productivity) was less in Europe than in the US in 1994 (61% as opposed to around 64%) and also less than in manufacturing (70%), while in the US it was much the same.

## Growth of employment

### per unit of output in services

The difficulties of measuring comparative levels of valueadded extend to growth in value-added over time, especially in services. In particular, as noted at the outset, the division between changes in the price and volume of service sector net output is beset with problems, which are tending to increase in importance over time as the weight of 'intangible' services relative to basic services increases. Moreover, there is no necessary consistency in the way that the division has been made in different countries.

In virtually all countries, the estimates produced tend to show prices rising at a faster rate in services than in the rest of the economy. This is why the share of services in GDP -or overall value-added --- has expanded by much more than the comparative rate of output growth would suggest. In practice, therefore, consumers have been willing to spend a larger share of their income on services as time has gone on, despite the apparent increase in their price relative to goods. The usual 'economic' explanation for this is that services as a group have a high income elasticity of demand (ie expenditure on them increases by more than in proportion to income) which offsets the negative effect on spending of the increase in their relative price. The alternative explanation is that the increase in prices is over-estimated and the growth of real output (or expenditure) correspondingly under-estimated. In other words, part of what is measured as a price rise is in reality a rise in output (which may take the form of a higher quality of the service supplied rather than more 'units').

There has been much debate in the economics literature about which of these two explanations is the more valid, without general agreement emerging. Though most economists have historically considered that the scope for productivity growth in services was, for the most part, less than in other sectors of the economy, this may be changing with the development and spread of new information technology.

In some sense, however, whether a given increase in valueadded in services relative to that in other sectors primarily arises from higher prices or higher volume of output may be less relevant for employment than is sometimes made out. If consumers are prepared to spend more on services, this may justify more people being employed, insofar as the valueadded, or income, generated is increased, irrespective of whether real output or prices are going up. In some cases, the employment of more people may show up as increased output (or increased quality of services), in others not, depending on the way output is measured.

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	в	DK	D	GR	Е	F	IRL	I	L	NL	А	Р	FIN	s	UK	EUR	US	Japar
Total economy																		
GDP	2.0	2.1	2.4	2.2	2,2	2.2	3.9	2.5	3.2	2,0	2.4	3.1	1.9	1.3	2,0	2.3	2.5	3,8
Numbers employed	0.0	0.3	0.5	1.0	-0.3	0.2	0.5	0.4	1.6	1.3	0.9	0.0	-0.8	-0.1	0,0	0.2	1.8	1.1
GDP per person em- ployed	2.0	1.8	1.9	1.2	2.5	2.1	3.4	2.1	1.5	0.8	1.5	3.0	2.8	1.4	2.0	2.0	0.7	2.7
Real labour costs	1.7	0.9	1.2	1.4	1.5	1.4	2.4	1.3	1.2	-0.3	1.6	0,9	1.9	1.1	1.4	1.3	0.7	2.1
Real compensation per employee	1.7	0.7	1,3	1.5	1.6	1.4	2,2	1.6	1.4	-0.6	1.7	0.9	1.7	0.2	1,7	1.4	0.5	1.6
GDP deflator	4.5	5.7	3.3	16.9	10.8	6.5	7.9	11.1	5.4	3.0	4.2	16.8	6.7	7.5	8.0	6.5	4.9	2.6
Consumer expendi- ture deflator	4.5	6.0	3.1	16.7	10.7	6.5	8.2	10.7	5.1	3.3	4.0	16.7	6.9	8.5	7.7	, 6.5	5.2	3.0
Manufacturing Gross value-added	22	1.5	1.3	na	1.8	1.3	na	33	2.7	1.9	2.5	na	3.1	12	0.7	1.6	2.0	5.0
Numbers employed	-2.1	-0.3	-0.7	na	-1.8	-1.8	na	-1.1	-1.9	-0.5	-1.1	na	-2.1	-2.0	-2.7	-1.5	-0.4	0.6
Value-added per per- son employed	4.4	1.8	2.0	na	3.7	3.1	na	4.5	4.6	2.5	3.7	na	5.3	3.3	3.4	3.2	2.4	4.4
Real labour costs	3.9	0.6	2,4	na	3.6	2.3	na	3.8	3.3	1.5	na	na	4.0	2.7	2.6	2.7	1.9	4.3
Real compensation per employee	1.9	0.6	2.1	na	1.8	1.7	na	1.6	1.6	-0.1	na	na	2.1	0.3	2.3	1.6	0,6	1.9
GDP deflator	4.5	5.7	3.3	na	10.8	6.5	na	11.1	5.4	3.0	4.2	na	6.7	7.5	8.0	6.5	4.9	2.6
Value-added deflator	2.6	6.0	2.9	na	8.7	5.8	na	8.4	3.4	1.7	3.0	na	4.9	5.9	7.4	5.3	3.8	0.7
Services Gross value-added	2.3	2.3	3.5	na.	2.8	2.7	na	2.8	4.9	2.6	3.0	na	2.3	1.9	2.2	2.8	3.0	3.9
Numbers employed	1.2	1.0	1.7	na	1.8	1.6	na	1.9	3.3	2.4	1.8	na	0.6	0.8	1.1	1.6	2.5	2.1
Value-added per per- son employed	1.1	1.3	1.7	na	1.0	1.1	na	0.9	1.5	0.1	1.1	na	1.7	1.1	1.1	1.2	0.6	1.8
Real labour costs	0.9	0.8	0.7	na	1.1	0.6	na	0.3	2.9	-0.8	na	na	1.2	0.7	0.7	0.6	0.6	1.5
Real compensation per employee	1.6	0.6	0.9	na	1.4	1.3	na	1.4	1.5	-1.1	nn	nn	1.6	0.1	1.7	1.2	0.8	1.4
GDP deflator	4.5	5.7	3.3	na	10.8	6.5	na	11.1	5.4	3.0	4.2	na	6.7	7.5	8.0	6.5	4.9	2.6
Value-added deflator	5.2	5.8	3.3	na	11.0	7.2	na	12.0	3.7	3.0	4.8	na	7.3	7.8	8.7	7.0	5.4	2.9
See Notes to Table 1 and To	ible 4																	

## Table 2 Changes in output, employment and labour costs, 1975-94

In consequence, the increase in nominal value-added in services relative to that in other sectors may be of as much relevance so far as the capacity of the sector to generate employment is concerned as the growth in volume terms (this is indicated in Table 3 below by the growth in value-added in services deflated by the GDP deflator instead of the service price deflator). This is an issue which needs to be considered further in the context of a more disaggregated analysis of growth and employment creation within the service sector.

## GDP and employment growth

## in Member States

The changes in employment relative to output and the shifts between sectors of activity which have occurred in the European Union as a whole conceal some differences between Member States, which make it hazardous to generalise about a European pattern of development. Nevertheless, there are broad points of similarity. There has been comparatively little difference between rates of economic





growth experienced over the past 20 years, which reflects the high degree of inter-dependence of economies within the Union, and in almost all countries, employment in agriculture and manufacturing has declined significantly while service jobs have expanded.

Between 1975 and 1994, GDP grew at an average of  $2-2^{1}/_{2}$ % a year in 10 of the 15 Member States (Graph 18 and Table 2). The exceptions are Ireland, Portugal and Luxembourg, where it was above 3%, and Finland and Sweden, where it was below 2%. All of these can be regarded in some sense as special cases: Luxembourg, for obvious reasons; Ireland and Portugal, because of the less developed structure of their economies, especially at the beginning of the period, than of most other parts of the Union, which meant that there was probably more scope for high growth; Finland and Sweden, because of their exposure to the collapse of the former Soviet Union, which was the major cause of a sharp fall in GDP in the early 1990s.

There was, however, less similarity in employment growth in the 10 countries where the rise in output was much the same. Although in 6 of these, employment increased by between 0 and  $\frac{1}{2}$ % a year, in three — Greece, the Netherlands and Austria — it rose by around 1% a year or more, and in Spain, it fell. At the same time, in the former 6 countries, which include the four largest Member States of the Union, there was a close association between the growth of GDP and the rise in employment, suggesting that even a small difference in the rate of growth can have a significant effect on the rate of net job creation.

This implies that in the latter 6 countries at least the growth of value-added per person employed was much the same. Indeed, extending the analysis to take account of changes in average working time indicates that for the majority of Member States, there was very little difference in the growth of value-added per hour worked, or labour productivity, over the



#### 19 Growth of labour productivity and labour costs in Europe, US and Japan, 1985-94

period for which data are available. Between 1985 and 1994, the growth of labour productivity measured in this way averaged between 1.9% and 2.3% a year in 9 of the 15 Member States (Graph 19). The exceptions are Ireland, Portugal and Finland, where it averaged some  $3\frac{1}{2}\%$  or more a year, and, at the other extreme, Greece, Luxembourg and the Netherlands, where the average was less than  $1\frac{1}{2}\%$  a year. Apart from in these latter three countries, therefore, in all Member States, GDP growth of a least 2% a year was necessary to increase the demand for labour at all. This also seems to have been true of the preceding 10-year period (insofar as this can be judged in the absence of data on working time), with Sweden replacing Luxembourg as one of the exceptions.

The evidence also suggests that for a given rate of GDP growth, reductions in average hours worked are a potentially important means of achieving an increase in the number in employment over and above the change in demand for labour. Those countries in which average hours worked declined by more than average, with the exception of Sweden, all experienced an above average increase in the number employed. Moreover, there is little sign that reductions in working time adversely affected productivity. The Netherlands and Greece apart, in none of these countries was productivity growth significantly below average.

In Greece and the Netherlands, the low rate of productivity growth was accompanied by wage moderation and there was little or no increase in the average cost of labour, though whether the former or the latter was the causal factor is hard to determine. Wage moderation, however, seems to have been common to most countries, in that average labour costs went up by significantly less than productivity. Indeed, in four countries in addition to Greece and the Netherlands — Germany, Spain, France and Italy — the rise was similar to or less than in the US. In none of these countries, however, was wage moderation associated with the same rise in employment as in Greece or the Netherlands or, indeed, the US.

The rate of increase in average labour costs, therefore, seems to have been conducive to employment growth in virtually all parts of the Union, though there is little sign of any systematic inverse relationship between rises in labour costs and employment growth.

# GDP and employment growth,

### 1975-85 and 1985-94

Further light on the relationship between output, employment and productivity can be shed by comparing the experience of individual countries in the period since 1985 with that before (though lack of data on average hours worked before 1985 restricts the analysis). This confirms the importance of economic growth for employment. In 7 Member States, again excluding Luxembourg, the numbers employed increased by significantly more between 1985 and 1994 than over the preceding 10 years. In all of these, GDP

												( <b>a</b> )	nnua	l ave	rage	% cha	nge)	
1975-85	В	DK	D	GR	$\mathbf{E}$	$\mathbf{F}$	IRL	Ι	L	NL	А	Р	FIN	s	UK	EUR	US	Japan
<i>Total economy</i> GDP	1.9	2.6	2.2	2.8	1.7	2.3	3.5	3.1	2.4	1.5	2.3	3.0	2.8	1.5	1.9	2.3	2.5	4.2
Numbers employed	-0.4	0.8	0.2	1.2	-1.6	0.1	0.1	0.9	0.2	0.8	0.8	-0.3	0.4	0.5	-0.2	0.1	2.0	0.9
GDP per person em- ployed	2.3	1.8	2.0	1.7	3.3	2.2	3.5	2.1	2.2	0.7	1.6	3.3	2.4	1.0	2.1	2.2	0.5	3.3
Real labour costs	2.1	0.7	1.4	3.4	2.1	1.9	2.3	1.5	1.1	-0.8	1.7	0.5	1.6	0.5	0.8	1.4	0.4	2.2
Real compensation per employee	1.3	-0.1	1.2	3.9	1.8	1.7	1.9	1.9	0.7	-1.2	1.4	-0.6	1.5	-0.3	1.3	1.3	0.4	1.3
GDP deflator	5.6	8.2	3.6	17.9	14.8	9.8	12.8	15.8	6.5	3.9	5.0	21.4	9.3	9.4	10.8	8.9	6.6	3.7
Consumer expendi- ture deflator	6.5	9.0	3.9	17.4	15.1	10.0	13.2	15.4	6.9	4.3	5.3	22.7	9.4	10.2	10.4	9.0	6.6	4.6
<b>Manufacturing</b> Gross value-added	3.1	2.8	1.8	na	1.4	1.3	na	4.3	2.4	2.0	2.8	na	3.7	1.1	-0.3	1.8	1.2	6.1
Numbers employed	-2.9	0.4	-0.7	na	-3.2	-1.7	na	-1.1	-2.5	-1.6	-0.9	na	-0.6	-1.4	-3.1	-1.7	-0.3	0.4
Value-added per per- son employed	6.2	2.4	2.5	na	4.7	3.1	na	5.4	5.0	3.6	3.7	na	4.3	2.5	2.9	3.6	1.5	5.7
Real labour costs	5.0	1.4	2.9	na	3.4	3.0	na	4.2	0.7	2.4	na	na	3.3	2.0	1.9	2.9	1.7	4.8
Real compensation per employee	1.7	-0.1	2.3	na	2.2	1.9	na	1.9	0.3	0.3	na	na	1.7	-0.2	2.5	1.6	0.8	1.8
GDP deflator	5.6	8.2	3.6	na	14.8	9.8	na	15.8	6.5	3.9	5.0	na	9.3	9.4	10.8	8.9	6.6	3.7
Value added deflator	3.1	7.4	3.3	na	13.8	8.9	na	12.9	6.5	2.2	3.9	na	7.7	7.7	11.1	7.6	5.7	1.6
<i>Services</i> Gross value-added	2.1	2.8	3.1	na	2.3	2.9	na	3.3	4.2	2.3	3.0	na	3.4	2.1	2.1	2.8	3.3	4.7
Numbers employed	1.2	1.6	1.4	na	0.7	1.8	na	2.9	2.5	2.1	1.7	na	1.8	1.7	1.0	1.6	2.8	2.1
Value-added per per- son employed	0.9	1.1	1.7	na	1.6	1.1	na	0.4	1.7	0.3	1.3	na	1.6	0.4	1.1	1.1	0.5	2.5
Real labour costs	0.9	0.7	0.7	na	2.2	1.1	na	0.3	1.5	-1.1	na	na	1.1	0.0	1.1	0.9	0.3	1.8
Real compensation per employed	1.2	-0.2	0.6	na	1.8	1.6	na	1.5	1.2	-1.8	na	na	1.5	-0.4	1.2	1.0	0.4	1.1
GDP deflator	5.6	8.2	3.6	na	14.8	9.8	na	15.8	6.5	3.9	5.0	na	9.3	9.4	10.8	8.9	6.6	3.7
VA deflator	6.8	8.0	3.7	na	14.7	10.5	na	16.9	6. <b>6</b>	3.6	5.6	na	9.8	9.7	10.5	9.2	6.8	3.9
Value-added in real terms	3.2	2.6	3.2	na	2.2	3.5	na	4.3	4.3	2.1	3.6	na	3.8	2.5	1.7	3.0	3.5	4.9
Value-added per per- son employed in real terms	2.0	1.0	1.8	na	1.5	1.8	na	1.3	1.8	0.0	1.9	na	2.0	0.8	0.8	1.4	0.7	2.7

# Table 3 Changes in output, employment and labour costs, 1975-85

also grew by more in the second period than the first (Tables 3 and 4). At the same time, in all of these, with the exception of the Netherlands (where it was already much lower than elsewhere), growth of output per person employed was lower after 1985 than before. There is no sign, therefore, of any systematic relationship between the growth of productivity and that of output.

In four countries — Finland, Sweden, Italy and Greece the number employed either increased by less in the later period than the earlier one or contracted. In all of these, GDP growth was also significantly lower in the later period.

In general, given the rate of growth of GDP, employment growth seems to be inversely related to the rate of increase in average labour costs. In 7 Member States, average labour costs went up by less in the period 1985 to 1994 than in the preceding one. In 5 of these, the number employed also increased by more in relation to the growth of GDP in the later period than in the earlier one. This, however, does not necessarily signify that it is low wage growth which is boosting employment: it is equally plausible that causation is working in the opposite direction and that wage rises are low in these countries because labour productivity growth is low.

What seems to be the case, however, is that low pay increases well below the growth in productivity are not by themselves a sufficient condition for high employment growth, even given the growth of GDP. In 9 Member States, there was a significant difference in the size of the gap between productivity and pay increases between the two sub-periods. In four of these — Ireland, Italy, the Netherlands and the UK — the increase in employment per unit of output was much the same in both periods. In two — Luxembourg and Portugal — the number employed per unit of output went up by more in the period when labour costs rose by more relative to productivity, instead of by less as might

Table 4 Changes in output, employment and labour costs, 1985–94																		
												(a	nnua	l ave	rage	% cha	nge)	
	в	DK	D	GR	Е	F	IRL	I	L	NL	А	Р	FIN	s	UK	EUR	US	Japan
Total economy																		-
GDP	2.2	1.6	2.7	1.5	2.9	2.1	4.3	2.0	4.0	2.6	2.6	3.1	1.0	1.0	2.2	2.3	2.5	3.4
Numbers employed	0.5	-0.3	0.9	0.9	1.2	0.3	1.0	-0.2	3.1	1.8	1.0	0.5	-2.2	-0.8	0.3	0.4	1.6	1.4
Average hours worked	-0.8	-0.2	-0.6	-0.2	-0.4	-0.3	-0.5	-0.1	-0.2	-0.2	-0.4	-0.7	-0.2	-0.4	-0.1	-0.3	-0.2	-0.9
Volume of employment	-0.3	-0.5	0.3	0.7	0. <del>9</del>	0.0	0.5	-0.3	2.9	1.5	0.6	-0.2	-2.4	-1.2	0.2	0.1	1.4	0.4
Productivity	2.4	2.1	2.4	0.8	2.0	2.2	3.8	2.2	1.1	1.1	1.9	3.3	3.4	2.3	2.1	2.2	1.1	3.0
GDP per person employed	1.6	1. <del>9</del>	1.8	0.6	1.6	1.9	3.3	2.2	0. <del>9</del>	0.8	1.5	2.6	3.2	1.8	2.0	1.8	0.9	2.0
Real labour costs	1.2	1.2	1.0	-0.8	0.7	0.8	2.6	1.1	1.2	0.1	1.4	1.3	2.2	1.8	2.0	1.2	1.0	2.0
Real compensation per employee	2.1	1.5	1.5	-1.0	1.4	1.0	2.5	1.3	2.3	0.0	2.0	2.6	1.8	0.6	2.1	1.5	0.6	2.0
GDP deflator	3.2	3.0	2.8	15.7	6.6	2.9	2.8	6.1	4.2	2.0	3.3	11.8	<b>3.9</b>	5.4	4.9	4.0	3.1	1.3
Consumer expenditure deflator	2.4	2.8	2.4	<b>16</b> .0	5.9	2.7	2.9	5.8	3.1	2.1	2.6	10.4	4.2	6.7	4.8	3.7	3.5	1.3
<b>Manufacturing</b> Gross value-added	1.3	0.1	0.7	na	2.2	1.2	na	2.2	3.0	1.8	2.2	na	2.4	1.4	1.8	1.4	3.0	3.8
Numbers employed	-1.1	-1.0	-0.7	na	-0.3	-1.9	1.3	-1.1	-1.1	0.6	-1.4	-0.4	-3.8	-2.8	-2.2	-1.3	-0.5	0.8
Average hours worked	-0.2	-0.4	-0.3	na	0.0	0.1	-0.1	0.1	0.0	0.1	-0.3	-0.2	-0.2	na	0.2	0.0	0.4	na
Volume of employment	-1.3	-1.5	-1.0	na	-0.3	-1.8	1.3	<b>-1</b> .0	-1.1	0.8	-1.7	-0.6	-3.9	na	-2.0	-1.3	-0.1	na
Productivity	2.6	1.6	1.7	na	2.5	3.1	na	3.3	4.2	1.1	4.0	na	6.6	na	3.9	2.7	3.0	na
Value-added per person employed	2.4	1.2	1.4	na	2.5	3.1	na	3.4	4.2	1.2	3.7	na	6.5	4.3	4.1	2.7	3.4	3.0
Real labour costs	2.6	-0.2	1.8	na	3.8	1.6	na	3.3	6.3	0.4	na	na	4.8	3.4	3.5	2.5	2.2	3.7
Real compensation per employee	2.2	1.3	1.9	na	1.3	1.3	na	1.2	3.0	-0.6	па	na	2.6	0.8	2.1	1.5	0.4	2.1
GDP deflator	3.2	<b>3</b> .0	2.8	na	6.6	2.9	2.8	6.1	4.2	2.0	3.3	11.8	3.9	5.4	4.9	4.0	3.1	1.3
Value-added deflator	2.0	4.3	2.4	na	3.4	2.4	na	3.7	0.0	1.1	2.1	na	2.0	4.0	3.4	2.7	1.7	-0.3
Services																		
Gross value-added	2.7	1.8	3.9	na	3.4	2.6	na	2.2	5.6	2.8	2.9	na	1.2	1.7	2.3	2.8	2.7	3.1
Numbers employed	1.3	0.3	2.1	na	3.0	1.5	2.6	0.7	4.2	2.8	1.9	3.3	-0.7	-0.3	1.3	1. <b>6</b>	2.1	2.1
Average hours worked	<b>-0.9</b>	0.0	-0.7	na	-0.4	-0.2	-0.6	-0.1	-0.2	-0.3	-0.4	-0.2	-0.1	na	0.0	-0.3	-0.4	na
Volume of employment	0.5	0.3	1.4	na	2.6	1.3	2.0	0.6	4.0	2.4	1.6	3.1	-0.8	na	1.3	1.3	1.7	na
Productivity	2.2	1.5	2.4	na	0.8	1.3	na	1.6	1.5	0.3	1.3	na	2.1	na	1.0	1.5	1.0	na
Value-added per person employed	1.3	1.5	1.8	na	0.4	1.1	na	1.5	1.3	0.0	0.9	na	2.0	1.9	1.0	1.2	0.6	1.0
Real labour costs	0.8	1.0	0.7	na	-0.1	0.1	na	0.3	4.4	-0.5	na	na	1.3	1.6	0.3	0.3	0.8	1.1
Real compensation per employee	2.0	1.6	1.3	na	1.0	1.0	na	1.3	1.8	-0.3	na	na	1.8	0.6	2.2	1.3	1.2	1.7
GDP deflator	3. <b>2</b>	3.0	2.8	na	6.6	2.9	<b>2</b> .8	6.1	4.2	2.0	3.3	11.8	3.9	5.4	4.9	4.0	3.1	1.3
Value-added deflator	3.5	3.4	2.9	na	7.1	3.6	na	6.9	0.6	2.4	4.0	na	4.7	5.7	6.7	4.7	3.9	1.9
Value-added in real terms	2.9	2.2	3.9	na	3.9	3.3	na	3.0	1.9	3.1	3.6	na	2.0	1.9	4.1	3.5	3.5	3.7
Productivity in real terms	2.5	1.9	2.5	na	1.3	2.0	na	2.4	-2.0	0.7	2.0	na	2.9	na	2.8	2.2	1.8	na

Notes: D: excludes new Länder throughout; EUR excludes GR, IRL, A. P and S. B 1985-93; L 1985-92; NL 1977-85, 1987-94; US 1977-85, 1985-93 (Services); Japan 1985-93; E: the sectoral data for 1975 are partly estimated. Hours worked data relate to average usual weekly hours; no data for 1975; S no sectoral data; E 1987-94, A 1985-93, P 1986-94; A, SF hours in manufacturing Fours worked and relate to decuge usual weekly hours, no and for 1975, 5 no sectoral and, E 1967-94, A 1960-94, P 1960-94, P, SF ho refer to total industry For the US, and Japan, the figures for average hours are for annual hours worked; for Japan, they relate to the average change 1983-92. Productivity is measured as GDP or value-added per volume of labour input, defined as total hours worked. Value-added and productivity in real terms are calculated by deflating nominal value-added by the GDP deflator. See also Notes to Table 1.

be expected, and in just three cases — Greece, France and Sweden — employment increased by more relative to GDP in the period when labour costs rose by less in relation to productivity.

### The sectoral pattern of growth

#### in Member States

There were also some differences in the broad pattern of output - and employment - growth, beyond the common tendency, Italy and Finland apart, for the growth of services to exceed that of other sectors (in Italy and Finland, growth of real value-added in manufacturing was higher than in services). In manufacturing, output increased by well under 1% a year in the UK and under 11/2% a year in Germany and France, but by 21/2% a year in Austria and over 3% a year in Italy. The difference in GDP growth between these countries, however, was less than 1/2 percentage point and much less than this between Germany, Austria and Italy. There is more relationship between the growth of GDP and the growth of value-added in services, but this is largely because services account for a major share of GDP in all countries. While all countries, apart from Ireland, experienced a fall in employment in manufacturing, the scale of this varied from over 21/2% a year in the UK to only around 1/2% a year in Belgium and the Netherlands. And although service jobs increased in all countries, this varied from 1% a year in Belgium and the UK to just under 2% a year in Spain, Italy and Austria and 21/2% a year in the Netherlands.

Nevertheless, growth of manufacturing, which in most cases remains the largest source of income from trade, seems to be important for economic growth as a whole and, therefore, for employment creation. With the sole exception of Germany, all countries which experienced above average rates of GDP growth between 1975 and 1994 also had relatively high rates of growth of value-added in manufacturing. This was also the case in the two sub-periods taken separately. In Germany, moreover, the manufacturing sector is proportionately larger than in other Member States and, therefore, generated more income to support the growth of services, which correspondingly accounted for a smaller share of employment than elsewhere than would appear at first sight. Equally, countries which experienced a large contraction of employment in manufacturing - Finland, Sweden, France and the UK, in particular --- had difficulty in offsetting this through higher employment growth in services.

There is some evidence also that productivity growth in manufacturing may be important for achieving growth of manufacturing output. In most Member States in which labour productivity increased above average over the period 1975 to 1994, so did output and vice versa, which was also true of the two sub-periods taken separately (though, as noted above, the direction of causation could equally plausibly be the reverse of this, since high output growth tends to boost productivity growth). The main exception seems to be the Netherlands, where productivity growth was much lower than anywhere else in the Union in both sub-periods, especially between 1985 and 1994, but output still increased by more than average. Equally, productivity growth was relatively high in France and Sweden in both periods, but output went up by less than average.

There appears, on the other hand, to be no systematic association between productivity growth in services and the growth of service output or of employment. In the four countries in which value-added per person employed went up by more than average between 1975 and 1994, in two - Germany and Luxembourg - value-added went up by significantly more than in the rest of the Union, in the other two - Denmark and Finland - it increased by less than in most other Member States (Graph 20). Luxembourg, moreover, was the only one of the four in which employment also rose by significantly more than average. At the other extreme, the Netherlands was the only Member States in which the growth of valueadded per person employed in services was substantially less than average, and here the number employed in the sector increased by more than anywhere else apart from Luxembourg.

Much the same findings emerge from examining the two sub-periods separately, which throws additional light on the issue. In most countries, the growth of value-added per person employed in services was similar over the years 1985 to 1994 to that between 1975 and 1985 (less than ½ percentage point difference). In three Member States, however — Spain, Italy and Sweden — it was significantly different. In Spain, growth of service value-added per person, and, therefore, almost certainly of labour productivity, was much less in the later period than in the earlier one, and both value-added and employment increased by more in the second period than in the first. In Italy and Sweden, the reverse was the case. Growth of labour productivity in services was much higher after 1985 than before and both output and employment

#### 20 Growth of value-added and numbers employed in services in Europe, US and Japan, 1975-94



increased by less than previously. Indeed, in Sweden, employment fell between 1985 and 1994, having risen by over  $1^{1}/_{2}$ % a year in the preceding 10 years, when growth of output in services was only slightly higher. In these three cases, therefore, increased productivity growth was associated with smaller increases in value-added and employment.

Although in most countries, average hours worked declined in services between 1985 and 1994, apart from in three countries - Belgium, Germany and Ireland, where the reduction in hours worked amounted in each case to over 1/2% a year and was equivalent to a guarter or more of the rise in the number in work - this seems to have contributed only to a minor extent to the growth in the number employed. This was the case most notably in the Netherlands, where value-added perperson employed did not increase at all over the period in real terms, but where this was associated with a very low rate of productivity growth in terms of hours worked (less than 1/2% a year). Productivity growth in services was also low - averaging 1% a year or less - in Spain and the UK, matching the rate in the US, though in the UK, unlike in Spain and the US, there was no reduction in average hours worked so tending to reduce the rise in the number in employment.

Nevertheless, in all Member States apart from Denmark, the reduction in average working time was greater in services than in manufacturing (in five countries, average hours worked per week in manufacturing were the same or more in 1994 than in 1985).

With the exception of Luxembourg and Spain (where the difference was marginal), average labour costs in services increased by less than labour productivity over the period 1975 to 1994 throughout the Union, in most Member States by much less (Graph 21). Indeed, in 8 of the 11 countries for which data are available, average labour costs rose by under 1% a year during this period and in the Netherlands, they fell,





implying a growth in real wages (ie compensation per employee adjusted by the consumer expenditure deflator) in most cases of only around  $1^{1}/_{2}\%$  a year or less (in no countries was it significantly higher than this). In these terms at least, therefore, conditions were generally favourable for a high rate of employment growth in the sector.

This is confirmed by the share of value-added going to labour (or the adjusted wage share), which fell significantly in services in all Member States, except Luxembourg, between the early 1980s and the mid-1990s, in all cases apart from Finland and the UK by at least 6% of GDP (Graph 22). As a result, the level of labour costs relative to value-added was lower in services in most countries than in manufacturing in 1994, the only exceptions being the three Nordic countries plus Luxembourg (where the sector has a somewhat different structure than elsewhere). They are also lower in five of the countries — Germany, Spain, France, Italy and the Netherlands — than in the US, though only in the last of these has the number in employment in the sector grown at a similar rate relative to value-added as in the US.

# Concluding remarks

The above analysis has shown that there is, in general, a positive relationship between GDP growth and the rate of net job creation in European Member States and that this has remained relatively stable over the past 20 years since the downturn in growth rates in the mid-1970s following the first world oil price shock. There is, however, some difference in the form of this relationship across the Union and between Europe and the US.

This difference is most relevant in services, which have accounted for virtually the whole of the growth in employment in recent years. In this sector, the US has succeeded in achieving a much higher rate of net job creation in relation to





the growth of value-added than in Europe, though in two Member States — Spain and the Netherlands (and probably Greece if the data were available) — the employment-intensity of growth was as high as in the US over the period 1985 to 1994.

The key question is why this difference, both between the US and Europe and between different Member States should exist and, specifically, why some countries should have succeeded better than others in translating growth of valueadded in services into jobs. Low rates of labour cost increases do not in themselves seem to provide an answer. In most European countries, there has been a significant gap between the growth of labour productivity and increases in labour costs, which would seem to indicate unexploited potential for job creation, in the sense that the increase in profits generated by employees has exceeded the rise in their cost. This assumes, however, that the level of labour costs at the beginning of the period was 'appropriate' in relation to value-added per person and that there was an adequate return to capital.

Although moderation of wages to prevent rises in labour costs exceeding the growth of productivity may be a necessary condition for increasing the employment-intensity of growth, it does not appear to be a sufficient condition — it seems to have been successful in the Netherlands, for example, but much less so in Italy. This would seem to indicate the importance of other factors, including, for example, the underlying institutional system or the extent of social cohesion as well as the structure of activity and the kind of jobs being created.

It may also indicate the importance of the prevailing structure of wages. As noted, above, there is some evidence that the dispersion of wages and the rates of increase are wider in the US than in Europe, especially at the bottom end of the scale, and, according to some, this may have encouraged more job creation for low-skilled workers. On the other hand, the evidence does not suggest that wage dispersion in the Netherlands, which has been the most successful country in Europe, other than Luxembourg, in generating jobs in services, is significantly wider than in other European countries, in fact, the reverse seems to be the case (see OECD, *Employment Outlook*, July 1996, Chapter 3).

The lack of a persuasive explanation for the differences in employment performance noted here suggests a need to examine the job creation process in services more closely and at a more disaggregated level across countries, differentiating between the growth of more sophisticated activities and that of more basic ones (which *inter alia* differ in terms of the problems of measuring real output growth), between more and less labour-intensive ones and between the growth of higher-skilled as opposed to lower-skilled jobs.

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# Sectoral mobility in the European labour market

The flexibility of labour markets in the European Union has been the focus of increasing attention in recent years. As the pace of structural change has quickened, accelerated by the rapid rate of technological advance caused by the revolution in the processing and communication of information and by the ongoing process of globalisation of markets for goods, services and finance, the importance of producers and employees alike adapting to changing circumstances has intensified. On the one hand, employers have to be able to respond quickly to the changing pattern of demand and technical know-how by adjusting what they produce and the processes they use to do it. On the other, workers have to be both willing and able to move between jobs as these changes take place, in the sense of having the requisite skills and aptitude to take up new tasks. At the same time, both employers and workers should be as free from institutional restrictions on their ability to adapt to change as is compatible with the maintenance of basic social rights.

The concern here is to throw light on these aspects of labour market flexibility, or adaptability, by examining the scale of movement between different sectors of activity and from unemployment and inactivity into employment in different parts of the European Union and the way in which this has changed over recent years. The analysis is based on the Community Labour Force Survey, which gives details of the employment status of respondents and the sector in which they were working one year before the survey was conducted (defining a sector in terms of the NACE 1-digit classification which divides total employment into 17 sectors, which have been aggregated into 13 here - 9 sectors in the case of comparisons over time because of the change in the system of NACE classifications in 1993). From this, it is, therefore, possible to identify both the number of people who were unemployed or inactive the year before who were in work at the time of the survey and the number who moved from one sector to another during the year. It is also possible, by comparing inflows into jobs defined in this way with the net change in employment shown by aggregate data, to estimate the number of people leaving employment. (The analysis updates and extends a similar study carried out three years ago and published in Employment in Europe, 1994, Chapter 4, which examined the period 1984 to 1992 and which was based on the old NACE classification.)

It should be emphasised, however, that since the observations are effectively one year apart, they are indicative only of the scale of movement involved in each case. They tell us nothing, in other words, about what might have happened in the intervening period, about the number of people who moved from a given sector into another and back again or, probably more significantly in terms of potential numbers, about those who were unemployed for a spell during the year but who were back in work by the time of the survey or, equally, about the unemployed or inactive who found a job during the year but who had become jobless again by the time of the survey. Accordingly, it gives a minimum estimate of the flows involved, which is unlikely to differ too much from reality in the case of movements between sectors, but which could significantly underestimate flows between unemployment and employment. The extent of underestimation, moreover, could well vary between Member States according to the average duration of unemployment and the numbers affected, which will show up in part in the number who are long-term unemployed. The comparative results obtained, therefore, on the scale of labour movement in different countries are liable to be affected by this and must remain indicative only until more direct evidence becomes available. (The new European Community Household Panel, established in 1994 to monitor the situation of a representative sample of households in Member States and how this changes over time, is a potential source of such evidence.)

It should also be emphasised that the analysis is confined to employees and, therefore, unlike the previous study noted above, excludes the self-employed, for whom less movement between sectors would be expected and for whom the notion of adaptability does not necessarily mean changing businesses but modifying what is produced and the processes used to do it.

The results obtained should, in addition, be indicative of the extent of overall labour turnover in Member States, particularly in a comparative sense, though the qualifications noted above should be kept in mind. Even though they exclude job changes both within the same enterprise and within the same sector, comparable data on which are more difficult to obtain, it may well be that the scale of these changes varies between countries in a similar way to the changes that are included.

At the same time, as stressed in the analysis, the rate of labour turnover needs to be interpreted with a good deal of caution. Since it is affected by such factors as the number of women interrupting working careers for family reasons or the proportion of young people combining education or initial vocational training with a part-time job (who would accordingly be recorded as employed rather than inactive so long as they worked more than one hour a week), which in themselves have very little to do with flexibility, a high rate does not necessarily signify that the labour market in the country in question is an adaptable one. Nor can high rates of turnover be equated with economic efficiency, in the sense that job stability may be an important determinant of productivity in a given activity if it involves a high degree of training or if experience is a significant attribute.

There is a need to note, finally, that the results are subject to an unknown margin of error because of the nature of the data. Inevitably, people may not know or recall accurately what they were doing one year previously or the sector in which they were working. This is particularly so in the case of people who report that they were unemployed since their view may not necessarily conform with the official, internationally-accepted definition of this (ie in practice, they may not have been available for work or actively seeking a job). The total of those reporting that they were unemployed in the preceding year does not, therefore, coincide with the number recorded as being unemployed at the time. For the present analysis, however, this problem ought not to affect the results too much as regards the number moving into employment each year, as most of those who were not strictly unemployed the year before will probably have been inactive rather than in work.

In practice, the figures obtained both for movements between sectors and from unemployment or inactivity into work do not vary substantially from one year to the next in the case of most countries, which suggests that any data errors may not be too serious --- or, at least, that they do not change very much from year to year. The results reported here for 1995 are, therefore, in most cases representative of earlier years as well, particularly as regards the relative scale of labour turnover in different sectors, age groups and Member States. The data relate to 13 Member States, excluding Austria and Sweden for which reliable data are not available, though for Italy, data are included only for movements from unemployment and inactivity into work since the flows of employees between sectors seem implausibly large. Figures for labour turnover at the Union level, in consequence, cover 12 Member States, excluding these three countries.

# **Outline of analysis**

In what follows, the scale of labour flows each year into the different sectors of activity across the European Union as a whole are examined for men and women employees taken separately. Given that many more women interrupt their working careers because of family responsibilities than men, flows into and out of employment are also greater.

Secondly, the relative size of labour movements between different sectors is considered to see the ease or difficulty of moving from one type of economic activity, such as manufacturing, for example, to another, such as services.

Thirdly, the scale of flows is examined by broad age group, distinguishing between young people under 25 and those in older age groups, the former being not only more likely than people of 25 and over to move from inactivity — in this case

from being in school or college — into work, but also from one sector to another.

Fourthly, flows both from unemployment and inactivity into employment and from one sector of activity to another are compared between Member States and attention is drawn to the significant differences in the scale of these which exist across the Union.

Fifthly, variations in rates of labour turnover by broad age group between Member States are examined, partly in order to focus on the comparative scale of labour movement in the prime working-age group of 25 to 49, which is most likely to be affected by labour market regulations and artificial barriers to movement. Differences in turnover in this age group are related to estimates of the ease or difficulty which employers in the various countries have to adjust their work forces to see how far the latter seems to influence the scale of movement.

Sixthly, changes in the size of labour flows over time are analysed in relation to prevailing economic conditions and, in particular, to the growth or decline in overall employment.

Finally, it should be noted that in the following analysis, the term 'labour turnover' is used as shorthand to describe the inflow of employees into a particular sector of activity from either another sector or unemployment and inactivity. More specifically, this relates to the number of employees working in a given sector as recorded by the Community LFS who were not employed in that sector one year before, either because they were working somewhere else or because they were not working at all. The number is then converted into a rate by expressing it as a percentage of the total number of employees in the sector in question, or in the economy as a whole, in the year being examined. This, of course, differs from the usual meaning of the term since it excludes, as noted above, people changing jobs within the same sector (or enterprise).

# Sectoral rates of labour turnover

In 1995, across the Union as a whole (excluding Italy, Austria and Sweden because of data problems), an average of some 12% of men and 15% of women employed in a particular sector were not working in that sector the year before. Just under 1 in 8 of men and just over 1 in 7 of women, therefore, either changed their jobs or became employed after not working in the year concerned. (Adding an estimate for those changing jobs within sectors — which as noted in *Employment in Europe 1994*, Chap. 4, was around 6% in 1992 — gives a figure for overall labour turnover in the year of over 1 in 6 for men and over 1 in 5 for women.) As described below, the figures tend to be slightly higher in years of growth and slightly lower in years of recession, though the change from year to year seems to be only around 1 or 2 percentage points at most.

For men, roughly equal proportions of those starting a job during the year before the 1995 survey had been unemployed,

inactive or working in another sector at the time of the 1994 survey, some 4% in each case. For women, the proportions who had been unemployed or working in a different sector the year before were marginally higher, at just over 4% for each, but the main difference was in the relative number who had been inactive, around 6%, reflecting the greater tendency for women to move in and out of the work force than men, largely to take care of young children or because of other family responsibilities.

These aggregate figures, however, conceal substantial differences between sectors (Graphs 1 and 2). In hotels and restaurants, some 24% of men and 26% of women working in the sector in 1995 had not been employed there the year before, double the rate of turnover in the economy as a whole. A large proportion of these — over 40% of both men and women finding a job in the sector — had been inactive one year earlier, largely because they were still in education or vocational training, reflecting the large numbers of young people, as noted below, who begin their working careers in this kind of activity. At the same time, however, there were significantly higher inflows from unemployment into hotels and restaurants than into other sectors.

The rate of labour turnover is also high in agriculture though only so far as employees rather than the self-employed (who account for most of the employment in the sector) are concerned — where in 1995, around 20% of men and 26% of women had not been working in the sector the year before, though in this case, more had been unemployed previously than had been inactive, suggesting a somewhat different age profile of new entrants than for hotels and restaurants. (Agriculture, it should be noted, is a very small sector in terms of jobs, accounting for only around 2% of total employees in the Union.)

There is a more similar age profile of new entrants to the latter in other high labour turnover sectors, in personal and other

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services, especially among women, and in retail and wholesale distribution. On the other hand, in business services, which has been the fastest growing sector in recent years, a relatively high proportion of those entering the sector had moved from jobs elsewhere rather than direct from school or from being out of work.

At the other extreme, rates of labour turnover are much lower than average in banking and insurance and public administration (around 7% for men and 10% for women in 1995 in both cases), as well as in mining and energy (gas, electricity and water).

In general, the variation in turnover rates between sectors seems to reflect the rate of growth in employment. Faster growing sectors need obviously to recruit people at a faster rate than declining sectors, while it would be expected that fewer new jobs would be created in declining sectors. This is confirmed on average if the rate of turnover of men and women employees by sector in 1995 is related to the growth in employment of these (Graph 3, which excludes agriculture as being a special case).

In practice, however, the relationship is far from being systematic and employment growth is by no means the only determinant of labour inflows. In particular, a high growth sector may have fewer people leaving and, therefore, may need to take on fewer new people than a sector which is expanding by less or even declining, but in which there is a high rate of exit. An important influence on this is the average level of educational attainment and skills demanded of people working in the sector and the level of salaries generally prevailing, which will tend to be related. In agriculture or hotels and restaurants, a large proportion of jobs require relatively little training and pay relatively low wages. Employers can, therefore, afford to accept a high rate of labour turnover, while workers on low rates of pay will tend to be looking elsewhere to increase their earnings.



#### Sectoral inflows of men employees in the Union, 2 1995

#### 2 Sectoral inflows of women employees in the Union, 1995



By contrast, in health or education, where employment has increased at a similarly high rate as in hotels and restaurants, or in banking and insurance, educational qualifications and training levels are significantly higher and the cost of losing an employee correspondingly greater.

For those who are unemployed or inactive, therefore, whether they are still in education or initial training or are taking care of children, there is a much greater chance of finding a job in some sectors rather than others irrespective of differences in rates of net job creation.

Some interesting differences in the rate of labour turnover emerge, however, as between men and women in certain sectors. If those moving from inactivity into employment, the main source of difference, are excluded, in the majority of sectors, there is comparatively little difference (less than 1 percentage point) in turnover rates between men and women. The exceptions, apart from agriculture and mining and energy where comparatively few women are employed in paid jobs, are, on the one hand, banking and insurance, public administration and manufacturing, where turnover rates for women are significantly higher than for men, and, on the other, health care, where they are significantly lower. In the former three sectors, this difference may reflect the fact that more women work in lower grade jobs involving less training than men (in the case of banking and insurance and public administration, in particular), as secretaries or clerks rather than specialists or managers, for example, or have skills which are less specific to a particular activity (in the case of manufacturing) and so are more footloose. In the latter case, it may reflect the specialised nature of women's employment in a sector where women account for over three-quarters of all employees which may inhibit them leaving.





# The direction of labour flows between sectors

The extent to which workers are capable of moving between sectors of activity, and, in particular, from declining sectors into expanding ones, is a key aspect of labour market flexibility. It is, therefore, important to examine the scale of labour flows between particular sectors and others, to see how far those leaving jobs in agriculture or industry where employment has been falling, and is likely to continue to do so in the future, find work in growing areas of the economy. The importance of this lies not only in what has happened historically but in its significance as an indicator of how far people no longer able to find a job in declining sectors are capable of finding one elsewhere.

To assess the scale of movement between different kinds of activity, the 13 sectors distinguished here are divided into three groups: agriculture and industry, basic services (distribution, hotels and restaurants, transport and communications and personal and other services) and more advanced services (banking and insurance, business services, public administration, education and health care). These groupings are determined largely by skill - or educational attainment - requirements, though they correspond to some extent to a division in terms of declining and expanding sectors. In the latter regard, however, there are important differences from a division based solely on employment growth, especially in the second group, where basic services include two high growth sectors - hotels and restaurants and personal and other services - and in the third group, where advanced services include two sectors - banking and insurance and public administration - in which employment is unlikely to increase very rapidly in the foreseeable future (see Employment in Europe, 1996, Part 2, Section 1).

These three sectors accounted, respectively, for 46%, 27% and 27% of male employment (employees only) and 19%, 30% and 51% of female employment in 1995. These size differences complicate the analysis of inter-sectoral movements, since it is only to be expected that a relatively high proportion of those moving into a particular sector would come from a sector in which comparatively large numbers work. The important question is whether this proportion is larger or smaller than would be expected given the size of the sector. To address this question, the data on inter-sectoral flows has been adjusted to allow explicitly for the differing employment sizes of the sectors being considered (see Box).

The evidence suggests that basic services, as defined above, are a prime source of employment for all sectors in respect of both men and women. In virtually all sectors, a much higher proportion of men and women taking up employment in 1995 were previously employed in basic services than the relative size of this sector would suggest. As indicated below, the underlying reason for this is that young people are far more likely to find a job in basic services, especially in distribution, hotels and restaurants, than in any other sector before at a later stage moving on to work in another activity.

In the case of men, those finding work in manufacturing or the public utilities were twice as likely to have moved from basic services than from other parts of the industrial sector, while those working in basic services themselves, in distribution, hotels, restaurants or transport, were three times as likely to have come from other basic service sectors than from industry or from more advanced services (Graph 4). Even in banking and insurance, business services or public administration, a higher proportion of employees taking up a job came from basic services than from more advanced services. Only in health, education and personal and other services did proportionately more new employees come from advanced services than basic services.

Conversely, comparatively few male employees moved from agriculture or industry into other sectors, even into basic services, while the movement into either industry or basic services from advanced services was also relatively small. The only exception is personal and other services, as noted above, which suggests that, for men at least, skill requirements may be more important than in other sectors included in the basic services category and, that, accordingly, this sector might more appropriately belong in the more advanced services group.

For women, the pattern of inter-sectoral flows is similar especially as regards the importance of basic services as a source of new entrants into all sectors — though there are some interesting differences (Graph 5). First, a higher proportion of women finding a job in manufacturing came from other parts of the industrial sector or agriculture in 1995 than in the case of men, while women were more likely to move from industry or agriculture into banking and insurance than from advanced services. Secondly, women were also more likely to enter education and, even more so, health





#### Labour flows between sectors

To assess the scale of flows between pairs of NACE 1-digit sectors some adjustment needs to be made for their relative size in terms of employment. For example, in the agriculture and industry group, manufacturing accounted for well over half of employment in 1995. It is only to be expected, therefore, that a comparatively small proportion of the men and women entering manufacturing would come from other sectors in the group.

To adjust for this and to give a more meaningful indication of the relative scale of movements, the relative number entering a given sector from any of the three groups distinguished in the text (agriculture and industry, basic services, advanced services) can be related to the latter's share in total employment, adjusted where relevant to exclude from the total the number employed in the former sector (ie for any given sector i, the ratio Fg/Ft is expressed as a ratio of Eg/E(t-i) where Fg is the flow into sector i from the sectors in group g, Ft is the total inflow from other sectors, Eg is the number of employees in group g and E(t-i) is total employees less the employees in sector i). The ratios are then converted into percentages to show the relative proportions of new entrants who come from the different groups, effectively weighted for their differential size. If, therefore, there was an even movement between sectors, then the proportions of men and women entering a given sector from the three groups (as shown in Graphs 4 and 5) would be a third in each case.



#### Sectoral inflows of women employees standardised for sector size, by previous sector in the Union,

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6 Sectoral inflows of men and women employees by age, 1995 0 5 10 15 20 25 30 Agentic Marga away Analatary Compation

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E 25-49

25

Women

20

% employees

25

30

Men

15



10

into different sectors, EU12, 1995







care from basic services than from advanced services. Thirdly, in contrast to men, proportionately more women taking up a job in the personal and other service sector were previously employed in basic services than in advanced services, suggesting that the typical nature of the job was somewhat different (though there is little difference in the average level of education attainment of men and women working in this sector).

In general, the overall conclusion to be drawn from this analysis is that it appears to be easier for someone employed in services to find a job in expanding activities, which are predominantly other service sectors, than someone employed in industry and that it seems slightly easier for women to move from declining sectors into other areas than men. This confirms the observation that those losing their jobs in declining industries, especially older male manual workers, irrespective of their skill level, in many cases have acute difficulty in finding alternative employment elsewhere.

#### Sectoral flows by age

The average age of those taking up work in the different sectors is far from uniform. As indicated above, a disproportionate number of people moving from inactivity or unemployment tend to find jobs in basic services and in distribution, hotels and restaurants, in particular. A high proportion of these are young people, significant numbers of whom, as also noted above, then move to jobs in other sectors at a later stage of their careers.

A high proportion of people starting work in any particular sector tend to be young, many of them coming from school or college. In 1995, 39% of men and 36% of women taking up employment across the Union as a whole in the different sectors considered together were under 25. Over half the men entering distribution, hotels and restaurants in the Union in 1995 were in this age group and almost half the women (Graph 6). Similarly, despite the fact that they are declining sectors, just under 40% of men finding jobs in manufacturing and agriculture were also under 25, though the proportions were somewhat lower for women (partly because of inflows into these sectors among women in slightly older age groups who had interrupted working careers because of family responsibilities).

On the other hand, under 30% of men and under 25% of women taking up employment in public administration were under 25 and only around 30% of both men and women finding jobs in personal and other services were in this age group.

As a result, in 1995, 31% of all men under 25 starting employment having been at school or college and 36% of all women went into distribution, hotels and restaurants, around twice the proportion of men and women actually employed in these sectors (Graphs 7 and 8). By contrast, only around 4% of people in this age group went from education into public administration, under half the share of total employment in this sector. While most of the young people taking up jobs in 1995 had previously been inactive or unemployed, a significant number had been working in another sector. Indeed, the proportion of both men and women moving between sectors who were under 25 was around twice their share of total employment. Employees, therefore, are far more likely to change jobs when they are young than when they get older.

# Sectoral turnover

## in Member States

Just as there are large differences in rates of turnover between sectors, so too do they vary almost as much between Member States. In Denmark and Spain, around 16% of male employees (just under in the former, just over in the latter) and 19–20% of women in 1995 had started working in a particular sector during the preceding year (Graph 9). In Finland, the proportions were even higher at almost 19% for men and almost 21% for women. (In these three countries, therefore, overall rates of labour turnover, including movements within sectors, were probably around 1 in 5 for men and 1 in 4 for women.)

At the other extreme, however, the sectoral turnover rate in Belgium was only around 6% for men and under 8% for women, while in Luxembourg, the rate for men was even lower, though for women, it was significantly higher at 11%. Rates were also well below average, both for men and women, in Germany, Greece and Portugal (in each case, under 10% of men and under 12% of women working in a given sector having started during the year before the survey). Of the other four countries for which data are available, turnover rates were slightly above average in France, the UK and the Netherlands and slightly below average in Ireland, especially for men.

In all Member States without exception, turnover among women was higher than for men, in most cases because of the larger relative number moving from a period of inactivity into employment. In Denmark, Ireland, Luxembourg, the Netherlands, Finland and the UK, the difference in this regard was 3 percentage points or more. On the other hand, in Belgium, Greece and Portugal, the difference was very much less and the main reason for higher rates of turnover was the larger number of women moving from being unemployed into work.

The source of high rates of labour turnover, however, differs between countries and in some degree means that the overall rate can be misleading as an indicator of labour market flexibility. In Spain, the high rate is due entirely to the large number of both men and women moving into work after being at school or college or after being unemployed, and the rate of movement between sectors is much lower than average (only around 2% of employees in the case of both men and women). The same is true in Ireland, where the overall rate is only just below average but where much smaller relative numbers of men and women employees than average tend to change sectors each year. On the other hand, in Portugal, a relatively low rate of labour turnover conceals a slightly higher than average rate of mobility between sectors, at least for men (though for women, the rate is below average).

In both the former two countries, and especially in Spain, the high rate of labour turnover reflects the high rate of unemployment and the relatively large numbers of unemployed who are, therefore, available to move into a job. This is also the case in Finland. Accordingly, in these three countries, it is to be expected that a higher proportion of people available for recruitment would be unemployed than in countries where unemployment is lower and where correspondingly, for the same rate of job turnover, a higher proportion of those available to be recruited would already be working. This would not be a problem if the data included people moving between jobs in the same sector. The fact that they do not means that the scale of labour turnover is liable to be underestimated in countries with low rates of unemployment (where labour movement is more likely to take the form of flows between jobs than flows from unemployment into work) relative to those in which unemployment is higher.

At the same time, a high rate of unemployment does not necessarily mean a high rate of labour turnover. The fact that there are large numbers of people looking for work does not in itself lead to increased demand for labour (though it may set in motion processes which have this result), still less to an increased demand for those who are unemployed. Jobs still need to be created for the unemployed to move into. In Belgium, for example, a higher rate of unemployment than average among women in 1995 was combined with a relatively small number of women entering employment after being out of work. Correspondingly, women unemployed in Belgium tended to be out of work for a longer period of time than elsewhere in the Union and the rate of long-term unemployment (those looking for work for a year or more) was well above average. Conversely, in Finland, though the rate of



#### 9 Sectoral inflows of men and women employees in Member States, 1995

unemployment among women was well above the Union average (and indeed, the rate in Belgium), the proportion who had been out cf work for a year or more was much less (32% as opposed to 50% — and 64% in Belgium) and the rate of long-term unemployment was relatively low.

Although the rate of entry into work from inactivity tends to vary less between countries, marked differences, nevertheless, exist across the Union. In Denmark, in particular, the high rate of labour turnover among men results predominantly from relatively large number of employees in 1995 who were inactive the year before. A large proportion of these were under 25, reflecting the significant number of young people who work while they are at college or university, usually on a part-time basis, and who might be temporarily employed at the time of the survey but not a year earlier. At the same time, however, the proportion of male employees aged 25 and over who were inactive the year before was also higher than in all other Member States, apart from Finland, which partly reflects the greater prevalence of temporary periods of absence from work, for child care or training, in particular, in these two countries than elsewhere.

The scale of movement from inactivity into employment among women also reflects the number who interrupt working careers because of family responsibilities, especially among those of 25 and over. It is affected, however, not only by the number of working mothers, which tends to increase it, but also by the child care arrangements in operation, which tend to reduce it. The rate of inflow into jobs among inactive women is, therefore, relatively low in countries where comparatively few mothers work and where child care is less of a problem, such as Belgium and Greece (in the latter, because of extended families), and relatively high in countries where a large proportion of mothers work and child care is less available, such as the UK. It is also low in Portugal, which is similar to Greece but where large numbers of mothers work, and Ireland, which is similar to the UK, but where comparatively few women are employed.

The size of inflows from inactivity into jobs is, therefore, a somewhat uncertain indicator of the extent of labour market flexibility. It is affected not only by the ease or difficulty of those who are inactive finding work, but also by the number of women who have to interrupt their working careers because of caring responsibilities. The fact that many women may have to stop working because of a lack of child care facilities, with similar numbers looking to start again after taking care of their children, can hardly be regarded as an unambiguous sign of a high degree of flexibility.

The scale of movement between sectors is a less ambiguous indicator, though, as noted above, it may tend to be less in those countries where unemployment is relatively high and where there is a greater possibility than elsewhere that people experience a spell without work before moving into a new job. The prime potential example of this is Spain, where as noted above, the high rate of turnover recorded is due entirely to high unemployment and where flows between sectors both for men and women are significantly less than in most other Member States. This is also the case in Ireland where the proportion of employees moving from one sector to another in 1995 was less than half the Union average. In these two countries, therefore, the relatively low movement of labour between sectors does not necessarily signify that the proportion of people changing the sector of activity in which they work is less than elsewhere, only that there is less tendency for them to do so directly. To check whether correspondingly more people in these countries than elsewhere experience an intervening period of unemployment while moving between sectors would, however, require data on both the job in which people worked before becoming unemployed and the job they moved into (which the LFS does not provide but which the Household Panel mentioned above might do).

Less ambiguously, the rate of movement between sectors was also low in Belgium (lower than anywhere else in the Union in all but the youngest age group), Greece and Luxembourg among men as well as women, all countries where both the flow of labour from unemployment into jobs and overall rate of labour turnover was low.

Similarly, the relative number of men and women moving between sectors in 1995 was higher than average in Finland, France, the Netherlands and the UK, while in Denmark, it was relatively high for men but only around average in the case of women, all countries where overall labour turnover was also above average.

# The pattern of

# sectoral flows in Member States

The relative rates of labour turnover in different sectors of activity are remarkably similar across Member States. In all countries, apart from Ireland, the rate of turnover of male employees in agriculture was greater than average in 1995 and in all countries, without exception, the rate in hotels and restaurants was above that in the rest of the economy, as it was everywhere in distribution apart from Finland. Equally, turnover in banking and finance and public administration was well below average in all Member States. Much the same is true of women, except for Luxembourg, where, because of the small numbers involved, the data become of questionable reliability.

# Sectoral turnover

# by age group in Member States

While young people under 25 account for a disproportionate share of labour movements (ie in relation to their share of employment) in all Member States, the size of this varies significantly across the Union. In Denmark and Ireland, they accounted for around half of all men and women employees who took up a new job in 1995, and in Belgium and the Netherlands, for only slightly less than this, while in Spain, Portugal and the UK, they accounted for 40% or more (Graph 10). On the other hand, in Germany and France, the figure was under third for both men and women and in Finland, only around a quarter.

Slightly different conclusions as to the relative scale of labour turnover are, therefore, likely to emerge if different age groups are considered separately. This is done below.

## Men and women, 15-24

For young people under 25, the highest rates of labour turnover are to be found in Finland, France, Spain and Denmark, where, in each case, in 1995, over 40% or more of men employees had either been not working the year before or been employed in a different sector (over 50% in Finland) and over 45% of women (Graphs 11 and 12). In the two former countries, these high rates in part reflect the comparatively small number of people under 25 in employment (under 30% of the 15 to 24 age group as against an average for the Union of 37%) so that there is a greater chance than elsewhere of those that are employed having been in education the previous year. This, however, is not true of Spain or Denmark, where in the former the high rate largely reflects the large numbers of unemployed as noted below. In Denmark, a high rate of movement from inactivity into work combined with the highest proportion of young people in employment in the Union (66%) suggests that there are relatively large flows in both direction (from employment, often part-time in practice, into inactivity as well as the reverse). At the other extreme, in Germany, Portugal and Luxembourg, turnover was well below 30%.

In all countries except Spain for both men and women and Greece for women, people leaving school or college and starting work account for the greater part of turnover, in Denmark and Germany, for more than two-thirds. Comparatively few young people in these two countries, therefore, become unemployed. In Spain, however, most of the young people taking up jobs had previously been unemployed (over a quarter of all young people in employment in 1995 had been unemployed the previous year), reflecting the temporary nature of many jobs in Spain as well as the high proportion of young people who go straight from education or initial training into unemployment. The proportion of young people going from unemployment into work was also relatively high in Greece (especially for women), France and Finland (especially for men), in all cases reflecting the high rates of youth unemployment in these countries. (It should be reiterated here that the meaning of unemployment in this context is open to question and may well vary from country to country, insofar as it depends on individual respondents' subjective view of their status one year earlier rather than being strictly in line with international conventions.)

Movements of young people between sectors, though more important than for older age groups, is, nevertheless, a comparatively small source of labour turnover in most countries. In five Member States — Belgium, Germany, Greece, Spain and Ireland — 5% or less of men and women employees in 1995 had been working in a different sector the year before. By contrast, in the Netherlands and the UK, the figure was over 10%, which suggests greater mobility between activities, though in part reflects the relatively large number of young people in education or training in these two countries who have part-time jobs (which may be completely different from the jobs they take up when starting full-time work).

## Men and women, 25-49

The same countries with high labour turnover among young people also tend to have high rates of turnover of people in the 25 to 49 prime working-age group. In Finland, over 16% of male employees and 20% of women in 1995 had not been in their current job a year earlier, well above the figures in other parts of the Union, most of them having been unemployed or inactive (Graphs 13 and 14).

For men, high rates of labour turnover are also evident in Spain, Denmark, and France — 11-12% in each case in 1995 — again much higher than in the rest of the Union, where the next highest rates were around 8% — in Germany, the Netherlands and the UK. By contrast, in Belgium and Luxembourg, only around 4% of male employees had not been working in a given sector the year before.

For women, the highest rates of turnover, other than in Finland, are also found in Spain, Denmark, France, at around 16% of employees in 1995 in the first and 14% in the other two. In this case, however, the rate in the UK is only marginally below and in the Netherlands not too much less  $(12^{1}/_{2}\%)$ . As for men, the rate is lowest in Belgium, with only 5% of women not being in their present jobs the year before, though in Luxembourg, it is closer to that in other Member States, at around 9%, slightly higher than in Greece and Portugal.





Sectoral inflows of men aged 15-24 in Member 11 States, 1995

13 Sectoralinflows of men aged 25-49 in Member States, 1995









12 Sectoral inflows of women aged 15-24 in Member States, 1995



14 Sectoral inflows of women aged 25-49 in Member States, 1995











The breakdown of labour flows between those who had been unemployed or inactive or working in a different sector varies almost as much between countries as the overall scale. In Spain, most of both the men and women moving into jobs in 1995 had been unemployed the year before, as had a substantial proportion of those in Finland, France and, in the case of men, Ireland and, in the case of women, Denmark and Greece.

A higher proportion of men in both Denmark and Finland than elsewhere had been inactive one year earlier, reflecting in part the significant numbers still in education beyond the age of 24 in these two countries, in part the relative prevalence of schemes for periods of leave (for training and child care, in particular). A comparatively high proportion of women employees had also been inactive in these two countries, especially in Finland, though the proportion was also above average in Ireland and the UK, partly because of the substantial rise in labour force participation in the former and the relatively large numbers of women interrupting working careers for family reasons in the latter.

The scale of movement between sectors was also relatively high in Denmark and Finland, at least for men, around 6% of employees changing sectors in the year before the 1995 survey, and it was around 5% in France and the Netherlands. By contrast, in Belgium and Ireland, it was under 2% and in Spain and Greece, only slightly higher. For women in this age group, the relative size of movement was similar between countries, with the exception of Denmark, where the proportion was marginally less than average, and the UK, where it was significantly above average (it was around average for men). In Belgium, Greece, Spain and Ireland, few women tend to change the sector in which they work.

# Men and women,

### 50 and over

The relative level of labour turnover among those of 50 and over across the Union is somewhat different than for younger age groups. For men, though Finland, France and Spain have the highest levels (7% or more of employees in this age group in 1995) and Belgium and Luxembourg the lowest levels, the level in Denmark is below average and in the UK, above average (Graph 15). For women, the level is again relatively high in France and Spain, but in Finland as well as Denmark and the UK, it is below average (Graph 16). Ireland, however, had the highest rate in 1995, largely because of the significant number of women even in this age group moving from inactivity into work (8% of employees were inactive the year before).

As would be expected, the rate of movement between sectors tends to be low in most Member States, at 2% or below, but there are exceptions. In France, some 4% of men employees and 5% of women changed the sector in which they were working in the year before the 1995 survey, while in Finland, the figure was similarly high for men.

# Labour turnover

# and labour market regulation

The potential effect of labour market regulation on job turnover is likely to show up most markedly in respect workers of 25 and over, who have been employed long enough in their jobs to be covered by employee protection measures, which restrict the ability of companies to adjust their work forces through redundancy or raise the cost of doing so. In practice, there is little correlation between rates of turnover as estimated here and the severity, or laxity, of protection against dismissal (as assessed by OECD in its Jobs Study, published in 1994 — see Part II, Table 6.5), which might be expected to affect the willingness of employers to take on workers. Spain, for example, which has one of the highest rates of labour turnover also has one of the severest systems for protecting workers against dismissal, while Finland with the highest rate is also judged to have an above average degree of severity (Graph 17). Equally, Belgium with the lowest turnover in the Union has below average restrictions on dismissal, though Greece and Portugal which also have low rates of turnover have relatively restrictive protection schemes.

This does not necessarily mean that labour market regulations have no effect on labour turnover — though the effect may well have been overstated by some — but that they may affect it in a different way than often assumed. Tight restrictions on dismissal need not deter employers from hiring new people, but they may alter the way they do so, in particular, by encouraging them to take them on under fixed-term contracts. This, paradoxically, would tend to increase the rate of labour turnover rather than reducing it. It is noteworthy in this context that Spain has the highest proportion of people employed on temporary contracts in the Union (33% of men in 1995), while Finland has the second highest rate ( $13^{1}/_{2}$ % for men). More relevantly perhaps, almost 90% of men in Spain





in this age group (and about the same proportion of women) moving from unemployment into a job in 1995 went into one with a fixed-term contract, while in Finland, the figure was around 55% (and almost 80% in the case of women) and in France, about the same (see *Employment in Europe*, 1996, Part 1, Section 4). On the other hand, the relative number of men (and women) in this age group on a fixed-term contract was lower in Belgium and Luxembourg than anywhere else in the Union.

Restrictions on dismissal might, therefore, have the effect of increasing the number of people employed on temporary contracts and, accordingly, the rate of labour turnover, contrary to received wisdom. It could also result in the development of a dual labour market with established employees enjoying a high degree of protection against losing their jobs, especially in expanding areas of the economy, and others having little or none. This is not necessarily the most desirable or efficient way of increasing labour market flexibility.

## Labour turnover over the cycle

18

While rates of labour turnover reported above for 1995 are not too different from those for earlier years, at least in terms of relative levels, absolute levels are, nevertheless, affected by underlying economic conditions. Inflows into employment tend to decline during periods of recession and of little or no net job creation and to increase during periods of upturn and job growth. The interest from a policy perspective concerns the size of these variations, especially in relation to variations in the scale of job losses, since this determines both the number of new jobs that are potentially being created for those looking for work — the unemployed, school-leavers and women who have interrupted working careers for family reasons — and the extent of structural change which is occurring in response to economic developments. In order to examine changes in labour turnover over the most recent economic cycle - and in order to minimise the potential effect of data errors - the years before 1995 have been divided into two sub-periods: 1987 to 1990, which were years of employment growth in most Member States, and 1991 to 1994, which in most cases were years of recession and little growth or declining employment. (In the case of the latter period, however, 1993 has been excluded because of data problems arising from the change in the NACE classification of sectors which occurred in that year. In addition, the analysis here of sectoral shifts is confined to movements between 9 rather than 13 sectors of activity because of the revision to the NACE classification system in 1993. The effect of this is to reduce movements between sectors by under 1/2 percentage point for men over the Union as a whole, but by just over 1/2 percentage point for women because of the increased disaggregation of services which are far more important for women as a source of employment than for men.)

#### Flows into and out

## of employment in the Union

Over the years 1987 to 1990 inclusive, when employment of men grew by an average of just under  $1^{1/2}$ % a year in the Member States for which data on turnover are available on a reasonably consistent basis (ie the 12 Member States considered above, excluding Finland, the Netherlands and Germany, the latter because of the significant effect of unification in the years from 1991 on), the average rate of entry into employment from unemployment and inactivity was just under  $8^{1/2}$ % (ie an average of  $8^{1/2}$ % of employees in each year had been unemployed or inactive a year before), about half from unemployment and half from inactivity (Graph 18). By implication, the average rate of exit from employment, either because of loss of job, retirement or other reasons for stopping



Inflows and exit rates of men in Member States

19 Inflow and exit rates of women in Member States with above average rates, 1987-95



Over the years 1987 t

working, was around 7% a year (again expressed in relation to employees in each year).

Over the period 1991 to 1994, the rate of inflow of men from inactivity and unemployment into work fell to an average of just over  $7^{1}/_{2}\%$  a year in the 9 Member States (the fall being concentrated on those who were previously unemployed). The average rate of exit increased to almost 9% a year so that employment declined at an annual rate of over 1%. The fall in the number in work, therefore, was due more to a rise in job losses than to a reduction in new jobs being created.

In 1995, the first year of recovery in employment, the rate of inflow into jobs increased to 9% while the rate of exit fell to just under 8% and the number of employees in work, therefore, went up by over 1% for these 9 countries (slightly more than in the Union as a whole because of the exclusion of Germany and Italy, countries where employment fell in 1995). In this case, therefore, the growth in employment was more a result of increased inflows than lower outflows, which may indeed be symptomatic of a year of transition from recession to upturn.

For women employees, the picture is similar. During the years 1987 to 1990 inclusive, the rate of inflow into employment from inactivity and unemployment averaged 12% for the 9 Member States (the inflow from inactivity being around twice that of the inflow from unemployment) (Graph 19). The rate of exit averaged  $9^{1}/_{2}$ % so that the number employed grew by  $2^{1}/_{2}$ % a year. In the period 1991 to 1994, the rate of inflow fell to just over 11% a year (in contrast to men, the fall being concentrated on those moving from inactivity) and the rate of exit rose to just over  $10^{1}/_{2}$ %. The number employed, therefore, went up by only  $1/_{2}$ % a year. As for men, the decline in the growth of employment resulted more from an increase in women leaving jobs than from a fall in inflows, but the difference was much smaller.

In 1995, the rate of inflow of women into work rose only slightly to just under  $11^{1}/_{2}$ %, entirely because of more of those unemployed finding jobs, while the rate of exit declined to 10%, so that the number in employment increased by  $1^{1}/_{2}$ %. For women, therefore, for whom the change in underlying employment conditions was less marked than for men, the higher growth of employment was due predominantly to fewer leaving jobs rather than more taking them up.

## Flows into and out

#### of employment in Member States, 1987-95

The same kind of variation in flows into and out of employment with economic activity is evident in a number of Member States but by no means all. In the two countries where the change in employment performance between the late 1980s and the early 1990s was most pronounced, Spain and the UK, the average rate of inflow of men into jobs from unemployment and inactivity declined by 1 percentage point between the earlier and later periods (in Spain, because of fewer of the unemployed finding work, in the UK, more because of fewer of the inactive — ie school-leavers — obtaining a job) (Graph 18). Similarly, in Luxembourg, where the change was less marked, the rate of inflow also fell in the later period, though only slightly. In all three cases, the rate of exit from employment increased by even more, contributing most to the decline in the number employed during the recession years (Graph 20). In all three countries, but especially the former two, inflows increased in 1995 as recovery occurred and exits declined significantly (in the UK and Luxembourg, by more than the rise in inflows, in Spain, by slightly less).

By contrast, in France and Portugal, which also experienced a reduction in employment in the years 1991 to 1994, the rate of inflow of men into jobs was higher in this period than in the



#### 21 Inflow and exit rates of women in Member States with below average rates, 1987-95



earlier one, if only marginally, as in both cases more of the inactive found work (the flow from unemployment into work falling in each country). The proximate reason for the fall in employment was, therefore, a marked increase in the number of job losses. In 1995, however, as employment rose in France, inflows also increased significantly (by about as much as exits declined). In Portugal, a continuing fall in employment was associated with a further slight fall in inflows.

In the other countries, apart from Germany, where there was less of difference in employment performance between the two periods, there was in most cases little difference in the rate of inflow. The one exception is Denmark, where inflows of men increased sharply in the period 1991 to 1994, largely because of more of the unemployed finding jobs. This was matched, however, by a similar increase in the number leaving employment, so that there was a greater turnover of jobs. Here, as well as in Ireland, a large rise in employment of men in 1995 was associated with a marked increase in the number of inactive finding work.

In Germany, where employment of men declined during the 1990s, any effect of this on the rate of inflow into jobs was offset by the impact of unification which resulted in a marked increase in labour turnover, as both the number of men moving into work and those losing their jobs rose significantly, especially in the former East German Länder.

For women, the Member States showing the biggest changes in net job creation between the two periods, if Germany is left out of account, were again Spain, the UK and Portugal. In the two former countries, inflows into employment declined substantially, in Spain because of fewer of the unemployed finding work, in the UK, because of fewer of the inactive moving into jobs (the same as for men) (Graph 19). The rate of outflow of women from jobs also increased, much more than the rise in inflows in Spain and slightly less in the UK. The growth in the employment of women in 1995 was comparatively small in the UK, and inflows increased only slightly, while in Spain, though it was much larger, inflows also rose only slightly.

In Portugal, unlike for men, the rate of inflow of women into jobs also declined in the early 1990s, though by less than in the former two countries, and the larger number of women leaving employment was the main reason, as in Spain, for the fall in the number in work (Graph 21).

In Greece, there was also a significant reduction in net job creation for women in the 1990s and, as in Spain and the UK, inflows into employment fell markedly, largely because of fewer inactive women taking up jobs. Moreover, the recovery in employment in 1995 saw an equally large rise in inflows, though reflecting more of the unemployed rather than more of the inactive finding work.

In the other countries, the effect of underlying employment conditions on labour flows was less marked. In Denmark, as for men, increased numbers of women moved into jobs in the early 1990s, despite a decline in employment, and more women left jobs. In Ireland, a higher rate of growth of employment during this period was accompanied by a slight reduction in inflows of women into work, as it was in Belgium. In Germany, because of unification, inflows increased significantly, though outflows rose by even more.

# **Flows into employment**

## by age group, 1987-95

#### Men and women, 15-24

The rate of inflow of young people under 25 into employment seems to be only slightly affected by underlying economic conditions. Over the period 1991 to 1994, the average proportion of men and women employees under 25, in the 9 Member States for which comparable data are available, who had been either unemployed or inactive the year before, was much the same (at around 28%) as over the preceding four years of growth (Graphs 22 and 23). This, however, is deceptive since markedly fewer people under 25 had jobs in the later period than in the earlier one (in the case of men, 15% fewer, in the case of women, 13% fewer). Given the increased numbers unemployed, the chances of someone moving from unemployment into work were, therefore, significantly less in the recession than the growth years.

This seems to have been the case in all Member States. Indeed, in most cases, the proportion of employees who had been unemployed a year earlier during the period 1991 to 1994 was less than over the previous four years, except in countries where underlying employment conditions diverged from those in the rest of the Union — such as in Greece for men and Luxembourg for women — or where special circumstances prevailed — such as in Germany after unification and Denmark, where policy effort was directed at providing jobs for the unemployed. In most countries, recovery of employment in 1995 has seen some increase in inflows of young people into employment.

At the same time, in most Member States, there is evidence of a trend increase in the relative number of young people in jobs who had been inactive — ie in education or initial training — the year before, which is a direct consequence of the reduced numbers of people under 25 in employment and the corresponding increased tendency for them to remain longer in education. This trend is particularly marked in Denmark, France and Ireland.

### Men and women, 25-49

The effect of underlying economic conditions on inflows into employment is more marked for those in the 25 to 49 age group. In the 9 Member States as a whole, the proportion of male employees in this age group who had been unemployed a year before fell from almost  $3^{1}/_{2}$ % to just over 3% between the period 1987 to 1990 and the recession years 1991 to 1994,



24 Inflows fom inactivity and unemployment of men aged 25-49 in Member States, 1987-95













25Inflows fom inactivity and unemployment of women aged 25-49 in Member States, 1987-95





27Inflows from inactivity and unemployment of women aged 50+ in Member States, 1987-95



implying a significantly bigger reduction in the chances of the unemployed finding a job (Graph 24).

This feature was common to most parts of the Union. In all Member States, which experienced a contraction of economic activity in the early 1990s, except France, the flow from unemployment into work for men in this age group declined as compared with the growth period of the late 1980s, the fall being especially marked in Spain and Portugal, where the contraction in activity was larger than elsewhere. Denmark and Germany were the only countries where the flow from unemployment increased, in the latter, reflecting unification and in the former, the increase in labour turnover.

The recovery in male employment in 1995, which was widespread across the Union (though in some cases, Portugal and Germany, it took the form of a reduction in the rate of decline rather than growth as such) was associated with increased flows from unemployment into work in most Member States.

In most Member States as well, there are signs of a trend increase in flows of men from inactivity into work, reflecting, in part, as for the younger age group, the parallel trend towards longer participation in education.

For women in the 25 to 49 age group, changes in the scale of flows from unemployment into work between the growth and recession periods are less marked, in part because employment of women has tended to be more stable than that of men. In the 9 Member States taken together, the rate of flow from unemployment into jobs declined only slightly between the two periods (Graph 25).

Nevertheless, in most of the countries where net job creation for women was less in the later period than the earlier one the UK, Spain and Greece, in particular — the inflow from unemployment also fell. The only exceptions, apart from Germany, are Denmark and Portugal. In all the countries where net job creation was higher in the 1990s than in the 1980s — Luxembourg, Belgium and France — the inflow from unemployment was also higher.

The recovery in employment in 1995, however, to the extent that it occurred (which was not the case in Luxembourg and Portugal, while growth was lower in Belgium), had a less systematic effect on the flow from unemployment into work than in the case of men. For the 9 Member States as a whole, fewer female employees in 1995 had been unemployed the year before than over the preceding period, as was also the case in Greece, France, Spain and (if only marginally) the UK, while in Portugal, the proportion was higher despite the fall in the employment of women.

While inflows of women in this age group into jobs were higher in most Member States in 1995 than they had been in the recession years (though much less higher than for men), this was due predominantly to more women who had previously been inactive moving into employment than to more of the unemployed finding work. In general, there is evidence of a similar trend towards increased inflows from inactivity into employment as for men, though on a larger scale, reflecting the tendency for more women of prime working age (and also of child-bearing age) to join the labour force — though equally for increasing numbers of women to leave employment each year (in the period 1987–90, an average of  $3^{1}/_{2}\%$  of women employees aged 25 to 49 left their job each year; in 1995, the figure was  $6^{1}/_{2}\%$ ).

#### Men and women, 50 and over

A similar tendency is apparent for inflows of men aged 50 and over into employment to vary over the cycle as for younger age groups, though for women, it is much less evident. In most Member States, the rate of flow of men from unemployment into jobs was less in the recession years than in the growth period, though paradoxically the flow from inactivity was higher, but it should be emphasised that the figures are small (Graph 26). For women, there are as many countries where flows from unemployment and overall employment growth moved in opposite directions over the two periods as ones where they moved similarly, though in general flows from inactivity moved in the same direction as employment growth (Graph 27).

In 1995, there was a rise in the flow of men in this age group from unemployment into work in all Member States, but for women the rise was less widespread. At the same time, movements of women from inactivity into jobs declined in all countries, except Ireland (which is clearly a special case) and France.

# Sectoral shifts

# by age group, 1987-95

The effect of fluctuations in economic activity on the scale of labour movement between sectors is not straight-forward to predict. On the one hand, since recession tends to affect sectors in long-term decline much more than expanding ones — industry more than services — an increase in job losses in the former during a recession would be expected to lead to more people looking to take up work in growth areas. On the other hand, the rate of creation of new jobs even in expanding sectors, though not necessarily all, will tend to fall at such times so that there would be fewer jobs to move into. Conversely, during periods of upturn, the rate of new job creation is likely to increase, making it easier for those contemplating moving from their present job to do so.

In practice, no uniform tendency is evident for the rate of movement between sectors to decline during recession and increase during upturn.

### Men and women, 15-24

For young people under 25, for whom job changes are more common than for others in work, some effect of the cycle on shifts between sectors is evident in the majority of countries but by no means all. For men under 25, the proportion of employees changing sectors generally declined during the recession years of the early 1990s as compared with the preceding growth period. In the 9 Member States as a whole, an average of just over 7% of young men in employment during the years 1987 to 1990 had worked in a different sector one year previously. In the period 1991 to 1994, the figure fell to 6%, rising to almost 7% again in the recovery of 1995 (Graph 28). This pattern of variation, however, was not common to all countries. In Spain, Portugal and Luxembourg, the proportion moving between sectors increased during the recession (though only marginally in the first case), and in Denmark and France as well as Spain and Luxembourg, the scale of sectoral movements failed to rise with the 1995 recovery. (In Denmark, it is worth noting that the significant increase in inflows into employment from unemployment and inactivity during the 1990s was accompanied by a large decline in sectoral shifts, not only for young men but also, as shown below, for all other groups of employees.)

For women employees under 25, the proportion moving from one sector to another fell in the 9 Member States taken together by much the same extent as for men between the growth and recession periods, but this was entirely due to the significant changes in three countries, the UK, France and Denmark (Graph 29). In the other Member States, apart from Germany and Portugal, the rate of movement changed relatively little, and mostly in the opposite direction to the change in net job creation. Moreover, only in the UK and Ireland was the increase in net job creation in 1995 accompanied by a rise in sectoral shifts.

# Men and women, 25-49

Little tendency is evident for shifts of either men or women in the 25 to 49 age group to vary over the cycle. For both, the proportion moving between sectors increased slightly rather than declined during the recession years of the 1990s in the 9 Member States as a whole and then fell in 1995 as employment grew (Graphs 30 and 31). Only in the UK and Denmark, was there any substantial fall in the scale of movements in the period 1991 to 1994 as compared with the years 1987 to 1990, and in the latter, there was little difference in net-job creation for men between the two periods. In Portugal and France, shifts of men between sectors increased significantly during the recession, as they did for women, despite very different underlying employment conditions for women in France during this period (employment rose by more than in earlier years).

In 1995, sectoral flows of both men and women in France and Spain declined as employment grew, though they increased in Ireland and Denmark where net job creation also rose.

# Men and women, 50 and over

There is also little sign of any systematic relationship between sectoral shifts for employees of 50 and over and underlying

economic conditions. The rate of movement of men increased progressively between 1987 and 1995 in four Member States — Portugal, Greece, Ireland and the UK — and declined progressively in three — Belgium, Denmark and Spain (Graphs 32 and 33). It also increased for women in Portugal, Greece and Ireland, but declined in the UK, as in Spain.

# **Concluding remarks**

From the evidence on people taking up jobs in the various sectors of activity, the rate of labour turnover in the Union appears to be relatively high. Even leaving aside changes in jobs within sectors, around 1 in 8 men and 1 in 7 women in 1995 had been in their present employment for a year or less. The situation, however, varies a good deal between sectors — the rate of turnover tending to be higher in the lower skill, faster growing sectors, such as hotels and restaurants — and between Member States. Turnover rates are highest in Finland, Spain and Denmark, both for men and women, and are also above the Union average in France, the Netherlands and the UK, though for the latter two, the rate for men in 1995 was only marginally above average. At the other extreme, rates are lowest in Belgium, Greece, Luxembourg and Portugal.

Rates, however, also vary between age groups. Inflows of young people into new jobs is much higher than in the case of older workers, not only because of men and women moving from school or college into work, but also because of significant numbers moving from one sector to another. Overall, people under 25 accounted for almost 40% of turnover of male employees in the Union in 1995 and around 36% of that of women, though around 50% in each case in Denmark and Ireland.

Variations in the share of labour flows accounted for by young people mean that differences between Member States in the overall rate of turnover are not necessarily the same in each broad age group. For men of prime working age, the four countries with the highest rate of turnover are the same as for the overall rate — Finland, Spain, Denmark and France — the difference between France and the others is less marked for this group. Both the Netherlands and the UK have rates which are slightly below average and much the same in 1995 as in Germany. Belgium and Luxembourg again have the lowest rates, but further below other countries than in respect of the overall rate.

For women of prime working age, the same four countries have the highest rates of turnover, though in this case not much higher than in the UK. In the latter, however, the high rate is due to a significant extent to high inflows into jobs of women who were previously inactive, which in some degree reflects the greater tendency in the UK for women to interrupt working careers to take care of children for a time and which are a questionable indicator of labour market flexibility. Excluding these, turnover of women in this age group in the UK was less than the Union average.



Sectoral shifts of men employees aged 15-24 in 28 Member States, 1987-95

30 Sectoral shift of men employees aged 25-49 in Member States, 1987-95



32 Sectoral shifts of men employees aged 50+ in Member States, 1987-95



29 Sectoral shifts of women employees aged 15-24 in Member States, 1987-95



31 Sectoral shifts of women employees aged 25-49 in Member States, 1987-95









Differences in rates of labour turnover between Member States do not seem to be correlated with the ease or difficulty of dismissing employees, though they do seem to reflect in some degree the importance of fixed-term contracts.

There is some evidence that the rate of labour turnover varies with the level of economic activity, increasing when employment grows and declining when it falls, so making it difficult for young people in particular to find jobs during periods of recession. At the same time, variations in overall employment growth seem, in general, to result more from an increase in the number of people leaving jobs during downturns than from a reduction in the number of new jobs being created. Shifts of employees between sectors, however, do not appear to be systematically affected by the economic cycle, at least as regards men and women of prime working-age.

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# The household characteristics of the unemployed in Europe

High levels of unemployment have plagued the European Union for two decades and remain the most serious problem facing economic policy-makers. There is increasing concern about the failure so far not only to reduce rates to more acceptable levels but more disturbingly to reduce the number of long-term unemployed.

Analysis of the problem of unemployment has mainly concentrated on the characteristics of the individual, their age, gender, level of education, the region in which they live and, where relevant, previous work experience. Though this has led to a clearer understanding of the issues involved and has helped to improve the effectiveness of labour market policy, analysis of the individual does not provide the complete picture either of the underlying causes of unemployment or of the social implications. The aim here is to examine the home environment of the unemployed, the number of other people in the household and whether or not they are in work, which is of potential relevance for their chances of finding employment, the incentive for them to do so and the problems they face by not having a paid job. The analysis is based on the Community Labour Force Survey, which itself is household-based, which enables the relevant characteristics to be identified and systematically examined.

The results are relevant not only for employment policy but also for systems of social protection in Member States and the problems that result from the persistence of high unemployment and the large number of people who have been without a job for a long period of time. In particular, the implications for social policy in its widest sense are somewhat different if large numbers of the unemployed are living alone rather than in households with other people in work.

# **Outline of analysis**

The analysis focuses on four main issues:

- the changing distribution of households in terms of size and the growing importance of those with only one or two people;
- the relationship between household size and unemployment and, accordingly, the potential importance of the

family as opposed to the State in providing support for those out of work;

- the relative numbers of the unemployed who are heads of household as opposed to being merely members;
- the relative numbers of other household members who are also out of work rather than in paid employment and how far the chances of being out of work, as well as being long-term unemployed, are influenced by the situation of other people living in the house.

The members of the household considered here are confined to those aged 15 and over (see Box for a description of the data used). This is because the Community Labour Force Survey does not cover young people below this age in any detail, since they are unlikely to be working or looking for a job, and because, accordingly, they are not relevant for the present analysis (though clearly they are of relevance for social policy). References to the number of people in a household, therefore, relate only to those of 15 and over (ie what is referred to as a two-person household, for example, could in fact consist of two adults and, say, two or three children).

A distinction is made throughout the analysis between the situation in Northern Member States and that in Southern ones. This not just because studies of labour market conditions across Member States often point to major differences between the two, but more importantly because the typical size of household differs significantly. Households in the North, in general, tend to be much smaller on average than those in the South, reflecting the fact that the extended family is still a widespread feature of societies in the latter, whereas in the former, the number of people of working age living alone for one reason or another, both with and without children, has increased significantly in recent years. In this context, Ireland is included in many cases with the Southern Member States since it shares many of their characteristics.

# **Demographic characteristics**

Before examining the characteristics of the households of the unemployed across the Union, it is important to consider differences between Member States in the typical size of households and how this is tending to change over time.

# The data used in the analysis

All the data used for this study is from the Community Labour Force Survey (LFS) for the years 1986 (1985 for the Netherlands for which there are no data for 1986) and 1995. There are no data before 1995 for the new Member States, though these are included for this year insofar as possible. There are, however, no reliable data for Sweden or, indeed, Denmark, and these two countries are excluded throughout. Analysis for the Union in 1995, therefore, relates to the 13 Member States excluding these two and 11 Member States, excluding in ad-Austria and Finland, for dition comparisons between 1986 and 1995. Data for Germany relate to the former West Germany for 1986 and for comparisons between 1986 and 1995, but include the new Länder for 1995.

The household data themselves distinguish, first, the number of adults (people aged 15 or over) in the household and second, their household status defined as:

- head of household
- spouse or partner of the head of household
- child (15 or over) of head of the household or of his/her spouse/partner
- ascendant relative of the head or of his/her spouse/partner (eg grandparents)
- other relative (15 or over)
- other person (15 or over)

As noted in the text, no children under 15 are included in the analysis.

The data also distinguish the employment status of household members, in terms of whether they are employed, unemployed or inactive. Since the focus is on employment and unemployment, the analysis is confined to those under 65, who represent virtually all of the people in work or actively looking for work and, therefore, excludes those who are most likely to be retired.

# The distribution of households

## by size in 1995

The distribution of households in terms of the number of occupants varies considerably between Member States. In the Union as a whole, single-person households (it should be remembered that children under 15 are not included in the analysis) accounted for over 10% of the total, while households consisting of two people (with and without children) represented another 45% (Graph 1). Less than half of households, therefore, had more than two people of 15 and over living in them and only around 20%, four or more.

There is, however, as noted above, a striking difference between the North of the Union and the South. In the Northern Member States, people are far more likely to live in one or two-person households, in the South, in households with three people or more. In 1995, 64% of men and women aged 15 to 64 in the North of the Union lived in one or two-person households and only 15% in households of four or more. In Southern Member States, including Ireland, only around 37%of the working-age population on average lived in households of two people or less, while some 63% lived in households of three of more and 36% (ie almost as many as lived in one or two-person households) in ones of four or more.

In Finland, Germany, the Netherlands, the UK and France, half or more of people of working age lived in two-person households and in the first four of these, over 13% (18% in Finland) in single-person households.

In Spain, Portugal, Italy, Greece and Ireland, 6% or less of those aged 15 to 64 lived in single person households (under 3% in Spain and Portugal) and, in the first three, two-thirds in households of three of more people of working age.

## Changes in household size, 1986-95

In all Member States, with the exception of Italy and Luxembourg, the relative number of people of working age living alone (or with children under 15) has increased over the past 10 years. Between 1986 and 1995, the proportion living in single-person households went up from 8% to 10% for the 11 Member States for which data are available, a rise of 25% in relative numbers (Table 1). This is all the more striking when considered against a background of a significant decline in the proportion of young people under 25 in the work force.

The increase, however, was largely concentrated in the North of the Union and although most Southern Member States also experienced a rise, it was generally on a smaller scale. In Northern Member States, therefore, the proportion living in single-person households rose from just under  $10^{1}/_{2}\%$  to just over  $13^{1}/_{2}\%$  on average, in the South, only marginally from just under  $4^{1}/_{2}\%$  to  $4^{1}/_{2}\%$ . The increase was particularly marked in the North in the Netherlands (from  $10^{1}/_{2}\%$  to 14%) and the UK (from  $7^{1}/_{2}\%$  to almost  $13^{1}/_{2}\%$ ), while in the South, there were

signs of an emerging upward trend in Greece (5% in 1986, 6% in 1995), though the most pronounced rise in the countries included in this group was in Ireland (from just over 5% to almost  $7^{1}/_{2}$ %). The growth of one-person households is examined further below for men and women separately.

At the same time, the growth in one-person households in the South of the Union, including in Ireland, was in all cases coupled with a decline in the relative number of people living in two-person households (from  $36^{1}/_{2}\%$  to  $32^{1}/_{2}\%$ , on average). In most Northern Member States, on the other hand — in all apart from France and Belgium — the proportion of people aged 15 to 64 living in two-person households increased. The rise was particularly large in West Germany (from 44% to 50%) and in the Netherlands (47% to 53%), in the latter, giving a combined rise in the proportion living in one or two-person households of almost 10 percentage points over the 9-year period, though the increase was only slightly smaller in Germany and the UK (8 percentage points in both cases).

This increase was accompanied by a significant decline in large households of four or more people (in the Netherlands, the relative number went down from 23% of the total to  $15^{1/2}$ % and in Germany and the UK, from around 20% to 14%). In the South, on the other hand, though the proportion of working-age population living in households with five people or more people declined, the proportion living in ones with four increased (from 21% to 24%), as did the proportion living in three-person households (from 25% to 27%).

The effect of these differing trends has been to reduce the average size of household in all Northern Member States, except Luxembourg, including in this case in Ireland, and to increase it or leave it much the same in the South. The reduction was especially marked in the Netherlands ( $8^{1}/_{2}\%$ ) and the UK(10%), while in Spain (1%) and Italy ( $2^{1}/_{2}\%$ ), there were small increases (Graph 2). In Germany, as well as Finland, the average number of people of working age per household had fallen by 1995 to slightly below two, whereas in Italy, Portugal and Spain, it was over  $2^{1}/_{2}$ .

### Average household size by age group

A disproportionate number of those of working age living in larger households tend to be young people under 25. This reflects the fact that a large proportion still live at home with their parents, whether they are in full-time education (an increasing number) or have begun their working careers.

In 1995, over the Union as a whole, young people aged 15 to 24 lived in households consisting of an average of just under three people of working age (Graph 3). In the South of the Union, however, the latter figure was significantly higher than in the North. In Spain, the figure was well over  $3^{1}/_{2}$  and in Italy and Portugal, as well as Ireland, only just below  $3^{1}/_{2}$ . In the Netherlands, Germany, France and the UK, on the other hand, the average number living in households with young people was around  $2^{1}/_{2}$  and in Finland, only just over 2. This suggests that while the vast majority of young people in





Average number of working-age adults per household in Member States, 1986 and 1995

2



3 Average number of adults per household by age group in Member States, 1995



Та	ble 1	l Dis	strib	utio	n of	wor	king	g-age	e <b>po</b> j	pula	tion	by ]	hous	seho	ld si	ze		
				in	Me	mbe	r Sta	ates,	198	6 an	d 19	95						
	В	WG	D	GR	Е	F	IR	I	L	NL	А	Р	FI	UK	E11	E13	North	South
One persor	1																	
1986	7.3	13.4	n.a	4.8	2.0	10.2	5.2	5.8	7.8	10.5	n.a	2.9	n.a	7.5	8.1	n.a	10.3	4.3
1995	10.0	15.8	15.2	5.8	2.3	12.3	7.3	5.7	5.3	14.0	11.1	3.5	17.9	13.3	10.2	11.1	13.7	4.5
% point change	2.7	2.4	n.a	1.0	0.2	2.1	2.1	-0.1	-2.5	3.5	n.a	0.5	n.a	5.8	2.2	n.a	3.4	0.2
Two perso	as																	
1986	46.7	44.1	n.a	40.5	30.9	50.6	38.0	39.4	41.8	46.8	n.a	36.1	n.a	49.3	43.5	n.a	47.6	36.5
1995	46.1	<b>49.9</b>	50.2	38.1	28.3	49.6	36.1	34.3	45.0	53.0	42.5	31.8	53.4	51.4	43.7	45.0	50.3	32.6
% point change	-0.7	5.9	n.a	-2.3	-2.5	-1.0	-1.9	-5.0	3.1	6.2	n.a	-4.3	n.a	2.1	0.2	n.a	2.6	-3.9
Three pers	ons																	
1986	22.7	22.6	n.a	27.9	23.7	<b>20.9</b>	18.5	25.4	23.5	19.9	n.a	25.8	n. <b>a</b>	22.7	23.1	n.a	22.0	24.9
1995	22.6	20.5	21.4	27.1	24.5	21.9	21.0	28.0	23.8	17.6	21.7	30. <b>9</b>	20.0	21.4	23.2	23.0	21.0	26.9
% point change	-0.1	-2.1	n.a	-0.7	0.7	1.0	2.5	2.6	0.3	-2.2	n.a	5.1	n.a	-1.4	0.1	n.a	-1.0	1.9
Four perso	ns																	
1986	15.1	13.7	n.a	20.0	23.0	11.9	17.7	20.1	17.4	15.2	n.a	1 <b>9</b> .3	n.a	14.6	16.3	n.a	13.6	20.9
1995	15.0	10.6	10.4	22.1	25.4	11.9	19.2	23.6	18.2	12.6	15.9	23.2	7.5	11.1	16.1	15.0	11.5	23.9
% point change	-0.1	-3.0	n.a	2.1	2.4	0.0	1.5	3.5	0.8	-2.6	n.a	3.8	n.a	-3.5	-0.2	n.a	-2.2	3.0
Five or mo	re pe	rsons	3															
1986	8.2	6.3	n.a	6.9	20.4	6.5	20.6	9.3	9.4	7.7	n.a	15.8	n.a	6.0	9.1	n.a	6.5	13.4
1995	6.4	3.2	2.9	6.9	19.6	4.5	16.4	8.3	7.7	2.9	8.7	10.7	1.3	<b>2.9</b>	6.8	5.9	3.6	12.2
% point change	-1.9	-3.1	n.a	0.0	-0.8	-2.0	-4.2	-1.0	-1.8	-4.8	n.a	-5.1	n.a	-3.1	-2.2	n.a	-2.8	-1.2
See box for descripti	on of da	ta																

this age group in Southern Member States live with their parents, in Northern Member States, substantial numbers either live on their own or with only one other person of working age.

For people of 25 and over (but under 65), the average household size was around 2 in 1995, though under 2 in all Northern Member States, excluding Austria, Belgium and Luxembourg (in the former two, it was only slightly above), and closer to  $2^{1}/_{2}$  in all Southern Member States, plus Luxembourg. Indeed, in Portugal and Spain, it was over  $2^{1}/_{2}$ .

# Single person households

As noted above, one of the most striking features of current social trends in Northern Europe is the growth of single-person households. This has been true of both men and women. Indeed, across the Union as a whole the proportion of men living alone (or at least with no other person of working age) has risen faster over the past 10 years than that of women, though it remains the case that more women of working age live alone than men (despite the fact that the total number of women of working age in the Union is much the same as that of men).

In all Member States apart from Luxembourg, the proportion of men living in single-person households increased between 1986 and 1995, while the same was true of women in all countries except Luxembourg and Italy (Graph 4). In all Member States, apart from Portugal, Ireland and the UK, the proportion of men living alone went up by more than that of women. The rise was particularly large in the latter country, where the proportion of women living alone rose from just over 8% to almost 15%, while that of men increased from  $6^{1}/_{2}\%$  to  $11^{1}/_{2}\%$ , in both cases more than in any other Member State.

# Unemployment by household size

Not only do more people live alone in the North of the Union than in the South, but a disproportionate number of these are unemployed and even more are long-term unemployed. In most Northern Member States, therefore, the proportion of the unemployed who live in households where they are the only person of working age, and where there is correspondingly no wage coming into the household, is far higher than for those who have jobs. This is not the case, however, in the South of the Union.

In 1995, 25% or more of unemployed men in the Netherlands, Finland and Germany lived alone (or, more, precisely, with no other person of working age), while in the UK and Belgium, the figure was over 20% (Graph 5). In each case, this was markedly higher than the proportion of those in employment living alone — around twice as high in three of the countries and 70% higher in the other two — which in all of these countries was 15% or less. Only in France and Austria of the countries in the North of the Union, as well as in Ireland, was the figure less than 20% (no reliable data are available for Luxembourg).

In the South of the Union, not only do comparatively few people live alone, as noted above, but the proportion of unemployed men living alone is little different from those in work. In all four of the Southern Member States, under 5% of men who were unemployed in 1995 lived alone and in Italy and Spain, proportionately fewer men out of work lived alone than was the case for those in employment.

Although the same features also apply to women, the differences between the unemployed and those in work are much less pronounced. Indeed, over the Union as a whole, proportionately fewer women who were unemployed lived alone in 1995 than was the case for those with jobs (Graph 6). The difference between the North and the South of the Union, however, is still very evident. In the UK, over 25% of women who were unemployed lived alone, more than twice the proportion of those in work, and in Finland, the figure was 24%, around a third higher than for those employed. In the Netherlands, Germany and Belgium, the proportion was 19-20%, in each case higher than that for those in employment (though only slightly so in Germany). Only in France of the Northern Member States did proportionately fewer unemployed women live on their own than women with jobs.

In the South of the Union, by contrast, the proportion of women living alone was less in the case of the unemployed than for those in work in all four countries and in all but Portugal, markedly so. In all of the countries, as for men, only 5% or less of women who were unemployed in 1995 lived on their own.

The sharp distinction between the North and the South of the Union in this respect emphasises the equally large difference in the financial implications of unemployment between the two. In Southern Member States, virtually all the men and women who are out of work live in households with other people of working age, who can potentially, therefore, provide some financial support. In practice, many of the unemployed in these countries are young people under 25 living with their parents and dependent on them for support.

In Northern Member States, on the other hand, significant numbers of the unemployed of both sexes live in households with no other person of working age and, accordingly, are dependent on financial support from outside. Though support may come from other members of the family living elsewhere, the implication is that there is a greater need for income support from the State in these countries than in the South of the Union.

At the same time, the more developed nature of State-operated systems of social protection in the North of the Union than in the South means that people are more able to live alone if they are unemployed. This is particularly so for young people under 25 who have no entitlement to social





5 Employed and unemployed men, 15-64, by size of household in Member States, 1995



6 Employed and unemployed women, 15-64, by size of household in Member States, 1995



assistance in Greece and Portugal if they are not working and relatively little, or at least uncertain, access to State support in many parts of Spain and Italy, where assistance is administered on a regional basis. In this regard, it is perhaps relevant to note that the situation for young people who are unemployed is similar in France where State support is confined to housing assistance and where fewer of the unemployed live alone than in other parts of the North (see Social Protection in Europe, 1995, Chapter 4).

The counterpart of a low proportion of the unemployed living alone in Southern Member States is a high proportion living in large households. In 1995, some 40% of the men unemployed in Greece and Portugal lived in households where there were four or more people of working age, while in Italy, the proportion was 45% and in Spain, over 50%, in each case significantly higher than the proportion of men in work living in such households. Although the figures were lower for women, it was still the case that a substantial number lived in large households (the proportion ranging from around a third of women in Portugal to 45% in Spain). This compares with under 15% of men and women unemployed living in households with four or more people of working age in Finland, Germany, the Netherlands and the UK.

The differences in the size distribution of households between the unemployed and employed are reflected in the average size of households of the two groups. In all Northern Member States except France, the average size of household of the unemployed was significantly less than that for those in work in 1995, especially in the case of men (at well under 2 in Finland, Germany and the Netherlands), while in Southern European countries, without exception, the reverse was the case, again especially for men (Graph 7).

Average household size of employed and

7

#### Changes in the number of

#### unemployed living alone, 1986-95

Just as the proportion of working-age population living alone has increased in recent years, so too has the proportion who are unemployed and, indeed, to a slightly greater extent. Between 1986 and 1995, the proportion of the unemployed living alone over the Union as a whole increased from  $9^{1}_{2}\%$  to  $12^{1}_{2}\%$ . As in the case of the total population of working age, the increase was more marked for men than women, though unlike for the total population, there was less of a difference between the North and the South of the Union.

The rise in the relative number of unemployed men living alone averaged over 4 percentage points in the Union as a whole between 1986 and 1995 and only in Germany and Luxembourg did the proportion decline (Graph 8). Although the proportion of unemployed men in working-age population was marginally lower in 1995 than in 1986, the relative number of these living in households with no apparent source of income from employment has, therefore, risen. The rise was particularly large in the UK, the Netherlands and Belgium, at over 8 percentage points — in the former two, accompanying a fall in male unemployment — though the proportion also doubled, if from a lower level, in Ireland and Portugal.

For women, the average increase over the Union was smaller, at  $2^{1/2}$  percentage points, though still greater than for those of working age as a whole, and in the Netherlands and Greece, the proportion went down slightly (Graph 9). Again, the rise was especially pronounced in the UK and Belgium — indeed, in the UK, at 14 percentage points, it was larger than for men. As for men, the proportion more than doubled in Portugal and virtually did so in Ireland.



#### 8 Proportion of unemployed men aged 15-64 living alone in Member States, 1986 and 1995



While, therefore, the relatively small change in unemployment between 1986 and 1995 would suggest that the social, and financial, implications were much the same in the two years, the figures for the significant growth in the proportion of the unemployed living alone convey a different message. In many Member States, and in the UK and Belgium, in particular, the indications are that the social problems, including the likelihood of social exclusion, and the need for State support increased markedly between these two years.

The problems of the relatively large number of unemployed living alone are brought into even greater relief if the analysis is extended to cover the duration of unemployment. As indicated below, many of the unemployed living in one-person households in the Union in 1995 had been out of work for some time.

## Long-term unemployment

9

### in single-person households

While the rate of long-term unemployment (defined as being out of work for a year or more) among women is slightly greater than for men in the Union, more men who are long-term unemployed than women live alone. Moreover, as for the unemployed as a whole, long-term unemployment of those living in single-person households tends to be higher in the North of the Union than in the South.

In 1995,  $15^{i}/_{2}\%$  of men in the Union who had been unemployed for a year or more lived alone as compared with  $12^{i}/_{2}\%$  of those unemployed for less than a year. For women, on the other hand, the proportion of the long-term unemployed living on their own, at 11%, was smaller than that for those unemployed for under 12 months,  $13^{i}/_{2}\%$  (Graph 10).

Proportion of unemployed women aged 15-64

living alone in Member states, 1986 and 1995

□% of unemployed living alone 35 35 Unemployed as % of population aged 15-64 Left bar: 1986; right bar: 1995 30 30 25 25 20 20 15 15 10 10 5 WG GR IB L. NL EL. UK E11 E

In all Northern Member States, proportionately more men who had been out of work for a year or more lived alone than those who had been unemployed for a shorter time. The difference in the proportion was particularly marked for men in Finland, the UK, Belgium and Germany. In Finland, some 40% of men who were long-term unemployed lived alone in 1995 as against 24% of those out of work for less than a year, while in the UK, the figure was 26%, 10 percentage points higher than for those unemployed for under a year, in Belgium, 24%, 7 percentage points higher, and in Germany, 28%, 6 points higher. Although in the Netherlands, the difference between the two proportions was much less, it was, nevertheless, the case that 32% of long-term unemployed men lived on their own.

In the four Southern Member States, on the other hand, under 5% of men who were long-term unemployed lived alone, much the same proportion as for those out of work for less than a year.

For women, the picture is more mixed. In three of the Northern Member States — the Netherlands, Germany and France — the relative number of long-term unemployed living alone was less than that for those unemployed for a shorter period, though still above 20% in the Netherlands. In the UK, Belgium and Austria, the proportion of the former living alone was markedly higher than for the latter (over 5 percentage points higher). In the UK, some 32% of women who had been out of work for a year or more lived on their own (whether with or without children), almost 10 percentage points more than for those unemployed for under a year.

In the South of the Union, the proportion of long-term unemployed women living alone in Italy and Greece was significantly less than for those out of work for a shorter period, while in Spain and Portugal, there was little difference between the two groups.



#### 10 Unemployed and long-term unemployed men and women, 15-64, living alone in Member States, 1995



Overall and long-term unemployment rates of

11

12 Overall and long-term unemployment rates of men and women, 15-64, by household size in South of the Union, 1995







In many Northern Member States, therefore, the need for financial and social support on the part of the unemployed is even greater than the simple figures themselves would imply.

## Unemployment and long-term

#### unemployment rates by household

The implication of the above analysis is that people living alone in the North are more likely to be unemployed than those living with other people, while in the South, the reverse is the case. In practice, the average unemployment rate of men living alone in the Northern Member States included in the analysis was 14% in 1995 as compared with an overall rate for men as a whole of just over  $8^{1}/_{2}$ %. Moreover, 54% of those who were unemployed were longterm unemployed (Graph 11). For men living in households with other people of working age, unemployment and longterm unemployment were much lower, except for those living in households with 5 or more people, though these accounted for under 4% of all men.

For women living alone in the North of the Union, the average unemployment rate was also higher than that for women living with other people of working age, at around  $12^{1/2}$ %, though the proportion who were long-term unemployed was only marginally above average.

In the Southern Member States, by contrast, the average rate of unemployment for men living alone was only around  $8^{1}/_{2}\%$ , much less than for all men (almost 12%), especially for those living in large households with four or more people of working age, for whom the rate was over 15% (Graph 12). The proportion of the unemployed out of work for a year or more, however, was much the same in all sizes of household.

For women in the South of the Union, the difference in unemployment between those living alone or in small households and those living in large households is even more marked. While the average rate for those living on their own was only  $11^{1/2}$ % in 1995 as against an average of 20% for all women, for women in households with five or more people of working age, it was 30%. Moreover, whereas 54% of those unemployed in single-person households had been out of work for a year or more, in those with three or more people, the proportion was around 60%.

### Youth unemployment rates

#### by household size

Much the same pattern of variation between the North and South of the Union is also true of young people under 25. In Northern countries, unemployment for young men living alone averaged 19<sup>1</sup>/<sub>2</sub>% in 1995 as opposed to an overall rate of just over 15<sup>1</sup>/<sub>2</sub>% and for young women living alone, 18<sup>1</sup>/<sub>2</sub>%

and status of members, 1995																
	I	3 D	GR	: E	: F	IR	L I	L	NL	А	Р	FI	UK	E13	North	South
Total Unemployment (000s)	17 <b>9</b> .3	1566.1	161.4	1732.2	1368.9	106.4	1295.2	2.2	271.0	85.0	168.9	224.9	15 <b>99</b> .6	8761.2	5297.1	3464.1
1-person households (%)	21.5	24.8	4.7	1.5	15.5	9.4	4.7	1.9	29.7	10.8	2.8	26.0	20.7	14.0	<b>2</b> 1. <b>1</b>	3.1
2-persons households (%)	34.2	44.2	23.8	22.9	41.2	34.4	23.0	39.4	38.1	45.5	25.0	42.4	42.6	34.8	42.2	23.4
of which: heads	17.4	34.5	18.2	17.5	35.6	22.0	17.4	30.5	33.3	34.7	17.9	22.9	34.9	27.4	33.7	17. <b>7</b>
spouse/partner	7.5	5.2	0.6	1.0	0.0	7.3	0.1	5.4	0.0	5.4	1. <b>6</b>	<b>16</b> .6	0.0	1.9	2.6	0.9
children of heads/spouse	4.5	3.4	4.1	3.5	4.5	3.1	4. <b>9</b>	3.5	4.2	4.4	4.4	1.5	5.3	4.2	4.3	4.1
3-person households (%)	22.6	18.9	31. <b>0</b>	24.2	21.0	19.7	26.6	24.5	17.9	18. <b>9</b>	31.9	22.8	21.8	22.6	20.5	25.7
of which: heads	4.2	10.1	9. <b>9</b>	8.5	8.6	7.7	5.9	9.2	6.4	6.8	13.2	9.4	8.8	8.4	8.8	7.8
spouse/partner	2.7	0.9	0.2	0.2	0.0	2.1	0.0	2.9	<b>0</b> .0	1.5	0.4	1.4	0.0	0.4	0.5	0.2
children of heads/spouse	11.9	7.2	20.4	14.1	11.5	8.1	19.7	11.4	10.9	9.4	16.5	8.7	11.4	12.5	10.0	16.4
4-person households (%)	12.9	8.7	28.6	26.4	13.7	18.0	30.4	19.3	11.7	16.5	25.1	7.6	11.8	17.8	11.3	27.7
of which: heads	2.5	3.9	6.1	6.9	4.4	6.0	4.2	3.1	2.5	4.8	8.1	2.5	3.6	4.6	3.8	5.9
spouse/partner	1.0	0.1	0.1	0.1	0.0	2.0	0.0	2.1	<b>0</b> .0	1.0	0.3	0.6	0.0	0.1	0.1	0.1
children of heads/spouse	6.1	4.3	21.4	18.1	8.8	8.9	25.5	11.5	8.8	9.0	15.0	2.3	7.9	12.2	6.8	20.6
5-person households (%)	8.9	3.4	11.9	25.0	8.7	18.4	15.4	14.8	2.5	8.3	15.2	1.2	3.1	10.9	4.8	20.1
of which: heads	1.4	1.2	1.7	4.5	1.9	3.8	1.7	3.7	1.2	2.2	3.0	0.2	0.8	2.0	1.2	3.2
spouse/partner	0.5	0.1	0.0	0.1	0.0	1.3	0.0	0.0	. 0.0	0.1	0.2	0.0	0.0	0.1	0.0	0.1
children of heads/spouse	4.1	1.9	9.9	18.6	6.2	12.1	13.2	7.9	1.1	4.3	11.0	0.3	2.0	8.0	3.1	15.6

Table 2 Structure of unemployment of men by household sizeand status of members, 1995

as against 15%. In addition, 35% of the unemployed men living alone had been out of work for a year or more as compared with an average for all men of 27% (Graph 13).

In the South of the Union, some  $19^{1}/_{2}\%$  of men under 25 living alone were unemployed (coincidentally, the same rate as in the North) as opposed to an average of 29% for all young men, while for men living in households of five people of working age or more, the rate was over 32% (Graph 14). For women under 25 living on their own, unemployment averaged 26% as compared with an overall rate of 39% for all women and one of  $43^{1}/_{2}\%$  for those living in five-person households. At the same time, the proportion of unemployed women, though not men, who were longterm unemployed was much higher in larger households than smaller ones, averaging 58% for those living in fourperson households as against 47% for those living alone.

# Unemployment

# by household status

In the remainder of the analysis, the focus is on the position of the unemployed in the household, whether they are the head, the spouse or partner of the head or one of their children, rather than on household size, though many of the findings are implicit in what has gone before. In practice, the majority of unemployed men are heads of household. Across the Union as a whole, around 57% of the men who were unemployed were heads of household in 1995, around half of these living with just one other person of working age (in most cases, their wife) (Table 2). Again, there is a marked difference between the North and South of the Union. Whereas in the former, two-thirds of unemployed men were household heads, in the latter the figure was only around 37%. Indeed, in Southern Member States, most (57%) unemployed men were the children of either the head of household or their partner.

In the case of women, only just over 20% of those unemployed in the Union were heads of household in 1995, most of these living alone (Table 3). Just under half the women (47%) were the spouse or partner of the household head and most of the rest were children of the head or of the spouse. In the North, however, some 55% of the women unemployed were spouses or partners of the head and under 15% were children. In the South, under 40% were spouses or partners and half were children.

# Youth unemployment by household status

The majority of young people aged between 15 and 24 live with their parents and they are slightly more likely to do so if they are unemployed than if they are in work. Over the Union as a whole, around 80% of young men in this age group who were

Table 3 Struc	ture	ot u	nen	nplo	yme	nt o	of wo	mer	ı by	hou	seh	olds	size			
and status of members, 1995																
	E	B D	GR	E	C F	IR	а I	L	NL	А	Р	FI	UK	E13	North	Sout
Total Unemployment (000s)	211.0	1609.4	218.4	1798.9	1605.1	64.7	1361.6	2.6	280.5	81.7	166.3	188.1	855.9	8444.2	4834.3	3609.9
1-person households (%)	<b>19</b> .0	18.8	5.1	2.1	15.0	12.8	4.5	10.5	20.3	16.7	4.6	23.9	25.5	12.3	19.0	3.
2-persons households (%)	52.6	54.4	30.7	30.1	52.2	37.9	31.4	42.5	48.2	45.7	31.6	48.9	45.5	42.5	51.3	30.8
of which: heads	6.5	9.6	3.3	2.9	3.1	15.5	2.2	5.1	3.0	8.2	5.8	22.7	5.6	5.1	6.7	3.0
spouse/partner	35.2	42.6	22.6	24.0	46.2	17.8	23.3	31.9	41.6	34.1	<b>22.9</b>	<b>22.6</b>	33.5	33.4	40.9	23.5
children of heads/spouse	2.3	1.3	3.4	2.6	1.8	2.6	4.3	2.4	2.2	2.7	2.1	1.4	3.8	2.5	2.0	3.3
3-person households (%)	15.1	17.8	27.2	22.3	17.9	17.6	24.4	21.8	18.3	20.1	31.2	1 <b>7.9</b>	17.0	20.2	17.6	23.7
of which: heads	1.2	2.0	1.4	1.0	1.2	4.4	0.7	3.2	1.3	2.4	<b>2</b> .5	5.6	1.4	1.4	1.7	1.1
spouse/partner	7.1	12.0	8.0	8.3	9.7	4.9	5.7	13.5	9.4	9.4	13.3	2.5	6.7	8.6	9.5	7.5
children of heads/spouse	4.5	3.5	17.0	12.0	6.4	6.6	16.7	5.0	7.4	6.8	12.6	5.3	7.2	9.1	5.5	14.0
4-person households (%)	8.8	6.6	26.4	24.2	9.6	16.2	27.4	13. <b>9</b>	11.4	10.7	23.1	8.1	9.5	15.8	8. <b>6</b>	25.4
of which: heads	0.4	0.3	0.4	0.7	0.2	2.8	0.1	2.4	0.1	0.1	0.6	2.1	0.3	0.4	0.3	0.5
spouse/partner	2.7	4.1	4.2	5.6	4.6	3.6	3.4	2.4	4.4	4.8	6.7	0.7	2.5	4.2	3.8	4.7
children of heads/spouse	3.7	1.9	21.3	17.1	4.5	8.2	<b>22.9</b>	8.2	6.9	5.2	14.3	2.1	5.7	10.4	3.9	19.2
5-person households (%)	4.4	2.4	10.6	21.3	5.4	15.5	12.4	11.3	1.8	6.7	<b>9</b> .5	1.3	2.5	9.1	3.5	16.6
of which: heads	0.1	0.1	0.1	0.2	0.1	1.5	0. <b>0</b>	0.8	0.1	0.5	0.8	0.2	0.0	0.1	0.1	0.2
spouse/partner	1.0	0.9	0.8	2.9	1.3	1.5	0.9	0.9	0.8	1.4	1.8	0.2	0.6	1.4	0. <b>9</b>	2.0
children of heads/spouse	2.3	1.2	9.4	17.0	3.7	11.0	10.9	7.0	0.9	3.7	5.7	0.4	1.5	7.0	2.1	13.6

unemployed lived with their parents (or with at least one of them), while 75% of those in employment did so (Graph 15). The same is true for women, though the proportions are somewhat smaller than for men because of those who are either married to or living with the head of the household who is in an older age group. Around 69% of women aged 15 to 24 who were unemployed lived with their parents in 1995 and some 61% of those in work (Graph 16).

As would be expected, the proportion of young people living with their parents is much greater in the South of the Union than the North. Over 90% of men aged 15 to 24 in Italy, Spain and Greece who were unemployed lived with their parents and just under 90% of those in work and, although the figures were slightly lower in Portugal, the same kind of difference was evident.

In the North of the Union, under a third of young men in this age group who were either in work or actively seeking work lived with their parents in Finland and only around two-thirds in Germany, Belgium, the UK, the Netherlands and France. Moreover, in Germany, the UK, the Netherlands and Ireland, a higher proportion of those in employment lived with their parents than those who were unemployed.

For young women, although the proportions are smaller for those living with their parents, the pattern of variation is

similar to that for men. In Italy and Spain in the South, almost 90% of women who were unemployed in 1995 lived with their parents, slightly more than the figure for those in employment, while the difference was larger in Greece (84% and 74%). In Portugal, however, a higher proportion of young women in employment lived at home than in the case of those who were unemployed.

This latter was also true, but to a larger extent, in the UK and Germany, as for men, as well as in Belgium, Luxembourg and Austria. In the UK, only 49% of women in this age group who were unemployed were living with their parents in 1995 as opposed to  $61^{1}/_{2}$ % of those in employment, while in Germany, the figures were 47% and 55%, respectively. In these two countries, around 25% of women aged 15 to 24 who were unemployed were classed as heads of household because they lived alone, and in Finland, the proportion was almost half.

# Unemployment of prime-age men

# and women by household status

In all Member States except Finland, a higher proportion of men aged 25 to 49 with jobs than without were classed as household heads or the spouse or partner of the head in 1995 (Graph 17). This is particularly the case in the South-



15 Employed and unemployed men, 15-24, by relationship to head of household in Member States, 1995 100 100 of tot 80 80 Child of head/spouse Spouse/partner of head Head 60 60 40 40 20 20 employed righ 0 0 1 Е GR Ρ А L E13 F IR NL UK в D FI

17 Employed and unemployed men, 25-49, by relationship to head of household in Member States, 1995



19 Employed and unemployed women, 50-64, by relationship to head of household in Member States, 1995



ern Member States, where 75% or more of men in employment were heads of household or their partners as opposed to 50% or less of those who were unemployed in Italy, Greece and Spain and under 60% in Portugal. The corollary of this is that almost half of unemployed men aged 25 to 49 in the former three countries were still living with their parents and over a third in Portugal. In the North of the Union, by contrast, under 10% of the unemployed men in this age group lived with their parents in Finland and the Netherlands and 20% or less in all the other Member States.

In the case of women of prime working age, proportionately more heads of household in the Union were unemployed in 1995 than were working, reflecting the relatively high number of women living alone who were unemployed (Graph 18). Indeed, in Finland and Ireland, more unemployed women were heads of household than were spouses or partners of heads and in the UK, Germany and Austria, around a third or more of women unemployed were household heads. This does not altogether conform with the conventional view of unemployed women being predominantly wives, supplementing household income rather than being the main source of it.

In the South, however, in Spain and Italy, proportionately more women who were household heads were employed than were unemployed in 1995, while in Greece and Portugal, there was little difference between the two proportions, both being relatively small (under 15%). In these countries also, especially in the former three, a significant proportion of women in this age group who were unemployed were still living with their parents, as in the case of men (over 30%in each case). In most countries in the North, by contrast, 5% or fewer of women who xere unemployed were still living with their parents.

# Unemployment of men and women

## aged 50 to 64 by household status

In the 50 to 64 age group, as would be expected, virtually all men and women are either household heads or their partners. Some 92% of men in the Union on average were household heads in 1995 and two-thirds of women were spouses or partners. The main feature of interest is that in most Member States, a higher proportion of women who were unemployed were heads of households than in the case of those who were in work and in Greece, the UK, Portugal, the Netherlands and Ireland, the difference was marked (more than 10 percentage points) (Graph 19).

# Is unemployment contagious?

The remaining question to be addressed here is whether there is a tendency across the Union for unemployment to be higher in households where at least one person is out of work. In other words, leaving aside those people living alone, do the unemployed tend to live in households where other people of working age are unemployed or in ones where they are mostly in work? This is clearly relevant to the financial implications for the State of unemployment as well as to the issue of social exclusion and to the extent of divisions within society between those with jobs and those without.

Analysis of the different members of the household (their sex, age and relationship to each other ) and their employment status (whether they are in work or unemployed and if the latter, how long they have been without work) rapidly becomes very complex as the size of household increases. To make the analysis manageable, it is focused on a few representative groups. These are:

- male and female heads of household
- female partners of heads of household
- male and female children of the head/partner.

Households with two, three and four or more people of working age living in them are analysed in turn.

## **Probability of unemployment**

### among other household members

A person who is unemployed is more likely to live in a house where at least one other person of working age is also unemployed than is the case for someone in employment. Over the Union as a whole, the average unemployment rate of men and women (here treated together) living in two-person households averaged 9% in 1995. Some  $16^{1}/_{2}$ %, almost twice as many, of those that were unemployed in households of this size, however, shared a house with someone else who was unemployed. In 6 of the 13 Member States for which data are available, the proportion living in a household where the other person of working age was also unemployed was over twice that of the unemployment rate of those living in two-person households as a whole.

It is also the case that the chances of someone unemployed sharing a house with someone else who is unemployed tend to increase the longer the person in question has been out of work, though the extent of the increase is relatively small over the Union as a whole. In 1995, 16% of those unemployed for less than a year living in a two-person household shared a house with someone else unemployed, while 17% of those unemployed for a year or more did so (Graph 20).

Once again, however, there is a distinct difference between the North and South of the Union. In all four Southern Member States, the likelihood of the second person in a two-person household being unemployed was significantly less in cases where the first person had been out of work for a year or more than where they had been unemployed for a

#### 20 Second persons unemployed in 2-person households by duration of unemployment of first person in Member States, 1995



21 Other persons unemployed in 3-person households by duration of unemployment of first person in Member States, 1995







shorter period. In all of the Northern Member States, the likelihood was greater. This was particularly the case in the Netherlands, where 13% of the long-term unemployed living in such households shared a house with someone else unemployed as against 9% of those unemployed for less than a year and in the UK, where the proportions were 20% and 14%, respectively.

The same features are broadly true of three-person households. For people living in such households, the average unemployment rate across the Union was just under 11% in 1995, yet 22% of the unemployed living in households of this size shared a house with at least one other person who was out of work.

As for two-person households, the chances of a second or third person being unemployed increase with the length of time the first person has been out of work, though the increase is more marked. Over the Union as a whole, in 20% of cases where one person living in a three-person household had been unemployed for under a year, at least one other person of working age was unemployed in the household. In almost 24% of cases, however, where one person had been out of work for a year or more, at least one other person was unemployed in the same house (Graph 21).

For households of this size, moreover, there was less of a distinction between the North and South of the Union. Only in Belgium and Spain was a person who was long-term unemployed in a three-person household less likely to be sharing a house with someone else who was out of work than in the case of a person who was unemployed for under a year. In France, Finland and the UK, the probability was substantially greater that at least two people would be unemployed if someone in the house were long-term unemployed as opposed to being out of work for less than a year.

In larger households containing four or more people of working age, the chances of two or more of these people being unemployed is significant. In 1995, the average rate of unemployment among those living in households of this size was just over 15% in the Union as a whole. However, some 31% of people who were unemployed in such households shared a house with one other person who were also out of work, a further 10% with two other people unemployed and an additional 4% with three other people unemployed. Most of the people concerned were in the South of the Union, in Italy and Spain, in particular.

As in the case of smaller households, the likelihood of someone unemployed sharing a house with other unemployed increases with the duration of unemployment. Some  $40^{1}/_{2}\%$  of those living in households of four people or more in the Union who had been unemployed for under a year had at least one other person who was out of work in the house as compared with 49% of those unemployed for a year or more (Graph 22). In this case, the same kind of difference is true of all Member States, though it is relatively small in Spain and the Netherlands.

# The employment status of heads

## of household and other members

The likelihood of at least one other person being in work are significantly greater if the head of household is employed rather than being out of work. In 1995, in around two-thirds of cases in the North of the Union, the second person in a two-person household (in most instances the wife of the head) was employed if the male head was working. In only around 40% of cases were they working if the head was unemployed and in only around a third of cases if they were long-term unemployed (Graph 23). For women heads of household of this size, who are far fewer in number, the same is true but the differences in the proportions are smaller.

In the South of the Union, where participation of women in the labour force is much lower, in under 50% of two-person households where the male head was in work was the second person also employed (Graph 24). Nevertheless, in only around a third of such households where the male head was unemployed was the other person in paid work.

Looking at it from the perspective of the second person in the household, if the woman partner of the household head was employed in 1995, then in around 90% of cases in both the North and South of the Union the head was also in work. If she was unemployed, however, the head was in work in the North in under 75% of cases and in only around two-thirds of cases if she were long-term unemployed. In the South, on the other hand, the difference between the two cases was less marked and over 75% of household heads were in work when their female partner was unemployed.

In the case of the children of working age living with a lone parent (ie children of the head in two-person households), what is immediately striking is that only in a minority of cases is the parent likely to be in work. In the North of the Union in 1995, in only around 40% of such households did the parent have a job, while in the South, the proportion was under 20%.

Moreover, in the North of the Union, the proportion of lone parents in work was lower if the child was long-term unemployed than in other cases. Thus in under 30% of such cases was the parent in paid employment, compared with around 45% of cases if the child was also employed or had been unemployed for less than a year.

In the South of the Union, on the other hand, there is slightly more chance that the lone parent is in work if the child of the household is unemployed, irrespective of the duration, than if they are working. In 1995, whereas the parent had a job in only around 17% of cases when the child was employed, they were working in around 22% of cases when the child was unemployed. The clear implication of the above is that, in the North of the Union at least, there is a significant tendency for the unemployed to live in households where the other person is also unemployed.

This conclusion is confirmed if the analysis is extended to larger households. In all cases, if one person in the household is unemployed — and in the North, still more if they are long-term unemployed — there is a significantly greater chance of at least one other person being unemployed than if they are in work (Graphs 25–28). Though the concentration of the unemployed in 'unemployed' households is more marked in the North than the South, it is, nevertheless, evident in the latter as well.

There are a number of possible factors which underlie this finding. In particular, it is possible that what is showing up here as a household characteristic may in fact be an effect of the large regional disparities in unemployment which exist across the Union and which mean that anyone living in an area of high unemployment is more likely to be out of work than someone living elsewhere, irrespective of the type of household in which they live. Equally, it may reflect the effect of differences in educational attainment, and skill, levels, which are an important determinant of someone's chances of getting a job and which may vary between households, because, for example, people tend to set up house with someone else of a similar educational background or that educational aspirations are passed from one generation to another or because of possible obstacles to higher education which may exist for those from poorer, less well-educated families. Whatever the underlying factors — and there is a need for further research to uncover them — the finding has important implications for both social and labour market policy towards the unemployed.

# Work-rich versus

# workless households

The polarisation by household of those with jobs and those without confirms the finding of a recent study covering selected OECD countries based on the same kind of data (Gregg and Wadsworth, "It Takes Two: Employment Polarisation in the OECD", Centre for Economic Performance, Discussion Paper no. 304, September 1996). This highlighted an increasing division between what are termed 'work-rich' households on the one hand and 'workless' on the other. A similar analysis is conducted here for the European Union Member States for 1986 and 1995, though for the population 15 to 64 rather than 20 to 59, a difference which ought not to affect the results significantly.

As in the previous study, the present analysis indicates that the net increase in jobs which occurred between 1986 and 1995 tended to go disproportionately to people living in households where those of working age were already in employment. At the same time, the unemployed have tended

23 Employment status of second person in 2-person households by employment status of 1st person in the North of the Union, 1995



25 Employment status of other persons in 3-person households by employment status of 1st person in the North of the Union, 1995



27 Employment status of other persons in 4-person households by employment status of 1st person in the North of the Union, 1995



24 Employment status of second person in 2-person households by employment status of 1st person sex in the South of the Union, 1995



26 Employment status of other persons in 3-person households by employment status of 1st person in the South of the Union, 1995



28 Employment status of other persons in 4-person households by employment status of 1st person in the South of the Union, 1995





30 Changes in employment rate and proportion of work-rich households in Member States, 1986 to 1995







to become increasingly concentrated in households where no-one else is in paid employment. Indeed, in a number of countries, despite unemployment coming down over the period, the problem of social and financial support for the unemployed has almost certainly increased rather than declined because of this concentration.

Between 1986 and 1995, the average unemployment rate in the Union (excluding in this context the former East Germany and the three new Member States as well as Denmark) increased very slightly by well under  $\frac{1}{2}$  percentage point, while the average proportion of the working-age population in employment rose by just over 1 percentage point. These relatively small changes were accompanied by a significant polarisation of households between those where all members of working age were in paid employment and those where no-one of working age was employed. While the former increased from 32% of total households to 36%, the latter went up from  $16^{1}/_{2}\%$  to 18% (Graph 29). The relative number of households in between, with one or more persons working and one or more out of work — and where, therefore, some support of those out of work was potentially available — declined from  $51^{1}/_{2}\%$  to 46%.

This pattern of change occurred in most Member States, the main exceptions being Portugal and Luxembourg, the only countries where the proportion of 'mixed' households increased. The change was particularly marked in the UK, which experienced one of the largest falls in unemployment between 1986 and 1995, but where the proportion of workless households increased in spite of this from 17% of the total to almost 191/2% and where the number with all people of working age in employment rose significantly to almost half the total. The latter proportion is the highest in the Union by some way, while the proportion of workless households is the fourth highest, behind only Belgium, Ireland and Finland (not shown in the graph), all of which have higher rates of unemployment. (In Ireland also, which experienced both the largest fall in unemployment and the largest rise in the employment rate, there was no reduction in the number of households with no person working.)

A striking feature of the comparison between Member States of the proportion of workless households is that it bears little relationship to the rate of unemployment, which in some degree is a reflection of the differences in household characteristics between the North and the South of the Union emphasised above. In both the UK and Belgium, this proportion was well above the Union average even though unemployment was below average, while in Spain and Italy, the proportion was much the same as the Union average despite unemployment being relatively high.

### Changes in work-rich households

### and the employment rate

There is a fairly systematic relationship across the Union in the increase in the proportion of working-age population in employment (the employment rate) and the relative number of households with everyone in work ('work-rich' households). Those Member States which experienced the largest rise in the employment rate between 1986 and 1995 also experienced the biggest increase in work-rich households (Graph 30). In most cases, moreover, the increase was much more than in proportion to the rise in employment, emphasising that the growth in jobs has gone disproportionately to households where there was already someone in work.

## **Changes in workless households**

## and the employment rate

There is also a reasonably systematic, though less close, relationship between the change in the employment rate and the proportion of households with no-one in work ('workless' households). In those Member States in which employment rose by most, the proportion of workless households increased by least or declined (Graph 31). At the same time, however, there is a clear trend towards a rise in the number of workless households which growth in employment has only partly offset in a number of countries. Thus, on average, the employment rate needed to rise by around 4 percentage points between 1986 and 1995 - about twice the increase in the Union as a whole --- to prevent the relative number of workless households from increasing. Indeed, only in the Netherlands, where the increase in the employment rate was the highest in the Union, did the proportion of such households decline by more than 1 percentage point over this period.

The growth in jobs, therefore, generally benefited households where no-one was in work only to a relatively small extent. This is partly because of the growth in one-person households which took place at the same time and which is a reflection of social developments which are likely to continue, though at a differing pace across the Union because of different starting positions. Even leaving aside this growth, however, there has still been an expansion in the relative number of workless households of two or more people.

# **Concluding remarks**

The above analysis has highlighted the sharp difference which exists in the average size of household between the North and South of the Union. Many more people live in small households in the former and over the past decade this difference has widened as increasing numbers in Northern Member States have taken to living alone — or, at least, with no other person of working age.

A disproportionate number of the latter are unemployed and a substantial proportion of these, long-term unemployed, with a corresponding need for financial and social support from outside the household. By contrast, in Southern Member States, the great majority of the unemployed live in the family home and have the potential support of other members of the household.

The trend towards one-person households, both of people living alone and of one-parent families, is an important factor behind the growing division of households between those where all the members are in work and those where no-one is in paid employment. This is particularly pronounced in the North of the Union, but it is also apparent in the South. In most countries, it has profound implications for social as well as employment policy since it threatens both to increase the problem of social exclusion and to widen income disparities. As yet it is a problem which has not been fully appreciated. Higher rates of employment growth may help to alleviate it, but on the evidence of the recent past are in themselves unlikely to provide a complete solution.

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**European Commission** 

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