3. LABOUR MARKETS IN THE EU: AN ECONOMIC ANALYSIS OF RECENT PERFORMANCE AND PROSPECTS
Summary

Halfway through the first decade of the Lisbon strategy, the targets for employment rates in the EU now look more challenging than they did. When one looks at the key demographic groups from which most of the increase in employment must come, it is difficult to see how the overall target of a 70 per cent employment rate can be achieved by 2010, even in the EU-15, let alone the EU-25. The 50 per cent target for older workers also appears out of reach, though substantial progress has been registered. There is still a chance that the 60 per cent target for female workers will be reached. The macroeconomic slowdown has not helped, but more importantly, a great deal remains to be done in the area of structural reforms.

Nevertheless, there is evidence that much of the improvement in labour market performance over the 1990s was structural, and that significant progress has continued in some areas, such as tax and benefit reforms and early retirement. Also on the positive side, there is no great mystery about the main determinants of labour market performance, or about the kinds of measures Member States need to take in order to permanently raise employment rates. The economic evidence – on the determinants of both overall labour market performance and employment in specific demographic groups – suggests that the right strategy has been set out in the EU’s Broad Economic Policy Guidelines for 2003-05, in the Employment Guidelines based on the reformed European Employment Strategy and in the recent report of the European Employment Taskforce chaired by Wim Kok.

The strategy includes, inter alia, steps to ensure that wages better reflect productivity and local labour market conditions, tax and benefit reforms in conjunction with well-targeted active labour market policies that favour labour market participation, labour market regulations that are conducive to job creation and policies to improve education and training, especially for the low-skilled and older workers. Detailed reform strategies have to be country-specific, looking at the ensemble of labour market and social protection institutions. Appropriate measures in one country might differ from what is required in another. But, in most EU Member States, there is ample scope for improvements in the design of institutions so as to improve incentives to take up employment while tackling deadweight costs and distortions that provide very little in the way of genuine social insurance. A comparison of country-specific priorities as identified in the EU Employment Recommendations and the Broad Economic Policy Guidelines with progress made in the last few years points to areas for urgent action at the Member State level.

Although a rising employment rate may temporarily depress productivity growth, simply because the number of workers per unit of capital is increasing, and because those who move from unemployment or inactivity into employment are likely, on average, to have a relatively low level of productivity to start with, there are three reasons why this does not give cause for concern. First, the temporary negative effect on productivity growth is estimated to be rather small. Secondly, even if growth in productivity – GDP per employed person – is negatively affected, a higher employment rate unambiguously raises growth in GDP per capita. Newly employed people clearly contribute more to GDP than they used to, even if their productivity is below average. Thirdly, both economic theory and evidence suggest that a higher employment rate has no significant negative implications for longer-term productivity growth, which is what really matters for the competitiveness and dynamism of the EU economy. These points – important ones for the Lisbon strategy – are supported by two separate pieces of analysis: an econometric analysis of the dynamic response of productivity to structural employment shocks, and a simulation based on the Commission’s macroeconomic model. This suggests that there is no genuine trade-off between policies to raise the employment rate and policies to foster productivity growth.
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LABOUR MARKETS IN THE EU: AN ECONOMIC ANALYSIS OF RECENT PERFORMANCE AND PROSPECTS

1. Introduction

The Lisbon strategy involves efforts on several fronts both to improve labour market performance and to raise productivity growth. This twin aspiration is neatly summed up in the phrase ‘more and better jobs’, which implies higher employment rates but also more productive, higher-quality employment.

The strategy set explicit targets for ‘more jobs’: an employment rate of as close as possible to 70 per cent and a female employment rate of over 60 per cent by 2010. The Stockholm summit a year later added a further target of an employment rate of 50 per cent for older working-age people. Given the rate of employment growth required to meet these targets, the Lisbon conclusions also established an implicit target for productivity growth with the statement that – if the recommended measures were implemented against a sound macroeconomic background – it should be possible to achieve 3 per cent GDP growth.

These targets have met with criticism in some quarters on several counts. Some regarded them as over-ambitious, particularly since the European Council – as opposed to individual Member States – lacks full control of the necessary instruments to meet its objectives. There were doubts about whether a credible strategy had been set out, or whether EU leaders realised the extent of reforms that would be required. Others pointed to the risk of policy distortions – there are many ways to raise employment rates, for example, but not all of them are fully consistent with raising economic welfare. On the other hand, the Lisbon targets appeared to score an initial public relations success, being widely interpreted as a signal that the EU was taking economic reform seriously.\(^1\)

Two clear advantages of the Lisbon strategy, and especially the employment rate targets, are often overlooked in these discussions. First, the commitment to raising employment rates, i.e. raising labour force participation as well as reducing unemployment, represents a clear rejection of an idea that has been one of the great weaknesses of some Member States’ employment policies in recent decades, namely that high unemployment can be cured by discouraging labour supply. If this seems obvious today, it is not so long ago in some countries that married women were discouraged from working, while older workers were actively encouraged to quit the labour market through early retirement schemes, partly in response to high unemployment. Even more recently, governments in some EU Member States were entertaining a similar notion – that employment in persons might be boosted by means of regulatory restrictions on hours worked.

Secondly, the Lisbon strategy embodies the idea that structural improvements in the functioning of markets are required for a sustained increase in employment rates and higher productivity growth. Clearly, at any given moment, output and (un-)employment are determined by real demand in the economy. However, over the longer term, real demand will generally tend towards a level consistent with stable inflation, this level being determined by overall supply conditions in the economy. By focusing on the functioning of labour, product and capital markets, as well as investments in R&D and human capital, the Lisbon strategy seeks to raise employment and growth potential in a sustainable manner.

\(^1\) Even then, though, it was noted that this might damage the credibility of similar exercises were the targets to be missed by a wide margin.
In addition, while one may ask whether the employment rate is the ideal variable to target, there is no doubt that low employment rates in several EU Member States are a symptom of poor labour market performance, and that improving labour market performance would lead both to higher employment rates and to greater economic welfare. The benefits of higher employment rates for the sustainability of public finances, at least in the short-to-medium term, were also noted.

The Lisbon strategy also addresses two much-discussed ‘trade-offs’ – one between employment growth and productivity growth, the other between employment and social cohesion. On the former, the position is clear: provided the necessary reforms are undertaken, it is possible to have both a substantial increase in the employment rate and higher productivity growth. Whether this is actually the case is the special concern of Section 2.2 of this chapter.

On social cohesion, Lisbon also takes quite a clear line, calling for modernisation of social protection systems in order to ensure that work pays, and stating that “the best safeguard against social exclusion is a job”. At the same time, the strategy underlines the need to improve working conditions and skill levels – i.e. the quality of jobs. This is not to say that uncomfortable choices may not sometimes have to be made between social protection and economic efficiency. However, in many cases, there is substantial scope for improving the design of labour market institutions in such a way as to improve employment performance without weakening social protection (see Section 3.1.3).

This chapter takes stock of the implementation of the Lisbon strategy as far as labour markets are concerned. Section 2 reviews labour market performance since 2000 and considers the extent to which disappointing progress can be put down to the less than favourable macroeconomic environment. It then focuses on a crucial question for the strategy of ‘more and better jobs’: whether and in what sense there are trade-offs between employment growth and productivity growth.

Section 3 reviews the best available evidence on the determinants of labour market performance, and compares this with actual performance and policymaking in the EU-15 since 2000. It then turns to critical groups in the labour force in which significantly lower unemployment and/or higher labour force participation would appear to be necessary conditions for approaching the Lisbon employment targets.

Section 4 reviews the priorities established for labour market reforms in EU Member States and compares progress achieved since 2000 to what is likely to be required in order to hit the Lisbon targets. Most of the chapter focuses on the former EU-15, to which the Lisbon strategy initially applied. However, Section 4 also looks at the labour market challenges faced by the ten new Member States, and at how they will fit into the Lisbon strategy.

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2. Lisbon at Mid-term: An Overview

2.1 Labour market performance since 2000

In 2000, the Lisbon employment targets seemed within easy reach to many. The EU-15 employment rate for the population aged 15-64 was 63.4 per cent, which meant that in order to reach 70 per cent by 2010, employment had to grow at an annual rate of 1 per cent.2 This would be well above the long-term average of 0.4 per cent since 1960, but half the rate of employment growth in 2000.

As it turned out, employment growth peaked at 2.0 per cent in 2000, fell to almost zero in 2003, and is expected to remain relatively weak in 2004 and 2005: 0.3 per cent and 0.8 per cent respectively, according to the Commission’s Spring 2004 economic forecasts. On this basis, the employment rate would rise to 65 per cent in 2005, and the annual rate of employment growth required to hit the 70 per cent target by the end of 2010 would then be 1.5 per cent. In other words, an immediate return to the economic performance of the late 1990s would be needed in order to hit the overall Lisbon target. Even then, the higher the employment rate rises, the more difficult it becomes to sustain rapid employment growth.

The disappointing performance over the past few years can be partly explained by the macroeconomic slowdown. Up to 2001, there were signs that structural reforms of product and labour markets, together with wage moderation, were beginning to pay off. The Commission services’ assessment was that these factors might be behind as many as 5-6 million additional jobs since 1995.3 However, the remaining 6-7 million jobs created during the same period could then be put down to cyclical or macroeconomic factors, and the removal of this stimulus clearly makes it a much more difficult to reach the Lisbon employment targets on schedule.

Nevertheless, disappointing performance cannot be ascribed entirely to the cyclical downturn. First, EU leaders were presumably aware that with less than favourable conditions of 1999 and 2000 might not continue for a whole decade. Secondly, had employment continued to grow rapidly, further structural improvements in labour market performance would still have been required in order to avoid inflationary pressures. Labour markets in some EU countries were already showing signs of tightness in 2000. Thirdly, the cyclical downturn in the labour market has not been particularly severe. Indeed as Graph 1 shows, the employment rate appears to be about its equilibrium level.

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2 Assuming, as projected by Eurostat, a roughly constant working-age population.
3 See the EU ECONOMY 2002 REVIEW, Chapter 2.
The upper panel of Graph 1 shows estimated ‘structural employment’ in the EU and the US, which combines estimates of the NAIRU\(^4\) and trend labour force participation. The lower panel compares the ‘employment rate gap’ – the deviation of the actual employment rate from its estimated structural level – with the output gap, or the deviation of actual GDP from its potential level. While for the EU the employment rate gap is almost zero, in the USA it is around minus 1.4 percentage points – i.e. the actual employment rate is 1.4 percentage points below its structural level.\(^5\) The cyclical response of employment appears more moderate in the EU than in the US, even after controlling for the wider fluctuations of the output gap in the US. This is despite the growing use of temporary contracts in the EU, which many expected to lead to an increase in the sensitivity of labour demand to the business cycle (see Box 1).

\(^4\) Non-accelerating inflation rate of unemployment: the ‘structural’ rate of unemployment that is consistent with constant inflation.

\(^5\) With a US working age population of 192 million, this implies a gap between potential and actual employment of 2.7 million jobs, not far from the “low” estimate (3.5 million) recently obtained by the Federal Reserve Bank of Boston (2004) assuming a NAIRU of 5.5 and a participation rate of 66.3 per cent. When the same calculation is done using OECD data on the population aged 15 years and over (as opposed to aged 15-64), which corresponds more closely to the usual US definition of the employment rate, the implied gap is 2.8 million persons. The Boston Fed’s ‘baseline’ and ‘high’ estimates (assuming, respectively, a NAIRU of 5 per cent and 4.5 per cent and a participation rate of 66.8 per cent and 67.3 per cent) indicate a somewhat larger employment gap, of 5.2 million and 6.9 million jobs respectively.
Box 1: The impact of temporary contracts on the cyclicality of employment rates

The use of temporary contracts in EU countries has grown rapidly over recent decades. These types of contracts, once a relatively rare exception to the rule of permanent employment, now represent a significant share of total employment in the EU-15: around 13 per cent in 2003 compared with 7 per cent in 1987. However, the share varies a lot across countries, ranging from 2 per cent in Luxembourg to 31 per cent in Spain in 2003.

Whether or not the growth of temporary contracts affects the overall level of employment, one might expect it to modify the response of participation and employment to the business cycle. Firms can choose not to renew temporary contracts in downturns, while, in periods of recovery or expansion, they can quickly hire new staff without running the risks associated with high firing costs. However, the legal restrictions on the renewal of temporary contracts may limit their use as a cyclical buffer. As surveyed by Portugal and Varejão (2003), other reasons to use temporary contracts include screening and ‘churning’. Screening occurs when employees are offered temporary contracts to see if they are suitable for permanent positions, while churning refers to the practice of successively hiring different employees on fixed-term contracts to fill the same permanent position.

To shed light on this issue, we checked in a panel of EU-15 countries whether the sensitivity of employment to the output gap is modified by the introduction of temporary contracts. The employment rate, $E_{it}$, is explained by the output gap, $OG_{it}$, the interaction between the output gap and the share of temporary contracts, $S_{it}$, country dummies ($\alpha_i$ and country-specific trends, $t_i$), capturing the heterogeneity across EU-15 countries. The equation is estimated for both male and female employment rates, where $\gamma$ is the parameter of interest that captures the impact of the temporary contracts on the cyclical components of employment rate:

$$E_{it} = \alpha_i + \lambda_i t + \beta O\!G_{it} + \gamma O\!G_{it} * S_{i t-2} + \epsilon_{it} = \alpha_i + \lambda_i t + (\beta + \gamma S_{i t-2}) O\!G_{it} + \epsilon_{it},$$

Initial results (Table below) suggest that temporary contracts have a small pro-cyclical effect on male employment but are insignificant for female and overall employment. For men, the magnitude of this effect is fairly modest, albeit not negligible: an increase of 10 percentage points in the share of temporary contracts would raise the (positive) impact of a 1 per cent output gap on the male employment rate by around 0.2 percentage points.

<table>
<thead>
<tr>
<th>Total</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output gap</td>
<td>0.200***</td>
<td>0.192*</td>
</tr>
<tr>
<td></td>
<td>(2.51)</td>
<td>(1.81)</td>
</tr>
<tr>
<td>Output gap * share of temporary jobs</td>
<td>0.009</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(1.25)</td>
<td>(-0.13)</td>
</tr>
<tr>
<td>Observations</td>
<td>239</td>
<td>239</td>
</tr>
</tbody>
</table>

Notes: Absolute value of t statistics in parentheses. Significance at 10% and 5% denoted by * and ** respectively. The equations are estimated by GLS allowing for heteroskedastic errors and common-across-group first order serial correlation. The share of temporary contracts jobs is lagged by two years to avoid any problem of endogeneity between the share of temporary contracts and the employment rate. Data are annual and start from 1986 for Portugal, from 1987 for Spain, for 1995 only for Denmark, Sweden and Finland.


When the same regression is run separately for periods of slowdown and expansion, the procyclical impact of temporary contracts on male employment appears to be slightly stronger in downturns. This may point to the role of temporary contracts as a cyclical buffer, though the smaller procyclical effect in periods of expansion is consistent with their use as a screening device as well. Conversely, for women, the effect of the share of temporary contracts is insignificant throughout the business cycle. This could indicate churning of temporary contracts in services, where female employment is concentrated.

In any event, temporary contracts do not, at first sight, appear to have a large impact on the cyclicality of total employment, although their effect on male employment might not be negligible. Further analysis, perhaps disaggregating further by economic sector or by age group and including missing explanatory variables, would be required to draw firm conclusions.
Table 1: Labour market performance in EU-15 Member States

| Country | Employment rate | Unemployment | Regional disparities *
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>59.6</td>
<td>51.8</td>
<td>28.1</td>
</tr>
<tr>
<td>DK</td>
<td>75.1</td>
<td>70.5</td>
<td>60.2</td>
</tr>
<tr>
<td>DE</td>
<td>65.0</td>
<td>59.0</td>
<td>39.5</td>
</tr>
<tr>
<td>EL</td>
<td>57.8</td>
<td>43.8</td>
<td>42.1</td>
</tr>
<tr>
<td>ES</td>
<td>59.7</td>
<td>46.0</td>
<td>40.8</td>
</tr>
<tr>
<td>FR</td>
<td>63.2</td>
<td>57.2</td>
<td>36.8</td>
</tr>
<tr>
<td>IE</td>
<td>65.4</td>
<td>55.8</td>
<td>49.0</td>
</tr>
<tr>
<td>IT</td>
<td>56.1</td>
<td>42.7</td>
<td>30.3</td>
</tr>
<tr>
<td>LU</td>
<td>61.8</td>
<td>50.0</td>
<td>34.2</td>
</tr>
<tr>
<td>NL</td>
<td>73.5</td>
<td>65.8</td>
<td>44.8</td>
</tr>
<tr>
<td>AT</td>
<td>69.2</td>
<td>62.8</td>
<td>30.4</td>
</tr>
<tr>
<td>PT</td>
<td>67.2</td>
<td>60.6</td>
<td>51.1</td>
</tr>
<tr>
<td>FI</td>
<td>67.7</td>
<td>65.7</td>
<td>49.6</td>
</tr>
<tr>
<td>SE</td>
<td>72.9</td>
<td>71.5</td>
<td>68.6</td>
</tr>
<tr>
<td>UK</td>
<td>71.8</td>
<td>65.3</td>
<td>55.5</td>
</tr>
<tr>
<td>EU25</td>
<td>62.9</td>
<td>55.1</td>
<td>40.2</td>
</tr>
<tr>
<td>EU15</td>
<td>64.4</td>
<td>56.0</td>
<td>41.7</td>
</tr>
</tbody>
</table>

* Coefficient of variation = Standard deviation of NUTS 2 regional unemployment rates / National average unemployment rate.

Source: Commission services.

Regarding the immediate prospects for employment, there are several different possible interpretations. First, and most pessimistically, the scenario of a delayed reaction to the downturn in output still cannot be excluded. This was the case in the early 1990s, when the employment gap continued to fall even after GDP growth had resumed. Secondly, if the employment rate is indeed at around its equilibrium level, then the nascent recovery might soon encounter the obstacles of low labour force participation and high structural unemployment. In this scenario, employment growth might remain relatively flat for several more years, assuming that there are no further increases in structural employment in the pipeline, due for instance to the delayed effects of earlier reforms.

Thirdly, however, the experience of the 1990s suggests that structural improvements to accommodate sustained employment growth without excessive inflationary pressures are a feasible scenario. This depends, of course, on sufficient progress on reforms having been made, or at least on expectations of continued growth in the structural employment rate in the EU (see Graph 1, top-left chart). This is consistent with the idea that employers in the EU have hoarded labour during the recent downturn, anticipating that employment rates would continue to grow and that recruitment difficulties might quickly re-emerge.

Graph 2 breaks down progress since 2000 by age group and gender. While the overall employment rate increased by less than one percentage point between 2000 and 2003, the female employment rate rose by two percentage points, in line with strong growth in women’s labour force participation. Indeed, there is a chance that the Lisbon target for a female employment rate of more than 60 per cent by 2010 could still be reached. The contribution of males to employment growth was actually negative in Denmark, Germany, Austria, Portugal and Finland. This is explained mainly be falling employment of younger people, partly due to increased enrolment in education, though even the employment rate of prime-aged men fell in some countries.

Older workers have made a remarkable contribution in recent years. The employment rate of 55-64 year-olds rose by as much as four percentage points in the EU (see Graph 1, top-left chart). This is consistent with the idea that employers in the EU have hoarded labour during the recent downturn, anticipating that employment rates would continue to grow and that recruitment difficulties might quickly re-emerge.

So far, this chapter has looked at labour market performance for the EU-15 as a whole. But of course performance varies a great deal among Member States, ranging from good to exemplary in the cases of
Denmark, Ireland, the Netherlands, Austria and Portugal, Sweden and the UK, and from bad to worse in Belgium, Germany, Greece, Spain, France and Italy, with Finland and Luxembourg somewhere in between. Table 1 provides a snapshot of performance by Member State. Although many Member States are still far from complying individually with the Lisbon employment targets, it should be recognised that some, including Spain and Greece, have made significant progress in recent years.6

Then, obviously, higher employment will be inevitably associated with lower output per worker and vice versa. Thus, in such a comparative-static setting it is easy to construe a situation where, for example, regulations and restrictions excluding low productivity workers from employment result in a higher level of actual labour productivity, but it will come at the price of lower employment; similarly, reform efforts to price back low productivity workers into employment will mean more jobs, but this will be associated with lower overall productivity.

In comparing labour productivity levels across countries, such considerations of a comparative-static nature can be useful. There appears to be widespread agreement that measured labour productivity in Europe relative to the US may be upward biased as a result of the exclusion of more low productivity workers. Indeed, the EU employment rate falls short of the US level by some 10 percentage points, with lower participation rates and higher unemployment rates disproportionately affecting low skill workers. In a similar vein, the capital-labour ratio appears to be typically higher in the EU than in the US, driving up measured labour productivity in Europe. Thus, both economic theory and quick inspection of a few aggregate figures suggest that one should control for these effects in productivity comparisons. Obviously, in consequence, a Europe at full employment may well see a significantly larger labour productivity gap vis-à-vis the US than the current actual figures suggest.

By how much could the productivity gap rise? A simple calculation could be performed focussing on comparisons of total factor productivity levels, using the following relationship:

\[ Y/L = (K/L)^{1-\alpha} \text{TFP} \]

where \( Y/L \) denotes measured labour productivity, TFP is total factor productivity, \( K/L \) is the capital intensity of production and \( 1-\alpha \) is the capital-elasticity of output in the constant-returns Cobb-Douglas case. For the

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6 See Chapter 1 in European Commission (2004a) for further details.
calculation, GDP and capital stock in PPP are taken from AMECO. Employment is civilian employment (LFS). Hours worked come from the GGDC (Groningen Growth and Development Centre). The results of this simple exercise, shown in the graph below, suggest that the productivity gap between the euro area and the US may be by some 6 percentage points wider than the actual figures indicate.

However, the notion of a negative relationship between employment and productivity levels emerging in comparative-static considerations should not be confused with a genuine trade-off between employment and productivity in a long-run dynamic sense. One of the “big” stylised facts in economics is that in the long run technical progress is neutral with respect to employment. History has told us that the process of capital accumulation and technological innovation has not meant the “end of work” and despite notions of “factories without workers”, it is clear that from an overall perspective workers have not been replaced by machines. In standard economic growth theory this long-run neutrality proposition has been captured by the concept of labour-augmenting technical progress. Along this balanced growth path, labour productivity, real wages and the capital intensity of production grow at the same rate, driven by (exogenous) technical progress. Technical progress is called total factor productivity growth, indicating that this concept should not be seen in a narrow “engineering” sense. Given that TFP determines our standards of living in the long run, clearly policy makers want it to grow faster than in recent years.

Actual labour productivity growth can of course deviate from the balanced labour productivity growth rate over the short-to-medium term due to capital-labour substitution; faster than “balanced” productivity growth indicates labour shedding, and a shortfall of actual relative to “balanced” productivity growth is a characteristic of what is loosely called labour-intensive growth. Obviously, then, the employment neutrality hypothesis will not hold over the short-to-medium term. In consequence, pressing ahead with labour market reforms may entail a temporary reduction in measured productivity growth below full potential, but this should not be regarded as a trade-off in any sense. A higher employment rate implies an unambiguous increase in GDP per capita with no negative implications for the long-run productivity growth of the existing workforce. Thus, there is no inherent problem to act on both fronts simultaneously, raising the “balanced” rate of productivity growth using all the available instruments to stimulate TFP growth, whilst at the same time encouraging the labour-intensive growth in the medium term that is needed to move towards full employment.

2.2.2 The dynamic employment-productivity relationship in recent years

EU employment and productivity growth patterns have diverged sharply over recent years. Compared with the first half of the 1990’s, the period since then has witnessed a significant increase in the contribution of labour to EU GDP growth but unfortunately this has been accompanied by a reduction in the contribution from labour productivity, with labour productivity growth having come down by about one percentage point. By comparison, over the same timeframe, the USA has been able to combine a strong employment performance with acceleration in labour productivity growth. Against this background, this section investigates to what extent the recent slowdown in labour productivity growth may merely reflect a response to a series of positive shocks to labour supply and jobs emanating from structural reforms and employment-friendly wage developments.

Graph 4, as a starting point for the analysis, shows the contribution to growth from employment measured in total hours worked and from labour productivity, with the US included for comparison purposes. Evidently, productivity growth has further slowed down over the

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Graph 3: TFP and labour productivity gap

**Source:** Commission services.
1990s, with the EU’s long established superiority in terms of labour productivity growth having disappeared over recent years. It is also striking that the contribution of employment to growth in the US, albeit partly due to immigration, has been consistently higher than in the EU, even during the recent period of ‘jobless growth’ in the USA.

The benign interpretation of the observed productivity growth trends sees the recent performance deterioration mainly as the mirror image of structural labour market improvements. Under this view the EU may now simply be in a transition phase whereby wage moderation and positive labour supply shocks may have initially created a negative trade-off between employment and productivity growth, basically via a temporary decline in capital-labour substitution; however, the dynamic adjustment path towards a new equilibrium with higher employment and lower structural unemployment will also involve capital accumulation that should eliminate the trade-off over the medium-term. The more pessimistic view, on the other hand, is that the labour productivity growth slowdown reflects a genuine negative shock, either in the form of a decline in total factor productivity growth or additional pressures on capital productivity; clearly, in such a scenario, prospects for a recovery of labour productivity growth are much bleaker.

Obviously, both interpretations are likely to contain an element of truth, posing the analytical challenge to derive inference on the relative magnitude of the employment and the productivity shock and their respective consequences for overall productivity and employment developments. The picture is complicated by a third possible factor, namely aggregate demand. Indeed, a comprehensive analysis has to allow for the possibility of positive or negative shocks to demand affecting output, employment and productivity in recent years.

Thus, the analysis distinguishes between three shocks, shocks to employment, shocks to productivity and shocks to aggregate demand and makes an effort to measure their relative importance for productivity and employment. What is of specific interest in the context of this section is the dynamic response of productivity to structural employment shocks. In technical terms, a structural VAR methodology is used to estimate a model in the three variables employment, productivity and inflation for the euro area, applying a procedure suggested by Stock and Watson (1988) and Blanchard and Quah (1990) to identify the shocks and estimate structural relationships. The identifying restrictions implied by a standard neoclassical growth model and used in the present analysis are the following:

- The labour market shock can have short and long run effects on employment, productivity and inflation.
- The productivity shock can have long run effects on productivity and inflation, but only short and medium run effects on employment.
- The demand shock can have a long run effect on inflation only, but not on employment and productivity.

The empirical results are presented in two steps. First, the impulse responses from the estimated VAR are discussed. These responses give the impact on employment and productivity of a unit shock to employment, productivity and demand. Recall that the identifying restrictions imply that temporary unit shocks to employment can have permanent effects on employment and productivity, while a unit shock to demand (inflation) can only have temporary effects. In order to evaluate the quantitative magnitudes of these shocks, they are compared to similar shocks simulated with the Euro area QUEST model. This comparison is

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10 See Box 2 for a formal description.
useful since it shows whether orders of magnitudes of these shocks are similar when two very distinct empirical tools are used, with the VAR model imposing very little economic structure apart from the long run constraints, while QUEST consists of explicitly estimated structural equations and estimated adjustment lags.

Employment shock: A positive employment shock initially leads to an increase in productivity; however, this short run positive effect in the VAR model is partly spurious.\textsuperscript{11} In the medium and long run the effect on productivity is negative, i.e. an increase in employment is associated with a decrease in labour quality. Note, though, that this negative long run effect is estimated to be small: a shock which leads to a permanent increase in the level of employment of about 1 per cent is associated with a long run productivity level effect of about -0.1 per cent.\textsuperscript{12} Analysis based on QUEST model simulations yields fairly similar result to the VAR approach, but the negative impact upon the long run productivity level is slightly stronger (-0.3 instead of -0.1); moreover, the QUEST model analysis does not reveal any short run increase in productivity. The productivity effect remains negative in the QUEST model over the entire simulation period of 10 years, reflecting the long lasting dynamics of capital-labour substitution induced by labour market reforms. However, the QUEST model does not distinguish between different skill levels and, in consequence, there will be no productivity impact over the very long term.

Productivity shock: A positive productivity shock is associated, in the short-run, with a small negative employment effect. The order of magnitude of the employment effect is only about one tenth of the size of the productivity shock. Again, in the QUEST model analysis a qualitatively similar pattern to the VAR emerges, but the short-run negative employment response appears to be somewhat stronger.

Demand shock: The demand shock is initially associated with a positive employment and productivity effect. This result appears quite plausible, since a demand shock is likely to lead to better capacity utilisation in the short run. As the demand effect fades away and employment is slow to adjust, the productivity effect turns negative and dies out within a year.

The identifying restrictions of the VAR model allow calculating the structural shocks from the estimated residuals. In the second step of the empirical analysis the shocks are cumulated over the period 1995Q1 to 2003Q4 in order to derive an estimate for the structural component in employment growth and its likely impact on productivity. The results of this exercise are depicted in Graph 7. The cumulated size of the employment shock over the period 1995-2003 is estimated at about 5 per cent. Thus, roughly one half of the overall observed employment expansion over that period is attributed to structural trend improvements. According to the VAR approach the cumulated productivity cost of this structural employment expansion may have amounted to \(\frac{1}{4}\) of a percent; the QUEST model simulations would put the productivity cost somewhat higher at \(1 \frac{1}{2}\) per cent; roughly translated into year-on-year figures, this implies a reduction in annual productivity growth of around two tenth of a percentage point, equivalent to some 20 per cent of the observed total productivity growth slowdown, which could be attributed to positive structural shocks in the labour market.

The empirical results presented above are quantitatively broadly in line with other available evidence on structural labour market improvements as indicated by a trend increase in participation and a reduction in structural unemployment. Moreover, relating the productivity effect to real wage moderation also suggests that the estimated impact on short-run productivity developments is of a reasonable order of magnitude. A stylised number for real wage moderation in the past 10 years or so would put the average annual reduction in real efficiency wages at slightly less than \(\frac{1}{2}\) of a per cent. Thus, back-of-the-envelope calculations would suggest that real wage moderation could, on average, have reduced annual actual labour productivity growth relative to its balanced steady-state rate by about two tenth of a percentage point, which is well within the range derived from the VAR and QUEST model approaches. Further corroborating evidence stems from growth regressions suggesting that about 25 per cent of the productivity decline is due to the increase in employment.\textsuperscript{14} In summary, and recalling that the overall slowdown in average annual productivity growth has amounted to about one percentage point, it emerges as a fairly robust result that only some 20 per cent of this reduction can be attributed to the dynamic response of productivity to positive structural shocks in the labour market.

\textsuperscript{11} This results from the labour input series being employment rather than hours worked. A positive employment shock is likely to be correlated with a short run increase in hours worked, which by definition will be associated with an increase in labour productivity per worker.

\textsuperscript{12} In fact, the hypothesis of a zero long run productivity effect cannot be rejected at standard significance levels.

\textsuperscript{13} It should be noted that this provides an estimate for the overall magnitude of the shocks, but not of the impact these shocks have had on the macroeconomic aggregates.

\textsuperscript{14} See EU ECONOMY REVIEW 2003, Chapter 2, Table A3.
Graph 5: Impulse response analysis

Source: Commission services.
2.2.3 Conclusions

In a nutshell, the analysis in this section dismisses the notion of a genuine trade-off between employment and productivity growth. Obviously, misguided policies to exploit such a trade-off have to be avoided. However, there are no reasons to think that structural labour market reforms boosting employment will typically entail negative implications for longer-term productivity growth. In particular, this section reaches the following conclusions:

- The negative relationship between productivity and employment in comparative-static considerations should not be interpreted as a genuine trade-off.
- However, all else equal, a move towards full employment is likely to see a widening of the labour productivity gap between Europe and the USA.
- The dynamic response of productivity to positive labour supply and wage shocks may entail a temporary reduction in productivity growth rates, which, in principle could be considered as benign; anyway, the size of a negative effect of this type is estimated to be fairly small.
- The increase in employment since the mid 1990s has indeed been to a significant extent the result of such positive labour market shocks, with about one half of the additional jobs attributed to structural improvements.
- Positive employment shocks can only account for a very small fraction of the observed productivity slowdown in recent years; consequently, the decline of labour productivity growth must be considered as predominantly caused by other factors and probably not just a temporary phenomenon.
Labour market reform efforts since there is no genuine trade-off – in the sense characterising the principal goal of labour market reform better” may serve as a simple catch-phrase strategy are straightforward: Indeed, “the more jobs the more productivity growth. Of course, misguided policies attempting to exploit such a trade-off have to be avoided – if, for example, policy-makers promoted sectors with low productivity growth prospects, if they introduced unnecessary regulations leading to “overmanning”, if they discouraged young people from pursuing further education, or if they used funds for public training programmes in an unproductive manner, then employment might be raised at the expense of longer-term productivity potential. However, none of these policies is advocated in the EU economic and employment policy framework. There is no inherent problem with the logic of the European Employment Strategy, i.e. attempting simultaneously to raise employment growth and labour productivity growth, and, in consequence, the dismal productivity performance in recent years cannot be attributed to labour market reform efforts.

3. The determinants of labour market performance

3.1 Determinants of overall performance

3.1.1 The impact of labour market institutions on labour market performance

A realistic account of the role of labour market institutions in influencing labour market performance must start from the recognition that the assumptions behind the textbook model of a competitive economy – complete markets, perfect information, atomistic and homogeneous agents, perfect competition – are often violated where labour markets are concerned. Nominal wages are the result of negotiations between employers and employees, while firms set price as a mark-up over labour costs. While in the short run unemployment is
determined by real aggregate demand, in the long run it converges toward the level which is compatible with a stable inflation rate.\textsuperscript{15} In this framework, labour market policies influence the stock of employment and unemployment in three ways: by modifying the wage formation mechanism; by changing the price elasticity of product demand; and by stimulating technological progress.\textsuperscript{16}

Another way to look at labour market performance is as the outcome of a process of matching between workers and job vacancies.\textsuperscript{17} The heterogeneity of workers and jobs, imperfect information about the characteristics of potential employers and employees and restrictions on labour mobility all generate labour market frictions. These in turn influence labour market flows. In the steady state, inflows into unemployment are equal to outflows from unemployment, and there is an inverse relationship (the Beveridge curve) between the number of vacancies and the unemployment rate. Anything that improves the efficiency of the matching between unemployed people and vacancies and/or increases the exit rate from unemployment will shift this curve inwards and reduce the steady-state level of unemployment for a given number of vacancies.

In both the stock and the flow approaches to equilibrium unemployment, labour market institutions affect firms' hiring and firing decisions and individuals' readiness and willingness to take up a job, as well as the extent to which unemployment reins in inflationary pressures. Institutions such as unemployment and welfare-related benefits, wage bargaining, labour market regulation and labour taxation thereby influence the equilibrium rate of unemployment.

However, the impact of labour market policies and reforms on labour market performance is often ambiguous, at least in theory. For example, it is well known that unemployment benefits are subject to moral hazard, since job-search effort cannot be fully observed. Benefits thereby reduce the incentive to find a job and raise reservation wages. But, in search models with risk-averse workers and imperfect capital markets, the absence of unemployment insurance may lead people to accept jobs too quickly, in the sense that further search for a higher productivity match would increase overall welfare. In this case, unemployment benefits do not work as a search subsidy but as a way to deal with imperfect insurance.\textsuperscript{18}

During the 1990s there has been a wealth of studies focussing on the effects of institutions on employment performance. The main results of several of the most widely cited are summarised in Table 2. Among these, three main strands may be identified.

In a first group of studies, indicators of labour market institutions are used to explain cross-country differences in unemployment rates.\textsuperscript{19} Unemployment is positively associated with generous unemployment benefits, a high tax wedge, and high union coverage and negatively associated with active labour market policies (ALMPs)\textsuperscript{20} and a high degree of coordination in wage bargaining. The role of employment protection legislation and union density is uncertain. However, a large part of the change in structural unemployment remains unexplained. Moreover, some of the unfavourable institutions were already in place in the 1960s in many EU countries, when European unemployment was lower than in the USA.

A second group of studies focuses on the interactions between labour market institutions and macroeconomic shocks.\textsuperscript{21} The essence of these is that transitory increases in unemployment due to shocks may be prolonged by labour market institutions that restrict labour market flows and protract the adjustment of wages. There is not a full consensus on the impact of different institutions. In Blanchard and Wolfers (2000), for instance, all the 'usual suspects' except union density are significant and with the expected sign. In Nickell et al. (2003), benefit duration, union density and low labour mobility shift the Beveridge curve outwards, which implies higher equilibrium unemployment, while employment protection legislation shifts it inwards.

A third important strand is studies, including some of those already cited, that look at interactions between different labour market institutions. Coe and Snower (1997) argued theoretically that a wide range of institutions may have complementary effects on unemployment. In Belot and Van Ours (2001, 2004), institutions strongly influence performance when they reinforce each other. This means that it is harder to predict the response of equilibrium employment to changes in a single institutional variable in isolation. Belot and Van Ours find, for example, find that high labour taxes and benefit replacement rates combine to weaken the financial incentives for employment, and that this interaction has driven the evolution of unemployment rates in several countries.

15 See, e.g., Blanchard (1986); Layard et al. (1991).

16 See the EU ECONOMY REVIEW 2002, Chapter 2.

17 See, for example, Mortensen and Pissarides (1999).


19 See Elmeskov et al. (1998); Nickell and Layard (1999).

20 It should be noted that placement of the unemployed in labour market programmes automatically reduces the number of people registered as unemployed. When one includes in the definition of unemployment also those participating in such programmes, the impact of ALMPs is usually more uncertain.

21 See Blanchard and Wolfers (2000); Fitoussi et al. (2000); Bertola et al. (2001); Nickell et al. (2002).
<table>
<thead>
<tr>
<th>Study</th>
<th>Countries and Periods</th>
<th>Institutions considered</th>
<th>Results</th>
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<tbody>
<tr>
<td><strong>1. Aggregate performance</strong></td>
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<tr>
<td>Elmeskov et al. (1998)</td>
<td>Static Panel data on 19 OECD countries over the period 1983-1995 (GLS random effects).</td>
<td>Tax wedge (TW)</td>
<td>Small positive effects. Positive and significant only in countries with intermediate co-ordination</td>
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<td>Gross replacement rate (GRR)</td>
<td>Positive effects, larger in countries that spend more on ALMPs</td>
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<td>Spending on ALMPs (ALMPU)</td>
<td>Negative effects if Sweden is excluded</td>
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<td>EPL</td>
<td>Positive effects. Positive and significant only in countries with intermediate co-ordination</td>
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<td>Minimum wage (MW)</td>
<td>Insignificant effects</td>
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<td>Co-ordination/Centralisation (CO)</td>
<td>Negative effects in high centralised/co-ordinated and decentralised countries</td>
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<td>Union density (UD)</td>
<td>Insignificant effects</td>
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<tr>
<td>Nickell and Layard (1999)</td>
<td>Cross Section on 20 OECD countries (GLS random effects)</td>
<td>Tax wedge (TW)</td>
<td>Effects on total unemployment</td>
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<td>Gross replacement rate (GRR)</td>
<td>Positive effects</td>
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<td>Benefits Duration (BD)</td>
<td>Positive effects</td>
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<td>Spending on ALMPs (ALMPU)</td>
<td>Negative effects</td>
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<td>EPL</td>
<td>Negative effects</td>
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<td>Co-ordination (CO)</td>
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<td>Union density (UD)</td>
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<td>Union Coverage (UC)</td>
<td>Insignificant effects</td>
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<td>Owner Occupation rate</td>
<td>Insignificant effects</td>
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<tr>
<td>Blanchard and Wolfers (2000)</td>
<td>Static Panel data on 20 OECD countries over the period 1960-1995. Interactions of time fixed institutions with TFP, real interest rate and labour demand shocks are considered with non-linear least squares</td>
<td>Tax wedge (TW)</td>
<td>Effects on employment rate</td>
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<td>Gross replacement rate (GRR)</td>
<td>Similar effects. UD, UC, GRR ALMP insignificant</td>
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<td>Benefits Duration (BD)</td>
<td>Positive effects</td>
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<td>Spending on ALMPs (ALMPU)</td>
<td>Positive effects. Among most significant when interacted with shocks</td>
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<td>Minimum wage (MW)</td>
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<td>Owner Occupation rate</td>
<td>Insignificant effects</td>
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<tr>
<td>Fitoussi et al. (2000)</td>
<td>Two steps approach. First step: Over the period 1960-1998 for 19 OECD countries, a dynamic panel (fixed effects) estimate of unemployment persistency and sensitivity to macro shocks is obtained. Second step: Cross section of (short- and long-run) fixed effects and sensitivity coefficients to labour market institutions</td>
<td>Macro-variables: world real interest rate, trend labour productivity growth, ratio of non-wage support to labour productivity, direct taxes, payroll taxes, inflation rate</td>
<td>At least 50% of cross country differences in unemployment and in sensitivity to shocks are explained by labour market institutions</td>
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<td>Labour market institutions: Replacement rate (GRR), benefit duration (BD), union density, (UD) union coordination (CO), union coverage (UC), active labour market expenditure (ALMP)</td>
<td>cross country differences in unemployment are a positive function of GRR, UD, CO and a negative of UC</td>
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<td>cross country differences in sensitivity of shocks are a positive function of BD, UD and a negative CO and ALMP</td>
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<td>Effects on unemployment rate</td>
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<td>Nickell et al. (2003)</td>
<td>Dynamic Panel data on 20 countries over the period 1961-1995. (GLS estimates)</td>
<td>Tax wedge (TW)</td>
<td>Positive effects. Larger in countries with high degree of bargaining co-ordination</td>
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<td>Gross replacement rate (GRR)</td>
<td>Positive effects. Larger in countries where the duration of unemployment benefits is high</td>
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<td>Benefits Duration (BD)</td>
<td>Insignificant effects</td>
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<td>EPL</td>
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<td>Co-ordination (CO)</td>
<td>Positive effects, reduced when co-ordination is bargaining is high</td>
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<td>Union density (UD)</td>
<td>Insignificant effects</td>
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<td>Owner Occupation rate</td>
<td>Effects on employment rate</td>
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<td>Similar effects. Only Benefits duration are insignificant</td>
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Belot and Van Ours (2004)  
Static Panel data on 17 OECD countries over the period 1960-1999

<table>
<thead>
<tr>
<th>Tax rate</th>
<th>Gross replacement rate (GRR)</th>
<th>EPL</th>
<th>Centralization</th>
<th>Union density (UD)</th>
<th>Union density* Centralization</th>
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**Effects on unemployment rate**  
Insignificant effects.  
Negative effects. The effect of GRR is larger in countries with a high tax rate  
Insignificant. Effect of the interaction with centralisation ambiguous  
Insignificant effects  
Insignificant effects  
Positive  
Effects on non-employment rate  
Similar results

### 2. Relative performance

Kahn (2000)  
Static panel data over the period 1985-1994 for 14 OECD countries

<table>
<thead>
<tr>
<th>Co-ordination</th>
<th>Union density (UD)</th>
<th>Union Coverage (UC)</th>
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**Effect on employment rate of middle- relative to low-skilled**  
Positive | Insignificant  
Positive | Insignificant  
Positive | Insignificant

**Effect on relative employment rate**  
Prime age vs. youth | Prime age vs. older  
Men | Women | Men | Women
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**Effect on the relative unemployment rate**  
Prime age vs. young | Prime age vs. older  
Men | Women | Men | Women
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Bertola, Blau and Kahn (2002)  
Static Panel data on 17 OECD countries over the period 1960-1999. (GLS estimates)

<table>
<thead>
<tr>
<th>Tax wedge (TW)</th>
<th>replacement rate year 1</th>
<th>replacement rate year 5</th>
<th>EPL</th>
<th>Co-ordination (CO)</th>
<th>Union density (UD)</th>
<th>Union coverage (UC)</th>
<th>Public pension replac. Rate</th>
<th>Replac. rate older workers</th>
<th>Disable. Replac. rate</th>
<th>Female retirement age</th>
<th>Male retirement age</th>
<th>Accrual rate 10 yrs age 55</th>
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**Effect on the relative employment rate**  
Prime age vs. young | Prime age vs. older  
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Jimeno and Rodriguez Palenzuela (2003)  
Static unbalanced panel data on 19 OECD countries

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**Effect on the relative unemployment rate**  
Young | Prime age | Young -Prime age  
Men | Women | Men | Age | M | W
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3.1.2 The determinants of labour market institutions

The next relevant question is why labour market institutions are as they are, and whether the current state of affairs might be desirable despite the likely unfavourable impact of some labour market institutions on employment and unemployment. Here, two basic views may be outlined.

The ‘normative as positive’ view emphasises the role of labour market institutions in insuring risk-averse agents against income volatility, where capital markets fail to provide adequate insurance against employment and income risks. Institutions such as unemployment insurance, employment protection legislation and wage compression in collective bargaining entail deadweight losses and information costs, but may still be welfare-improving when markets are incomplete. In addition, the aims of some policies and institutions are clearly related to pure redistribution and social protection. The argument here is that, even though these may unavoidably reduce labour market efficiency, the benefits in terms of distribution mean that social welfare is still greater.

These normative arguments for labour market institutions are important, since they show clearly why ‘flexibility’ of labour markets is not an end in itself. However, an alternative, “purely positive”, view contends that institutions are in practice largely shaped by political interests. In particular, anything that raises average wages and reduces the likelihood of dismissal will benefit the typical labour market ‘insider’. The resulting institutions are liable to introduce a wedge between labour supply and labour demand, interfere with the reallocation of labour, compress the wage distribution and restrict mobility. This results in lower employment rates, especially for those with high labour supply elasticity, including many women, young people and older workers, and quite possibly reduced overall welfare.

In practice, both views have some validity. The question is how to design labour market institutions in order to secure the benefits, while avoiding as far as possible the distortions that provide little benefit in terms of insurance or social protection. The optimal design of institutions depends on several factors, including the characteristics of financial markets and the frequency and nature of labour demand shocks, both of which influence the need for insurance. In addition, different labour market institutions, and social protection more generally, may act as substitutes. The apparent trade-off between the stringency of EPL and the generosity (levels and coverage) of unemployment insurance is well-known, for example.

Both views also imply that institutions cannot be regarded as exogenous in practice. Changes in one area, or in external conditions, are likely to create demands for changes elsewhere. Moreover, the optimal configuration of institutions will change over time. Increased competition in product markets, which increases the elasticity of demand for labour, and arguably more turbulent technological progress, for example, change the labour market response to existing institutions. Institutions that performed reasonably well in the past may entail large employment losses in more competitive markets.

22 The consequences of incomplete insurance markets have been explored in the case of redistributive taxation (Varian, (1980)), of unemployment insurance (Acemoglu and Shimer (1999)), of employment protection (Bertola (2004a)) and Bertola and Koeniger (2004)) and institutional wage compression (Agell (2002)). With insurance arguments the benefits of insurance should be trade-off with the cost due to reduced efficiency.

23 Higher wages for those remaining employed and social transfers for non-employed individuals have a first order effect on the welfare of risk-averse workers who prefer to smooth consumption inter-temporally across different states of the world, Bertola and Koeniger (2004); Bertola (2004a).

24 That is, established worker, probably on a permanent contract and well-represented by labour unions, see Lindbeck and Snower (1988).

25 Bertola and Koeniger (2004) show that there is a significant correlation between EPL and borrowing constraints, which suggests a greater need for institutions to reduce labour income fluctuations in countries where under-developed financial systems reduce consumption smoothing opportunities. Hassler et al. (2001) argue that relatively immobile workers who acquire specialised skills tend to prefer more generous unemployment insurance. The data indeed strongly suggest a negative relationship between the mobility rate and unemployment insurance.

26 See Buti et al. (1998); Boeri, Conde-Ruiz and Galasso (2002).

27 See Bertola, Boeri and Nicoletti (2001); Mortensen and Pissarides (1999).

28 See Boeri (2001); Bertola (2004b, c).
serving partly to tighten the eligibility conditions of successful reforms have included activation measures focused on labour market performance. Countries where reforms appear to have led to improved active labour market policies—has been highlighted in design of unemployment benefits and in the targeting of vacancies. The role of incentives—particularly in the improving the matching between unemployment and vacancies. The role of incentives—particularly in the design of unemployment benefits and in the targeting of active labour market policies—has been highlighted in countries where reforms appear to have led to improved labour market performance.

Successful reforms have included activation measures serving partly to tighten the eligibility conditions of unemployment benefits, combined with more intensive active measures—including subsidies to employers, direct job creation and training measures—targeted towards groups at higher risks of inactivity or unemployment. Eligibility conditions and job-search requirements may be even more important than the level of benefits. There is evidence that the threat of losing benefits if an employment offer is not accepted tend to raise the incentive to find a work (Jensen, Rosholm and Svarer, 2003). More generally, a system with monitoring and sanctions restores search incentives most effectively, since it brings additional incentives to search actively so as to avoid the sanction, allowing for higher benefits than otherwise.

3.1.3 Principles for the design of labour market institutions

Growth- and stability-oriented macroeconomic policies are an essential underpinning for an improvement in labour market performance. Macroeconomic stability is supported by a wage formation mechanism that sets wage growth in line with both price stability and productivity developments. There remains some room for debate over whether wage bargaining should in general be centralised or decentralised (see Box 3). In the context of monetary union, and in view of large regional employment disparities in several Member States, wages, including minimum wages, must be adaptable to local productivity and labour market conditions. At the microeconomic level, an improvement in the functioning of the labour market requires pricing in workers with low labour market attachment and improving the matching between unemployment and vacancies. The role of incentives—particularly in the design of unemployment benefits and in the targeting of active labour market policies—has been highlighted in countries where reforms appear to have led to improved labour market performance.

Evidence from OECD countries (Boeri et al. (2001)) suggests that highly coordinated, centralised systems tend to be associated with lower unemployment and, moreover, that the degree of coordination between different bargaining levels is a much more significant influence on performance than union density or coverage, i.e. the share of workers who belong to a union or are covered by collective agreements.

However, coordinated bargaining also entails greater wage compression, with negative effects on relative employment—especially at the bottom of the wage distribution (Blau and Kahn, 1996). Bargaining institutions tend to raise the relative wages of the young and less-educated, which results in lower employment, especially for men, though possibly higher employment for women, since higher relative wages encourage female labour supply (Kahn 2000). Wage compression also modifies the industry distribution of employment, shifting employment away from industries with low wages (Davis and Henrekson, 2000), and is liable to widen regional employment disparities. In contrast, decentralised bargaining allows higher relative wage flexibility and leaves wider room for bargaining on working conditions more generally. It also makes possible the introduction of performance-related pay schemes where wages are used to motivate and improve workers’ productivity.

In practice, the distinction between centralised and decentralised systems is blurred, since bargaining often takes place at two or more levels. The kind of ‘decentralisation’ in two- or three-tier systems that involves local wage increases in excess of those agreed at higher levels, is liable to discourage wage moderation (Calmfors, 1993). In the context of monetary union and large regional disparities within several EU countries, a shift from centralised towards more decentralised bargaining appears desirable.

Box 3: Centralised vs. decentralised wage bargaining

Both theoretical and empirical analyses have suggested that bargaining systems which are either highly centralised at national or multi-industry level or decentralised at the level of firms perform better than intermediate systems where bargaining takes place at the level of industries (Calmfors, 1993). According to this literature, the relationship between wages and centralisation is hump-shaped, implying lower employment in intermediate bargaining systems. In practice, the key requirement is that wages should reflect productivity and local labour market conditions, and this might be achieved under different bargaining systems, depending partly on factors such as the size of the country, the extent of regional productivity disparities and whether bargaining tends to be constructive or conflictual.

The main advantage of centralised bargaining is that it allows labour representatives to take into account the negative impact that excessive wage claims would have on overall employment. Decentralised bargaining, on the other hand, means that wages are restrained by market forces and adjust better to local productivity and labour market conditions.

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30 See De Koning et al. (2004); Van Ours (2003); Madsen (1999). The example of the British ‘New Deal for Young People’ (for those unemployed for 6 months or more) is interesting. Before being offered subsidies training or subsidies or government-provided employment, participants must pass through a ‘Gateway’ period where they are assigned a personal adviser. The evidence suggests that, at this stage, a substantial share (40 per cent) move into unsubsidised employment (Bell et al. (1999)).

31 See Fredriksson and Holmlund (2004).
The liberalisation of temporary contracts facilitates hiring. In order to explain a large share of the variation in employment rates, researchers usually have to include macroeconomic factors, country dummy variables (fixed effects) and/or lagged employment rates among the explanatory variables.

This means that, over a period of around 10 years, some countries will be doing better, and some worse, than one might expect just by looking at labour market institutions. In some cases, this will be due to unobserved factors – an example here would be the relatively cooperative relationship between unions and employers in the Nordic countries, which does not show up in standard indicators. In countries where bargaining is more conflictual, a similar bargaining structure may be more problematic. Another example is where the employment rate deviates from its structural level on account of macroeconomic shocks or short-term policy effects. As noted in Section 2.1, part of the improvement in the EU since the mid-1990s has been cyclical rather than structural.

What can be said is that, in the few countries where more or less comprehensive labour market reforms have been undertaken over the past decade or more, these appear quite clearly to have led to improved performance. Within the EU, the leading examples are:

- the United Kingdom: substantial reforms of taxes, benefits and the collective bargaining system in the 1980s, continued tax and benefit reform, reinforced by active labour market policies focused on job-search in the 1990s;
- the Netherlands: wage moderation combined with reductions in the tax burden on labour; substantial tightening of benefit systems and job-search requirements, especially for younger unemployed people; and
- Denmark: reforms of unemployment benefits and active labour market measures in the 1990s, shifting the emphasis towards job-search rather than automatic benefit entitlement, were widely seen as instrumental in the large fall in unemployment, especially among young people.

Ireland is sometimes included, though the very particular macroeconomic circumstances affecting that country over the past decade make it a difficult case to judge. Spain, despite its beginning as the worst-performing EU Member State, and the fact that the fall in unemployment in recent years is partly a statistical phenomenon, might well be added to the list. A succession of reform packages since the mid-1990s addressing employment contracts, unemployment benefits and labour taxation has coincided with a sustained rise in the employment rate.

In recent years, several EU countries have undertaken partial reforms of their labour market institutions. Liberalising temporary contracts without addressing labour market regulation for other employees is perhaps the most notable example, and may be a risky strategy. In addition, early reforms have sometimes focused on politically ‘low-hanging fruit’, such as tax cuts in return for wage moderation, expenditure-based active labour market policies and liberalisation of part-time work. Remaining reform options may therefore be concentrated in politically more difficult areas such as benefit entitlements, wage bargaining or employment protection legislation, and therefore tougher to implement. Moreover, the experience of the most successful countries suggests that far-reaching labour market reforms require major shifts at both macro and micro levels. Thus, both theory and experience suggest the need for a comprehensive package, or at least a close sequence, of reforms.

Policy efforts within the revised European Employment Strategy and the BEPGs might include a shift in the wage-setting mechanism through a redefinition of rules, norms and the nature of contractual arrangements, perhaps combined with tax reforms; a rebalancing of measures designed to protect workers from labour demand shocks, such as employment protection or unemployment insurance; reform of unemployment and other benefits, focusing especially on duration and eligibility criteria, coupled with enhanced enforcement of job-search requirements and followed by a range of targeted active measures for those unable to find work during the period of benefit entitlement.

A well-functioning labour market should also be inclusive, reducing the risks of marginalisation and of long-term unemployment. The debate on how to reform the European labour market has often been dominated by the perception of an inescapable trade-off between efficiency and equity. Blanchard (2004) presents this as a production possibility frontier, with efficiency on one axis and social insurance on the other. However, several

### Box 4: Reforms in successful countries

As noted in Section 3.1.1, labour market institutions alone explain a relatively low share of the variation in employment and unemployment performance. Thus, a simple story about successful countries that have pursued reforms and unsuccessful ones that have not is unlikely to be fully convincing. In order to explain a large share of the variation in employment rates, researchers usually have to include macroeconomic factors, country dummy variables (fixed effects) and/or lagged employment rates among the explanatory variables.

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countries are characterised as being located inside the frontier. The idea is that the design of labour market institutions is below best practice, and might be improved in ways that would improve both efficiency and equity, or at least improve one without compromising the other.

Clearly, the management of taxes and transfers entails administrative costs and deadweight losses as well as risks of welfare dependency. Nevertheless, Blank (2002) notes three situations in which the equity-efficiency trade-off may be low, or there may even be complementarities between equity and efficiency. These are: 1) when transfers go to segments of the population with no capacity of changing their behaviour; 2) when benefits are paid conditional to behavioural requirements; 3) when payments change the behaviour or the opportunities in such a way that increase income in the future. While the first condition holds only in the case of social policies strictu sensu, such as genuine incapacity benefits, the others are clearly relevant for labour market policies.

Reforms of unemployment benefit systems and active labour market policies that withdraw entitlement to benefits for those not actively seeking employment may be perceived as inequitable by some. But in cases where such reforms appear to have been effective, particularly in reducing youth unemployment, it seems difficult to argue that equity or social cohesion overall have been adversely affected. Employment protection legislation in some countries has a clear impact on distribution, but not necessarily in a way that everyone would agree is equitable. It protects established employees on permanent contracts, but partly at the expense of groups who are worse-off, such as the unemployed or those on temporary contracts. Moreover, protection often takes the form of administrative and legal costs and delays – i.e. deadweight costs. The impact on efficiency and distribution could be strengthened, for example, by reducing deadweight costs while facilitating redundancy payments.

3.2 Employment and participation in specific groups

This section provides an alternative perspective on the determinants of labour market performance by looking at the structural determinants of employment in key demographic groups. Graph 8 provides a memorandum of longer-term developments in labour force participation, employment and unemployment among women, older-working age people and young people, as well as for the working-age population overall.
3.2.1 Female employment

The female employment rate has increased sharply in recent years and decades, driven mainly by increased female labour force participation. This in turn is due partly to institutional factors, but also largely to changing social and cultural attitudes as well as the rise in female educational attainment in recent decades. Indeed, participation of young women in education or the labour force is now barely below that of young men, while young women are now on average better educated than their male counterparts (see Table 4).

However, women – especially married women and those with children – are still less attached to the labour market on average than men. The opportunity cost of employment is higher when there are viable alternatives in the form of home production or child care. Part-time employment has risen rapidly in recent years, and around one third of employed women are working part-time in the EU-15 as a whole, although this varies substantially across countries, from 7 per cent in Greece to 74 per cent in the Netherlands.

Women who participate in the labour force also remain more likely to be unemployed than active men, though the gap between female and male unemployment rates has declined since the mid-1990s. The share of long-term unemployment in total unemployment is also higher for women, at 42 per cent of total female unemployment in 2002 as compared with 38 per cent for men.

Nevertheless, the fall in overall unemployment signals greater employment opportunity for women, and may thus prompt ‘discouraged workers’ to return to the labour market from inactivity or long-term unemployment. This phenomenon also explains the procyclical pattern of labour force participation, with a positive output gap or higher economic growth enhancing women’s prospects of finding a job.

Main structural determinants of female employment

The increase in female education in recent decades appears to be a major determinant of the positive trend in female labour force participation. In 2002, a woman with tertiary-level education was more than twice as likely (79 per cent) as a woman with lower-secondary level or below (38 per cent) to be in employment. This does not guarantee that further increases in average educational attainment will lead to further increases in aggregate female employment. Nevertheless, the rise in female education relative to males over recent decades is no doubt a factor that, along with broader social and cultural changes, has enabled women to opt increasingly for market employment. Improved education may also increase the returns to professional experience, as more women access higher responsibilities and more qualified occupations. Olivetti (2001) shows for the USA that the increase in total hours worked by married women between 1970 and 1990 can be explained by a rise in returns to experience. As the opportunity cost of temporarily leaving the labour market increases, married women increasingly avoid interruptions to their professional life.

The change in cultural attitudes and social norms regarding gender roles is clearly a major influence on female employment. Participation in the labour market is increasingly the norm for women of all ages. In most European countries, women try to plan motherhood in order to reconcile family and professional life. They tend to postpone the first child, have children at shorter intervals and have fewer children in total. The change in cultural attitudes is reflected in differences between age cohorts, with married women from younger generations much more likely to participate in the labour force.

Some reduction in the gender wage gap might be an additional factor behind the rise in female participation, although its magnitude should not be overstated. The narrowing in the wage gap is not fully explained by convergence in experience and education but may also be related to the decline in gender discrimination. Gender segregation by sector and relatively low wages in female-dominated sectors nevertheless explain a significant proportion of the remaining gender pay gap.

The tax system distorts the labour market participation decision of married women, who are more heavily taxed as second earners than men in many EU countries. There is sound evidence that high marginal tax rates reduce labour supply and, moreover, that labour supply is more elastic for women than for men. Only in a few countries – Finland, Sweden, Luxembourg and Greece – do second earners and single individuals face similar marginal tax rates. Almost all countries now have separate taxation for married women, who are more heavily taxed as second earners than men in many EU countries. The tax system distorts the labour market participation decision of married women, who are more heavily taxed as second earners than men in many EU countries.

Likewise, child benefits reduce female participation by increasing the disposable income of families with children, by up to 10-20 percent on average in some EU countries. This income effect on participation may be

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33 In absolute terms and, to a lesser extent, in relative terms.
34 Men with tertiary-level education are also more likely to be employed (86.4 per cent) than men with lower-secondary level or below (61.8 per cent), but less so. Of course, the causality may run both ways, better employment prospects leading individuals to invest more in education, as well as education leading to improved employment prospects.
36 See Pissarides et al. (2003).
38 See Jaumotte (2003).
Table 3: Part-time employment as a share of total employment in the EU-15

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Source: Eurostat.

combined with an inactivity trap effect in the case where child benefits are means-tested and are likely to decrease if the mother enters employment. In particular, child benefits deter women from taking up part-time work.40 Some of the evidence suggests that, other things equal, the availability of long paid parental leave may also lower female participation by encouraging women to withdraw from the labour market in the short run.41 In turn, withdrawal from the labour market is liable to reduce wage and career prospects in the longer run.

Conversely, female participation may benefit from measures aimed at better reconciliation of work and family life. In particular, childcare subsidies cut the relative price of childcare, increasing the relative return of market work. The empirical evidence42 indicates that childcare subsidies raise female labour supply and that the employment rate of married women is higher in countries providing for subsidised childcare. Maternity leave or short paid parental leave helps women to reconcile working and family lives by reinforcing their attachment to the labour market while allowing them to take care of newborn children.

Part-time work also appears to facilitate female labour force participation. Labour force surveys indicate that family responsibilities are one of the main reasons for working part-time and that only 14 per cent of female part-time employees are seeking a full-time job. Part-time work is clearly associated with higher female participation and higher employment in persons.43 Nevertheless, a high share of part-time work is not a necessary condition for a high female employment rate, as the example of Finland shows.

Anti-discrimination policies are expected to lead to further increases in female participation and employment. Although there is a relatively well-developed legislative framework regarding equal pay and employment opportunities within the European Union, there remain substantial differences in enforcement, as measured for example by the number of lawsuits, and public awareness of these problems.44

The sectoral shift from manufacturing and agriculture to services, which tend to be more female employment-intensive, is perhaps the main demand-related factor behind the rise in female employment. As women are disproportionately employed in smaller establishments in service sub-sectors such as catering, personal services, product market regulations affecting the creation and expansion of such enterprises may be particularly relevant for female employment.45

However, there is still some evidence of segmentation by gender, especially in the southern Member States, where women are over-represented in involuntary part-time, temporary or casual jobs. Since these jobs tend to offer relatively poor pay, working conditions and prospects, there is a risk that many women’s skills are under-utilised.

As regards institutional influences on the demand side, Bertola, Blau and Kahn (2002) find that centralised wage-bargaining together with a high degree of unionisation lowers the female employment rate, while preserving a high employment rate for prime-age men. The idea is that unions purposely negotiate large wage

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40 See Buddelmeyer et al. (2004).
41 See Jaumotte (2003).
42 See Jaumotte (2003).
43 See Jaumotte, 2003; Garibaldi and Mauro, 2002.
44 See Pissarides et al. (2003).
45 See Pissarides et al. (2003).
premiums for those whose opportunity cost of employment is high, which results in wage compression, and increased female inactivity and unemployment.

3.2.2 Older working-age people

The low employment rate for 55-64 year-olds is mainly due to early exit from the labour force. The unemployment rate for this age group is less than half the rate for the working-age population as a whole. There is a broad agreement in the economic literature that the decline in participation and employment of older working-age people over recent decades has been largely due to generous early retirement pathways. Such schemes were offered to redundant or unemployed elderly workers in response to severe shocks in the labour market. They comprised a wide array of early retirement and other benefit schemes such as unemployment pensions or prolonged unemployment benefits, special contracted pensions to redundant workers, disability pensions awarded on the basis of labour market considerations, benefits provided in exchange for the employment of young workers.

In addition, many reforms of old-age pension systems have contributed to disincentives for continued work, for instance, by lowering the standard retirement age, increasing replacement rates of pensions, increasing pension contribution rates, and reducing the pension benefit in case of early retirement by less than what would be actuarially justified.

Main structural determinants of employment of older working-age people

In theory, rational individuals would withdraw from the labour market at the age which maximises their expected welfare over the life cycle, given preferences for consumption and leisure. However, actual retirement decisions do not conform to the basic life cycle model, for several reasons. First, capital market imperfections may prevent people from borrowing to finance retirement before they become eligible for benefits. Secondly, pension systems often strongly discourage or disallow work after the statutory retirement age. Thirdly, retirement at the customary age may be a strong social norm. Fourth, people are usually not fully aware of incentives to advance or defer retirement, which tends to result in their retiring as soon as benefits become available.

The retirement decision is influenced by many factors, including: (i) health, (ii) mandatory retirement rules, (iii) rules on continued earnings, (iv) other benefits apart from pensions, (v) actuarial fairness, or the incentive structure, of pension systems, and (vi) social norms.

A broad range of theoretical and empirical literature concludes that incentives embedded in tax and benefit systems are a critical influence. Old-age and early retirement pension systems are the most important benefit types in this respect, but unemployment insurance and disability benefits often serve as substitutes. In addition, the interaction of benefits with the taxation of earnings is an important influence.

More precisely, the key determinants of early retirement appear to be: (i) the first age at which the benefits are available; (ii) the generosity of benefit systems; and (iii) the implicit tax rate imposed on continued employment once an individual is eligible for benefits. The availability of benefits seems to largely eclipse incentives to postpone the take-up of benefits. An implicit tax on continued employment arises when the cost of working one additional year in terms of foregone benefits and additional contributions paid is not offset by higher future benefits. This represents a clear distortion of the labour supply decision.

In addition, OECD (2003a) finds that the prevalence of unemployment has an impact on the labour supply of older workers, probably through the ‘discouraged worker’ effect.

Education is often supposed to play a role in the employment and participation decisions of older workers, less-educated people being prone to early withdrawal. As in the working-age population in general, those with a high level of education are much more likely to be employed than those with a medium or low level. However, it is unclear whether changes in the average level of education over time influence older working-age people’s employment. In countries where mass upper-secondary and tertiary education spread earliest, and where older workers are therefore almost as well educated as the rest of the labour force (see Table 4), the employment rate of older workers is not necessarily high (see Table 1, third column). Nevertheless, formal years of schooling provide at best an imperfect proxy for functional skills and adaptability, which are likely to be among the true determinants of older workers’ employability.

On the demand side, older workers are affected by temporary demand shocks like any other workers. However, they may be less adaptable than younger colleagues, in part because of lower education levels and/or obsolete skills, and therefore more difficult to retain in employment. This is of particular relevance in times of rapid technological change. Employers may be reluctant to provide training for older workers, both for

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48 OECD (2003a).
50 See Pestiau (2001); OECD (2003a).
51 See Gruber and Wise (1999); Blöndal and Scarpetta (1998), (1999); OECD (2003a).
the above reasons and simply because the period over
which the investment can be amortised is relatively
short.

These issues might be less problematic if wages closely
reflected productivity and performance. However, wages
tend to increase with seniority and are rigid, at least
downwards, even in the event of declining productivity,
which reduces the demand for older workers’ labour.
Moreover, to the extent that a monotonically increasing
age-earnings profile is seen as the norm, older workers
may be discouraged from supplying their labour under
different terms and conditions.

There is limited evidence that participation in training
may, in a sense, substitute for wage flexibility. Bassanini
(2004) finds low returns to training in the form of higher
wages for older workers, but some evidence of returns in
the form of increased job security. One possible
interpretation is that, other things equal, the productivity
of older workers fails to keep up with the growth in
wages due to seniority pay, thus reducing the likelihood
of continued employment. Training, however, may
arrest this decline in older workers’ unit labour costs,
which would raise the probability of continued
employment, but without leading to wage increases.

Employment protection legislation favours established
workers by definition and is therefore likely to delay
redundancies of some older workers, with a positive
impact on their employment relative to other groups.
However, it does not prevent redundancies or early
retirement in the event of severe demand shocks or sharp
deciles in an individual’s productivity, and is likely to
make it more difficult for older working-age people
seeking re-employment, at least on similar terms and
conditions to established staff.

3.2.3 Young people
The situation of young people in European labour
markets appears to have steadily worsened over the past
30 years, with falling participation and rising
unemployment. Moreover, earnings are not only much
lower than those of prime-age workers, but have been
falling gradually in relative terms since the 1970s.52
These developments may be partly explained by
increased enrolment in education since, as enrolment in
education rises, labour market participation falls
directly, while those young people who remain in the
labour market tend to be the lowest-skilled.
Nevertheless, with youth unemployment around or over
20 per cent in several EU countries, the picture is still
bleak.

Employment of young people is also relatively volatile,
for several reasons. First, almost 37 per cent of
employees aged 15-24 are on temporary contracts,
compared to 9.5 per cent of 25-64 year-olds. Secondly,
many others do not benefit from employment protection
laws or are vulnerable to ‘last in, first out’ provisions.53
Thirdly, young people’s labour supply tends to be
elastic: many are still searching for and choosing the job
that suits them best; the opportunity cost of working is
high for those with parental support but without families
of their own; and publicly funded education provides a
viable alternative to employment.

The situation improved over the mid-1990s, following a
severe shock to youth employment during the recession
of the early 1990s. Since 2000, the youth employment
and unemployment rates in the EU-15 have remained
broadly constant at around 40-41 per cent and
15 per cent respectively.

Main structural determinants of employment of young
people

The population aged 15-24 has decreased in the EU by
over 6 per cent between 1995 and 2002, from 48 to 45
million, while total population has grown over the same
period by over 3 per cent, from almost 363 million to
almost 375 million. To the extent that youth
unemployment is partly due to over-supply of relatively
low-skilled, inexperienced workers, the fall in the youth
population, given a broadly constant participation rate,
would be expected to result in lower youth
unemployment.54

The share of young people in education has increased
considerably in most EU countries over recent decades,
which is reflected in the decline in average years of
schooling beyond age 25, as shown in Table 4.55 This
explains part of the decline in labour force participation
and employment. It may also be a negative influence on
the youth unemployment rate, since it is the relatively
low-skilled who tend to enter the labour force rather
than pursuing further education. On the other hand, the
increase in educational attainment may have a positive
longer-term effect on overall employment (see Box 5).

52 See Blanchflower and Freeman (1999).
54 See Korenman and Neumark (1997).
55 15-24 year-olds have fewer average years of completed
schooling because many are still studying, and years are
only counted once the level of education in question has
been successfully completed.

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27
Table 4: Years of schooling by age group and gender, 2002

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Note: Estimated from Labour Force Survey data. The (self-reported) highest level of schooling attained is multiplied by the standard number of years required to reach that level; see the EU Economy 2003 Review Chapter 3 for further details.

Source: Commission services.

Box 5: Education and employment

For those of working age, education and labour force participation are strong substitutes, especially in countries where part-time work is hard to come by or where students traditionally live with parents during studies. Nevertheless, one may be both employed and in full-time education, since paid work of one hour or more per week counts as employment in the Labour Force Survey.

Rising enrolment in education is thus one reason for the long-term decline in labour force participation of young people. The EU ECONOMY 2003 REVIEW (Chapter 3) estimates that, with a further rapid expansion in upper-secondary and tertiary enrolment over the next decade or so, reduced participation might lower the overall (i.e. 15-64) employment rate by up to 0.9 percentage points. This is not to be lamented, since the evidence suggests that education is a key driver of economic growth, so that reduced employment today will be compensated by more productive employment in future.

An important question is whether rising educational attainment also has a positive employment impact. Individuals with tertiary education are much more likely to be employed (82.8 per cent) than those with only lower-secondary education or less (49.4 per cent). But it does not necessarily follow that an increase in the average level of education leads to an increase in aggregate employment. This is because it is arguably one’s level of education and skills relative to others that influences labour supply and demand. In any event, it is striking that neither in the literature on the determinants of aggregate employment and unemployment (see Table 2) nor in studies of the impact of education on economic growth is there any solid evidence that education influences the aggregate employment rate. That may be partly because researchers have not had access to data – including data on functional competences, as opposed simply to years of schooling – that would allow them to investigate the links between education and employment more thoroughly.

It seems likely that education, along with broader social and cultural shifts, has been a factor behind rising female employment (see Section 3.2.1), and quite possible that training may help older people to remain longer in the workforce. For younger people, any aggregate employment effect is likely to depend on how increased attainment is distributed. It is far from obvious that sending more young people to university, for example, will raise aggregate employment. On the other hand, encouraging more people to complete upper-secondary education would have the effect of evening out the distribution of skills. This, given the impact of labour market institutions on the demand for young people’s labour, seems more likely to yield aggregate employment gains.
Over 22 per cent of young workers are in part-time jobs, compared to 15.5 per cent of prime-age workers. There is a significant gender difference, though less pronounced than in the case of prime-age workers: 16.3 per cent of young men work part-time, compared to 29 per cent of young women. Of course, many people who combine studies with employment choose to work part-time. Thus, the availability of part-time work is likely to be an important influence on youth labour supply in persons.

A combination of unemployment benefit reforms and active labour market policies has had a clear impact on effective labour supply among young people in recent years. As noted in Section 3.1.3, stricter enforcement of benefit eligibility criteria in combination with personalised jobsearch assistance appears to have helped many young people at risk of becoming long-term unemployed to find unsubsidised employment.

The evidence is less clear on whether more intensive active interventions – such as subsidised jobs and training programmes – have improved the employability of beneficiaries. People are not counted as unemployed while they participate in such programmes, so in this sense there is a statistical improvement. But evaluation results have been mixed. Some studies find that active programmes do nothing to raise – and in some cases even reduce – the probability of unsubsidised employment, or that any enhancements in employability are prohibitively costly. But some programmes, where well-designed and carefully targeted to the individual needs of participants, appear to have been more successful.

Youth unemployment is generally much higher than overall unemployment, but closely correlated with it. According to various studies, total unemployment is – together with the relative size of youth population, labour market institutions and macroeconomic shocks – the main factor explaining differences in youth unemployment.56

The sectoral shift from agriculture and industry to services, and the expansion of many low-wage service industries that traditionally employ many youths, has arguably been a positive factor for youth employment. Many young people find their first jobs in retail trade or hotels and restaurants. Young males are often employed in construction and young females in health care. Blanchflower and Freeman (2000) find empirically that, in most countries over the period 1985-1994, the changing industrial structure has a positive impact on youth employment.

One reason why the labour market is tough for young people is that they tend to have relatively low skill-levels and, by definition, not much work experience. While, as noted, educational attainment has risen rapidly in recent decades, the consensus view is that the demand for highly educated workers has risen even faster. This has been good news for young people who complete higher education, but leaves those who drop out early from education in a difficult situation.

The wage-setting mechanism has been highlighted as one key institutional factor affecting youth unemployment. As noted, the labour supply of young people is relatively elastic, which makes them vulnerable to bargained wage structures, by the same argument as in Section 3.2.1 on female employment.

Minimum wages might be expected to have a similar impact, although theoretical and empirical studies are far from reaching conclusive agreement on this. Nobody doubts that a very high and undifferentiated minimum wage would have a negative impact on youth employment. But some argue that market-determined wages may be too low in some circumstances, especially where employers have monopsony power and workers are in a weak bargaining position. In this case, a minimum wage might even raise employment by encouraging increased labour supply; or it could at least improve job quality without reducing employment. Empirical studies do not give a clear indication of the direction of interactions between minimum wages and youth unemployment.57 This may be partly because minimum wages are frequently set at lower levels for young people.

Employment protection legislation (EPL) clearly benefits prime-age, established workers at the expense of young people. Firms are more reluctant to fire established workers if this involves severance payments, notice periods and costly procedures. They are also reluctant to take on new workers on standard permanent contracts, since they must take into account the possibility of having to pay firing costs in future. Young people may be employed on apprenticeship contracts or temporary contracts, which involve lower firing costs, but more often than not these are not converted into standard contracts. Empirical studies confirm that more stringent EPL is associated with higher youth unemployment relative to prime-age unemployment.58

3.2.4. Migrants

Third-country nationals are a small but increasingly significant group as far as EU employment rates are concerned. In the EU-15, they accounted for 3.6 per cent of total employment in 2002, but as much as 22 per cent of employment growth between 1997 and 2002. Spain, Italy and Ireland have seen particularly large increases, albeit beginning from low levels. Migrants make a significant contribution to the labour force in several Member States: Luxembourg (43.2 per cent of the labour force), Austria (9.9 per cent), Germany (8.9 per cent), Belgium (8.2 per cent) and France (6.2 per cent).

56 See Gaudé (1997); Jimeno and Rodríguez-Palenzuela (2003).
58 See Bertola, Blau and Kahn (2002); Jimeno and Rodríguez-Palenzuela (2003).
In most countries, migrants of working age, especially women, are less likely than natives to participate in the labour force. In a few Member States, namely Spain, Italy, Greece, Luxembourg and Austria, the participation rate of foreigners is similar to or higher than that of natives. Foreign workers are more likely to be unemployed than natives in all Member States.

Disparities in labour market outcomes exist both between migrants and natives and among migrants themselves. Migrants are a very heterogeneous group according to their age, gender, skill level, country of origin, reasons for immigration and timing thereof. Not surprisingly, women, young adults, older workers and those with lower skills find themselves in the worst position, even more so than the same groups in the native population. Empirical evidence available for some countries indicates that humanitarian migrants tend to have worse labour market outcomes than other migrants, and that the disadvantage of migrants relative to natives tends to be reduced with the time spent in the host country.

**Main structural determinants of employment of migrants**

The low level of education and skills – including language and other host-country skills – among many migrants is a major determinant of low labour force participation and high unemployment. In most Member States, over 40 per cent of foreigners aged 25 to 64 have no secondary education. Differences in the labour market performance of migrants across Member States may also be linked to their education level, since the distribution of the foreign population by education level varies across receiving countries. The proportion of foreigners with tertiary level education attainment is relatively high in Denmark, Luxembourg, Portugal, Sweden and Spain.

Formal education is only part of the picture. Most of the difference in unemployment rates between foreigners and natives is explained by the quality of initial training, professional experience, the transferability of skills, language skills and problems relating to discrimination.

Several empirical studies, mainly for the US, indicate that the marital status and presence of children also play a role in explaining the difference in participation rates among immigrant and native women; the foreign-born who had not graduated from high school were more likely to be married or to have children than their native counterparts, which in turn reduced their likelihood of participating in the labour force.

A large body of literature for the US supports the hypothesis of economic assimilation, whereby wages or employment prospects of migrants improve with time spent in the host country. Empirical studies typically find that the earnings gap between immigrants and natives falls over time. The interpretation provided is that, in the absence of any form of discrimination, wages reflect individual productivities, and only part of the human capital acquired in the country of origin can be transferred to the destination. Migrants who have lived longer in the country have had more time to adapt and learn the language and other country-specific skills.

Empirical evidence for the EU is more limited. Results for the UK indicate that, among non-white foreign-born men, a significant share of the initial disadvantage diminishes with time and labour market experience. Employment rates rise sharply in the five years after arrival and more slowly afterwards. The effects on unemployment probabilities are even more marked. There is ample empirical evidence on the importance of host-country language skills, notably on employment probabilities.

The data available for Belgium, Germany, France, Luxembourg, the Netherlands and the UK suggest that the skill level of foreigners tends to be higher on average for recently arrived migrants than for those who arrived a few years ago. Evidence for the USA and the UK indicate an improvement in the educational attainment of migrants’ children relative to natives. Card (2004) finds above-average levels of educational attainment for immigrants’ children in the USA, even for children born to parents who had much lower educational attainment than native parents. Hatton et al. (1998) identify higher participation rates in full-time education among ethnic minorities than among whites in the UK, while their labour market participation rates are slightly lower and their unemployment rates are significantly higher.

Country-of-origin differences can have a strong impact on the labour market performance of migrants. Nationals from other EU Member States or the USA have an average participation rate similar to natives in the host country, but migrants from, for example, Turkey, Morocco, Sub-Saharan Africa or ex-Yugoslavia have lower participation rates than natives. The same applies to Mexicans in the US and it often reflects the economic situation prevailing in the country of origin. However, the labour market participation of foreigners also differs across host countries, depending partly on host country characteristics and partly on when immigrants arrived. For example the participation rate of Moroccans is more than 73 per cent in Spain and less than 40 per cent in Belgium and nationals from former-Yugoslavia have lower participation rates than natives in Sweden and the UK and higher rates than natives in Austria.

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59 Nevertheless, because immigrants are over-represented in working-age cohorts, the average immigrant is still more likely to be in the labour force than the average native, except in Sweden, Finland, Denmark and the Netherlands.

60 See Bauer et al. (2003).

61 OECD (2003b).

62 See Mosisa (2002).
Observed wage differentials between immigrants and natives can be explained by the quality of education and training received abroad, language acquisition, discrimination and also unobserved individual characteristics. Empirical studies in the US indicate that, once education is controlled for, the wage gap falls to under 10 per cent for both males and females. Nevertheless, the possible role of discrimination remains significant. UK evidence suggests that the wage disadvantage of foreign-born people relative to natives seems to be smaller than that in access to jobs.

Labour market institutions are also likely to play a role in explaining the relatively low employment rates of many immigrant groups, although there is insufficient evidence to draw robust conclusions. Migrants perform relatively well in the labour market in Spain and Greece, where low-skilled jobs are relatively abundant. The employment of migrant and foreign workers is concentrated in certain sectors employing a relatively high share of unskilled workers such as agriculture, construction, hotels and restaurants, care for the elderly and other household services. In the past, many foreigners were employed in industry. In the last few years however, employment of foreigners in the services sector has gained importance, partly due to the characteristics of new foreign inflows. Foreigners who have arrived in the past five years are generally under-represented in sectors such as mining, manufacturing, energy and construction, while they tend to be over-represented in the services sector: education, health and other community services, household and other services.

Institutions such as unemployment and other benefits or minimum wages can be expected to affect migrants disproportionately, given their lower earnings potential on average, for reasons explained in previous subsections. Institutions leading to a high degree of wage compression may also act as a disincentive for the highly skilled, which may partly explain the attractiveness of some Member States for highly skilled migrants. Evidence from Denmark and the UK on self-employment provides partial support for this view. In Denmark, self-employment is much higher among migrant groups and they earn lower wages than wage-earners. Yet self-employed natives earn on average one-quarter more than wage-earners. This is consistent with the view that it is difficult for immigrants to find employment at going wages. Finally, a relatively high tax wedge on labour incomes tends to make it more expensive to employ low-skilled workers, including migrants, in the provision of household services.

4. Labour market reform in the EU: priorities and progress

4.1 What is required to meet the Lisbon targets?

Even without further policy measures, the employment rate in the EU is expected to continue increasing over the next decade and beyond for two main reasons. First, younger women are much more likely to be employed than older women, owing to social and cultural changes, rising educational attainment and the effects of previous reforms, such as the liberalisation of part-time employment. This gives rise to a cohort effect which, according to Burniaux, Duval and Jaumotte (2004), would mechanically increase female participation from 59.9 per cent in 2000 to 63.6 per cent in 2010. Secondly, the early retirement tide has turned, with most governments having embarked on reforms to encourage later and more flexible retirement and to support the employability of older workers. It will take some time for the full impact of these reforms on the employment of older working-age people to materialise.

However, without further structural reforms, the EU is likely to miss the Lisbon target of a 70 per cent overall employment rate by a considerable distance. If female participation rises to 63.6 per cent, the female unemployment rate would still need to be halved, from 8 per cent to 4 per cent, in order to reach a 60 per cent female employment rate, which looks difficult though not impossible. The target for older working-age people looks challenging even if further reforms are implemented. OECD (2003a) simulates the impact of the following additional measures: (i) a removal of early retirement schemes; (ii) a move towards actuarial neutrality of old-age pension schemes; and (iii) a convergence of standard retirement ages to 67. With these reforms and under the assumption of a high elasticity of labour supply, a halving of the unemployment rate for older workers would still be required to reach the 50 per cent employment (see Table 6). Moreover, the labour force participation rate of 15-24 year-olds is likely to continue to decline in view of stated policy objectives at both EU and national levels for increased investment in human resources, in some cases involving targets for increased enrolment in higher education.

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67 See Hatton et al. (1998).
68 See Roseveare and Jorgensen (2004).
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**Box 6: Main additional measures to raise employment in specific groups highlighted in Section 3.2**

Women: reforms of wage bargaining systems; tax reforms promoting neutral treatment for second earners; affordable child care facilities in preference to higher child benefits; more flexible labour market regulations, especially as regards part-time employment; enhanced enforcement of anti-discrimination legislation; and product market reforms enabling the expansion of sectors where female employment is concentrated.

Older working-age people: removal of early retirement schemes; actuarially reduced benefits or additional contributions in the case of early retirement; proper implementation of eligibility conditions for disability pensions, extended unemployment benefits or unemployment pensions; higher pension accrual rates for people continuing to work beyond a certain age; flexible retirement arrangements such as removing the statutory retirement age and allowing more flexible combinations of part-time work and semi-retirement; reforms of wage bargaining, including a more flexible relationship between earnings and seniority; greater participation of older workers in training and lifelong learning.

Young people: reforms of wage bargaining systems; reforms of labour market regulation, in particular redressing the balance between established workers and first-time jobseekers; continued progress on benefit reforms and well-targeted active labour market policies; investments in education and training, especially measures targeted at those with low attainment. Facilitating part-time employment could help more young people to combine education and employment.

Migrants: Measures to ease assimilation, such as language training and validation of existing qualifications, and improved enforcement of anti-discrimination would help. Reforms of labour market institutions as discussed in section 3.1.3 could help in two ways: first, by improving access to low-skilled employment and, secondly, by allowing labour markets the flexibility to attract highly skilled immigrants, particularly in areas of apparent skill shortages.
Broadly speaking, these results are consistent with the overall findings of Section 2. In particular, the importance of reforms of tax and benefit systems, wage bargaining and early retirement incentives is confirmed. Some points emerge more clearly when looking at specific groups – two examples are the importance of part-time work for the participation of young people and women, and the need for vigorous implementation of anti-discrimination laws in the case of women and migrants.

The potential role of education and training also appears in a more positive light. Rising educational attainment has been an important influence on female employment, which raises the question of whether lifelong learning could not play a similar role with regard to older working-age people. The role of well-targeted training measures in facilitating the entry of young people and migrants into the labour market is also highlighted. Increasing the share of young people who successfully complete upper-secondary education – which is an explicit objective of the Lisbon strategy – might be expected to have a positive long-term employment impact. However, one should not necessarily expect that sending more young people into tertiary education, which is where much of the additional investment in human resources seems likely to be concentrated, will have a significant impact on aggregate employment, though it will raise productivity.

In the light of the results of Section 2.2, one may ask what the implications of measures to raise employment among women, older working-age people, young people and migrants might be for productivity growth. There are clear examples of possible short-run ‘trade-offs’, in that people with low attachment to the labour market and below-average productivity are likely to be over-represented in net employment growth. Examples may include low-skilled migrants, unemployed young people, women entering the labour market after a long period of absence and possibly some older workers whose productivity may be declining, particularly if they have changed occupations. In any event, Section 2.2 suggests that the impact is in general temporary, with no significant implications for longer-term productivity growth, and so this should not be regarded as a genuine trade-off.

The question remains whether there are any exceptions to the general rule. Among the measures discussed in this section, there are few candidates. One might be if a particular economic sector with low productivity growth potential, for example in the service sector, was promoted in order to favour female employment. An area where there is clear scope for genuine trade-offs is investment in education. It would not be a good idea, for example, to discourage young people from participating in further education in order to raise the employment rate. This might well have long-term consequences for productivity growth, since learning begets further learning. Nor would it be a good idea to promote inefficient investment in human capital, however, since the resources could be used more productively elsewhere – in investment in R&D, for example.

4.2 Priorities for and progress with labour market reforms in the EU-15

Clearly, an improvement in the performance of the EU-15 as a whole depends mainly on an improvement in the group of poorly performing countries. But, as stressed in Section 3.1, the precise measures required will vary from country to country. Thus, it would be difficult to prescribe a detailed reform package for the EU as a whole.

Nevertheless, it is possible to identify priorities for the EU as a whole in the following, more restricted, sense. First, it is relatively simple to identify which Member States have the greatest potential contribution to make to raising the EU-15 employment rate – those with larger working-age populations and/or lower employment rates.

Secondly, the large body of cross-country evidence reviewed in Section 3 and especially in Table 2 is a valuable guide to which policy areas are likely to be most significant in determining employment in a heterogeneous group of countries with different institutional configurations. This literature is less useful when it comes to designing detailed reforms in individual countries. One can always point to imperfections in the data and indicators used, as well as apparent inconsistencies between the results of different studies. For example, as regards wage bargaining, it is not clear whether union density, coverage of wage bargains or the degree of coordination and centralisation are the key factors. The answer may be some combination of these, together with other factors – such as whether industrial relations are more or less confrontational or constructive – that are very difficult to take account of in simple indicators. Nevertheless, despite these imperfections, the empirical literature consistently identifies wage bargaining as a key determinant of labour market performance.

In Table 2, incentives in tax and benefit systems are also consistently identified as being a critical influence on employment and unemployment. Incentives to retire early are an important special case of this, as stressed in 3.2.2. The evidence is more mixed on other areas such as employment protection legislation and active labour market policies. Some areas of work organisation, such as the availability of part-time contracts, are clearly

69 On the other hand, there are also highly skilled migrants, and younger women are now better-educated than men on average, while older workers have, of course, the benefit of experience.

70 See Heckman (2000).
relevant, but the evidence on other elements – working-time arrangements, for instance – is lacking.

Some policy areas – such as education and training or labour mobility – are hardly covered in the cross-country literature on the impact of labour market institutions on aggregate employment and unemployment. This may be partly due to the lack of suitable indicators. In the case of education and training, the expectation that the major impact will be on productivity as opposed to aggregate employment may also play a role. Nevertheless, lack of evidence should not be confused with insignificance; it may be that the importance of these areas simply remains to be proven.

Priorities thus identified are broadly consistent with the four key challenges identified by the European Employment Task Force chaired by Wim Kok. These are increasing adaptability of workers and enterprises; attracting more people to the labour market and making work a real option for all; investing more and more effectively in human capital, for the benefit of productivity as well as employment; and ensuring effective implementation of reforms through better governance.

Thirdly, we may look directly at country-specific priorities for labour market policies, of the kind established in the detailed country-specific analysis underlying the EU’s Broad Economic Policy Guidelines (BEPGs) and European Employment Strategy. The country-specific recommendations in the BEPGs and the Employment Recommendations take into account the institutional configuration and any national particularities in each Member State. For example, the cross-country evidence suggests that generous unemployment benefits may be problematic. In Italy, however, coverage of unemployment insurance is very low, and the recommendation is to increase the resources available in order to widen coverage. At the same time, while employment protection legislation (EPL) is not necessarily a problem per se, the rigid systems in Germany and Italy for medium-sized and large enterprises are an issue. On the other hand, EPL is not judged to be particularly problematic for the Netherlands, even though, according to the indicator used in most cross-country studies, EPL is also stringent in the Netherlands.72

Table 7 summarises the main priorities established since Lisbon, and also progress made against these, as assessed in the Commission’s reports on the implementation of the BEPGs.

Graph 6 combines Tables 2 and 7 to provide a broad, graphical illustration of progress compared to priorities for the EU as a whole.73 On the horizontal axis, Member States are ordered by their approximate potential contribution to raising the EU-15 employment rate. On the vertical axis, main policy areas are listed very tentatively in order of their known potential contribution to raising aggregate employment over the next decade, as discussed above. Each cell is shaded according to Table 7. Panel A shows priorities. It makes no assertion about precisely what kinds of reforms are required; it merely identifies the policy areas and countries where appropriate measures would make an important contribution to attaining the Lisbon objectives for the EU as a whole. The clear concentration of shading towards the upper-left hand corner suggests that the BEPGs indeed largely focus on areas likely to have the largest impact in raising the EU employment rate.74

If EU Member States were doing enough, collectively, to hit the Lisbon employment targets, then one would expect to see a similar pattern in Panel B, which illustrates progress. There is a substantial amount of shading, including in some of the key areas, such as tax and benefit systems and early retirement. However, many blanks remain, often in country-specific priority areas, i.e. the ones shaded in Panel A. Most notably, almost nothing has been done in the key area of wage bargaining. Furthermore, a closer reading of the Implementation Reports on the BEPGs reveals that, where progress has been made, it has often been of a piecemeal nature, including in the key area of tax and benefit reforms. Thus, while the strategy may be sound, serious doubts remain over whether its implementation is sufficiently timely and comprehensive.

However, employers do not report particular problems in obtaining approval where necessary.73

It is no substitute for a careful reading of the BEPG Implementation Reports when it comes to assessing progress in individual Member States.

Of course, this partly reflects the fact that countries with the greatest problems receive the most recommendations, and four out of the six problem countries are large.


72 The OECD indicator of EPL stringency for the Netherlands is high largely because formal approval by the courts or public employment services is still required for dismissals.
Table 6: Main priorities and progress on labour market reforms, 2000-03

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<thead>
<tr>
<th>Priority Policy Areas (as indicated in BEPGs)</th>
<th>Progress made (as indicated in Implementation Reports)</th>
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</thead>
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<tr>
<td><strong>BE</strong></td>
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<tr>
<td>-tackle distortions to work incentives in the tax-benefit system</td>
<td>-changes in housing market and efforts to overcome linguistic barriers</td>
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<tr>
<td>-reduce early withdrawal from labour force</td>
<td>-work-related tax credits reducing marginal tax rates at lower levels; streamlining of tax incentives for recruitment of specific groups (female and older workers)</td>
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<tr>
<td>-wage setting to take account of productivity and skill differences</td>
<td>-steps towards alignment retirement age for men and women</td>
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<tr>
<td>-relax restrictions on fixed-term and temporary contracts</td>
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<tr>
<td>-address obstacles to labour mobility</td>
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<td><strong>DK</strong></td>
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<tr>
<td>-improve efficiency of ALMPs</td>
<td>-improved incentives in the benefit systems; steps to tighten eligibility and reduce marginal tax rates</td>
</tr>
<tr>
<td>-reform of tax system and benefit eligibility; reduce marginal tax rates on low wages</td>
<td>-more flexibility of working time</td>
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<tr>
<td>-postpone retirement through improved incentives</td>
<td>-training measures to address foreseen shortages of skilled workers</td>
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<tr>
<td>-increase labour supply by integrating immigrants and by channelling students faster through education</td>
<td>-more effective and efficient ALMP spending</td>
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<tr>
<td><strong>DE</strong></td>
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<tr>
<td>-simplify benefit administration; improve tax-benefit incentives especially for older workers</td>
<td>-some progress towards improved incentives in the benefit system; reduced marginal tax rate at lower wages; changes in tax-benefit system to improve mobility incentives; unemployment benefits reform</td>
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<tr>
<td>-improve efficiency and evaluation of ALMPs</td>
<td>-relaxation of social criteria for firing and reduced EPL for small firms</td>
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<tr>
<td>-allow for wage differentials to reflect productivity across regions and skills with Social Partner involvement;</td>
<td>-some progress towards more efficient ALMPs (Hartz reforms)</td>
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<td>-tackle excessive rigidity of labour market regulations, including EPL;</td>
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<tr>
<td>-reduce regulatory burden inter alia in view of more flexible working time</td>
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<tr>
<td>-promote childcare availability for more female participation</td>
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<td>-further reforms in education to improve achievements to address skill shortages</td>
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<td><strong>EL</strong></td>
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<tr>
<td>-improve work incentives in tax and pension systems</td>
<td>- partial but still incomplete implementation of 1998 labour market reform packages; some facilitation of part-time work</td>
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<tr>
<td>-reduce non-wage labour costs</td>
<td>-changes in tax-benefit system to improve mobility incentives</td>
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<tr>
<td>-reform wage bargaining to allow wage differentials to reflect productivity and local conditions</td>
<td>-some progress on child-care facilities</td>
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<tr>
<td>-improve flexibility, modernise work organisation and review labour market regulation; relax EPL</td>
<td>-steps taken to reform pension system</td>
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<td>-improve educational and vocational training systems to enhance skill levels</td>
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<td>-take measures to raise the female employment rate</td>
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<tr>
<td><strong>ES</strong></td>
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<tr>
<td>-reform wage bargaining through effective decentralisation; wage differentials to reflect geographical and productivity differences</td>
<td>-tackled excessive rigidity of labour market regulations that discourage hiring and slow adjustment; increased control of fixed-term contracts</td>
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<tr>
<td>-further reforms of EPL to reduce market segmentation across contract types</td>
<td>-job search and mobility requirements to unemployment benefits strengthened – disincentives addressed</td>
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<tr>
<td>-remove fiscal distortions to improve mobility</td>
<td>-eased search in the housing market (rental reform) to increase mobility</td>
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<tr>
<td>-improve child care facilities and facilitate part-time work</td>
<td>-orientation for lower-level wage bargaining, but no reforms</td>
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<tr>
<td>-review tax-benefit incentives to promote hiring</td>
<td>-tax incentives and child care to increase female participation</td>
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<td><strong>FR</strong></td>
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<tr>
<td>-fully implement new unemployment insurance system; improve incentives for job-search in tax-benefit system</td>
<td>-improved incentives in the benefit systems; increased tax credits; reduced marginal tax rates; changes in tax-benefit system to improve mobility incentives</td>
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<tr>
<td>-reform EPL</td>
<td>-reduced in social security contributions</td>
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<tr>
<td>-reform the pension system, adapting it to more flexible employment and reducing early retirement incentives</td>
<td>-35 hour week monitored</td>
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<td>-‘closely monitor’ the 35 hour week</td>
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<td>-reduce fiscal pressure on labour</td>
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<td>Country</td>
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| IE      | - improve efficiency of ALMPs  
         | - ensure that wage bargaining allows wage differentials to reflect productivity and skills; monitor wage developments |
| IT      | - encourage more decentralised wage-setting mechanism, reflecting differences in productivity and skills  
         | - further reform of EPL to reduce market segmentation across contract types and firm size  
         | - lower tax on low wages  
         | - improve childcare and postpone retirement  
         | - increase resources and efficiency of unemployment benefits  
         | - increase flexibility of working time  
         | - tackled excessive rigidity of labour market regulations that discourage hiring and slow adjustment; efforts to achieve more flexible contracts  
         | - decline in marginal tax rates  
         | - expansion of private job placement services  
         | - partial implementation of tightening of eligibility rules for pension and other benefit schemes |
| LU      | - reduce early retirement incentives; tighten disability pension eligibility rules  
         | - steps to reduce marginal tax rate envisaged  
         | - new labour code, raising duration of fixed contracts (i.a.)  
         | - better use of ALMP  
         | - more cost-effective education spending and progress in proposed enhancement of productivity and skills |
| NL      | - improve efficiency of ALMPs  
         | - continue benefit reforms, including disability benefits, especially with regard to eligibility and conditionality  
         | - improved incentives in the benefit systems; review of unemployment insurance, tightening eligibility requirements; reduction in the disability inflow; tax-benefit reform to raise female participation  
         | - agreements on flexibility of working time  
         | - measures undertaken to reconcile work and family life through increased parental/care leave rights  
         | - 2000 reform package reduces tax burden on labour, increases retirement age, and lowers replacement ratio in unemployment insurance; reduced marginal tax rate envisaged  
         | - overhaul of pension system, expected to raise participation; alignment of the retirement age for men and women  
         | - reform of severance pay |
| AT      | - improve link between contributions and benefits in pensions  
         | - speed up tax-benefit reform for older workers  
         | - enhance incentives to work and increase low average effective retirement age  
         | - agreements on flexibility of working time |
| PT      | - allow for wage differentials and encourage wage moderation (taking into account productivity and skill increases in wage growth)  
         | - improve training and education systems and reduce early school leaving  
         | - increase flexibility of working time  
         | - new labour code, raising duration of fixed contracts (i.a.)  
         | - better use of ALMP  
         | - more cost-effective education spending and progress in proposed enhancement of productivity and skills |
| FI      | - reform wage bargaining so that wage differentials reflect productivity  
         | - improve tax-benefit incentives and reform eligibility criteria to make job search more effective; reduce marginal effective tax rates for low wages  
         | - increase efficiency of ALMPs  
         | - agreements on flexibility of working time  
         | - reforms in the tax-benefit system to improve work (and mobility) incentives  
         | - measures to retain older workers and to promote participation of young and immigrants  
         | - more effective and efficient ALMP spending |
| SE      | - reform income tax to improve work incentives  
         | - make ALMPs more efficient  
         | - steps to reduce marginal tax rate envisaged  
         | - steps towards pension reform taken  
         | - more effective and efficient ALMP spending |
| UK      | - improve work incentives for all those who can and want to work by reforming sickness and disability benefits  
         | - efficient active measures for those at most risk of long-term unemployment, particularly in deprived areas  
         | - improved incentives in the benefit systems; tax credits and financial incentives extended  
         | - merging employment services with the benefit administration for those in working age  
         | - steps towards alignment of retirement age for men and women  
         | - enhanced ALMPs announced |
### Table 7: Priorities and progress on labour market reforms since 2000

#### Panel A: Priorities as indicated in the BEPGs

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#### Panel B: Progress as assessed in the implementation reports

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**Note:** “Tax and benefit system” includes recommendations on labour taxation alone; recommendations on active labour market policies in recent BEPGs mostly concerned improving the efficiency of existing policies. Countries are ordered along the horizontal axis according to their approximate potential contribution to raising the EU-15 employment rate. For present purposes, this is taken to be the number of jobs that would be created if each country equalled the performance of the Member State with the highest employment rate in 2000, which was Denmark with an employment rate of 76.4 per cent.

**Source:** Commission services.
4.3 Labour markets in the enlarged EU

4.3.1. Labour market conditions in new Member States

The labour market situation in new Member States is considerably worse than in the EU-15. In the Central and East European countries, the process of transition to the market economy has brought about large structural shifts in the labour market, and this accounts for much of the initial decline in employment and the dramatic increase in unemployment. However, the persistence of labour market problems also reflects deep structural problems. Table 8 provides an overview of labour market conditions in the new Member States. The main features can be summarised as follows:

- performance varies among the new Member States as much as it does within the EU-15;
- nevertheless, employment rates are generally below the EU-15 average of 64 per cent, although higher than in the worst performing countries of the EU-15. They are particularly low among young and older working-age people. Female employment rates, once higher than in the EU-15, have fallen considerably since the start of transition. In contrast to the EU-15, employment rates in the new Member States as a whole have been steadily falling, albeit with differences across countries. Employment losses in agriculture and industry have not been fully offset by gains in the expanding services sector;
- unemployment rates are above the EU-15 average in most of the new Member States, though again these range widely, from 4 per cent in Cyprus to 19 per cent in Poland. Unemployment tends to be concentrated among certain groups, especially the young, the low-skilled and ethnic minorities. Moreover, a large share of unemployment is long-term in most countries.

In general, differences in regional unemployment widened during the 1990s and regional disparities in some new Member States are serious, close to those of existing EU Member States with the largest imbalances. Over that period, changes in the structure of employment by sector, occupation and firm ownership were dramatic, yet labour mobility within new Member States has been very low, even declining in some countries.75

The large income gap, yet relatively small education and skills differentials, as educational attainment is in some cases much higher than the EU-15 average, would argue for the relocation of labour towards EU-15 Member States that enjoy relatively higher wages. There is a high uncertainty about the potential flows of labour from the new Member States after the EU Enlargement. The

75 OECD (2002).

4.3.2. Integrating the new Member States into the Lisbon strategy

Since most of the new Member States have employment rates that are below the EU-15 average and, moreover, on a deteriorating trend, their inclusion into the Lisbon strategy will clearly make the employment targets – which apply to the EU as a whole – even harder to achieve. On the other hand, with economic growth potential well in excess of 4 per cent in most cases, these countries are likely to provide a major stimulus to attaining the overall Lisbon goals of increased competitiveness and dynamism.

The broad policy challenges in the field of labour markets do not differ a great deal between new and old EU Member States. Structural problems include a very high tax burden on labour and financial disincentives to work in benefit systems, highly regulated permanent employment with relatively loose arrangements for temporary contracts, and undifferentiated national minimum wages that are liable to restrict labour market access for new entrants, the low-skilled and those living in less productive regions. Nonetheless, many of the new Member States do face a somewhat different set of economic circumstances, which suggests that a slight change of emphasis may be warranted. Real convergence implies that large structural shifts in the labour market are most likely to continue for many years. Significant labour reallocation away from industry and agriculture towards the service sector and a sectoral composition closer to that in Member States in the EU-15 is likely to continue. This would underline the need for flexible and adaptable labour markets and institutions and effective ALMPs to facilitate the adjustment process, by supporting labour mobility across sectors, regions and occupations, as well as by enhancing workers’ skills.

76 Nevertheless, as a result of the accession negotiations, temporary derogations to the principle of free movement of workers will apply for a maximum of seven years. All EU-15 Member States except Ireland and the UK have announced that they will maintain restrictions on access to their labour markets for workers from the new Member States, at least for the first two years following accession.
### Table 8: Labour market conditions in the new Member States

<table>
<thead>
<tr>
<th>Country</th>
<th>Employment rate</th>
<th>Unemployment</th>
<th>Regional disparities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Female Older workers All Youth Long term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CY</td>
<td>69.2 60.4 50.4 4.4 10.6 1.1</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>CZ</td>
<td>64.7 56.3 42.3 7.8 18.6 3.8</td>
<td>0.44</td>
<td></td>
</tr>
<tr>
<td>EE</td>
<td>62.9 59.0 52.3 10.1 22.9 4.6</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>HU</td>
<td>57.0 50.9 28.9 5.8 13.1 2.4</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>LT</td>
<td>61.1 58.4 44.7 12.7 27.2 6.1</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>LV</td>
<td>61.8 57.9 44.1 10.5 17.6 4.3</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>MT</td>
<td>54.2 33.6 32.5 8.2 19.8 3.5</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>PL</td>
<td>51.2 46.0 26.9 19.2 41.1 10.7</td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td>SI</td>
<td>62.6 57.6 23.5 6.5 15.9 3.4</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>SK</td>
<td>57.7 52.2 24.6 17.1 32.9 11.1</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>EU-25</td>
<td>62.9 55.1 40.2 9.1 18.4 4.0</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>EU-15</td>
<td>64.4 56.0 41.7 8.1 15.9 3.3</td>
<td>0.63</td>
<td></td>
</tr>
</tbody>
</table>

* Coefficient of variation = Standard deviation of NUTS 2 regional unemployment rates / National average unemployment rate

Source: Commission services.

The framework for the conduct of macroeconomic policies will remain different from that facing EU-15 Member States for some time. In particular, the new Member States will continue to operate national monetary and exchange rate policies. Notwithstanding efforts to support a stable macroeconomic climate, they may be more susceptible to economic shocks compared to the EU-15. Against this background, wages will play an important role. It will be necessary to avoid wage-inflation spirals, and also to ensure that real wage developments support external competitiveness in light of the need to attract foreign direct investment. New Member States will continue to face very tight fiscal constraints. It is therefore essential that labour market policies are affordable and consistent with achieving sound fiscal policies that support a stable macroeconomic framework. The challenge is in many respects wider than pure labour market concerns, and relates to the overall structure of the tax systems as well as administrative efficiency.

New Member States need to combine more jobs with fast productivity growth to catch-up with the EU-15. Productivity gains have been substantial during transition, but may be more difficult to sustain as past gains were mainly achieved through labour shedding. With the process of privatisation largely completed in most countries, this suggests that future productivity increases will rely more heavily on investment and human capital formation, and underlines the need to tackle skill shortages and improve the quality of education and training systems.

### 1. General conclusions

The Lisbon employment targets look much more challenging than they did in March 2000. When one looks at the key demographic groups from which most of the increase in employment must come, it is difficult to see how the overall target of a 70 per cent employment rate can still be achieved by 2010, even in the EU-15 let alone the EU-25.

The macroeconomic slowdown has not helped, but cannot shoulder all the blame. Progress on structural reforms has not matched the ambitious targets set at Lisbon and Stockholm. Nevertheless, there is evidence that much of the improvement in labour market performance over the 1990s was structural, and that significant progress has continued in some areas, including tax and benefit reforms and early retirement.

Also on the positive side, there is no mystery about the main determinants of labour market performance, or about the kinds of measures Member States could take in order to permanently raise employment rates. The economic evidence – on the determinants of both overall labour market performance and employment in specific demographic groups – suggests that the right strategy has been set out in the BEPGs, as summarised in Table 7, and in the European Employment Strategy.

Reform strategies should be country-specific, looking at the ensemble of labour market and social protection institutions. There is scope for improvements in the design of institutions with a view to improving incentives to take up employment and eliminating deadweight costs and distortions that benefit vested interests rather than providing genuine social insurance.
Governance, as highlighted in the recent report of the European Employment Taskforce chaired by Wim Kok, is a key priority.

Reforms aimed at raising the employment rate necessarily imply that productivity growth will be temporarily below full potential, because of the implied increase in the labour intensity of production. Furthermore, net additions to the labour force are likely to be below the average skill level, at least initially. This negative effect on average productivity is estimated to be fairly small. In any event, it should not be regarded as a genuine trade-off. The higher employment rate represents an unambiguous increase in GDP per capita, since newly employed people clearly contribute more to GDP than they did before. Moreover, there are no reasons to think that a higher employment rate has any negative implications for longer-term productivity growth.
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