Unemployment:
Choices for Europe

Monitoring European Integration 5
Centre for Economic Policy Research

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Preface

Informed discussion of European integration should be based on economic analysis which is rigorous, yet presented in a manner accessible to public and private sector policy-makers, their advisers and the wider economic policy community. These are the objectives and the intended readership of CEPR Reports.

Monitoring European Integration assesses the progress of and obstacles encountered by economic integration in Europe. A rotating panel of CEPR Research Fellows meets periodically to select key issues, analyse them in detail, and highlight the policy implications of the analysis. The output of the panel’s work is a short annual Report, for which they take joint responsibility. This is the fifth in the series.

CEPR is network of over 250 economists based in over 100 different institutions, primarily in Europe. Much of the research in the Centre’s various programmes relates more or less directly to short- and long-run issues of economic policy in Europe. CEPR puts extremely high priority on effective dissemination of both policy research and the fundamental research underlying it. This series of annual Reports has become an important component of this effort.

The topic for this Report is the single most important issue facing European policy-makers in the 1990s: how to respond to the challenge, indeed the threat, of sustained high unemployment. There have been other major studies of this issue recently, beginning with the European Commission’s very important White Paper at the end of 1993. Our authors take a somewhat different perspective. The prescience, analytical clarity and relevance of previous Reports in this series promise a fresh, illuminating approach, and I believe readers will find these expectations justified.
The 1990 Report examined the impact of developments in Eastern Europe on the economies of Western Europe and on the process of economic integration among them. Some of its key insights went against conventional (and even new) wisdom, yet have proved correct and prophetic – for example, the conclusion that German unification would entail a real appreciation of the DM in the short run.

The 1991 Report dealt with Economic and Monetary Union in the European Community, in particular the macroeconomic and microeconomic issues arising from the process leading to a single currency and a European Central Bank. The Report has served as a guide to evaluating the Maastricht Treaty and as a text for interpreting developments in the EMS since August 1992. Again, the analysis in that Report has proved far-sighted and robust.

The 1992 Report analysed the political economy of enlargement of what is now the European Union. The Report argued that the issues raised by the EFTA countries’ wish to move immediately from the European Economic Area to full EU membership were primarily political; whereas for the existing EU members, the motivation was reversed – the EEA had been mainly a political gesture, but there were significant economic incentives for bringing the EFTAns into the Union. The weakness of the economic motivation for the EFTAns may help to explain the difficulty of gaining popular support for accession in these countries. The picture for the Central and East European Countries (CEECs) was and remains quite different: on economic grounds, EU membership is not realistic for a long time to come; but radically improved access to EU markets (including agriculture) is essential for the economic progress necessary to make membership feasible, and a commitment by the Union to ultimate membership would provide an important anchor for economic expectations in the CEECs and their political development. That commitment has since been given at the Copenhagen Council of June 1993 and confirmed by the Essen Council of December 1994.

The fourth MEI Report, on subsidiarity, will serve for a long while as the fundamental study of this complex problem of political economy. It examines the application of the principle of subsidiarity to both the macroeconomic and the microeconomic policies of the Union. It shows where central intervention may be
justified on economic grounds and where there is no such justification, although political and bureaucratic motivations may nevertheless result in intervention.

The German Marshall Fund of the United States has again provided generous financial assistance essential to the completion of the Report. We are also grateful to the UK Department of Trade and Industry; to the Commission of the European Communities, whose Human Capital and Mobility programmes financed the Centre’s research networks on ‘Macroeconomics, Politics and Growth in Europe’ and ‘Product Market Integration, Labour Market Imperfections and European Competitiveness’; and to the Ford Foundation, which has supported much of the Centre’s research on economic integration. This Report includes new research, but since it is written and published quickly so as to be relevant to ongoing policy processes, it must rest on a solid base of past fundamental and policy-oriented research. The authors and CEPR express their continuing thanks for the support of such research which has come from these bodies and all others that contribute to the Centre’s funding.

The authors and CEPR are also grateful to officials in several countries and in the European Commission who were generous with their time and cooperation in discussing the issues treated here. For expert research assistance they thank Arnaud Lefranc and David Lopez-Salido. For the production of the Report they thank Julie Deppé, Kate Millward and Samantha Ontano in particular, as well as other staff at CEPR whose patience and professionalism have been most helpful.

None of these institutions or individuals is in any way associated with the content of the Report. The opinions expressed are those of the authors alone, and not of the institutions to which they are affiliated nor of CEPR, which takes no institutional policy positions. The Centre is extremely pleased, however, to offer to an outstanding group of European economists this forum for economic policy analysis.

Richard Portes
9 March 1995
Introduction

In the quarter century after the Second World War, the rate of growth of the European economy was high, both by historical standards and compared with the United States. The unemployment rate in Europe was also both historically and relatively low during this period. There is a straightforward explanation for this robust growth performance. Wartime destruction had decimated Europe’s physical capital and left it with a level of income per head less than a half that in the United States; rebuilding Europe’s industrial base, using best practice techniques, then allowed it to catch up rapidly. By the time of the first oil price shock, income per head had risen to about four-fifths of US levels, and the scope for easy catch-up had all but disappeared. Thus in retrospect this Golden Age of high European growth can be seen as just a transitional period in its history, and growth prospects were bound to deteriorate thereafter.

The economic environment in which the industrialized countries have found themselves since the mid-1970s bears little resemblance to the Golden Age. Growth has fallen back to levels more in line with historical experience, and this lower growth has been accompanied by two new phenomena: rising inequality in the United States and rising unemployment in Europe. Europe’s relatively heavily regulated labour markets and generous welfare state provisions were forged on the back of the optimistic expectations engendered by the Golden Age, but they have turned out to be less suited to a world of low growth and high unemployment. Instead of relaxing these provisions along the lines of the US model, however, European governments have predominantly chosen to maintain social cohesion by retaining, or even strengthening, the existing structure.

In addressing the question of how to tackle Europe’s high unemployment, it is tempting to call for extensive deregulation so that the market is left free to operate. Indeed such a solution has
been frequently advocated, most notably in the recent OECD Jobs Study. But calling for complete deregulation is somewhat naive, from both an economic and a political perspective. First, it is not clear that the costs of regulation are as high as they appear: labour markets in Europe are not as sclerotic as often thought, and total national output does not appear to have suffered greatly. Second, regulations and so on play an important role in offsetting market failures in an imperfect world. But more importantly, from a political perspective, society as a whole simply does not appear to be ready to sacrifice the advantages of high wages, benefits and job protection in order to fight high unemployment. The reason is not hard to find. Deregulation will have adverse effects on the incomes of a large proportion of the employed labour force – indeed it is not even clear that the unemployed themselves can expect to be better off – and those who stand to gain significantly are relatively small in number.

This is not to say that current levels of European unemployment are satisfactory – far from it. But if they are a by-product of policies that help society to achieve certain goals, it is as important to recognise what these goals are as it is to understand the extent of the inefficiencies created. Only then can a conclusion be reached on whether deregulation is a good thing or not, and on what reforms might be appropriate to fight unemployment. Our report aims to contribute to this understanding.

The Report is structured as follows. First, in Chapter 2, we recount some salient facts about European and US labour markets, including the structure of unemployment, the patterns of worker and job turnover, and the behaviour of wages. We shall see that in some ways the European economies look more like the United States than is usually supposed, although there remain key differences in the job market experience of the typical unemployed worker. The next two chapters discuss the possible causes of the rise in unemployment. Chapter 3 focuses on the possible impact of growth and technology, as well as the possible reasons for the persistence of unemployment within the labour market, while Chapter 4 reviews the role of Europe’s labour market institutions.

We then discuss in more detail the functions of labour market regulations. Chapter 5 considers the economics of regulation, and points out that in an imperfect world some regulation is desirable
purely on economic efficiency grounds, although we note that Europe's relatively heavily regulated labour market may be less appropriate now than it once was. Chapter 6 goes on to consider the political economy behind the existing regulations, and who stands to gain and who to lose from deregulation. We conclude that even though deregulation may be effective in reducing unemployment, the potential beneficiaries may be too small in number to make large-scale reform likely.

Finally, and in the light of our earlier discussion, we try in Chapter 7 to identify what can be done. Since wholesale reform is infeasible, even if it were desirable, we note that most reforms will probably need to be incremental. We suggest a number of useful reforms to the tax and benefit systems, as well as identifying a number of popular remedies that we think to be unimportant; we also note that macroeconomic policies can play a helpful supporting role in such structural changes.
2 The European labour market: Some facts

2.1 Unemployment: An overview

The first half of the post-war period was a Golden Age, for both the industrialized world in general and Europe in particular. The growth rate of income per head in Europe was high and unemployment was low. On both counts Europe's performance was good compared with both its own past and the United States. Thus in Europe unemployment rates hovered around 2–3%, while in the United States the unemployment rate was generally twice this amount (see Figure 2.1). But in the 1970s things began to change. The first oil price shock in 1974 was associated with a doubling of European unemployment to more than 5% of the labour force. However, unlike in the United States, the unemployment rate had not even begun to recover by the time of the second oil price shock in 1979. It subsequently rose to double-digit levels, overtaking the United States in the process. While the unemployment rate in the United States soon began to fall from its peak of just under 10% in 1982, reaching a low of 5.3% in 1989, the unemployment rate in the European Union\(^1\) kept rising to reach a high of just under 11% in 1985. Although it fell during the boom of the late 1980s, it still stood above 8% in 1990; since then it has again risen so that by 1994 it was above the previous peak of 1986 with more than 11% of the labour force unemployed. Furthermore, countries like Sweden and Finland that seemed to have avoided large-scale increases in unemployment in the 1970s and 1980s began to exhibit similar characteristics, with unemployment quadrupling in both countries\(^2\).
Furthermore, the costs of the increase in unemployment have been borne unequally within the labour force. Table 2.1 gives a breakdown of unemployment rates by age, gender and skill. The key points to note are as follows.

First, unemployment rates among those under 25 years of age are especially high. In France, Ireland, Italy and Spain, for instance, youth unemployment rates exceed 25%, and across the European Union as a whole roughly one in five young people are without jobs (compared with one in eight in the United States). In part this may reflect high inflows of young people on to the labour market, echoing the 'baby boom' of the 1960s, but the difficulty that young people experience in obtaining a job is especially worrying if it colours their subsequent attitude to work and society.

Second, unemployment rates for women tend to be relatively higher in Catholic countries, reflecting their different social attitudes.
Table 2.1 The incidence of unemployment

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<tr>
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<td>1.3</td>
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<td>13.3</td>
<td>6.5</td>
<td>3.2</td>
<td>11.7</td>
</tr>
</tbody>
</table>

Sources: OECD (1994b) and ILO (1993).

Note: Skilled workers are defined as those with higher education, while unskilled refers to those with lower secondary education or less. Long-term unemployment is expressed as a percentage of total unemployment.

Third, unemployment rates for unskilled workers are roughly three times higher than those for skilled workers, although interestingly the ratio is very similar in the United States.

Finally, a significant percentage of the unemployed in Europe – more than 40% – have been unemployed for more than a year. By contrast in the United States the number is barely above 10%. Probing more deeply into this reveals that much of this long-term unemployment is concentrated among older workers, although countries where youth unemployment is high also have a high percentage of long-term unemployment among that age bracket.
This turnaround in relative labour market performance between the late 1960s and the present day is quite astonishing, and all the more so since the United States has, despite the worldwide slowdown in growth and the disruption of the two oil price shocks, managed to maintain average unemployment levels not that much higher than during the Golden Age. The now dominant response to this rather depressing absolute and relative deterioration in the performance of the European labour market is to argue that the problem lies in the ‘sclerotic’ nature of the European labour market, and that measures to increase ‘flexibility’ along US lines will help to generate unemployment rates that are at least comparable with current US levels, even if the levels of 2–3% that obtained during the Golden Age might be unattainable.

We agree that recognizing the nature and impact of Europe’s labour market institutions is an essential ingredient in understanding the source of Europe’s high unemployment. However, this Report will argue that appeals for deregulation are frequently founded on a misconceived notion of how rigid European markets are in practice, fail to recognize the role played by regulations in tackling other market failures and ignore issues of political economy in advocating certain reforms. An adequate response to Europe’s unemployment problem does, we think, require careful analysis of exactly where the problems lie, of how the possible policy responses affect both the wider efficiency of the economy and the distribution of welfare, and of how the desirable policies can be made to command enough support for them to be enacted in a democratic society. Later chapters will discuss the causes of high unemployment, the functions of labour market regulations and the political economy of reform, but first we wish to explore in more detail the differences between European and US labour markets.

2.2 Labour market flows

Data on the levels of employment and unemployment give an incomplete picture of what is happening in the labour market. An economy could be characterized by complete stagnation with constant employment and unemployment, and absolutely no movement from one to the other. By contrast the same levels of employment and unemployment could be generated in a very
dynamic economy in which, at any given moment, many jobs are simultaneously created in some parts of the economy and destroyed in others. Workers move from job to job, as well as into unemployment, or from unemployment into jobs. According to the conventional wisdom Europe is closer to the first extreme, and the United States is closer to the second. As we shall see, this is something of a caricature. We start with worker flows.

2.2.1 Worker flows

At any moment a person will be in one of three mutually exclusive labour market states: employed; unemployed and seeking work; or out of the labour force entirely. Over time people move between these different states, as well as from job to job. Of course it is not only the net flows between states that is of interest, but also the gross flows in each direction. Let E, U and N denote the three states of employment, unemployment and non-participation respectively, and let appropriate combinations of these letters indicate the origin and destiny of the flows (so that EU denotes flows from employment to unemployment, for instance). Total flows into unemployment are then EU + NU, while outflows from unemployment are UE + UN. Total flows into employment (denoted H for hirings) are then just \( H = UE + NE + EE \) (where EE is job-to-job movements), and outflows from employment (denoted S for separations) are \( S = EU + EN + EE \). Gross worker turnover (WT) – a measure of the total gross comings and goings into and out of employment – is then defined as \( WT = (S + H)/E = (UE + NE + EU + EN + 2EE)/E \).

Information on these flows can be derived from household and labour market surveys, and from administrative registers. Figure 2.2 reports the gross flows for France, Germany and the United States, for 1987, an average year in the last business cycle, while Table 2.2 reports some associated inflow and outflow rates, expressed as a fraction of a suitable base population for a larger sample of countries. A number of features are worth noting. To begin with, the size of the unemployment inflow and outflow rates is an order of magnitude bigger in the United States than in Europe. The implication is that average US workers are more likely to experience unemployment than their European counterparts, but that they are also more likely to leave it once there.
Unemployment: Choices for Europe

Figure 2.2 Worker flows, 1987

Table 2.2 Annual gross worker flows, 1987
(percentage of source population)

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<tr>
<th></th>
<th>France</th>
<th>Germany</th>
<th>Spain</th>
<th>UK</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment inflow</td>
<td>3.88</td>
<td>3.01</td>
<td>1.61</td>
<td>7.8</td>
<td>23.88</td>
</tr>
<tr>
<td>Unemployment outflow</td>
<td>69.62</td>
<td>93.33</td>
<td>16.80</td>
<td>120.40</td>
<td>545.47</td>
</tr>
<tr>
<td>Employment inflow (= H/E)</td>
<td>28.86</td>
<td>22.33</td>
<td>19.80</td>
<td>6.55</td>
<td>25.27</td>
</tr>
<tr>
<td>Employment outflow (= -s/E)</td>
<td>30.69</td>
<td>21.47</td>
<td>20.92</td>
<td>6.61</td>
<td>26.53</td>
</tr>
<tr>
<td>Gross worker turnover (WT = (H + S)/E)</td>
<td>59.55</td>
<td>43.80</td>
<td>40.72</td>
<td>13.16</td>
<td>51.80</td>
</tr>
<tr>
<td>Average duration of unemployment (months)</td>
<td>8.02</td>
<td>8.04</td>
<td>6.12</td>
<td>10.67</td>
<td>5.04</td>
</tr>
<tr>
<td>Proportion of long-term unemployment (%)</td>
<td>39.52</td>
<td>36.98</td>
<td>51.48</td>
<td>42.16</td>
<td>12.66</td>
</tr>
</tbody>
</table>

Sources: OECD (1990) and Burda and Wyplosz (1994).
As a consequence, the expected length of unemployment spells is higher in Europe, as is the percentage of long-term unemployment (defined as those who have been looking for work for more than a year).

Next, the size of the flows between employment and non-participation are also proportionately bigger in the United States than in Europe. This seems to be a reflection of two features. First, temporary layoffs are more common in the United States, and temporarily laid-off workers are more likely to take a period out of the labour force rather than search for another job. Second, young people switching into and out of education appear to be a more significant factor in the United States.

Finally, there is no obvious transatlantic difference in hiring, separation and worker turnover rates. The one oddity is the United Kingdom, where the employment inflows and outflows are a quarter to a third of those in the other countries; we will return to this puzzle when we have discussed data on job turnover. Given the definition of worker turnover, the immediate implication is that in Europe a significant part of worker turnover is in the form of direct job-to-job movements, whereas in the United States most worker turnover is via unemployment or non-participation.

As far as the cyclical behaviour of these flows is concerned, the key features, which are common to labour markets on both side of the Atlantic, are as follows. First, unemployment inflows and outflows are strongly positively correlated and countercyclical. Second, since the dominant components are movements between unemployment and employment, the flows from unemployment to employment and from unemployment to employment are also countercyclical. That flows from unemployment into jobs go up in recessions may seem odd, but it simply reflects the fact that at such times there are more people seeking work, which makes it easier for firms to fill vacancies. Finally, since job-to-job flows are strongly procyclical, employment inflows and outflows are both procyclical, rather than countercyclical. This is consistent with the view that recessions are periods of major reorganization during which inefficient producers and methods of working are weeded out and ultimately replaced by more efficient ones, and seems to run against the view that the European economies are unduly sclerotic.
Table 2.3 The secular behaviour of unemployment flows (percentage points)

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<td>6.6</td>
<td>5.7</td>
<td>42.4</td>
<td>34.2</td>
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<td>0.18</td>
<td>0.26</td>
<td>19.6</td>
<td>6.3</td>
<td>39.3</td>
<td>33.5</td>
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<td>0.17</td>
<td>0.18</td>
<td>8.3</td>
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<td>0.25</td>
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<td>32.0</td>
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<td>9.9</td>
<td>14.1</td>
</tr>
</tbody>
</table>


Note: Unemployment flows are average monthly flows as a percentage of source population. Long-term unemployment rate is percentage of total unemployment.

Finally, and in the context of Europe’s current unemployment crisis most importantly, we turn to the secular behaviour of these flows and their role in the rise in unemployment. A striking feature of the rising level of unemployment within the European Union is that it has been associated with longer spells of unemployment, rather than more frequent spells of unchanged average length. This is documented in Table 2.3 which gives data for the (monthly) unemployment inflow and outflow rates for 1979 and 1988, together with the share of long-term unemployment in total unemployment in 1983 and 1993. Outflow rates within the European Union halved, while inflow rates changed relatively little over this period. By contrast the (higher) inflow and outflow rates in North America remained roughly unchanged. (The high outflow rate in Sweden is a consequence of the operation of the extensive programme of active labour market policies there.)

A more detailed analysis of the role of hiring and firing rates for France, Germany, Spain and the United Kingdom follows. Using
the notation above, inflows into unemployment are \((EU + NU)\), outflows are \((UE + UN)\) and the change in unemployment per period is thus just \((EU + NU) - (UE + UN)\). Adding and subtracting flows from employment to out of the labour force, \(EN\), to the previous expression, and letting \(u\) denote the unemployment rate and \(n\) the growth rate of the labour force \((L = E + U)\), we may then write the following expression for the change in the unemployment rate per period \(\dot{u}\):

\[
\dot{u} = (s + h + n)(\dot{u} - u)
\]

where: \(s = (EU + EN)/E\) is the separation rate; \(h = UE/U\) is the hiring rate; \(z = (NU - UN - EN)/L\) is the 'demographic' component of unemployment; and \(\dot{u} = (s + z)/(s + h + n)\) is the steady-state, or 'target', unemployment rate. (Note that these definitions of the 'separation' and 'hiring' rates are not quite the same as those used earlier as they ignore job-to-job flows for which data are not available for every year.)

Using this equation, we can then decompose movements in the unemployment rate into two components: the first is the result of shifts in the 'target' rate, \(\dot{u}\), whereas the second reflects the transitional dynamics associated with the gradual convergence of the actual rate, \(u\), towards this (moving) 'target'. Figure 2.3 plots the actual unemployment rate, \(u\), and the 'target' rate, \(\dot{u}\), for each country. They are quite similar, except for France. There the target rate is consistently well ahead of the actual rate in the late 1970s and early 1980s, and it is only in 1989 that the actual rate catches up with the target. (In particular, although the actual unemployment rate was rising during the 1980s, the underlying target rate was declining. This might explain why French policy-makers felt deceived by the recovery of the mid-1980s which did little to reduce the unemployment rate.)

We next proceed to an analysis of the behaviour of the target unemployment rate \(\dot{u}\). Figure 2.4 plots the target unemployment rate \(\dot{u}\), and the three unemployment rates that would have prevailed had the separation rate, \(s\), the hiring rate, \(h\), or the demographic component, \(z\), respectively, remained at their 1973 level (1976 for the United Kingdom).
Unemployment: Choices for Europe

France

Germany
The European labour market: Some facts

Figure 2.3 Target unemployment rates, 1970–93
Unemployment: Choices for Europe

France

Germany
Figure 2.4 Decomposition of target unemployment rates, 1970–93

Spain

United Kingdom
This allows us to analyse the contribution of movements in each of these rates to the rise in unemployment, although it should be remembered that in practice they are unlikely to move independently (for instance, an increase in labour costs may simultaneously raise the separation rate and reduce the hiring rate).

In all four countries a decline in the hiring rate, h, plays an important role; indeed in the United Kingdom it is virtually the only thing that matters. Since the average duration of unemployment spells is inversely related to the hiring rate we have here the proximate cause of the lengthening of unemployment durations and the build-up of long-term unemployment that was documented in Table 2.1. However, in France, Germany and, especially, Spain the rise in the separation rate, s, is also a significant factor; indeed unemployment in Spain would actually be close to zero if the separation rate had remained at its 1973 level. The demographic component, z, plays a relatively minor role, except in the case of France where shifts by women out of non-participation is a significant factor.

2.2.2 Job turnover

To complete our sketch of labour market flows we need to look at the other side of the coin, namely the creation and destruction of jobs, where a ‘job’ henceforth means a filled employment position. Job creation (JC) is defined as the sum of new jobs in new or expanding establishments, while job destruction (JD) consists of total job losses in closing and contracting establishments. Gross job turnover (JT) is then the sum of job creation (JC) and job destruction (JD), while the difference between job creation and job destruction is net job change (NJ). The excess of gross job turnover over net job change is thus an indicator of the extent of job reallocation within the economy.

Table 2.4 reports average job turnover rates, and its components, for the second half of the 1980s into the early 1990s for four European Union members (France, Germany, Italy and the United Kingdom), Sweden, Canada and the United States. Since there are international differences in the way new entries and closures are treated, a truer picture of cross-country differences is obtained by focusing just on continuing establishments. Also, as far as possible,
The European labour market: Some facts

The data relate to establishments (the exceptions are Canada, Italy and the United Kingdom where data are only available for firms).

The main point to note is that, although the rates of job turnover are somewhat higher in Canada and the United States than in Europe, with the exception of the United Kingdom the transatlantic difference is really not that marked. Another feature to note is that these rates are themselves very high. Even for the United Kingdom the job turnover rate implies that about one in every 11 jobs is either created or destroyed each year. For the other countries it is one in every six or seven. European labour markets thus again seem to be a long way from being stagnant and sclerotic, as they are so often depicted.

Table 2.4 International comparisons of gross job turnover and its components

<table>
<thead>
<tr>
<th>Country</th>
<th>Job creation (JC)</th>
<th>Job destruction (JD)</th>
<th>Net job change (JC-JD)</th>
<th>Job turnover (JC+JD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>6.7</td>
<td>6.3</td>
<td>0.4</td>
<td>13.0</td>
</tr>
<tr>
<td>Germany</td>
<td>6.5</td>
<td>5.6</td>
<td>0.9</td>
<td>12.1</td>
</tr>
<tr>
<td>Italy</td>
<td>8.4</td>
<td>7.3</td>
<td>1.1</td>
<td>15.7</td>
</tr>
<tr>
<td>UK</td>
<td>6.0</td>
<td>2.7</td>
<td>3.3</td>
<td>8.7</td>
</tr>
<tr>
<td>Sweden</td>
<td>8.0</td>
<td>9.6</td>
<td>-1.6</td>
<td>17.6</td>
</tr>
<tr>
<td>Canada</td>
<td>11.2</td>
<td>8.8</td>
<td>2.4</td>
<td>20.0</td>
</tr>
<tr>
<td>US</td>
<td>11.3</td>
<td>7.6</td>
<td>3.7</td>
<td>18.9</td>
</tr>
</tbody>
</table>

Sources: OECD (1994a); US figures from Garibaldi et al. (1994).

What is the explanation for the anomalous behaviour of the United Kingdom? While it is difficult to be sure, given that the data are available for only a limited time period, it is possible that the particularly low rate of job destruction (and therefore a low job
turnover rate) is associated with the fact that in 1980–2 the economy had experienced the severest recession since the interwar period, and an almost unprecedented shake-out of surplus labour. By the time of the upswing relatively few firms would still have had surplus labour to get rid of. This low rate of job destruction over the period in question would then help to explain the low rate of employment outflows and worker turnover we saw in Table 2.2. On the other hand it seems difficult to believe that this explanation could account for the magnitude of the difference with the other countries. Instead it may simply be a reflection of differences in the way the data are constructed, and is indicative of the pitfalls in making international comparisons based on data from diverse sources.

While overall job turnover rates are not that different in the United States and Europe, there are more significant transatlantic differences in respect of the cyclical behaviour of job creation and job destruction. In the United States job creation is mildly procyclical and job destruction is strongly countercyclical, while the variability of the latter is also much greater than that of the former\(^\text{11}\). Consequently job turnover is countercyclical. This fact has given rise to the ‘cleansing hypothesis’, whereby recessions are seen as periods during which the economy is ‘cleansed’ of unprofitable jobs employing obsolete production techniques. When similar studies have been carried out for European countries the results are not so clear. In Germany and Italy job turnover appears to be uncorrelated with the cycle, whereas in the United Kingdom, as in North America, job turnover is countercyclical. This is illustrated in Table 2.5 which compares job turnover, and its components, for 1984–9 (a period of expansion) with 1990–2 (a period of recession). With the exception of Canada, the United States and Sweden, widespread increases in turnover are not evident. The explanation for this difference in the cyclical behaviour of job reallocation surely lies in the higher firing costs in Europe which encourage the hoarding of labour during recessions and thus flatten the peak in job destruction\(^\text{12}\).

Finally it is useful to compare the data on job turnover with the earlier data on worker turnover. One point to note is that worker turnover is three to four times larger than job turnover. This suggests that roughly a half of worker flows are driven not by the destruction of old jobs and the creation of new ones, but rather by
The reallocation of workers across a given set of jobs in response to, for example, changes in personal preferences about where to live and work. More formal work has established that between a third and a half of worker turnover in the United States arises from job destruction and creation, and similar fractions have been obtained for European countries\textsuperscript{13}.

### Table 2.5 Job turnover across the cycle

<table>
<thead>
<tr>
<th>Country</th>
<th>Job creation</th>
<th>Job destruction</th>
<th>Job turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>France</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expansion</td>
<td>6.6</td>
<td>5.9</td>
<td>12.5</td>
</tr>
<tr>
<td>Recession</td>
<td>6.8</td>
<td>6.8</td>
<td>13.6</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expansion</td>
<td>6.4</td>
<td>5.7</td>
<td>12.1</td>
</tr>
<tr>
<td>Recession</td>
<td>7.4</td>
<td>4.8</td>
<td>12.9</td>
</tr>
<tr>
<td><strong>Italy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expansion</td>
<td>8.6</td>
<td>7.0</td>
<td>15.6</td>
</tr>
<tr>
<td>Recession</td>
<td>8.2</td>
<td>7.9</td>
<td>16.1</td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expansion</td>
<td>6.0</td>
<td>2.5</td>
<td>8.5</td>
</tr>
<tr>
<td>Recession</td>
<td>6.1</td>
<td>3.0</td>
<td>9.1</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expansion</td>
<td>8.7</td>
<td>8.1</td>
<td>16.9</td>
</tr>
<tr>
<td>Recession</td>
<td>7.0</td>
<td>11.3</td>
<td>18.3</td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expansion</td>
<td>11.7</td>
<td>7.3</td>
<td>19.0</td>
</tr>
<tr>
<td>Recession</td>
<td>10.0</td>
<td>12.8</td>
<td>22.8</td>
</tr>
<tr>
<td><strong>US</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expansion</td>
<td>12.1</td>
<td>6.0</td>
<td>18.1</td>
</tr>
<tr>
<td>Recession</td>
<td>10.6</td>
<td>9.4</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Sources: OECD (1994a) and Garibaldi et al. (1994).
The bottom line is that European labour markets are in some key respects not so different from the US one. On both sides of the Atlantic there is a large amount of job creation and destruction; these are of broadly comparable magnitudes, although the cyclical behaviour is somewhat different. Worker turnover is also of a broadly comparable magnitude on each side of the Atlantic, driven only partly by job turnover. A key difference is the nature of job-to-job movements. In Europe these are more likely to be direct, while in the United States movements via unemployment or withdrawal from the labour force are more likely. But spells of unemployment in the United States tend to be quite short lived. By contrast unemployed workers in Europe can expect to find themselves waiting for quite a long period of time before they find an acceptable job.

2.3 Wages and the quality of jobs

2.3.1 The distribution of wages

The likelihood of experiencing unemployment is only one aspect of a worker’s experience on the job market. We also need to look at the behaviour of wages, because long spells out of work may be more than compensated for by higher wages when in a job. The level, and rate of growth, of real wages per se is not very informative, however, because we need to consider also the economy’s ‘capacity to pay’ which is determined by the state of technology and the level of capital, both physical and human. Attention is therefore often focused on the behaviour of the share of aggregate output going to labour and capital respectively. In most European countries the share of national income going to labour rose during the 1970s and fell back during the 1980s (see Table 2.6). Thus real wage growth tended to exceed productivity growth during the 1970s, but this was reversed during the 1980s. By contrast in the United States there was relatively little change in the labour share, where real wage growth was generally in line with productivity growth, but the pattern of a rising and then falling wage share was even more marked in Japan than in Europe. Note in addition the general slowdown in productivity growth from the early 1970s onwards, and the fact that productivity growth in Europe exceeded that in the United States throughout the period.
Table 2.6 Wage share and productivity growth

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>74.2</td>
<td>76.1</td>
<td>75.6</td>
<td>71.3</td>
</tr>
<tr>
<td>US</td>
<td>71.8</td>
<td>71.5</td>
<td>72.1</td>
<td>71.5</td>
</tr>
<tr>
<td>Japan</td>
<td>72.9</td>
<td>80.6</td>
<td>78.1</td>
<td>74.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Productivity growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
</tr>
<tr>
<td>US</td>
</tr>
<tr>
<td>Japan</td>
</tr>
</tbody>
</table>


It is sometimes suggested that these data indicate that the rise in European unemployment during the second half of the 1970s was due to factors generating excessive upward pressure on wages, while the unemployment of the 1980s was the consequence of other factors (such as insufficient demand in the economy). This line of argument only really makes sense, however, if productivity growth is treated as an exogenous process unaffected by the behaviour of input prices, which is not very plausible. In fact inferring anything from the behaviour of the labour share is fraught with difficulty because of the endogeneity of productivity, and an increase in real wages can be associated with either a rise or a fall in labour’s share depending on the nature of the economy’s production technology. Furthermore the observed behaviour of the real wage, and thus also the labour share, will depend on the interaction of the way nominal wages are set (either by firms or as the outcome of individual or collective bargaining) with the way prices are set by producers. As a consequence even if it is agreed that a rise in the labour share is the result of an increase in real wages, it does not follow that this is the consequence of labour market developments that have generated a higher level of wage ‘push’. It could also reflect a reduced ability of firms to keep prices high, e.g. because of an increase in the intensity of competition in product markets.
While the behaviour of the labour share may be of only limited interest, the behaviour of the distribution of wages is worth noting, as it is suggestive of forces at work that may be to blame for the rise in unemployment. Table 2.7 gives information on the distribution of wages in the early 1970s, at the beginning of the 1980s and at the end of that decade. Three measures are provided where available: the ratio of earnings for an individual at the bottom of the top 10% of the earnings distribution to median earnings; the ratio of earnings for an individual at the top of the bottom 10% to the median; and the ratio of average earnings of those with some sort of higher education to those with only the minimum of primary and secondary education (the exact definition of this last variable differs across countries, so the figures are not strictly comparable). The following features are worth noting.

First, the distribution of earnings, particularly at the bottom end, is most unequal in North America.

Second, there has been a tendency for inequality to increase during the 1980s in the English-speaking nations, particularly at the bottom end of the distribution. By contrast, in continental Europe earnings at the bottom end have not deteriorated, although there has been some increase in dispersion at the top of the distribution.

Third, there seems at the same time to have been an increase in the return to education as the relative earnings of those with an advanced education compared with those without have risen, again particularly in the English-speaking nations.
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Table 2.7 The distribution of wages

<table>
<thead>
<tr>
<th>Country</th>
<th>Early 1970s</th>
<th>Early 1980s</th>
<th>Late 1980s</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th:5th Decile</td>
<td>2.00</td>
<td>2.05</td>
<td>2.11</td>
</tr>
<tr>
<td>5th:1st Decile</td>
<td>0.62</td>
<td>0.63</td>
<td>0.66</td>
</tr>
<tr>
<td>By education</td>
<td>-</td>
<td>1.66</td>
<td>1.63</td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th:5th Decile</td>
<td>-</td>
<td>1.47</td>
<td>1.65</td>
</tr>
<tr>
<td>5th:1st Decile</td>
<td>-</td>
<td>0.67</td>
<td>0.72</td>
</tr>
<tr>
<td>By education</td>
<td>-</td>
<td>1.36</td>
<td>1.42</td>
</tr>
<tr>
<td>Italy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th:5th Decile</td>
<td>-</td>
<td>1.44</td>
<td>1.56</td>
</tr>
<tr>
<td>5th:1st Decile</td>
<td>-</td>
<td>0.69</td>
<td>0.75</td>
</tr>
<tr>
<td>By education</td>
<td>1.96</td>
<td>1.60</td>
<td>1.61</td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th:5th Decile</td>
<td>1.70</td>
<td>1.72</td>
<td>1.96</td>
</tr>
<tr>
<td>5th:1st Decile</td>
<td>0.68</td>
<td>0.68</td>
<td>0.61</td>
</tr>
<tr>
<td>By education</td>
<td>1.64</td>
<td>1.53</td>
<td>1.65</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th:5th Decile</td>
<td>1.57</td>
<td>1.68</td>
<td>1.56</td>
</tr>
<tr>
<td>5th:1st Decile</td>
<td>0.76</td>
<td>0.78</td>
<td>0.76</td>
</tr>
<tr>
<td>By education</td>
<td>1.40</td>
<td>1.16</td>
<td>1.19</td>
</tr>
<tr>
<td>Canada</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th:5th Decile</td>
<td>1.67</td>
<td>1.67</td>
<td>1.75</td>
</tr>
<tr>
<td>5th:1st Decile</td>
<td>0.52</td>
<td>0.48</td>
<td>0.44</td>
</tr>
<tr>
<td>By education</td>
<td>1.65</td>
<td>1.40</td>
<td>1.42</td>
</tr>
<tr>
<td>US</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th:5th Decile</td>
<td>1.93</td>
<td>1.95</td>
<td>2.14</td>
</tr>
<tr>
<td>5th:1st Decile</td>
<td>0.41</td>
<td>0.41</td>
<td>0.38</td>
</tr>
<tr>
<td>By education</td>
<td>1.49</td>
<td>1.37</td>
<td>1.51</td>
</tr>
</tbody>
</table>


Notes: '9th:5th Decile' is the ratio of the upper limit of the 9th decile of the male earnings distribution to the upper limit of the 5th decile; '5th:1st Decile' is the ratio of the upper limit of the 5th decile to the upper limit of the 1st decile. 'Early 1970s' is 1973, except for the United States where it refers to 1975; 'Late 1980s' is 1989-90, except for Italy and Sweden where it refers to 1987-8. 'By education' refers to the ratio of earnings of those with university or similar education to those with the minimum primary and secondary education.
Of itself, this increase in earnings inequality in the English-speaking nations need not necessarily indicate a less egalitarian society because what matters is not the cross-section distribution of earnings at a point in time, but rather the distribution of lifetime earnings. Typically wages rise with tenure because of the acquisition of skills through work experience. Now suppose that all workers start out their working lives the same, but the premium for these skills rises for some reason (why this might have happened is discussed in Chapter 3). Then we would expect to observe a steepening of the relationship between wages and experience. The cross-section distribution at a point in time which includes both experienced and inexperienced individuals would also widen. Yet there need be no increase in the inequality of lifetime earnings. Econometric studies suggest that it is indeed the case that wage-experience profiles have steepened in the United States over the last decade and a half\textsuperscript{15}. These studies also find, however, that this is by no means the whole story, and that there has been a general widening of the wage distribution at all levels of experience. Thus there also seems to have been a widening in the inequality of lifetime earnings\textsuperscript{16}.

2.3.2 Unemployment experience and the quality of jobs

To complete our thumbnail sketch of the similarities and differences between the European and US labour markets, we now turn to a discussion of the experience of the unemployed over time and the ‘quality’ of jobs. Section 2.2 noted, among other things, that the rise in European unemployment was mostly associated with unemployment spells of longer duration, rather than an increased frequency of experiencing job loss. In the United States, by contrast, most unemployment experience consists of relatively frequent spells of unemployment of rather short duration. Furthermore, worker turnover in Europe is mainly job-to-job in nature, while in the United States a job-to-unemployment-to-job pattern is much more frequent. All this seems to point towards a European labour market in which a favoured core of ‘insiders’ are relatively unlikely to experience unemployment, while a group of ‘outsiders’ face long spells in unemployment. By contrast, typical US workers face a higher probability of job loss, but are unlikely to find themselves stuck in unemployment for long, so that such an insider-outsider distinction is inappropriate.
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In fact European and US labour markets are not so sharply polarised. While the average duration of unemployment is very short in the United States, this does not imply that the lifetime labour market experience of typical US unemployed workers is necessarily any better than their European counterparts. Just as important a distinction as between employment and unemployment, although somewhat harder to document, is the distinction between 'good' and 'bad' jobs – in effect between a primary sector of well-paid and relatively secure workers, and a low-paid secondary market in which job loss is much more frequent. One view of European unemployment is that the presence of minimum wages and generous benefits places a floor under wages, and prevents firms offering the low-paid casual jobs that are taken up by the US unemployed. Chapter 6 discusses the political economy of such regulations in depth, but here we merely note that, even for the currently unemployed, removing such a floor is not necessarily a good thing because the increased probability of finding a job will be offset by reduced expected earnings if they are successful in their quest. An important question is thus whether these low-paid casual jobs provide a gateway into better paid, more secure jobs for the people who take them, or whether they simply experience repeated short spells of poorly paid casual employment punctuated by periods of unemployment. The argument for removing the source of the wage floors will presumably be that much stronger in the first case than in the second.

Unfortunately answering this question is not easy, given the difficulty of defining what is a 'good' job and what is a 'bad' job for measurement purposes. A recent INSEE study suggests that for adult French males between 48% and 71% of 'precarious' jobs subsequently lead the worker into a 'stable' job, rather than into another 'precarious' job or back into unemployment (the exact percentage varies with age). For adult females the percentages are rather lower, lying between 35% and 55% (this is not surprising as female attachment to the labour market is weaker than for males). For young males the figure is much lower – only 19% – which presumably reflects the fact that for many people their first experience of the world of work is in a sequence of casual jobs, such as cleaning restaurant tables or hamburger tossing, which they then leave to take up a career. These data seem to suggest that a 'precarious' job is quite a good gateway into a more stable one. A number of caveats are in order, however. First, the distinction
between ‘stable’ and ‘precarious’ jobs does not correspond precisely to the required distinction between ‘good’ and ‘bad’ jobs (‘precarious’ jobs are short-term, but not necessarily low-wage ones). Second, even if 60% of ‘precarious’ jobs lead directly into ‘stable’ jobs, this is still consistent with a dichotomized society in which there are two kinds of people in such jobs: 60% who are certain to move into a ‘stable’ job, and another 40% who are condemned to a lifetime of ‘precarious’ jobs or unemployment. Third, the supply of ‘precarious’ or ‘bad’ jobs should be lower in France than in an unregulated labour market, and a proper picture of what deregulation would be likely to do can only be gained by looking at US experience.

The best we can do here, there being nothing resembling a useful decomposition into ‘good’ and ‘bad’ jobs, is to look at worker mobility between different parts of the wage distribution. Using data from the National Longitudinal Survey of Youth, and focusing attention on men aged 23 in 1985, we find that those who were in the bottom 10% of the earnings distribution for their cohort in 1985 had a 54% chance of still being in the bottom 10% some six years later, and only a 20% chance of being in the top 70% of the distribution. Thus even in the United States, often held up as an exemplar of the mobile society, a significant percentage of the population seem to be confined to an existence at the bottom end of a wage distribution, which in addition, as we have seen, has been widening markedly in recent years. This would appear to give some credence to the notion that there is also an insider/outsider dichotomization in US society, where the outsiders include not only the unemployed, but also a significant group of ‘working poor’.

A final remark is in order regarding the implications for the international comparison of unemployment data of the presence of a wage floor in Europe, and the associated rationing of jobs at the bottom end of the wage distribution. The incentive to remain available for work will be greater in Europe than in the United States, because of both the more generous unemployment benefits and the higher wage if job search is successful. Hence discouraged workers (i.e. those who leave the labour force and are therefore not counted in the ranks of the unemployed) should be more numerous in the United States than in Europe. For instance we saw in Figure 2.4 that in France, at least, a significant part of the rise in the unemployment rate is associated with an increase in the fraction of
job losers who decide to register as unemployed rather than move out of the labour force (the 'demographic' component, $z$). If the fraction of job losers moving out of the labour force had remained constant at 1973 levels the male unemployment rate would have been a couple of percentage points lower, while for women (who comprise 60% of the unemployed) the actual unemployment rate would have been an astonishingly low 4%\textsuperscript{18}. In a similar spirit Table 2.8 reports international data on unemployment rates after correction to take account of discouraged workers and workers who take a part-time job because they cannot find a full-time one. Naturally these unemployment rates are higher than the conventional measured ones. However, the key point is that the adjustments are for the most part relatively more significant in the low unemployment countries.

Table 2.8 Alternative measures of unemployment, 1989

<table>
<thead>
<tr>
<th>Country</th>
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<th>New measure</th>
</tr>
</thead>
<tbody>
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<tr>
<td>Italy</td>
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<td>15.8</td>
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<tr>
<td>UK</td>
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<td>9.3</td>
</tr>
<tr>
<td>Canada</td>
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<tr>
<td>Japan</td>
<td>2.2</td>
<td>7.2</td>
</tr>
</tbody>
</table>

2.4 Conclusions

This comparative perspective on European labour markets suggests that, although job turnover is somewhat lower than in the United States, they are far from being as sclerotic as is sometimes thought. The big difference is in worker turnover: unemployment spells in the United States tend to be frequent, but short. In Europe both inflows into, and outflows from, unemployment are lower, but the duration of unemployment spells is long. The rise in unemployment has been associated with a lengthening of this duration. As a consequence there is an increasing dichotomization between those in work and those out of work. In the United States the distinction is less between those in work and those out of it, but rather between the rich and the poor, with the unemployed representing only a part of the latter group. This dichotomization between rich and poor has been exacerbated by the notable widening in the earnings distribution that has occurred in recent years. Armed with this background, we turn to a consideration of the causes of Europe's high unemployment.
3 Causes of the rise in unemployment

3.1 Introduction

Why did unemployment rise so much in the European Union after 1975? One answer is that Europe was the subject of unique adverse disturbances or shocks, whether exogenous or policy induced. Another is that while all the industrialized countries were subject to these shocks, the institutions of Europe were particularly badly equipped to deal with them which meant the effect of the disturbances was particularly virulent or long lived. Some of the likely culprits – such as the two oil price rises – were clearly global in nature. At a proximate level it seems obvious from Figure 2.1 that the two oil price shocks must share part of the blame, because the coincidence in timing is just too great for it to be otherwise. Other disturbances – such as the transmission of tight monetary policies throughout the European Union via the Exchange Rate Mechanism in the wake of German reunification – were more identifiably European in their origin or impact. In this report we do not intend to survey all the possible causes that have been cited and investigated in the literature\(^1\). We will instead consider a few explanations, either that have attracted attention recently or that we feel to be important, focusing in particular on how the peculiar institutional structures in European labour markets affect their intermediation.

3.2 A framework for analysis

In order to structure the discussion it is useful first to lay out a very simple version of the now standard analysis for thinking about the
causes of unemployment and the policies to cure it. This is illustrated in Figure 3.1, with the (post-tax) real wage on the vertical axis and employment on the horizontal axis. The downward-sloping line DD gives the demand for labour as a function of its real cost\(^2\), its location and slope depend on technological factors and the quantity of capital. The backward-L-shaped line LL is competitive labour supply. The floor is the workers' 'reservation wage' below which they would choose not to work; this will be affected by the level of unemployment benefits, workers' financial wealth and the availability of credit when unemployed. Above this floor we assume, for simplicity, that labour supply is inelastic. Finally the upward-sloping line WW is a wage-setting schedule which describes the level of wages as a function of the tightness of the labour market. This schedule reflects the activities of unions, which are able to press for higher wages when labour is scarce, or of firms, which set 'efficiency wages' above market-clearing levels in order to elicit greater efforts from their workforces. The equilibrium level of employment and real wages is then at point E, with an associated unemployment level U.

Figure 3.1 The determination of equilibrium unemployment
Point E describes the equilibrium levels of employment and unemployment, when wages and prices have fully adjusted. In practice many wages and prices are changed only periodically, and therefore have to be set on the basis of expectations of future levels of both nominal spending and other relevant wages and prices in the economy. Thus it will often happen that the economy is away from E because wages and prices have not yet been adjusted to the correct levels, or because the expectations on which they were based have turned out to be wrong. In the interregnum, while wages and prices are still adjusting, employment will be determined by the level of demand in the economy. Thus we might start out at a point like A, where the level of nominal wages and prices is too high relative to the level of nominal spending in the economy, and therefore real spending is too low (although as drawn the real wage happens to be at the right level). The high level of unemployment, and low rates of capacity utilization, then put downward pressure on wages and prices respectively, leading to disinflation and an increase in the level of real spending on domestically produced goods as competitiveness improves. Ultimately the economy gets pushed back to point E.

This simple framework is useful for thinking about unemployment as it allows us to distinguish between movements in structural (i.e. equilibrium) unemployment and cyclical unemployment, as well as to analyse the impact of different variables on the equilibrium unemployment rate. Thus an increase in the workers’ reservation wage, for instance, will shift both LL and WW vertically upwards and raise equilibrium unemployment. Similarly anything that raises the demand for labour, but leaves the reservation wage unaffected, will shift DD upwards and reduce equilibrium unemployment.

3.3 Macroeconomic policies and cyclical unemployment

We start our discussion of the causes of high European unemployment by considering the role of cyclical factors. The first half of the 1980s was generally a period where policy was directed primarily at disinflation. This was associated with fiscal consolidation, except in the United States where tax-cutting
policies produced a burgeoning deficit (see Table 3.1). Monetary policies were generally restrictive, with a very pronounced increase in short-term real interest rates, which rose to unprecedented levels of around 4–5% per annum by the mid-1980s (see Table 3.2). Thus both monetary and fiscal policies were contractionary in Europe during the first half of the 1980s, while in the United States fiscal loosening was coupled with monetary tightening. By the late 1980s, fiscal tightening in Europe had ceased, and the stance of both monetary and fiscal policy was relatively constant. Then in the early 1990s, fiscal policy in Germany relaxed in the wake of reunification, and monetary policy tightened, while monetary policies in the rest of Europe were also tightened in order to preserve exchange rate parities within the European Monetary System. Monetary policy in the United States, by contrast, was loosened somewhat. Let us see what implications these movements in policy had for unemployment.

Table 3.1 Fiscal indicators: Government structural balances (percentage of output)

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</table>

Source: OECD (1994c).
Causes of the rise in unemployment

Table 3.2 Monetary indicators: Short-term interest rates (% per annum)

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<tr>
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<td>(5.0)</td>
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<td>(4.9)</td>
<td>(9.5)</td>
<td>(3.7)</td>
<td>(1.6)</td>
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</table>


Figure 3.2 plots inflation against unemployment for the European Union and the United States from 1961 to the present (Figure 3.4 below also gives data for France, Germany and the United Kingdom over just the more recent past). We see that the United States is characterized by a series of loops, in which inflation tends to rise when unemployment is low and falls when it is high. Our theoretical analysis in the last section suggests that unexpected fluctuations in the rate of growth of nominal aggregate demand and inflation should lead to (temporary) movements in unemployment away from its equilibrium level if wages and prices, or expectations thereof, are slow to adjust. The figure strongly suggests that the expected inflation that is built into wages and prices is based largely on a simple extrapolation of recent experience. This then leads to an ‘accelerationist’ model of unemployment and inflation, in which increases in inflation are positively related to deviations in unemployment above its equilibrium value, and vice versa. Furthermore, for the United States it looks as though most of the action is likely to be in this cyclical component, rather than in movements in the equilibrium rate.
Figure 3.2 Unemployment versus inflation, 1961–94
Causes of the rise in unemployment

Figure 3.3 The Phillips curve, 1961–94
For the European Union things are not so simple, because the loops are open rather than closed. In order to explain the high unemployment in the late 1980s purely in terms of cyclical factors we would need to believe that inflation must have been consistently much lower than people were anticipating. Since inflation had by this time stabilized at around 3–4%, this is not very plausible, and we are instead led to believe that the underlying equilibrium rate has also shifted. However, this does not imply that cyclical factors are absent either. What we want to do, then, is somehow decompose unemployment into its equilibrium and cyclical components. To do this properly some assumptions need to be made about how each is determined. There is no entirely unambiguous and uncontentious way of doing this, as the empirical literature on European unemployment has so far failed to agree on the underlying determinants of the equilibrium rate of unemployment. For the purposes of this Report, however, it is sufficient to make the rather broad assumption that the somewhat erratic short-run movements in unemployment are primarily cyclical in nature, while the longer-run swings in unemployment reflect movements in the equilibrium level of unemployment; this then allows us to make the required decomposition.

We can then plot the inflation rate against what we have identified as the cyclical component of unemployment. When we do this, loops similar to the plot for the United States appear, suggesting that an ‘accelerationist’ model describes the data for Europe quite well too. This is documented directly in Figure 3.3 which plots changes in the rate of inflation against the deviation of unemployment from its equilibrium value for both the European Union and the United States. What is evident from both plots is a pronounced inverse relationship; quantitatively they imply that an extra point on the unemployment rate for one year reduces the inflation rate (permanently) by about three-quarters of a percentage point. This suggests that the cost of reducing inflation in the European Union from a high of 12.8% in 1980 to a low of 4.0% in 1987 was about 10.2 extra percentage point-years of unemployment.

It is important, however, to realize that the size of this trade-off between inflation and unemployment is unlikely to be constant. In particular, it depends on both the structure of labour and product markets – and is therefore affected by structural policies – and the
credibility of macroeconomic policies. Disinflation will be less costly, other things being equal, when announcements of tight policies carry high credibility with the financial markets, and with wage and price setters. Otherwise there will need to be a period of credibility building as inflationary expectations are ratcheted downwards. Evidence of the importance of the framework within which policy decisions are made is provided by considering the experience of different countries within the European Union during the last 15 years (see Figure 3.4).

France
Figure 3.4 Unemployment versus inflation, 1978–93
Consider first the case of France in Figure 3.4. During 1981 the Mitterrand government decided to go for growth through expansionary macroeconomic policies, although it simultaneously introduced policies such as a minimum wage which could be expected adversely to affect the supply capacity of the economy. Although France consequently avoided the deep recession suffered by its neighbours in 1982, French inflation remained high while inflation in Germany fell significantly. As a consequence of its unsustainable expansionary policies at home, and the recession abroad, France faced a deteriorating current account on the balance of payments and speculative attacks on the franc. In 1983 it was decided to make sticking to the exchange rate parities agreed under the Exchange Rate Mechanism of the European Monetary System the cornerstone of macroeconomic policy-making, reversing the expansionary fiscal and monetary policies. However, this commitment was not immediately credible to the private sector, and only gradually did French macroeconomic policy gain anti-inflationary credibility so that the cost in terms of unemployment was substantial.

By contrast, Germany, with its staunchly independent central bank committed above all to price stability, was able to reduce inflation with far less cost in terms of increased unemployment. Although unemployment rose in the recession of 1982, subsequent reductions of inflation in the 1980s were purchased almost at no unemployment cost.

The United Kingdom is our third example. UK macroeconomic policy was firmly under the control of politicians during this period, and past experience gave the private sector little reason to believe statements that inflation would not be tolerated. Yet the British under Mrs Thatcher, unlike the French, engaged in a strong anti-inflationary policy effort. Again it took time to build up credibility and, lacking the external constraint provided by the need to preserve an exchange rate parity for the franc, the costs were even greater than in France.

Given the quite reasonable objective of reducing the high rates of inflation that obtained at the start of the 1980s, some increase in cyclical unemployment was an inevitable by-product. So, although it certainly contributed to the rise in unemployment, macroeconomic policy does not seem to have been seriously
misdirected over this period; the only issue is whether different structural policies, or a different institutional framework, might have helped to achieve this at lower cost. The same cannot be said of the increase in cyclical unemployment in the 1990s. The reconstruction of the East German economy after reunification required a period of high investment. It is entirely rational that this should be financed by all generations of Germans, and not simply those alive today. Consequently it was correct for Germany to run (temporary) fiscal and current account deficits, and to switch production towards satisfying domestic needs rather than supplying foreign markets.

The counterpart of this switch in the destination of German production should be a real appreciation of the Deutschmark, and the easiest way to achieve this would have been through a *nominal* revaluation. Furthermore, since this would have taken place in the face of the archetypal idiosyncratic country shock, there would have been no reason for it to produce any general loss of credibility in policy-making elsewhere in the Union. There had been no general realignment of parities within the Exchange Rate Mechanism since 1987, however, and a number of governments in the rest of the Union saw this hardening of parities as the first step towards eventual monetary unification. As a consequence they were reluctant to agree to a realignment. Given its hegemonic role within the system, and the refusal of other countries to realign, it was entirely appropriate for the Bundesbank to seek to contain domestic inflationary pressures by tightening German monetary policy. The overriding objective of maintaining parities then led other countries to pursue inappropriately tight monetary policies, so that the required real exchange rate change would be brought about through lower inflation outside Germany, rather than higher inflation within it.

Ultimately, of course, the financial markets woke up to the political unsustainability of this policy in terms of the implied output losses and forced the exit of some currencies from the system, and a relaxation of the constraints for the remainder. Some countries, such as the United Kingdom, then took advantage of the new-found freedom to adopt a more relaxed monetary policy, while others, like France, insisted on trying to maintain the parity with the Deutschmark by persisting with tight policies. The result of this
Causes of the rise in unemployment

sorpy episode has been to raise unemployment unnecessarily; in our view this represents a sequence of major policy misjudgements.

3.4 Equilibrium unemployment: Technology, growth and jobs

While there have been macroeconomic policy errors in Europe in recent years, these seem to explain only a relatively small part of the current high unemployment levels. Instead much of the increase in unemployment appears to be the result of an increase in equilibrium unemployment. The causes of this increase in equilibrium unemployment have been investigated fairly intensively. Possible factors that have been considered include: the two oil price shocks, and more generally movements in the terms of trade; high taxes, especially on the employment of labour; generous unemployment benefits; minimum wages; excessive union power; increased mismatch between the pattern of the demand for, and the pattern of the supply of, labour; and high real interest rates. None of these provide an entirely convincing reason why equilibrium unemployment should have risen in the way it seems to have done, although all of them may have had some part to play. In particular, while Europe's relatively generous welfare state provisions may be important in understanding why a given shock might have a bigger and longer-lasting effect in Europe, as we shall see they did not become significantly more generous between the 1960s - when the unemployment rate in Europe was half that of the United States - and the 1980s. Thus the generosity of Europe's welfare state cannot be the impulse that led to the rise in unemployment, although it does help us account for both its propagation and its persistence.

In this Report we do not intend to review all this literature. Instead we wish to focus on a few possible explanations for a rise in equilibrium unemployment that seem to us of particular significance, or else have attracted attention in recent debates. In particular much of the popular discussion centres on the impact of technological progress, which is sometimes held to be responsible for making labour redundant. In fact, far from accelerating in recent times, growth has if anything been slower during the period of rising unemployment (see Table 2.6).
How far can we go on attributing the rise in European unemployment to this slowdown in growth? In itself, the fact that lower growth yields higher unemployment is not surprising. The decision to hire a worker is akin to an investment decision, so that faster growth implies a larger return to this investment, *ceteris paribus*. The incentive to hire labour is consequently greater, the higher is the growth rate. Conversely, higher real interest rates imply heavier discounting of these future revenues and so there is less incentive to hire. Since the 1980s was a period of both low growth and high real interest rates, the implication is that the demand for labour should have fallen, i.e. the labour demand schedule, DD, in Figure 3.1 shifts inwards. The result is higher unemployment, other things being equal\(^\text{25}\). This phenomenon is sometimes referred to as the ‘capitalization effect’.

This is not the only effect of growth, however. Some patterns of growth are more destructive than others, and technical progress – the key condition for modern economic growth – may well destroy more jobs than it creates. As we saw in Chapter 2 modern capitalism is indeed destructive as well as creative, with high rates of job destruction, as well as creation, even in supposedly sclerotic Europe. All in all, is there any reason to expect the creative effect of economic growth to dominate this destructive component of economic growth? Despite casual observation that may point to the contrary, the answer is unambiguously yes. The implication is that the slowdown in growth is a plausible candidate for explaining the rise in equilibrium unemployment in Europe. In order to see why this is so – and why it runs against the conventional wisdom that technological progress destroys jobs – it is useful to spend a little time considering exactly how technological progress affects the demand for labour.

The fear that technological progress eliminates jobs is nothing new. John Kay, the inventor of the ‘flying shuttle’, had to flee to escape angry textile workers who thought they would be rendered redundant and destitute by the new technology; Hargreaves, the inventor of the ‘spinning Jenny’, found himself surrounded by angry workers who burned down his house; the Luddites smashed up machines that they thought threatened their jobs; and even today we find print workers in the newspaper industry trying to prevent the introduction of new print technology\(^\text{26}\). A seemingly naive question is: why does technological progress excite such fear?
Suppose that a new multi-vitamin pill were suddenly invented that increased by a factor of ten the output a person can produce. Should we expect the pill to destroy jobs and to raise unemployment? History has an answer: the productivity of labour has risen tenfold since the beginning of the century, and it is wages and income that have increased, rather than unemployment. Yet, as the examples above show, the fear that machines will replace labour is real, and must be taken seriously. Let us see how to reconcile these fears with the facts.

3.4.1 Why does technological progress destroy jobs?

First consider a primitive economy in which all workers are identical and they produce a single good, for example corn. When our magic pill is invented, every worker has the ability to produce ten times more corn than before. What could prevent this happening? For one thing, the workers might decide to work less, so as to spend more time enjoying their leisure. This has indeed happened to a degree over the last two centuries, as the average number of hours worked per week is now roughly half of what it was in the middle of the nineteenth century. But this fall in hours worked was proportionately much less than the rise in productivity. Besides this voluntary reduction in hours worked, could the number of hours worked be inefficiently reduced by a lack of demand? Some economists in the past, and even today, have expressed the view that consumption could never keep pace with the ever rising productivity of labour, so that the demand for labour would be forced to shrink correspondingly. Yet despite these fears, the primary consequence of technological progress has been higher consumption. We conclude that there is little reason to think our primitive economy would have to suffer higher unemployment from the invention of our pill, other than as a result of the voluntary increase in the amount of leisure taken by workers.

Let us continue to assume that the economy produces a single good, but now recognize that in reality there are many different kinds of workers. We can now see why technological progress might destroy jobs. For one thing, it may be that the new pill, in order to be fully effective, requires combining the workers in different ways from hitherto, or some of them may need to be retrained to acquire new skills. In that case, firms may need to fire
their current workers in order to hire new ones with the required characteristics. This will create unemployment as the labour force is reshuffled across sectors. Furthermore, if instead of a single innovation, technological progress continues steadily over time, then the continual reshuffling and retraining this necessitates will generate continual unemployment. The question then is whether this destructive effect of technical progress is offset by the 'capitalization effect' that we alluded to earlier.

Now abandon the assumption that the economy produces only com, and consider the more realistic case of an economy producing and consuming many different goods. In such an economy there is another mechanism at work that generates a link between technical progress and unemployment. Although the idea that people will become saturated with goods, so that there is insufficient demand to absorb the higher production, is wrong at a general level, there is an aspect of it that is right. Innovation rarely affects all sectors of the economy equally. If an innovation, such as our pill, allows a tenfold reduction in the manufacturing costs of a car, but without affecting the costs of producing other goods, we cannot expect an equiproportional increase in the demand for cars. Such an increase in the demand for cars will be prevented by the shortage of highways and parking lots, as well as the consumers' desire to spend money on goods other than cars.

This sort of idiosyncratic technological breakthrough is thus totally different from a general increase in productivity that affects all sectors equally. We would then expect the most progressive sectors to suffer job cuts, while employment in the less progressive sectors would expand. (Strictly speaking this is on the proviso that the two types of commodities are not good substitutes for one another; if they were instead close substitutes then the more progressive sector would expand at the expense of the less progressive one.) Job reallocation, and unemployment, thus results from the uneven nature of technological progress across the economy.

This is not the end of the story, because the nature of growth also matters. Imagine a completely stagnant economy, in which the children simply take on exactly the same work as their parents as the latter become infirm or die. Such an economy will experience no growth and no unemployment. Now suppose instead that growth is brought about by a Schumpeterian process of 'creative
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destruction'. Here the price of growing fast is the constant obsolescence of old jobs, which are continually replaced by new ones elsewhere in the economy. Now there can be both rapid growth and a high unemployment rate, because if more growth means even more such transformations, it will also mean more job destruction, and thus more flows into, and out of, unemployment.

3.4.2 Evidence on technical progress, job turnover and unemployment

The impact, then, of technical progress is a complex phenomenon in a modern economy. Sometimes it might be beneficial for employment, at other times it might not be. Is there any evidence to suggest that the growth process has been particularly harmful for employment in the OECD economies in recent years, and what evidence is there to suggest the growth slowdown affected equilibrium unemployment?

If we pursue the idea that growth results from a process of 'creative destruction', job turnover may be considered as the proximate cause of unemployment (if a job is destroyed then, ceteris paribus, an additional person must be unemployed). This leads to the view that more job reallocation should be associated with higher unemployment (also sometimes referred to as the 'sectoral shifts' hypothesis).

Figure 3.5 plots the job turnover rates for the countries reported in Table 2.4, as well as Belgium, Denmark and Finland, against average unemployment rates in the 1980s; there is a significant inverse relationship between the two. Hence the 'creative destruction' view is not supported by this simple bivariate analysis.
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Figure 3.5 Unemployment versus job turnover

Source: Garibaldi et al. (1994).

Figure 3.6 Change in unemployment versus change in productivity growth
Turning now to the effect of the growth slowdown on unemployment, Figure 3.6 plots the change in average unemployment between 1965–74 and 1975–84 against the change in the average annual rate of productivity growth for 20 OECD countries. Apart from the two outliers of Austria and Japan, there is a clear inverse relationship, suggesting those countries that experienced the greatest slowdown in productivity growth also experienced the largest increase in unemployment, both because of higher separations and because of lower hirings.28

3.5 Equilibrium unemployment: Bias in technological change

It is also worth considering a variant of the technology thesis that has attracted recent attention, namely the idea that technical progress has been particularly unfriendly to the employment of unskilled labour. The result has been a fall in the relative demand for unskilled labour: in other words the demand for brains has outstripped the demand for brawn. This seems to accord with much casual empiricism among people who complain that traditional ‘men’s’ jobs in industries like iron and steel, shipbuilding and mining are being destroyed by new technology, while the new jobs require people who know how to use computers, or have similar skills. Indeed it is not uncommon to hear claims that the unskilled unemployed have become essentially ‘unemployable’, so that any amount of increased labour market flexibility and lower wages for the unskilled will not cure unemployment. Transforming the unskilled unemployed into employable skilled workers through training is the only solution.

In its baldest form this thesis must be wrong. If unskilled labour were virtually free, then firms would surely employ the unskilled simply to stand around to open doors, pick up litter as soon as it is dropped, and so on. But a more reasonable line of argument runs as follows. Worldwide there has been a bias in technical progress towards economizing on the use of unskilled labour that has outstripped any reduction in the relative supply of unskilled labour. As a consequence an excess demand for skilled labour, and an excess supply of unskilled labour, has tended to open up, driving
skilled wages up and unskilled wages down. As we saw in Chapter 2, this is pretty much what has happened in the United States. However, in Europe generous unemployment benefits, and in some countries high minimum wages too, have prevented the required downward movement in unskilled wages, leading instead to increased unskilled unemployment. Consequently the current high level of unemployment in Europe is the result of a welfare system that has prevented the wage adjustment necessary to accommodate the technologically induced shift against unskilled labour.

As well as being consistent with the evolution of wages, this thesis also apparently fits with the evolution of unemployment rates by skill. For instance, at the beginning of the 1980s the ratio of the unemployment rates of unskilled to skilled workers was 1.9 in France, 2.9 in Germany, 0.8 in Italy, 2.2 in the United Kingdom and 3.1 in the United States; at the start of the 1990s the corresponding ratios were 3.5, 3.4, 1.3, 3.8 and 3.2 respectively (see Table 2.1). Thus the relative unemployment rates deteriorated for all the European countries, but hardly changed in the United States. It is also consistent with more detailed microeconometric work on the source of the widening of wage differentials in the United States, which traces it to shifts in relative demands (that furthermore are not simply the result of a changing industrial structure) rather than supplies.

All of this is circumstantial evidence, however. The problem is that when economists try to analyse the contribution of 'technology' to economic growth, or the growth of unskilled unemployment, it is always in terms of the residual that is left over after all other factors have been accounted for. In other words they have failed to come up with a more convincing (and testable) explanation. There is, however, no direct evidence that suggests that technological progress has been especially biased against unskilled workers in the recent past. For instance, if we take the computer revolution, casual empiricism suggests that computers perform tasks that previously required a reasonable skill level. Computers do not clean the floor, nor do they serve beers in cafes, nor do they lay bricks. Rather, the computer revolution has destroyed jobs among industrial designers, accountants, etc. It may well be the case that technical change has increased the demand for very highly skilled workers. Yet when we talk about training programmes to reduce unemployment, we do not mean half the workforce getting PhDs.
A second problem with the technological bias thesis is that the widening of the wage distribution that has occurred in the United States has a ‘fractile’ quality to it: however finely the income distribution by occupation is subdivided the same widening is found to be taking place. Thus the earnings distribution for top lawyers and opera singers has also widened. This may have something to do with the electronics revolution that means a few ‘superstars’ can service more customers than before, but it is certainly not a simple case of unskilled labour being made redundant.

Finally, and perhaps most importantly, if the technological bias explanation were correct, we would have expected to observe both a rise in unskilled unemployment and a fall in skilled unemployment. Yet this has not happened: both unemployment rates have risen, and in Europe the increase in skilled unemployment has been substantial. This suggests that only a rather small part of the increase in unemployment can be attributed to a technological bias against the use of unskilled labour.

3.6 Equilibrium unemployment: International competition

Another, and it turns out related, explanation for Europe’s high unemployment is the effect of increased competition from the developing and newly industrialized countries, particularly those situated on the Pacific Rim. Thus the European Commission’s 1993 Competitiveness White Paper, in asking why equilibrium unemployment is so high, claims that ‘the role we have come to play in the new international division of labour has not been an optimum one because we have neglected future growth markets in concentrating too much on the revenues and positions established in traditional industries’, and that ‘other countries are becoming industrialized and competing with us – even on our own markets – at cost levels which we simply cannot match’.

The simple notion – which appeals to many business people and politicians – that these countries have in some sense ‘stolen our jobs’ is just plain wrong, and suffers from the same ‘lump of
labour’ fallacy that characterizes the argument that technical progress necessarily destroys jobs. The whole purpose of trade, international or otherwise, is precisely to facilitate the specialization of labour so that people or a country make and sell what they or it have a comparative advantage in, and buy what they or it are not so good at making. Having access to a cheaper source of some goods that we currently make should then allow us simply to shift the freed resources into other lines of production, so that in total society is better off.

There is a more subtle reason, however, why increased global competition could be to blame for both the rise in unemployment in Europe and the widening wage inequality observed in the United States and the United Kingdom. A key feature of the emerging economies is their access to a large pool of relatively cheap, unskilled labour. As a consequence they should have a comparative advantage in producing goods that are intensive in the use of such labour. Opening European markets to these goods certainly should improve overall welfare in Europe, but does not necessarily mean that everybody is actually better off. (In principle the gainers ought to be able to compensate the losers but, as we make clear in Chapter 6, it is often infeasible to make such transfers.) A basic theorem of international trade theory – the ‘Stolper-Samuelson’ theorem – predicts that the opening up of markets to international trade should increase the returns to the factors of production that are scarce relative to the global supply, and reduce the returns to those factors that are relatively abundant. Since the ratio of unskilled to both skilled labour and physical capital is higher in the emerging economies than in most of the OECD, we should expect increased trade to lead to a fall in the relative wages of unskilled labour in the latter. This is, of course, exactly what has happened in the United States. However, if there is a wage floor present, as is perhaps the case in Europe, then the required wage adjustment is impeded and the result is an increase in unskilled unemployment, exactly as in the biased technical progress thesis.

While this explanation is attractive, unfortunately it does not stand up to closer scrutiny. In the absence of a wage floor, the theory has two very clear implications. First, the ratio of skilled to unskilled unemployment should decline in all industries, reflecting the fact that skilled labour is now relatively more expensive. Second, the industry mix should shift in favour of those industries that are skill
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intensive. But the empirical evidence for the United States, where there is no wage floor and no substantial increase in unemployment, is quite clear. The ratio of skilled to unskilled unemployment has been rising in most industries, and there has been no very noticeable shift in the industrial structure towards skill-intensive industries.

These findings may seem rather odd as the emergence of the Pacific Rim economies is one of the most notable economic phenomena of the last 20 years. However, despite their phenomenal growth, it is the case that their exports to the United States and Europe are still very small in relation to the latter countries’ national income — between 1% and 2% in fact — and most developed country trade is still with other OECD members. Consequently it is not altogether surprising that they have not yet had a major impact on the structure of the developed economies. Of course the share of the emerging economies is very likely to grow, so that the effects alluded to above may well become apparent in the future. There are therefore good reasons for thinking of it as a potential problem, even if it is not a current one. In this context, however, we would like to point out that there are also mechanisms that may lead to some self-correction. In particular, as these economies develop so they are likely to improve their skills base, and indeed the emerging countries of 20 years ago like South Korea and Taiwan already have a well-educated workforce. The danger may then be that Europe gets squeezed not out of sectors intensive in unskilled labour, but rather out of the more skill-intensive ones. The fact that writing computer programs and the processing of company audits is already being subcontracted to operations based in India is indicative of what might happen in a far greater range of industries in the future.

3.7 Persistence

An alternative important strand of thinking about the rise in European unemployment is that the apparent rise in equilibrium unemployment is itself a consequence of past shocks, rather than reflecting any change in the ‘fundamental’ determinants of equilibrium unemployment. There are four potential sources of such unemployment persistence, two that operate on the demand
side of the labour market and two that operate on the supply side. We start with the demand side of the market.

3.7.1 Hiring and firing costs
The impact of hiring and firing costs, and all forms of labour market regulation more generally, on unemployment is considered in more detail in the next chapter. Here it is enough to make the obvious point that high hiring and firing costs will lead firms to be both slow to close jobs when a recession hits, and slow to open them when business conditions improve. Neither hiring costs (the costs of finding and training new workers) nor firing costs (mandated or contracted severance payments) will be recouped if a job is closed or reopened respectively; in other words they are sunk costs. Consequently both opening a new job, and closing an existing one, take on the character of an investment decision. Thus the expected marginal profitability necessary to get a firm to open a job must exceed the hiring cost, and the expected marginal gain from closing one must exceed the firing cost.

As a consequence there is a range of job profitabilities between which a firm will be tempted neither to expand employment nor to contract it. There is thus a 'zone of inaction' in which employment levels will be relatively impervious to movements in the cost of labour, etc. Furthermore, the width of this zone of inaction is greatly increased by the presence of uncertainty about future business conditions, because if there is a possibility that an improvement in business conditions will not continue there is a chance that the firm's investment in extra workers will turn out to have been unwise (and similarly there is a chance that conditions may shortly improve, even though business fortunes may currently be deteriorating). In such circumstances there is a payoff to waiting until things are less uncertain. All this means that the demand for labour may initially be rather slow to respond to changes in business conditions or labour costs, but that if a large shake-out of labour does occur, as for instance in the wake of a very deep turndown in aggregate demand, then a simple restoration of the level of demand to the status quo ante may be insufficient to restore employment to earlier levels: there is 'hysteresis' at work.
3.7.2 Capital shortage
The other persistence mechanism relating to the demand side relies on there being insufficient capital for additional workers to work with, i.e. there is a capital shortage. Since this could be thought of as simply a very large hiring cost – the firm may have not only to find and train new workers, but also to buy them the appropriate equipment to work with – the effect should be qualitatively quite similar to that stemming from hiring costs, although it would be aggravated if there are ordering and other gestation lags involved in installing new capital. The importance of this in sustaining high unemployment in the 1980s and 1990s, however, is debatable as most firms have been reporting considerable spare capacity even during the boom of the late 1980s. In addition there are many lines of work that do not require major additional investment in physical capital. It remains a possibility, however, that if there were a sustained non-inflationary recovery in Europe, the beneficial effects on employment might be slow to come through, and would need to be accompanied by an investment surge 35.

3.7.3 Insider membership dynamics
Turning now to the supply, or wage-setting, side of the market, we have the argument that the presence of hiring and firing costs separates the labour force into those with jobs – the ‘insiders’ – and those without – the ‘outsiders’. Because the insiders cannot be replaced costlessly by outsiders, this gives the insiders bargaining strength over wages. According to this theory, there is not a single economy-wide labour market in which supply and demand are brought into balance, but several internal markets in which wages are bargained over, subject to maintaining the profitability of existing jobs. Downward wage adjustments are then possible when the jobs of existing workers are threatened, so that the theory is consistent with the tendency to negotiate wage cuts in order to avoid unemployment (Volkswagen and Air France are recent examples). Otherwise, however, the insiders would prefer wherever possible to preserve or raise wages, rather than reduce them to encourage job creation and employment of some of the pool of outsiders.

A central implication of this theory is that once unemployment has risen it will not automatically disappear when conditions improve. Suppose there is an unexpected deterioration in business conditions
that leads to some of the employed labour force losing their jobs (this might just be through natural wastage, rather than involuntary layoffs). Typically these displaced workers will cease to be part of the group responsible for negotiating wages with the firm. Consequently when business conditions improve again, the now smaller group of insiders will seek to push wages upward, rather than allowing employment to expand back to its earlier levels. There are obvious limits to this process because eventually it will become profitable for new firms to start up, hiring their workers at low wages from the ranks of the unemployed, thus enabling them to undercut existing firms employing the expensive insiders. However, the basic message – that the self-interested behaviour of insiders, coupled with the fact that the unemployed play no role in wage setting, leads to unemployment persistence – survives.

### 3.7.4 Outsider disenfranchisement

The final persistence mechanism relies on the characteristics of the unemployed, rather than the behaviour of those in work. The unemployed gradually lose the habit of working and this is aggravated by the fact that employers frequently use the unemployment history of workers as a signal of their likely effectiveness. The result is that employers become very reluctant to hire the long-term unemployed; like fading flowers in a florist shop everybody passes them by, preferring the newer blooms at the front. Faced with an ever decreasing prospect of success in finding a job, the long-term unemployed are likely to become demoralized and quit searching altogether. The implication is that the long-term unemployed do little to keep wages in check as the labour market tightens.

Empirical evidence provides reasonably strong support for the first and last of these persistence mechanisms: international comparisons suggest that the degree of persistence of the deviation of unemployment from its long-run equilibrium rate is increasing in a measure of the size of hiring and firing costs and in the duration for which unemployment and associated benefits are available. In addition, in respect of the outsider disenfranchisement story, there is some direct, although less clear-cut, evidence that a high share of long-term unemployment reduces upward pressure on wages. The econometric evidence in favour of the importance of the insider membership mechanism is less convincing – persistence does not
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seem to be related to the prevalence of unions, for instance — but there are certainly individual cases when it appears to be important. Spain is the most obvious example: here those on permanent contracts are effectively insulated from labour market developments by a large buffer of workers on temporary contracts, but play the central role in wage determination, not only for themselves, but also for those on temporary contracts. In any case it seems likely that all of the mechanisms have some role to play in creating persistently high unemployment, albeit to different extents in different countries.
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4.1 Labour market regulations

Freedom of choice in the employment and compensation of labour is generally limited by both custom and collective agreements between workers and management. But, especially in Europe, it is also constrained by legislation inspired by notions of 'fairness' and 'equity' in such matters. We begin by summarizing the character and extent of such restrictions. As all the various aspects of employment contracts are interrelated, so are the regulations pertaining to them. To organize the discussion, however, we shall focus on regulations pertaining to hiring, to firing, to hours worked and to compensation, highlighting their interrelationships as they become apparent. This includes regulations and constraints that may be negotiated by unions, as well as those that are imposed by legislation.

4.1.1 Hiring constraints

Private-sector employers cannot be forced to employ a specific number of workers, but they often do not have complete freedom over the choice of who to hire. Even in the relatively unconstrained labour market of the United States, between 1965 and 1986 Federal government contracts were conditional on employers making 'good faith efforts' to employ minorities through affirmative action. European countries often impose similar quotas on the employment of handicapped people on medium-sized and large firms (ranging from 3% in the United Kingdom to 15% in Italy). More generally, the identity of new employees is often not a matter of choice for European employers, as their search is channelled, to a greater or lesser extent, through public employment agencies where the unemployed tend to be
ranked according to their need for employment rather than their qualifications and willingness to work. Given the near monopoly of public employment agencies in the placement of relatively unskilled jobs in most European countries, such criteria affect the identity of new hires. In Italy the law explicitly specifies social criteria, such as the number of dependants and the length of the unemployment spell, for the ranking of the unemployed, and firms are required to make some or all of their new hires in rank order (the rule applied to all hires, with some exceptions, until 1985, when the law limited the rank rule to only half of new permanent hires, again with some exceptions).

4.1.2 Firing constraints

Even more important than constraints on hiring are constraints on firing. Firms are generally not free to shed labour at will. Like hiring quotas, some firing restrictions protect workers with certain characteristics. It is generally unlawful to single out minority or handicapped workers for employment termination, and this ensures that the provisions regarding their hiring have an impact. Regardless of their identity, however, virtually all employees enjoy some protection against sudden dismissal 'without cause', i.e. for reasons outside their control. The International Labour Office Convention 158 of 1982 specifies that all workers, other than those on explicitly temporary contracts, should be given a valid reason for their dismissal and, except in the case of serious misconduct, be given 'reasonable' notice or financial compensation in lieu of notice. It is hard to be specific as to what might constitute a 'valid' reason and, in particular, as to whether a firm's low profitability (which could be a result of bad management) is a valid cause for mass dismissal. The bite of such general principles thus comes from the provision that workers should have the right to appeal against the 'validity' of the reason given for dismissal. In practice, this means that individual and collective dismissals often require costly and time-consuming legal procedures of uncertain outcome. While the International Labour Office convention had only been ratified by France, Spain and Sweden as of 1992, legislation in the same spirit exists in most European countries. The stringency of job-security provisions does vary across labour markets (and to some extent over time; see below). Some of this variability is readily quantifiable, such as the number of months' notice that must be given for individual separations and for mass redundancies. Other, no less important, aspects of job-security
provisions, are more difficult to quantify precisely, such as the willingness of labour courts to entertain appeals by fired workers, and the interpretation placed by workers, unions and judges on the rather vague notion of 'just cause'.

4.1.3 Quantitative restrictions
Besides regulating employment indirectly through rules on hiring and firing, legislation and national contracts generally restrict the number of hours that may be worked by each individual over a day, a week, or longer, and specify the rate of compensation applying to overtime working. Regulations on hours interact with restrictions on hiring and firing in determining the costs of varying the total labour input into production. This is more costly the stricter are the constraints on employee hiring and firing, and the more constrained are the hours worked by each employee. There is again considerable heterogeneity across national labour markets. Regulations on hours do not differ with respect to the standard work week (which is roughly 40 hours per week in all industrial countries), but do differ in regard to the period over which total hours can be flexibly distributed while still averaging to the standard work week (over only two months in the United Kingdom, but up to a year in Belgium, France, the Netherlands and the EFTA countries), and with respect to the overtime premium applying to additional hours (which varies between 25% in France and Germany to 80% in Sweden)43.

Last, but by no means least, a very important set of labour market regulations constrains wage rates. If wages were completely unrestrained, restrictions on the number or identity of employees could hardly be binding, as employers could offer wages so low as to make employment profitable to them (and probably unacceptable to the workers), and dismissals could be turned into voluntary quits by drastic wage cuts. Besides giving force to quantity constraints, limits on the freedom offered to employers and workers in setting wages are justified by the consideration of 'equal pay for equal work', and by the belief that freely contracting parties may not be sufficiently rational or informed to evaluate correctly the ultimate consequences of arrangements that might appear optimal at a particular moment. Thus slavery and indenture are generally outlawed and, by extension, many countries' labour laws are based on the notion that individuals may not deviate from state-mandated
or centrally contracted practices, even by mutual consent. International Labour Office conventions state the general principles that underly most countries’ policies in this respect: minimum wages should be legislated for when collective agreements do not provide for wage floors (Convention 26 of 1928), and collective agreements should be promoted rather than hindered by legislation (Convention 154 of 1981). The former convention has been ratified by most developed countries, but notably not by the United States and the United Kingdom, where even the relatively low minimum wages set in some industries by the wages councils were abolished in 1993. Unemployment benefits have a similar effect to minimum wages, as they effectively establish a floor for wages.

4.1.4 Summary
The extent to which general principles governing the number and identity of employees and the ‘fairness’ of wages are implemented differs widely, not only across national boundaries, but also over time. Figure 4.1 gives data for the major European countries between 1956 and 1984 for two easily measured proxies for the rigidity of employment relationships: the notice period and redundancy payment applicable to workers with ten years of tenure. Between 1968 and 1974 these countries appear to have simultaneously tightened both the notice period and redundancy payment requirements. As judged by these two measures, however, job protection was already relatively high in Italy in the early 1960s, and notice periods were quite long in France even in the late 1950s.
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Figure 4.1 Firing costs, 1956–84
More recently, a similarly synchronized move has taken place in the opposite direction as European labour markets have generally (although with some exceptions) become progressively less regulated over the 1980s and 1990s. Data limitations prevent us from updating the (very limited) information provided by the indicators in Figure 4.1. We simply refer readers to the qualitative information in OECD (1993) concerning the various and hardly quantifiable respects in which protection from dismissal has been reduced, from lengthened minimum-service requirements for dismissal protection in the United Kingdom (in 1985) to increased salary thresholds in Belgium (in 1985) to explicit inclusion of low profitability among ‘just causes’ for termination in Italy (in 1986). Besides relaxing job security provisions for standard employment relationships, labour-market deregulation has also taken place through the introduction of new and more flexible forms of part-time and fixed-term employment, introduced, for instance, in Spain in 1984 (although recently revoked), Germany in 1985, France in 1986 (with a partial revocation in 1990) and Italy in 1987. As we shall see in Chapter 6, such partial flexibility measures have particular importance when the political economy of reforms is considered. First, however, we shall discuss the implications of job-market regulations for unemployment and growth, and their effect on welfare.

4.2 Labour market regulations and unemployment

As noted in the last section, the extent and character of labour market regulation varies both across countries and over time. The temptation is strong, therefore, simply to correlate the behaviour of unemployment, wages and productivity with each regulatory aspect. This section briefly discusses the practical difficulties encountered by such unstructured exercises, and then reviews the (rather mixed) extant evidence from time series and cross-section data.

As the aspects of employment relationships subject to regulation are so many and varied, the overall degree of ‘rigidity’ in a particular labour market is easy neither to define nor to measure.
Further, each regulation affects unemployment, wages and productivity in subtle ways, and simple regressions of each on some measure of regulation will therefore not necessarily be informative. In so far as data are available on each of the various regulations, however, their relative stringency can be evaluated in isolation: a longer notice period is certainly a sign of greater rigidity, while narrower coverage of collective agreements certainly denotes greater flexibility. Most such indicators of rigidity tend to be strongly correlated across countries, and this has two important implications for unstructured empirical work. First, the high correlation between the different indicators of rigidity makes it difficult to identify their separate influence on the variables of interest. Second, and more promisingly, if a clear ranking as to the rigidity of different labour markets does emerge from the available information then it is meaningful to try to relate simple indicators of aggregate labour market performance to each available indicator of rigidity, or indeed to the overall rigidity rank itself.

Clear relationships between such loosely defined measures of rigidity and some aspects of aggregate labour market performance are indeed apparent in the data. Not only does centralized collective bargaining result in compressed pay scales, but more rigid labour markets appear to be characterized by the following. First, there is more stable (un)employment and a lower responsiveness of unemployment to variations in activity. Second, a longer notice period and higher severance pay requirements are associated with higher rates of long-term unemployment. Third, an index of job-security provisions is inversely correlated with the rate of job reallocation. The economic mechanisms underlying these strong cross-country relationships are easy to identify. If regulations make it difficult to dissolve existing employment relationships then, other things being equal, large and sudden declines in employment (and therefore sharply rising unemployment) should indeed be less likely. On the other hand, however, there will also be less job creation; hence the individuals who do find themselves unemployed at any moment (including new entrants to the labour market) are less likely to exit into employment, and are more likely to experience long-term unemployment.

In other respects, 'common sense' is not such a good guide in interpreting the empirical evidence. From a cross-country
perspective, nations with relatively rigid labour markets do not appear to experience high average unemployment rates, or relatively slow productivity growth. The evidence for unemployment is documented in Figure 4.2, which plots average unemployment in the 1980s for ten countries against a rank index of the strength of job security provisions (a low number corresponds to a high level of job security). There is clearly no systematic relationship whatsoever, and this is equally true for other time periods. It is not difficult to see, however, why there could not be any robust relationship between labour market regulation and performance. The overall character of European, or at least continental, labour markets has always been relatively rigid compared with the more flexible institutional environment of the United States. Yet in the post-war Golden Age, European unemployment rates were both lower and more stable than in the United States; and the productivity growth performance of relatively rigid Europe compares favourably with that of the United States (see the data in Table 2.6). Similar relationships, or rather the lack of them, also hold within Europe.

![Figure 4.2 Job security and unemployment, 1981–90](source: Bertola (1990).)
This rather broad-brush perspective on long-run labour market performance suggests that there is no simple relationship with the extent of labour market regulation. It is, therefore, not surprising that formal empirical evidence on the effects of labour market regulation is generally mixed. High unemployment insurance replacement ratios are not clearly associated with high unemployment rates, and in any case if they were it could well be spurious as inactive workers are more likely to be registered as unemployed when benefits are generous. Similarly evidence of an adverse effect of minimum wages on employment is notably hard to find.

Consider next what might be learned from time series investigations. Labour market regulations were tightened in the late 1960s (although leaving the cross-section ranking of countries unchanged), while unemployment in Europe increased soon after. Thus reduced form regressions which use quantitative information such as that displayed in Figure 2.1, but nothing else that might explain the upward drift in unemployment, almost inevitably find them statistically significant in explaining the rise in unemployment. It is misleading, however, to interpret such joint behaviour in a causal way. Like the generalized wage push of 1968–70, the elements of rigidity introduced before 1970 are likely to have reflected the enhanced bargaining position of labour in the rapidly growing Europe of the 1950s and 1960s and the associated scarcity of labour. Furthermore, expectations of continued robust growth made concessions on job security of little importance to employers who did not foresee the likely need for large-scale labour redundancies. In the aftermath of the oil and raw materials price shocks of the early 1970s, the further tightening of job security provisions was probably as much a consequence as a cause of unemployment. Indeed the increase in unemployment should actually have been dampened by the restraints on firing already in existence. Moreover, the flexibility oriented measures of the 1980s have generally failed to reduce European unemployment substantially, further undermining the interpretation of the time series correlation between unemployment and rigidity as indicating a causal relationship.

Most striking, perhaps, is the case of the United Kingdom, where dramatic declines in unionization, unemployment benefit replacement ratios, minimum wages and employment protection
since 1979 appear so far to have failed to reduce the equilibrium unemployment rate to any great degree. Furthermore, the changes seem to have greatly increased its variability. In the 1960s UK unemployment fluctuated between 1% and 3.5%, and in the 1970s between 3% and 6%. Much bigger swings have occurred since: from 6.4% in 1980 to 12.4% in 1983, down to 6.8% in 1990, and up again to over 10% in 1993. This experience hardly supports the view that deregulation will by itself drastically improve labour market performance.

The UK experiment with deregulation is, however, consistent with the evidence reviewed above, providing us with two distinct cross-section comparisons. The first comes from the pre-1980 period, when relatively high (and rising) labour market regulation was associated with relatively stable unemployment, at levels comparable with those obtaining in other European countries. The second comes from the more recent period of reduced regulation and greater flexibility; unemployment rates were again on average comparable with those in other European nations, but were now much more volatile, while wage dispersion also increased. This again suggests that average unemployment is not linked to labour market rigidity in any simple way, while rigid markets do tend to have more stable unemployment, as well as lower wage dispersion.

4.3 Wage bargaining institutions and unemployment

We now turn to another dimension of the impact on unemployment of the structure of the labour market, namely the organization of collective bargaining. It is notable that small ‘corporatist’ countries, such as Sweden and Austria, had, at least until recently, managed to maintain relatively low unemployment rates, despite having generally high taxes, high firing costs and all the other things that are apt to be held up as being inimical to employment by free market enthusiasts. The key feature here seems to be that wage bargaining was carried out at a centralized, rather than sectoral or firm, level and in a coordinated fashion. The argument is that these countries have been successful at preventing high unemployment because trade unions and governments make ‘collective’ choices
which take into account the interests of the jobless, as well as the interests of those who have jobs. In such cases the effect of wage settlements on unemployment is thus directly internalized by the decision-makers.

Recent work has formalized this idea\(^{53}\). The exploitation of monopoly power by trade unions to push wages up generally leads to inefficiently low levels of employment in the economy as a whole because it raise prices, and possibly also the level of wages, elsewhere. With a given level of nominal demand, the effect is to reduce output and employment below what would be achieved with a competitive market structure. Centralizing wage bargaining, however, internalizes these external effects on others and thus also promotes efficient employment levels. The relationship between unemployment and the extent of centralization of wage bargaining should therefore resemble an inverted-U curve. Both extremes – that is either total centralization or complete decentralization – lead to good outcomes, but the intermediate situation (which best characterizes most countries in the European Union) does not. Furthermore centralized pay bargaining systems are likely to be better equipped for dealing with adverse shocks to an economy, such as the terms of trade loss associated with the two oil price increases. In the absence of sufficiently centralized and coordinated bargaining, unions will not want to moderate wage demands in their sector, if the effect of these efforts is simply to benefit other sectors; and in the absence of strong competitive pressures which would force wages down, decentralized bargaining will only partially respond to any disequilibria in the labour market. Empirical evidence suggests that it is indeed the case that the corporatist economies adjusted more rapidly to such shocks\(^{54}\).

It thus seems that there are in principle (at least) two ways of efficiently organizing the labour market. One is the ultra-liberal way of the United States. The other is the ultra-corporatist model as exemplified by Sweden. Neither, however, is quite the paragon it may seem to be. We shall discuss the limitations of the *laissez faire* approach in detail later. Here we more briefly discuss the limitations of the corporatist way by focusing on the Swedish case. This suggests that the corporatist approach may be an inherently unstable one.
A key feature of the Swedish approach is that it involved more than an agreement for wage bargaining to be conducted centrally. It was part of a wider Social Contract in which the state undertook to ensure an adequate standard of living for all citizens and to this end redistributed much of the nation’s output via high taxes and high levels of government spending. Unemployment was kept low not only through coordinated wage restraint, but also through heavy spending on ‘active’ labour market policies (amounting to no less than 2% of national output in 1989). Together wage restraint and active labour market policies seemed to have been effective at maintaining low unemployment, until everything began to unravel, and unemployment began to rocket, at the start of the 1990s. But in any case was the record on unemployment as good as it appeared? Sweden’s low unemployment in the 1970s and 1980s turns out on closer inspection to be largely the result of the state acting as an ‘employer of last resort’, hiring extra civil servants to mop up any excess unemployment, rather than creating the right incentives for the private sector to create more jobs. The result of a permanently tight labour market was an intensification of inflationary pressure and a series of devaluations which ended in a desperate attempt to fix the krona. All this was exacerbated by the very high levels of taxes which led to increasing discontent. Furthermore, in the 1960s, before the corporatist years, Sweden had one of the highest per capita incomes in the world, but by the 1990s it had slumped to fourteenth. However good the Swedish record might have been with respect to unemployment, it appears to have been very costly in terms of forgone output. This casts doubt on its usefulness as a model for the future development of Europe.
5 The economics of labour market regulation

5.1 Introduction

Enhanced labour market flexibility is high on the priority list of policy discussions. For instance, a quarter of the 59 policy recommendations in the OECD Jobs Study relate more or less directly to the removal of restrictions on the terms of employment. Yet we saw in the previous chapter that the direct evidence in favour of the beneficial effects of less regulation is in practice decidedly mixed. This suggests that more flexibility, like most things in economics, is not necessarily an unqualified blessing. Furthermore, although economists tend to view any limits to the individual's freedom of choice as an unmitigated evil, the rigidities that feature in actual economies would have no reason to be there if they did not benefit some group or other. In some cases these rigidities may thus have a benign aspect, helping to overcome other types of market failure. In other cases their primary effect may be to transfer income or wealth from one agent, or group of agents, to another, but in the process they may also impair the efficiency of the economy. Identifying the role played by each regulation is therefore important in deciding, first, whether their removal is desirable, and, second, if it is desirable whether it is likely to be feasible.

This chapter discusses the economics of regulation, beginning with the standard, static, competitive analysis that usually underlies calls for increased flexibility. We then examine the validity of the standard arguments in a variety of more realistic environments in which agents have market power; the economic environment is uncertain and in a state of flux; there are informational deficiencies that prevent the drawing up of fully contingent labour contracts; and there is investment in human capital. This leads us to conclude
that, in some circumstances, it is economically desirable, from society’s perspective, that employment relationships are not completely unregulated. The subsequent chapter then goes on to explore the politics of regulation.

5.2 The economics of regulation

5.2.1 The simple case for flexibility
We begin with the standard, static, supply-demand representation of the labour market, depicted in Figure 5.1. The solid lines depict demand and supply schedules for labour. The horizontal axis measures the quantity of labour employed in a specific task: it could refer to readily measured labour units, such as hours worked, or to the less easily measured total amount of effort expended by workers. The real wage is measured on the vertical axis. The height of each point on the upward-sloping supply schedule measures the opportunity cost to workers incurred by forgoing the return from alternative uses of the marginal unit of their labour. Points on the downward-sloping demand schedule measure a firm’s revenue from the productive employment of those same marginal labour units. As is well known, the intersection between these schedules has remarkable efficiency properties. If both sides of the market take the wage rate as given, then it is not possible to improve one agent’s lot without damaging another, and the pursuit of purely individual objectives maximizes the total surplus from the exchange of labour services for wages.

If constraints on either buyers or sellers prevent the attainment of this equilibrium, at point \( E^* \), the resulting outcome will not be efficient: even though one side of the market may benefit from wage and employment points different from \( E^* \), the other side’s loss more than offsets any such gain. Figure 5.1 illustrates this point by considering a wage-employment pair, labelled \( E \), other than the intersection \( E^* \) of the demand and supply schedules. Can it be a good idea to somehow mandate that employment be set at \( L \) rather than \( L^* \), and that each unit of labour be paid \( W \) rather than \( W^* \), so that firms’ total wage bill and labour’s income is given by the area of the rectangle \( OWEL \)? The answer is ‘No’ if, as implied by the assumptions, the opportunity cost to workers of supplying a
quantity of labour L is given by the area OEL beneath their supply curve, and firms’ gain from employment of L is given by the area OWL under the labour demand curve. If the outcome is that labelled E, firms’ labour costs exceed revenues by the area of the WEL triangle. Employment L* and wage W* would replace those losses by profits, measured by the area of the W*WE triangle, and the improvements in the firms’ surplus is more than large enough to compensate labour for the reduction of its surplus from the area of OWE to OW*E*. In fact, the gains afforded to firms by a move from E to E* exceed labour’s losses by the area of the E*EL triangle, which measures net (or ‘social’) losses from the suboptimal allocation E. The existence of such a region readily follows from the fact that the supply schedule is defined as the return to workers from the alternative use of their labour, be it leisure or gainful employment in productive tasks other than that considered.
5.2.2 Market power

The optimality of competitive outcomes follows from the equality of marginal (value) productivity and marginal opportunity cost at equilibrium. Some of the institutional rigidities reviewed in Chapter 2 prevent the market from reaching such an equilibrium, for example by specifying that workers should remain employed at unchanged wages even when there is an exogenous fall in their productivity. Before turning to such dynamic considerations in the next subsection, however, we briefly discuss the realism of the basic premise on which the notion of competitive equilibrium is based – namely that, in the absence of quantitative restrictions, participants would be paid the value of their marginal product (and thus, in equilibrium, also their marginal opportunity cost). In reality, wages are not set by impersonal forces at the equilibrium $E^*$. Rather in some labour markets firms dictate the buying price, while in others workers set their selling price and in yet others wages are determined through bilateral bargaining. To the extent that their counterpart’s supply or demand schedule is known (and is not flat), the resulting monopsony or monopoly power introduces a wedge between the individually optimal bid or ask price and the underlying opportunity cost or marginal product.

Firms which are large in relation to the markets for their output and inputs can indeed be expected to be aware of such price-setting opportunities and, in particular, to enjoy some monopsony power in their choice of employment and wages. It is not always easy for even unspecialized workers to find alternative employment when offered low wages. This is so not only in the case of a ‘company town’ with a single employer, but also in many other situations where the search for better wages requires the worker to incur mobility or retraining costs. Monopsonistic behaviour on the part of employers then leads to equilibrium wages below the worker’s marginal product, together with underemployment. A textbook solution to this problem is to set a minimum wage above the monopsonist’s chosen wage, ideally at the competitive equilibrium level. This leads not only to higher wages, but also to higher employment. Empirical studies of the impact of minimum wages in California and the wages councils in the United Kingdom suggests that this may indeed be exactly what has happened\textsuperscript{56}. Clearly, however, if it is set too high employment will suffer.
Of course, the market power need not be all on the employer's side. Even in the absence of institutional rigidities, realistic labour market frictions give employees some market power, as firms may find it costly to recruit alternative workers should a worker quit. Some of the institutional features of European labour markets establish or increase the monopoly power of the suppliers of labour. For instance, when regulation prevents undercutting of centrally bargained wage rates, workers effectively form a labour supply cartel which, given a downward-sloping labour demand schedule, will trade off underemployment against higher wages for those who are employed. From the workers' point of view, it will be optimal to mark up wages above their opportunity cost, and restrict supply as any monopolist would; for the same reason, workers may collectively favour binding minimum-wage regulation even when it has adverse effects on employment. From the social point of view, unfortunately, the efficiency costs of monopsonistic and monopolistic behaviour, far from cancelling each other out, have a compound negative effect on allocative efficiency. If firms restrict labour demand in order to push down wages and unions restrict labour supply to bid them up, economic activity will be doubly inefficiently low. In theory, it would be possible to achieve the efficient outcome via marginal employment subsidies financed by lump-sum taxes. The obvious problem is that such schemes may be technically or politically difficult, if not impossible, to design and implement (see Chapter 6).

5.2.3 Uncertainty
As long as labour does have alternative uses, the argument that rules out the efficiency of points other than the competitive equilibrium is quite general. However, to capture properly both the reality of actual labour markets and, indeed, the very notion of 'flexibility', we need to acknowledge that both supply and demand schedules shift over time in the face of exogenous shocks, such as technological change or shifts in the level of demand. Thus points other than the current competitive equilibrium may well have been optimal in the past. For example, an adverse movement in the demand for a firm's product will reduce its demand for labour; and the opportunity cost relevant to labour supply may be the labour demand schedule of another firm or sector, unaffected by the negative shock in question, possibly adjusted for mobility and retraining costs.
Two relatively subtle points of interpretation deserve to be mentioned that shed light on the ambiguous empirical relationship between labour market rigidity and average unemployment (as opposed to the connection with the amplitude of unemployment fluctuations, where no such ambiguity exists).

First, not all unemployment is wasteful in a dynamic economy. Unemployed workers may not contribute directly to production, but, to the extent that they have left relatively unproductive jobs and are searching for more productive employment opportunities, they do contribute indirectly to economic efficiency by raising future output. Thus the ambiguous cross-section relationship between labour market regulations and unemployment may be due in part to the contrasting character of unemployment in flexible and rigid labour markets. Unemployment may quite conceivably be higher in a flexible, and therefore turbulent, labour market experiencing the continuous creative destruction of jobs than in a sclerotic one where few individuals ever lose jobs, however unproductive they may be.

Second, constraints on the ease with which firms can shed redundant labour (or reduce wages) affect both the extent of job destruction and, less obviously, the intensity of job creation, as prudent employers will surely take future firing costs into account when deciding whether to respond to a possibly temporary improvement in the company’s fortunes. The effect on job creation is stronger when adverse future shocks are more likely. Conversely, there is no presumption that firing restrictions and wage rigidities should have adverse effects on employment creation if the economy is on a path of strong productivity growth, as was the case for Europe in the 1950s and 1960s. Wages hardly ever need to fall along a path of strong and steady growth – indeed wage rigidity may even have a positive effect on employment if it prevents wages from rising along with labour productivity – and firing restrictions will hardly discourage hiring if employment reductions appear very unlikely over the relevant time horizon.

From a normative point of view, the efficiency of a competitive equilibrium suggests that adverse shocks to company, or sectoral, labour demand should result in a decline in employment, offset by higher employment elsewhere, and in a lower wage if labour market frictions are present. Both the workers’ incomes and the
firm's profits decrease, but, quite independently of how losses are distributed across firms and workers, their sum total is lowest if the value of labour's marginal product and its opportunity costs are equal.

A dynamic and uncertain reality can be readily collapsed into the simple textbook model of competitive equilibrium. To do so, labour is viewed as a 'contingent' commodity. The horizontal axis of Figure 5.1 then represents labour quantity (or effort) in a particular state of the world, and the vertical axis measures the reward to labour paid in that state of the world. Many such diagrams could then be drawn, with each one representing a different state of the world, each of which will be associated, in a dynamic setting, with a particular sequence of possible shocks.

The logic of the efficiency of a competitive equilibrium can be readily applied to this extended set-up. If we assume that a wage can be specified for the exchange of labour services in each and every state of the world, and at all dates, then the competitive determination of such wages will lead to an optimal allocation of labour. As in the static setting of Figure 5.1, extraneous constraints are welfare reducing in this 'complete markets' set-up. Specifically, extraneous restraints on the (re)allocation of labour in the face of changing circumstances must lead to inferior outcomes, as long as \( \text{ex ante} \) contracts, which are also enforceable \( \text{ex post} \), can be drawn up that take all the relevant contingencies into account. However, the optimal \( \text{ex ante} \) contract may well imply that some 'rigidity' is desirable, as labour reallocation may be costly and/or distasteful to the worker. In a world of perfect and complete markets, however, no explicit, externally imposed, constraints on wages or employment are necessary to achieve the degree of rigidity required. Competition in the market for \( \text{ex ante} \) labour contracts will ensure that what is desirable for the economy as a whole is also optimal for individual agents.

Such prearranged contingent contracts will generate compensating income transfers along with an \( \text{ex ante} \) efficient reallocation of labour. To the extent that all such contingent exchanges can be specified and contracted upon, the overall welfare of market participants (but not their relative welfare levels) will be affected by aggregate developments, while purely idiosyncratic shocks will trigger compensating payments, i.e. there is complete insurance
against such idiosyncratic events. Under these conditions, productive efficiency does not require that any particular agent's welfare alter as a result of exogenous events, but only that the economy's reaction to them be such as to preserve the equality of marginal products and opportunity costs. With complete markets, these contingent payments will be preset in the light of the contracting parties' attitudes to risk, but it is never optimal to reduce productive efficiency in order to buffer the impact of a shock on some agent's welfare.

5.2.4 Informational constraints
While the reasoning behind the efficiency of a competitive equilibrium can be extended to an uncertain, dynamic environment, the assumptions required become rather stringent. The competitive equilibrium paradigm remains a useful logical construction but, unfortunately, is no longer an accurate representation of economic reality. If information about the 'state of the world' is costly to acquire, verify, or communicate, then wages and prices cannot be made properly contingent on it. Consequently markets 'fail' in their allocative role. Such failures are pervasive in reality, and their presence is very relevant to the nature of the institutions we observe in actual labour markets.

In practice it is likely to be particularly difficult to gather and convey information on labour's productivity and opportunity costs. In an advanced economy, where production is the end result of many highly specialized and intricately coordinated tasks, the productivity of labour is affected by a myriad of task- and worker-specific exogenous influences. For instance, a decrease in production could result from shocks to either the demand for, or the supply of, labour; if such shocks are not both observable and verifiable by both parties, they cannot be used to trigger the appropriate labour reallocation and/or contingent payments. As far as labour supply goes, individual effort is hard to monitor and verify objectively, even when the individual's output can be observed. By implication, it is hard or impossible to draw up contingent contracts that would shelter workers' labour income from exogenous shocks. A priori, low output could result from either exogenous influences or wilful negligence, and it would be desirable to obtain insurance against the former. However, if effort is both costly to workers and unobservable to the firm, employees
The economics of labour market regulation

will be disinclined to work hard unless their income depends on their performance; the resulting moral hazard problem rules out insurance in equilibrium. Furthermore, where production is the result of team work (the norm in modern economies), it becomes difficult even to quantify individuals' output, let alone their underlying effort. As far as labour demand goes, the productivity of a given quantum of labour effort depends on technological and product demand conditions, which are hard both to specify \textit{ex ante} for contracting purposes, and to ascertain \textit{ex post} because of the privileged information available to employers.

If information on the behaviour of market participants is scarce and unverifiable, then the allocation and compensation of labour are necessarily based on imperfect indicators of individual performance and productivity. The link between contingent actions and contingent payments is thus broken, and price signals cannot be relied upon to ensure that individual behaviour still leads to efficient aggregate outcomes. As a result, individual workers' compensation may be affected by circumstances beyond their control (and thus fail to give them, or their employers, appropriate incentives, as explained below).

Such market failures are all the more relevant because an imperfect allocation and compensation of labour under \textit{laissez faire} can be particularly harmful to the individuals affected. Job loss can lead to the catastrophic disruption of an individual's or a family's life, especially if the job loser is the primary, or only, breadwinner in the household. Disgrace and a loss of self-esteem are frequently added to economic hardship as job loss is often the result of poor performance on the job. But job loss can be a tragic event even when it is due entirely to outside market influences rather than to an individual's own shortcomings. Labour reallocation is very costly in an advanced economy where jobs are highly specialized, but the difficulties involved in writing a contract to insure the worker against such an eventuality means that the costs of flexibility are largely borne by individuals rather than by society. Indeed psychological evidence suggests that a spell of unemployment is the second most stressful experience that most people encounter (the death of a spouse or a close relative is the first)\textsuperscript{58}.
Thus while the case for government intervention in the labour market is perhaps not quite as compelling as that for health services, it is certainly stronger than that for public intervention in most product markets, such as those for groceries or entertainment services. Even though the government may not have an informational advantage over private parties, it would be naive to argue that private agents could draw up enforceable contracts to replicate any state legislation when informational deficiencies prevent *laissez faire* markets from both allocating labour efficiently and compensating it appropriately. Rather, legislation can coordinate equilibrium outcomes on different, and potentially superior, equilibria if it outlaws ‘opportunistic’ behaviour, i.e. behaviour that appears optimal at the individual level, but has adverse welfare effects at the level of the economy as a whole because it is based on imperfect price signals.

Consider, for example, government-sponsored unemployment benefits, which in effect aim at providing centralized insurance against bad ‘market luck’. In a first-best world, contingent payments would be used to soften the blow to redundant workers’ welfare when events require the costly reallocation of labour, while preserving productive efficiency. If access to financial markets is easier for employers than for workers, explicit or ‘implicit’ contracts between them can implement such compensation schemes to a degree. However, as in any insurance market there is an ‘adverse selection’ problem: workers who know that they are likely to enter unemployment will want to purchase such insurance from their employer, while those who are confident that they will keep their jobs will not. Consequently free markets cannot be counted upon to implement first-best insurance arrangements. Mandatory participation, organized by government, is then a possible solution. Thus in advanced economies, individuals carry compulsory insurance not only against car accidents, but also against unemployment, in the form of state-sponsored unemployment benefits, subsidized layoffs and similar collective schemes.

Such institutional and regulatory features aim to reconcile the flexible reallocation of labour with maintaining the stability of individual workers’ income flows. Straight unemployment benefits can certainly reduce individual income variability, and more complex (and more costly to administer) forms of relocation assistance can help preserve allocational efficiency. Unfortunately,
the same informational shortcomings that prevent first-best outcomes under *laissez faire* also have adverse effects on insurance-based schemes that shift the burden of idiosyncratic shocks away from individuals on to society at large. Efficiency requires that redundant workers be employed in whatever alternative occupations may be available. If finding such alternatives requires effort on the worker's part, the provision of unemployment insurance quite clearly reduces the incentive to take such jobs. The optimal allocation of labour requires personally costly actions on the workers' part but, because their search efforts are largely unobservable, it is hard to devise insurance schemes that both lead to optimal search behaviour (and thus preserve productive efficiency) and ensure that welfare levels are unaffected by idiosyncratic events. Of course, unemployment insurance payments can be (and are) made contingent on evidence of proper behaviour on the workers' part, such as a willingness to accept available job offers and compliance with reporting requirements. Like market participants, however, employment agencies have only limited information on individual efforts. Hence, harsh punishments for failure to obtain gainful employment can hardly be imposed without occasionally harming individuals whose behaviour is entirely proper. As a result, the objective of achieving an equitable allocation of income generally conflicts with that of achieving efficiency.

Other labour market institutions can be viewed in much the same light as unemployment benefits as far as their income-buffering and efficiency effects are concerned. Job security provisions and wage rigidity clearly change the *ex post* effects of exogenous shocks. On the one hand, they shelter workers' incomes from uninsurable losses, and this is desirable *ex ante* if individuals are risk averse. On the other hand, they prevent the reallocation of scarce resources, and this has adverse effects on productive efficiency. Can the combination of these effects result in an overall improvement in welfare? As in any second-best situation, the answer depends on the precise structure of the economy. In the absence of such information, the best we can say is that *some* regulation of the labour market does have the *potential* to raise welfare.

The nature of the security/efficiency trade-off along which labour market regulation can place an economy is perhaps most clearly
illustrated by anti-discrimination law. Obviously, if discrimination is the result of blind prejudice, then outlawing it will have no adverse consequences for economic efficiency. But if discrimination reflects exogenous productivity differences, prohibiting it reduces aggregate efficiency, while simultaneously sheltering individuals from the consequences of the otherwise uninsurable bad luck of being born into the unfavoured group. (Note that once again there is an important distinction between insurance against exogenous events outside workers' control, and the treatment of workers who choose to be unproductive. No one would argue that the latter should be compensated, as it has nothing to do with bad luck.) Similarly, laws and regulations that restrict the shedding of labour when it is no longer profitable decrease ex post allocative efficiency, but also reduce the volatility of labour income which raises welfare.

5.2.5 Human capital: A rigid route to efficiency?

We have argued that labour market rigidities (partially) diversify uninsurable risks when fully contingent contracts are neither verifiable nor enforceable. Above, we took it for granted that this would happen at the expense of ex post production efficiency. It is possible, however, for labour market rigidities to enhance economic efficiency by inducing more far-sighted behaviour on the part of market participants: a regime with high job security and rigid wages will encourage workers and firms to undertake match-specific investments that would otherwise be deemed too risky.

The stability of employment relationships appears to be valuable not only to workers because of the uninsurable costs they have to bear in the event of job loss, but also to employers. In practice labour contracts rarely contain explicit contingent compensation schemes, other than perhaps an element of profit sharing. But, in modern economies, even very mildly specialized labour is not traded in day-to-day spot markets. Rather many aspects, both formal and informal, of the employment relationship seem to contain an intertemporal dimension that fosters stability. A notable example is the commonly observed phenomenon that wages rise automatically with tenure. The carrot of higher wages in the future is certainly a spur to diligent behaviour on the job by the worker. But an upward-sloping wage-tenure profile also discourages quits,
which will be costly to employers when they involve the loss of workers with significant human capital that is expensive for them to replace.

Since the costs of investment in job-specific human capital are usually shared between employers and employees, both sides will usually value stability in their relationship. Without such stability neither side would find it worthwhile to make such an investment. Can *laissez faire* contractual arrangements be counted upon to give proper incentives for the accumulation of such human capital? The answer is probably not. The informational problems discussed in the previous section mean that the wage may fail adequately to reward either the worker’s or the employer’s investment, and the fear of this may induce excessively short-sighted behaviour by either or both parties. For instance, suppose the *ex ante* optimal equilibrium in Figure 5.1 is at E, but requires a specific investment in human capital. This investment might have been financed either directly by the employer, e.g. by running training programmes, or indirectly by workers through being paid a wage below their marginal product. A reduction in product demand then occurs that reduces the return on this human capital and makes it desirable to move to \( E^* \). If employers and employees know this is a possibility when the investment is undertaken, then it will in general be optimal to prescribe in advance appropriate compensation to the party that bore the main burden of financing the investment. It is virtually impossible, however, to write enforceable contracts that can quantify the returns to such job-specific investment and appropriately share the burden of losses that are due to adverse shocks. Consequently rational economic agents should refrain from bearing investment costs whenever others may profit from them. The fundamental point is that ill-defined property rights to the return on investment in human capital reduces the accumulation of that capital.\(^{59}\)

Atomistic workers and firms do not internalize the systemic implications of their actions and, in equilibrium, have no incentives to draw up enforceable contracts that would prevent stable employment relationships from being undercut by opportunistic behaviour. If *laissez faire* leads to underinvestment in match-specific human capital, legislated job security favours equilibria where workers are encouraged to undertake firm- or sector-specific investments and employers react imaginatively to
negative shocks, preserving their employees' investments rather than scrapping them.

We would not wish to overplay this argument. There is no theoretical presumption – and certainly no hard evidence – that mandated job security not only decreases otherwise uninsurable income uncertainty, but also increases productive efficiency once all their effects are taken into account. Labour market rigidities are obviously a very blunt tool for pushing market allocations closer to an unachievable first-best. Yet job security certainly lengthens the horizon of job-specific investment decisions, and this beneficial aspect should be kept in mind when evaluating the desirability of across-the-board labour market deregulation.
The political economy of labour market regulation

6.1 Introduction

The last chapter focused on the arguments for why some regulation may be a good thing from the perspective of ex ante, and even ex post, economic efficiency. We saw that, in a world of imperfect markets, a case can be made in favour of some types of rigidities, because the distortions they create may offset existing market failures, such as those caused by market power or an incomplete market in contingent labour contracts. The key role played by rigidities, which almost certainly explains their origin, however, is rarely to offset such inefficiencies, for which other, more direct, tools might also be available. They often instead play a redistributive role. Furthermore, they are generally motivated by political considerations rather than normative ones. While there are many policy proposals to reduce European unemployment on the table, little attention is usually devoted to the political feasibility of these reforms and their impact on different groups within society. Yet recognizing this is surely essential if these policies are to be enacted by democratically elected governments. First, however, let us briefly note why rigidities and regulations might offer an appealing solution to a political problem.

In societies with wide income inequalities distributional conflicts are apt to arise. Left unattended to, they are likely to result in rising crime and civil disobedience; the recent experience of some Latin American countries and Russia are examples. One resolution to such conflict is a high degree of redistribution through the tax-transfer system (as for instance in Sweden; see our discussion at the end of Chapter 4). These high tax and transfer rates create distortions, and will therefore have adverse effects on economic efficiency. In addition, people who are heavily taxed will lobby for
special allowances to reduce their burden, so tensions even then will not disappear. But another solution is the introduction of rigidities that restrict inequality. By artificially creating divergent interests among otherwise similar individuals, rigidities paradoxically can reduce conflicts. In a society where the multitude of the poor want to expropriate a minority of the rich, making some of the poor richer, even if the rest are made poorer, helps create a convergence of interests between the former and the rich. If the poor who are made richer are the politically decisive group, then there will be less pressure for redistribution.

To illustrate this consider the imposition of a minimum wage. Suppose the labour market is otherwise fairly competitive so that questions of distortions introduced by the presence of monopsony power do not arise. Then the imposition of a minimum wage above the competitive wage will raise wages and reduce employment. It thus raises the income of those (presumably relatively unskilled) workers lucky enough to get a job, while reducing the income of those who end up unemployed. If the former group is sufficiently large, collective decisions are then shaped by the (still divergent) interests within the ‘insider’ group of employed workers. However, these interests are less divergent than in the absence of rigidities. The problem, of course, is the existence of a group of outsiders – the unemployed – who are both economically and politically marginalized. Indeed, the lack of political influence of the outsiders is a prerequisite for the introduction of rigidities to reduce political polarization. This lack of political influence reflects the fact that the unemployed are both in a minority and poorly organized.

In the remainder of this chapter we explore this political dimension to labour market regulations. We note that they typically fulfil a redistributive role, and that as a consequence removing them may fail to command majority support within the electorate, even though they may improve economic efficiency. In particular uncertainty about who will gain and who will lose from reform tends to generate an inherently conservative bias towards the status quo. We then consider a variety of ways in which the constituency for reform might be enlarged. We conclude with a consideration of the relative merits of the US and European ‘models’ of the labour market in the light of these political considerations.
6.2 Obstacles to reform

Suppose we ignore the issues raised in the last chapter, and assume that labour market liberalization is an appropriate policy from the viewpoint of economic efficiency. There are at least three reasons why such reform may be politically difficult to implement in democratic societies.

The first is that there may be more losers than winners. Although unemployment is a painful experience for a large number of people, they still represent a poorly organized minority, who have relatively little impact on political decisions. The majority of the electorate are employed, and face little risk of becoming unemployed. They will be in favour of policies to tackle unemployment only if their risk of exposure to unemployment is large enough or if these policies benefit them in some other way (for instance, deregulation may lead to lower wages and this will benefit shareholders). Evidence from election results suggests that a sharp increase in unemployment is much more likely to lead to an adverse outcome for the incumbent government than a high but stable level of unemployment. Rising unemployment is likely to be associated with an increase in the perceived risk of job loss, whereas high, but constant, unemployment may mean a very low probability of job loss for those lucky enough to be in a job. Similarly, the more the employed are sheltered from the possibility of losing their jobs, the more they will tend to favour policies that protect their jobs and increase their bargaining power, even if those policies simultaneously introduce, or accentuate, distortions that increase unemployment. Attempts to tackle unemployment must thus face the fact that policy is in practice determined by the interests of the employed, not the unemployed. In particular, many of the rigidities that are thought to contribute to Europe’s high unemployment (such as minimum wages, generous unemployment benefits, high firing costs and strong unions) actually benefit (some of) the employed and are therefore difficult to remove.

The second reason why labour market deregulation may be difficult to implement is that it is likely to benefit a very heterogeneous set of shareholders, skilled workers, small entrepreneurs and unemployed workers. This is an ‘extreme’ grouping which includes both the richest and the poorest people in society. These people may have a common interest in increasing labour market flexibility,
but divergent interests on almost all other issues including redistributive taxation, social policies and the role of the police. In representative democracies, except at referenda, the electorate votes for competing packages of policies rather than a single issue. It is unlikely that these people will support the same political platform.

The third, and perhaps the most subtle, reason is uncertainty about who will benefit and who will lose from reform. Consider first the following simple example: assume there are three groups in society, A, B and C, each of equal size. Suppose a reform is contemplated such that group A loses 5 from the reform, group B gains 4 and group C gains 10. The aggregate gain from the reform is then 9 (= 10 + 4 - 5), and efficiency requires that the reform should be implemented. If everybody was certain about the group they would belong to after the reform, then those who anticipate being in groups B and C would support it, so that two-thirds of the electorate would support it. Now consider the case where people do not know which group they will belong to after the reform. More specifically, assume that members of groups C know for sure they will remain in group C after the reform, while members of groups A and B expect to end up in the other group with a 50% probability. Then the expected gain from reform for both groups is \((0.5 \times 4 + 0.5 \times (-5)) = -0.5\). We see now that reform will not be supported by a majority because groups A and B expect to lose from it on average.

Thus uncertainty about who gains and who loses will lead to a bias in favour of the status quo. This argument may be particularly relevant in the case of European labour market reform, because while we may be able to identify the winners quite easily, who bears the losses is a much more open question. A significant minority – skilled workers and the unemployed with particularly poor prospects of finding a job – know for sure that they will gain from a reform. The latter will find a job that much sooner and the former will enjoy higher wages because of the increase in unskilled employment (assuming that skilled and unskilled labour are co-operant factors of production). The unskilled, however, are much less certain to gain because their wages will fall and/or they might be forced to relocate to other sectors. So are the unemployed with good prospects of finding a job quickly, who would not like to see the wage in their next job fall. If uncertainty about the impact of
reform makes the gains too diffuse for the unskilled and the better-placed unemployed then they might end up opposing reform.

6.2.1 An illustrative calculation

We now present a simple numerical exercise which allows us to assess who might gain or lose, and by how much, from the deregulation of European labour markets, and whether there is likely to be sufficient support to make it politically viable. We have begun by splitting the labour force into five groups, each corresponding to a quintile of the income distribution; these are assumed to correspond to five distinct types of labour, with the lowest quintile corresponding to the unskilled, and the higher quintiles to progressively more productive skilled workers. These different types of labour are then combined to produce output, and there is a well-behaved relationship relating the demand for each type of labour to its own cost and that of other labour types. With competitive labour markets the level of unemployment is assumed to be the same for all groups (to allow for frictional unemployment resulting from new entrants into the labour force and so on). The distribution of income then reflects differences in productivities. However, initially the degree of wage inequality is lower than would be the case with competitive markets, e.g. because of the impact of relatively generous unemployment benefits or a minimum wage, that have the effect of raising wages for all except the highest earners. As a result there is excessive unemployment among all groups except the highest one. People then vote on whether to remove the rigidities causing this excessive unemployment. The cost of this is an increase in inequality, and a potential decline in some workers' incomes.

In order to make the exercise realistic we have calibrated the model so that the status quo ante replicates the current French distributions of unemployment rates and income (the income of the richest group is thus roughly three times that of the poorest). We have then assumed that deregulation would lead to a distribution of income similar to that of the United States (where the richest are roughly six times better off than the poorest). The aggregate unemployment rate pre-reform is 11.7%, while the unemployment rate for all skill levels under laissez faire is set to 6.4%, which is the pre-reform rate for the highest group, as well as corresponding roughly to the average rate of unemployment in the United States.
Table 6.1 shows the pre- and post-reform income shares and unemployment rates for each group.

### Table 6.1 Income shares and unemployment rates

<table>
<thead>
<tr>
<th>Group</th>
<th>Income share pre-reform (%)</th>
<th>Income share post-reform (%)</th>
<th>Unemployment rate pre-reform (%)</th>
<th>Unemployment rate post-reform (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>10</td>
<td>7</td>
<td>17.8</td>
<td>6.4</td>
</tr>
<tr>
<td>II</td>
<td>12</td>
<td>10</td>
<td>11.3</td>
<td>6.4</td>
</tr>
<tr>
<td>III</td>
<td>17</td>
<td>16</td>
<td>11.0</td>
<td>6.4</td>
</tr>
<tr>
<td>IV</td>
<td>23</td>
<td>23</td>
<td>9.3</td>
<td>6.4</td>
</tr>
<tr>
<td>V</td>
<td>38</td>
<td>44</td>
<td>6.4</td>
<td>6.4</td>
</tr>
</tbody>
</table>

### Table 6.2 Gains and losses from reform

<table>
<thead>
<tr>
<th>Group</th>
<th>Gain to the employed (%)</th>
<th>Gain to the unemployed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>-43</td>
<td>-7</td>
</tr>
<tr>
<td>II</td>
<td>-10</td>
<td>+29</td>
</tr>
<tr>
<td>III</td>
<td>-8</td>
<td>+31</td>
</tr>
<tr>
<td>IV</td>
<td>+3</td>
<td>+35</td>
</tr>
<tr>
<td>V</td>
<td>+24</td>
<td>+24</td>
</tr>
<tr>
<td>Aggregate</td>
<td></td>
<td>+3.3</td>
</tr>
</tbody>
</table>
This framework may be then be used to estimate which groups gain and which lose from the reform. We first look at what happens in terms of the incomes of the employed. Table 6.2 shows the relative gains for each group, along with the aggregate gain in terms of output. The reform generates an aggregate output gain of 3.3% as employment rises in all except the most skilled group; the aggregate unemployment rate then drops from 11.7% to 6.4%. The gains, however, are very unevenly distributed. The reform generates very large income losses for the employed in the bottom group, and very substantial ones for the next two. The gains for the fourth group are relatively small, implying that their support for the reform will be small. The gains for the most skilled are substantial.

Next consider the unemployed. We have assumed they receive benefits equal to half the wage of their group; these benefits are financed by a flat rate tax on the employed. There are now two conflicting effects in operation. On the one hand, the elimination of the rigidities raises the probability of employment for all except the top group; on the other hand wages (and benefits) decline for the bottom three groups. The net effect, with these parameters, is such that the unemployed in the top four groups will support the reform, while the drop in living standards for the bottom group is so big that the unskilled unemployed will actually oppose the reform.

In total 44.4% of the workforce would support the reform. These calculations have been carried out assuming, somewhat unrealistically, that no separations from employment into unemployment take place. We have also studied the impact of relaxing this assumption by allowing for a 5% probability of people losing their jobs in any given year (the same for all skill classes). This makes reform more attractive to the employed since they now face the possibility of experiencing unemployment, which is lower post-reform. At the same time, it becomes less attractive to the unemployed in the bottom group, since their future wages will fall. It turns out that the unemployed of groups II and III will now switch to opposing the reform, while the preferences of the other groups are unchanged. Total support for the reform drops to 40% of the labour force.

Finally, we have also explored the implications of allowing inter-group mobility. The results again are basically unchanged,
except that both gains and losses are smaller, implying that the middle group (III) now loses, although by very little.

What do we conclude from this exercise? First, the overall support for reform is closely balanced, with slightly less than half the labour force supporting it and slightly more than half against it. Second, the reform generates large gains and losses. Thus the opposition will be harsh, although some winners may also stand to gain a lot. Experience, however, suggests that it is the losers who are more likely to mobilize. Third, although there are major winners and losers, the stakes are actually rather small for the decisive voter; this will tend to generate a bias towards maintaining the status quo. Even without uncertainty, this may help to explain why there is a majority favouring the continued labour market regulation in Europe, while in the United States the opposite is true.

This sort of reasoning explains why policies that are generally thought to reduce unemployment are not necessarily implemented in practice. For example, high social security contributions are sometimes blamed for high unemployment, because they increase the cost of labour and thus reduce the demand for labour. But if firing costs cushion the employed from job loss, an increase in social security contributions will have little impact on them because they will not bear the burden of the induced reduction in labour demand. Rather the fall in the demand for labour is manifested in a reduced rate of hiring as firms take account of the increase in labour costs. Those who lose are thus those without jobs. So raising payroll taxes turns out to be a politically efficient way of generating revenue, even though it may be economically rather inefficient. (In fact we believe that the impact of payroll taxes is grossly exaggerated; further discussion of this is postponed to the next chapter, however.)

Similarly, the proposal that payroll taxes be selectively reduced for the least skilled workers runs into the problem that it involves the redistribution of income to a minority from the majority of taxpayers, who have to foot the bill. The same problem arises with a shift from welfare to workfare, for example by using the unemployment insurance budget to fund relief jobs for the long-term unemployed. The majority of the employed, for whom the presence of unemployment benefits fulfils the role of income insurance, rather than a redistributive mechanism, would lose
because they are unlikely ever to be forced to take these jobs but they pay for them through their contributions.

6.3 Implementing reform

Given the difficulties of building a political majority for increased labour market flexibility, how can reform be made politically viable? There are a variety of ways it can be done, at least in principle.

6.3.1 Compensating transfers

If a policy increases, even modestly, the efficiency of the economy, there must exist a set of compensating interpersonal transfers which make everybody better off – the winners can ‘buy out’ the losers. Enacting such transfers is, however, usually no more than a theoretical possibility. First, because individuals’ preferences are unknown, it is difficult to know how to compute the appropriate level of these transfers, and, if asked, people will always have an incentive to overstate the extent to which they have been harmed by a policy so as to receive bigger compensation – the ‘revelation’ problem. Second, and more importantly, the transfers that will prevail in equilibrium are themselves the outcome of the political process. While theory suggests that one-off lump-sum transfers are all that is required, in practice any transfers are likely to be ongoing flows and are unlikely to be enacted simultaneously to the reform. It is impossible for a government to commit itself, and more particularly its successors, on future levels of taxes and transfers in the wake of reform. So the people who lose from increased flexibility (those factors of production whose price falls) may end up being inadequately compensated, unless they have sufficient political influence to ensure the taxes and transfers are maintained. Or, more perversely, those who gain may fear that future governments will tax their gains excessively. In these circumstances retaining the rigidities may be the less risky option for all concerned.

Take, for example, the minimum wage again. Suppose there are two types of labour, skilled and unskilled, and there are no problems of monopsony to worry about. Then imposing a
minimum wage above competitive levels will raise the unskilled wage, reduce the demand for unskilled labour and thus create unskilled unemployment. If skilled and unskilled labour are cooperator factors of production, then the demand for skilled labour, and with it the unskilled wage, will fall. So the minimum wage redistributes income from skilled to unskilled labour, at the cost of creating unemployment. In the absence of taxes and transfers, eliminating the minimum wage would be favoured by the skilled and the unemployed, and opposed by the unskilled employed. If taxes and transfers could be set in advance as part of the policy package, it would thus be possible to make everybody better off by eliminating the minimum wage.

Now let us recognize that taxes and transfers are politically determined through the democratic process, not by some benevolent dictator. In that case it is reasonable to assume that among the three groups (skilled employed, unskilled employed and unskilled unemployed) the median voter will be unskilled employed. The pressure for income redistribution, and therefore the marginal tax rate, will tend to be higher, the higher is the differential between the skilled and the unskilled wage. As a result, the removal of the minimum wage will automatically be accompanied by an increase in redistribution through the tax system. This is a somewhat desirable outcome, because it tends to compensate the unskilled employed for the drop in their income, and thus contributes to building support in favour of reform. However, the equilibrium tax rate may end up being so high that it is the skilled who suffer from the reform. This example again illustrates our earlier argument that labour market rigidities may promote political stability by tending to homogenize the interests of the majority (here the employed) at the expense of a politically unimportant minority (the unemployed).

To summarize, three cases may be distinguished. First, taxation may be insufficient, so that not enough income is redistributed from winners to losers, implying that reform may be blocked. Second, taxation redistributes enough income to generate a wide enough consensus over the reform. Third, taxation is too redistributive, so that the gainers actually block the reform.
6.3.2 Timing
Political viability may be also achieved through an appropriate timing of the reforms. As we discussed earlier, an important determinant of the political support for the reforms is the exposure of the employed to the risk of unemployment. This exposure has less to do with the level of unemployment, and more to do with the rate of job destruction, and thus changes in the level of unemployment. This suggests that reforming the labour market should be easier when the rate of job destruction is high, such as during episodes of major structural change or at the beginning of a sharp recession. Short, mild recessions may not be very helpful since voters will anticipate that the increase in job destruction is only temporary. Furthermore, for the reform to be supported it must be the case that voters expect it to have a substantial positive impact on job creation, which is unlikely during a recession. So it is when the economy is experiencing a high degree of structural change – implying both a high rate of job destruction and a high rate of job creation – that labour market deregulation is most likely to get wide political support. An example of this was the labour market reforms introduced in Spain in 1984 when the country was in the middle of a period of massive job reallocation as the production structure inherited from the Franco era was updated. Employment growth immediately accelerated from −1.3% per annum over 1982–5 to 3.1% over 1986–9 (although, as we shall see below, the reforms also had some undesirable features that may have exacerbated unemployment in the longer term).

6.3.3 Two-tier systems
A third strategy for making reform politically viable is to deregulate at the margin, for example by liberalizing new labour contracts while leaving the terms of existing ones untouched. One example of this is provided by the case of Spain. There, in 1984, legislation was introduced to permit temporary labour contracts lasting six months (renewable up to a total of three years) which were not subject to the same stringent termination restrictions as regular employment contracts. By 1993 33% of the employed labour force were covered by such contracts. Since the interests of those on temporary contracts differ from those on regular contracts, the political weight for further reform was decisively altered. Creating a two-tier system of this sort has both advantages and drawbacks.
The advantages are as follows. On the economic side, a two-tier system can be just as effective at raising the demand for labour as a complete liberalization of the labour market. This is because in firms which employ workers on temporary contracts, labour demand is determined by the cost of labour at the margin, i.e. the cost of the next worker to be hired or fired. Since this will typically be a worker under a temporary contract, the appropriate marginal cost of labour is that associated with a temporary contract. Therefore – with the exception of those firms which do not employ workers on temporary contracts – the demand for labour is the same as if the whole of the labour market had been liberalized. On the political side, those already employed on regular contracts are much more likely to support a two-tier system than an all-embracing liberalization. This is because they will still enjoy the same degree of job protection, while also benefiting from the higher rate of job creation in the event that they should end up unemployed.

The drawbacks of two-tier systems are as follows. First, if not properly designed, they can have perverse effects on wage formation. An example is the effect of temporary contracts on wage formation in Spain; the presence of a buffer stock of workers on temporary contracts increased the job security of those workers on regular contracts – who play the central role in wage setting in Spain – and encouraged higher wage demands.\textsuperscript{70} This would not have mattered if the wage on temporary contracts was not linked to the wage on regular contracts, but the legislation was framed in such a way that they were linked. Consequently all wages increased. Second, they may intensify distributive conflicts within the workforce, thus increasing other forms of inefficiencies. For example, workers on lower-paid temporary contracts will be tempted to press for more progressive taxation so as to shift income from better-paid workers on regular contracts towards themselves. This might be a particular problem if temporary workers have little prospect of getting a regular job. Third, they gradually affect the balance of political power in society. As the number of workers under temporary contracts increases, these workers will be more important politically and can be used by the government to generate support for further reforms of the labour market. This is fine, but if those on regular contracts recognize that in time their political influence will gradually be undermined by the increasing number of temporary workers, they will oppose the marginal
The political economy of labour market regulation

liberalization in the first place. That may lead to the reform being blocked, or to a different reform being passed. For example, in countries such as France, Germany and Sweden, the government managed to liberalize the use of temporary contracts only to a limited extent, since the unions agreed to their introduction on the condition that restrictions were placed on their use so as to prevent the number of workers on temporary contracts growing too large. Finally, it may be quite difficult to avoid deadweight and (especially) displacement. (Deadweight occurs when an action would have been taken anyway without financial inducements; displacement occurs when one worker is replaced by another in order to receive the marginal payment.)

The Spanish experience is again revealing. The government introduced legislation to permit temporary contracts in 1984, at a time when the economy was experiencing an unprecedented rate of job destruction. However, in order to prevent the use of temporary contracts becoming too widespread, the unions managed to restrict their renewal up to a total period of three years; after this they had to be converted to regular contracts. Nevertheless as much as 95% of new hires were under temporary contracts, and the proportion of the workforce subject to them had risen to 30% by the early 1990s. The unions, sensing this was undermining their position, exerted pressure on the government to outlaw temporary contracts. But by the beginning of the 1990s workers on temporary contracts and the unemployed together formed a powerful constituency in favour of further increases in labour market flexibility. This opened the way for reform, and in 1994 the government was able to strike a deal with the unions trading the phasing out of temporary contracts for further increases in flexibility. The fragility of the Gonzalez government, however, meant that the reforms were rather less ambitious than might have been hoped; the feasibility of reform does not necessarily mean that it will be implemented. Spain therefore lost an opportunity which may not be repeated.

6.3.4 Redistribution of property rights

We have seen that nothing guarantees that an appropriate set of transfers will accompany reform, and that this may lead to the reform being blocked. Another way out of this dilemma is to change the ownership structure of the economy so as to build the transfers into property rights before the reform. A simple example
is when the policy redistributes income from labour to capital, as will happen with any reform that reduces wage pressure. Then a possible commitment device to ensure that appropriate compensating transfers to labour are implemented is a redistribution of the ownership of the returns from capital so as to benefit the workforce. This will lead to the gains from reform being shared more equally, and may therefore help create a consensus for it. A significant element of profit-sharing, as in Japan, is the obvious way to achieve this. More generally such policies can help to build support for free markets and a dynamic capitalist economy.

Such a redistribution of property rights is much more difficult to implement when increased flexibility is associated with transfers within the workforce, for example if it reduces wages for the unskilled and increases them for the skilled. Since property rights on the returns from working are not tradeable in the same way as shares in companies, it is difficult to carry out a similar exercise. However, another approach, that has a similar effect, is to increase the educational level of the unskilled; by changing relative factor supplies this changes the constituency for reform.

6.4 Labour market institutions compared

Let us now draw together the various strands of the discussion. The call for increased flexibility in European labour markets is essentially a plea for a move in the direction of the US model (or more accurately the Anglo-US model, since labour market reforms in the United Kingdom over the last decade or so have pushed it decisively in the direction of less regulation). First, how do the US and European models compare on the economic front? Second, are the political economy aspects such as to make a move from one model to the other problematic, even should it be desirable?

It is important to remember that the European model performed relatively well during the period before 1973, when unemployment was low and growth high compared with the United States. There is no doubt that this largely reflected the generally benign economic environment of the Golden Age and the particular possibilities for rapid growth in Europe through reconstruction and ‘catch-up’. In
such circumstances the beneficial aspects of a regulated labour market and generous welfare provision in rectifying the various market failures outlined in Chapter 4 were dominant. But the ending of the Golden Age, re-entry into a historically more normal period of lower growth, and adverse shocks such as the oil price hikes, made their malign aspects in retarding adjustment more apparent, soon after many of these regulations had actually been strengthened. Thus the calculus of the relative merits of regulated and *laissez faire* labour markets appears to have shifted towards the latter.

Table 6.3 Growth rate of income per capita (percentage)

<table>
<thead>
<tr>
<th></th>
<th>1950–73</th>
<th>1973–89</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>4.9</td>
<td>2.1</td>
</tr>
<tr>
<td>UK</td>
<td>2.5</td>
<td>1.8</td>
</tr>
<tr>
<td>France</td>
<td>4.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Japan</td>
<td>8.0</td>
<td>3.1</td>
</tr>
<tr>
<td>US</td>
<td>2.2</td>
<td>1.6</td>
</tr>
<tr>
<td>OECD average</td>
<td>3.8</td>
<td>2.1</td>
</tr>
</tbody>
</table>

*Source: Maddison (1991).*

Although the European model clearly has been relatively inefficient in terms of recent job creation and unemployment experience, productivity performance has remained relatively good (even though productivity growth is lower than before, it is still better than in the United States; see Table 2.6). A better indicator of economic performance than either unemployment or productivity is income per head of the population, which essentially offsets the better European productivity performance by making an allowance for the underutilisation of its human resources. Table 6.3 gives data on this, and shows that per capita income growth has been no less robust in Europe than in the United States since the ending of the Golden Age. The difference is that in Europe growth was achieved
through a high rate of immaterial technical progress (which explains as much as half of the growth). In the United States, by contrast, growth was achieved very largely through extra jobs and other material inputs. The force driving this higher rate of technical progress in Europe is the same one that generates high unemployment: high wages force entrepreneurs to innovate so as to economize on expensive workers. Thus output turns out to be no lower in Europe, despite rising unemployment.

The bottom line is that the European model is not quite as costly in economic terms as it seems. But, of course, unemployment is also a social problem in its own right. Even if a society where more than a tenth of the labour force are unemployed loses little in terms of forgone output, it will still suffer a lack of social cohesion and all the tensions that engenders. Should that necessarily lead us to prefer the US model? The answer is ‘No’, because although deregulation, the reduction of benefits, and so on, may lead to a fall in unemployment, they will also lead to simultaneously rising income inequality. In addition, to the extent that the reduction in unemployment is brought about by an increase in the number of low-paid and unstable jobs, such reforms may simply increase the number of working poor. Tackling this through the expansion of in-work benefits would then necessitate higher taxes, and all the problems which that brings. So inevitably the choice between the different labour market models involves value judgements over the appropriate distribution of income, and the rigidities imposed by the European model may well be the least bad way, in the short-term at least, of achieving the desired distributional objectives.

Furthermore, as we have seen earlier in this chapter, policies moving Europe in the direction of the US model are likely to have diverse effects on different groups in society. Undertaking reform will only be possible if enough people expect to gain by the move. As the data on per capita income indicated, increased flexibility cannot be expected to lead to a large increase in overall output, and while there will be some losers and some gainers, the vast bulk of the electorate may not be affected very much one way or another. Given the uncertainty over exactly who wins and who loses, and the difficulty of undertaking compensating transfers and so on, there is an inevitable bias towards maintaining the status quo. The
reason why the European model still has many supporters within Europe therefore has as much to with politics as economics.

But if the European model represents a sort of political equilibrium it is worth asking why the United States is not rushing to adopt it. US society is after all pretty heterogeneous with great extremes of income and wealth, yet it has not introduced the sort of regulations which prevail in Europe, nor gone for high levels of redistributive taxation. Why is that so? One explanation is cultural: most US citizens are (or are the offspring of) immigrants who were fleeing state persecution and saw the United States as a land of opportunity, where a high degree of mobility between different income classes meant that even the poor could hope to become rich one day. This has generated a greater tolerance for income inequality than in Europe, where many of today’s rich became so through inherited wealth. We saw in Chapter 2, however, that income mobility is no longer that high at the bottom of the income distribution, and it is quite likely that this cultural aspect will be attenuated as the society becomes more mature. There is another reason for the lack of pressure for more regulation and redistribution in the United States. The median voter is relatively unaffected by the choice of regime in Europe and it is the same in the United States, where the bias in favour of the status quo operates equally strongly. This ‘history dependence’ in the choice of labour market regime thus explains why many people in Europe do not want to embrace the US model, while many people in the United States do not wish to introduce European-style regulations.

This view of the European model as a political equilibrium which is difficult to change may seem rather pessimistic. Does it imply that Europe can never change? The answer is ‘No’, because it need not remain a political equilibrium indefinitely. Just as the Swedish ultra-corporatist experiment collapsed as circumstances changed, so might the European model. Note first that the ‘core’ group of insiders who naturally support the status quo will tend to be larger when income inequality is low and society is more homogeneous. If exogenous forces, such as biased technical change or increased competition from low-wage countries, continue to produce a widening of income differentials, then countervailing social pressures will arise to strengthen the rigidities and thus attenuate the process; the cohesion of the core is thus preserved. The problem is that these policies simultaneously reduce the number of ‘insiders’
in this core by raising unemployment, and eventually this will threaten the political majority that sustains the policies. It is possible that the unemployed could eventually become so numerous as to force the political reappraisal of the whole system. Until such a time, however, it is pointless to talk about wholesale systemic changes. The best that can be hoped for are incremental changes that improve the functioning of the European economy, while still commanding enough support to be politically viable. It is in this spirit that we will discuss some of the proposed remedies for unemployment in the next chapter.
Policies to fight unemployment: Taking stock

7.1 Introduction

In this chapter we shall take a look at some of the most widely touted cures for Europe's high unemployment. As there are quite a few of these - the OECD Jobs Study, for instance, contains 59 separate policy recommendations - we shall focus only on those that have been the object of most attention. In line with our earlier analysis we shall seek to identify those that are likely to be most effective in the fight against unemployment and consider whether the enactment of such measures is likely to introduce or aggravate other inefficiencies, what effect they are likely to have on the distribution of income and, finally, whether their introduction is likely to be politically feasible. Since even the best economic policies are of little use if they are unlikely to command sufficiently widespread political support, this last condition is an essential prerequisite for a policy that is not only effective but also viable.

Policies to fight unemployment fall broadly into two categories. First, there are those that involve the removal of existing impediments that are thought to have worsened the functioning of the labour market and contributed to the rise in unemployment. Most of the policies that are aimed at increasing flexibility come into this category, such as reducing firing costs or the level of income support during periods of unemployment. We might think of these as eliminating the negative influences. Second, there are policies whose aim is actively to improve the operation of the labour market. Under this heading come calls for more training and active labour market policies. We might think of these policies as designed to accentuate the positive. We shall discuss each of these two classes of policies, concluding with a discussion of the role of macroeconomic policies in tackling unemployment.
7.2 Eliminating the negative

7.2.1 Unemployment benefits
The microeconomics of mandatory unemployment insurance was discussed in Chapter 5. There we saw that insurance against job loss was desirable because of the inability of workers to diversify their human capital and the costs of changing jobs. However, with a voluntary scheme, adverse selection in the presence of informational deficiencies meant that the *laissez faire* outcome would lead to the suboptimal provision of unemployment insurance because those with low unemployment risk would be unwilling to participate; mandatory participation in a scheme could help to overcome this market failure. Moral hazard issues – the need to encourage the unemployed to keep searching – mean, however, that insurance must necessarily be incomplete.

In addition we need to look at the macroeconomics of unemployment benefits. The presence of an unemployment benefit scheme means that unemployed workers receive income when out of work, and in return pay taxes when in work. If we take our standard, static labour supply/labour demand diagram of Chapter 3 (Figure 3.1), with the *post-tax* wage measured on the vertical axis (repeated as Figure 7.1), the effect is to shift the labour demand curve down, because the cost of labour is increased by the presence of the tax, and to shift the labour supply and wage-setting curves up, because the opportunity cost of working is raised by the presence of the unemployment benefit\textsuperscript{74}. As a consequence employment will be lower than without the benefits and taxes.
On the face of it, this is rather absurd: unemployment is subsidized, while employment is taxed. Taking into account the amount of resources that are devoted to unemployment support, it seems even more absurd. If the costs of the various retraining programmes and special schemes for the unemployed are added to unemployment benefits (the replacement ratio is between 40% and 50% in most European countries), the total social cost of making someone unemployed is nearly 80% of the average wage. At first sight there is an obvious economic inefficiency here: if the productivity of the unemployed is only 20% of that of the employed, then it still ought to be possible to put them all back to work at the going wage without anybody being worse off. One way to achieve this would be to eliminate unemployment benefits entirely – thus making the experience of unemployment so painful that the unemployed would take any job offered – and correspondingly reduce the tax rate on workers. Implicit in such a scheme is the idea that ‘fiscal increasing returns’ lead to the existence of multiple equilibria. In one equilibrium benefits and taxes are high and there are many workers unemployed; in the other equilibrium benefits are non-existent and

Figure 7.1 Equilibrium unemployment
Unemployment: Choices for Europe

taxes are lower, but since nobody is unemployed no one suffers from the lack of benefits.

Unfortunately things are unlikely to work out like this in practice. First, it is not the case that the abolition of unemployment benefits would completely eliminate unemployment. Unemployment benefits are by no means the only determinant of the opportunity cost of working. Because some unemployed workers can run down savings, borrow on the credit market or from friends, survive on income from working in the ‘black economy’, or rely on the income of other members of the household, eliminating benefits entirely would be unlikely to force all the unemployed straight into regular jobs. Empirical evidence on the search behaviour of workers in the United States suggests that a 20% cut in unemployment benefits would reduce the average unemployment duration by about half a week, while econometric investigations of the response of wages to unemployment benefits suggest that each ten percentage points off the replacement ratio reduces real wages by somewhere between 1.5% and 4.5%, other things being equal. Thus while the abolition of unemployment benefits would certainly reduce unemployment it would by no means eliminate it.

Second, the abolition of unemployment benefits does not necessarily generate an improvement in economic efficiency. To begin with the efficient matching of heterogeneous unemployed workers to a variety of unfilled jobs requires that there be a certain amount of ‘frictional’ unemployment, so the goal of eliminating unemployment entirely is in any case undesirable (which is not to deny that current European unemployment rates are certainly inefficiently high). More importantly, as we saw in Chapter 5, risk-averse workers will want to insure themselves against bad luck in the labour market. Eliminating benefits thus closes off an insurance market (pay while you work for the times when you might lose your job), and is almost certain to be welfare reducing. Efficiency considerations, however, do suggest that many European unemployment insurance schemes are badly structured, in that they give insufficient incentives to take work, by paying a flat rate of unemployment benefit for a long time (or in some cases indefinitely). Offering a lump-sum payment on job loss, rather than making what is effectively a duration-contingent payment as at present, would improve job-taking incentives. In practice the way to do this would be to reduce the amount of benefits with the
duration of the unemployment spell, or simply make them payable for a finite period of, say, six months. The empirical importance of these considerations is demonstrated by the positive correlation reported in Chapter 3 between the degree of unemployment persistence and the duration for which unemployment benefits are payable. Unfortunately this measure would also reduce the insurance element in the system, because people who are unlucky and find it especially difficult to get a job do not get bigger payments than those who find jobs quickly; consequently it might also have to be coupled with more active measures to place the long-term unemployed in jobs. Alternatively benefits could continue beyond six months, but at a reduced level, and contingent on availability for work.

More radical alternatives are possible. One involves the possibility of turning unemployment benefits into vouchers which can be redeemed by hiring firms; this is discussed below in Section 7.3.2. Another would be to adopt a scheme recently introduced in Chile whereby workers have a notional account with the government that they carry through their working life, which is credited with their own, and their employer’s, contributions while at work, and debited with their receipts during periods of unemployment. On retirement they receive a lump sum equal to the balance in the account. Such a scheme essentially involves workers self-insuring by effectively borrowing against future income in bad times, but would preserve the appropriate incentive for them to find jobs fast when unemployed. Its drawback, however, is that workers are unable to insure themselves against lifetime bad luck in the labour market involving the experience of repeated, or especially protracted, spells of unemployment.

Turning finally to political issues, at first sight tightening the unemployment benefits regime may be a policy that would command relatively wide support, since the unemployed, though large in number, are still only a small fraction of the electorate. Nevertheless, it would be unrealistic to expect radical reform for a variety of reasons. First, a considerable number of the employed workforce believe themselves exposed to the risk of unemployment. Second, the presence of unemployment benefits raises the bargaining position of the employed because they have less to fear from pushing for higher wages; reducing unemployment benefits would therefore tend to lower the wages of
those in work\textsuperscript{78}. Third, the unemployed who fail to get jobs would suffer, and uncertainty about who among their number would ultimately benefit from a tougher benefit regime will mean that the unemployed as a group certainly will be opposed. Thus even though it may be possible to improve the structure of benefit regimes, radical reform starting from the present position of high unemployment is difficult, precisely because benefits matter. Only in a world of short and relatively infrequent spells of unemployment, where the level of benefits does not matter very much, might it be possible to undertake major reforms.

7.2.2 Minimum wages

Many European countries impose a minimum wage, as shown in Table 7.1. In addition to being relatively generous, the ratio of the minimum to the average wage has generally been rising over the last 20 years, unlike in the United States where the reverse has happened. Thus in France the minimum wage has risen from 40\% of average earnings in the late 1960s to 50\% in the mid-1980s, while in the United States exactly the opposite has occurred. One view that we discussed in Chapter 3 is that high minimum wages and generous unemployment benefits have turned a decline in the demand for unskilled workers (because of technological change or increased competition from low-wage industrializing countries) into higher unemployment, whereas in the United States the result has been rising wage inequality. As evidence that the minimum wage bites more than in the past we might note that in France in 1993 8.2\% of the labour force was employed at the minimum wage, against less than 5\% in the mid-1970s. Perhaps even more striking is the fact that while only 5.9\% of labour working in industry was working at the minimum wage, 30.2\% of workers in such services as catering were paid the minimum wage. Finally, one last and simple way to assess the role of the minimum wage is to compare the bottom end of the wage distributions in the United States and France (although this also reflects other labour market phenomena such as unemployment benefits): the ratio of the average wage of the lowest decile to the median wage is twice as high in France as in the United States.
**Table 7.1 Minimum wages**

<table>
<thead>
<tr>
<th>Country</th>
<th>Ratio to median wage (%)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>-</td>
<td>Negotiated at sectoral and regional level.</td>
</tr>
<tr>
<td>Ireland</td>
<td>-</td>
<td>Negotiated at sectoral level.</td>
</tr>
<tr>
<td>Italy</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>72</td>
<td>Economy-wide, at age 23. -10% per year of age below 23.</td>
</tr>
<tr>
<td>Portugal (1985)</td>
<td>73</td>
<td>Economy-wide, at age 18. -25% per year of age below 18.</td>
</tr>
<tr>
<td>UK</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Drèze and Sneessens (1994).*

Regarding the impact of minimum wages on unemployment, recall our discussion in Chapter 5, where it was pointed out that in monopsonistic labour markets the imposition of a minimum wage could simultaneously raise employment and wages. We also noted that there was some empirical evidence suggesting this in fact had happened (in California and with wages councils in the United Kingdom). Such studies, however, certainly do not imply that the imposition of a minimum wage always and everywhere increases employment as well as wages, because the minimum wage can surely be set at a level that is so high that employment suffers. This is obviously most likely to happen in the case of low productivity labour, of which the prime example today is
inexperienced young workers. There is some empirical evidence to suggest that this has indeed happened in France\textsuperscript{80}.

Turning to the distributional implications, obviously the primary intention of a minimum wage is to raise incomes at the bottom of the income distribution. As noted in Chapter 5, however, the full effects are more complicated than this. It is certainly to the benefit of the low-paid unskilled workers who have, or eventually find, a job. But it is detrimental to more highly paid skilled workers on the assumption that skilled and unskilled labour are cooperator. It is also detrimental to the unskilled unemployed for whom the higher expected wage in work is offset by longer spells in unemployment.

Leaving aside the monopsony argument – for which a single national minimum wage is probably far too blunt a tool – is there a good reason to favour a minimum wage as a means of achieving distributional aims? As already noted a high minimum wage is not a very good tool for achieving this end because by raising unemployment it may make some poor households even worse off. Also there are other policies that could achieve much the same ends, such as a negative income tax which guarantees all members of society a minimum standard of living, or a system of more generous in-work benefits. Furthermore, a negative income tax would help tackle poverty not just among those in work, but also among those unemployed or out of the labour force. Both a negative income tax, however, and more generous in-work benefits would require higher marginal tax rates, other things being equal, and these will have adverse efficiency effects too. Indeed it is the fact that a minimum wage appears to be a costless way of raising the incomes of the poorer members of society that makes it so attractive to governments. For this reason, although we would not advocate its introduction where one does not presently exist, we do not expect it to be politically feasible to remove it where it does exist. But we believe that its most deleterious effects could be reduced by: first, ensuring that it does not apply to young workers; second, holding it constant in real terms rather than indexing it to the average wage so that over time the ratio to average earnings might be brought back to the levels of the late 1970s; and, third, offsetting the impact on the cost of employing unskilled workers by reducing payroll taxes for low wage labour (see below).
7.2.3 Payroll taxes

Payroll taxes have reached a very significant proportion of total labour cost in some European countries. At first sight this seems bizarre as a payroll tax is specifically a tax on jobs (unlike income tax which also impinges on capital income). Consequently a number of both economists and politicians have been led to argue that they should be reduced or eliminated, so as to boost labour demand. There are actually three separate issues here. One is simply about the elasticity of demand with respect to total labour costs. The second is whether a reduction in payroll taxes would indeed lead to a fall in labour costs once the endogeneity of the wage is recognized. The third has to do with how a payroll tax reduction is financed.

Let us start with the effect of the cost of labour on its demand. There are a variety of estimates in the literature, and in addition it needs to be clear what is being held fixed (output, the capital stock, and so on). A ball park estimate for the ‘long-run’ elasticity, once all the adjustment dynamics have had a chance to work themselves out but holding the capital stock fixed, is somewhere between a half and unity. This means that a ten percentage point reduction in labour costs could be expected, other things being equal, to lead to a 5–10% increase in employment, i.e. enough to reduce unemployment to US levels. Once we take account of the fact that the resulting increase in profitability will also encourage investment the effect is likely to be even larger. Indeed if the production function of the economy exhibits constant returns to scale and all inputs can be varied then the effect is strictly speaking infinite (the labour demand schedule in Figure 7.1 is horizontal).

But there is a big ‘if’ – namely the fact that everything else, including the wage, is held constant. If the payroll tax could be reduced by ten percentage points, would this reduce labour costs permanently by the same amount? Or should we alternatively believe that wages will in due course rise to offset some or all of the gains? As an example that we cannot just take the wage as fixed we simply need to look at Denmark, where the payroll tax is much lower than in other countries, yet this has shown up in neither lower labour costs, nor lower unemployment. This is why Denmark is sometimes held up as an example that proves the practical irrelevance of the payroll tax for unemployment.
There are more general reasons for expecting that payroll taxes may be roughly neutral in their effects on unemployment. Wages always end up, sooner or later, rising with labour productivity. Some mechanism must therefore be in operation that indexes total labour cost on the ability of firms to pay, and a change in payroll taxes affects precisely this ability of firms to pay. What is this mechanism?

First, in a completely competitive labour market, shifts in labour demand will be entirely reflected in wages with no change in employment only if labour supply is inelastic with respect to the wage, i.e. the labour supply curve is vertical. The fact that participation rates have not changed that much over the last 150 years, while real wages have risen tenfold, suggests this is not a bad approximation to the truth.

Second, if there is job rationing, as in the labour market picture of Figure 7.1, then payroll taxes will be neutral if labour supply is inelastic with respect to the wage (the vertical part of the backward-L) and the ‘floor’ to the wage-setting curve shifts down by exactly the amount of the tax. The level of this floor is set by the opportunity cost of working, which in turn is determined by unemployment benefits, future earnings and financial wealth. Since shocks to productivity tend to be permanent rather than temporary, and benefits are also usually indexed to wages, a productivity shock tends to raise the opportunity cost of working by something close to one-for-one. The same is also true of a permanent cut in payroll taxes, although there will be a smaller effect on the opportunity cost of working, and thus some effect on employment, if unemployment benefits are related to the wage after payroll taxes have been deducted. By contrast a temporary cut in payroll taxes should have much less effect on the opportunity cost of working, and so lead to a bigger effect on employment. But even then the size of the employment/unemployment effect will depend on how steep the wage-setting curve is, and if it is very steep then most of the effect will be felt on wages rather than employment.

This suggests that if payroll taxes were reduced, wages would eat up, at least in part, the increased profits of firms. This is why most studies which have systematically examined the effect of payroll taxes on employment usually find strong effects only in the short run. For instance, a recent study of the OECD economies finds that
A reduction of one percentage point in the payroll tax reduces labour costs by an average 0.43 percentage points in the first year, but that this effect is almost exactly zero in the long run. Thus the beneficial effect on unemployment of a cut in payroll taxes may be considerably less than its supporters suppose.

This argument does not, however, rule out a significant effect on certain segments of the workforce. If minimum wage regulations are operative, or the wage for some type of labour has fallen to the level of unemployment benefits, then there is a binding floor to the wage. In this case, because the wage is effectively set outside the labour market, alleviating the payroll tax will boost the demand for this sort of labour. Thus while we believe that a general, and very costly, reduction in payroll taxes is unlikely to have that great an effect on unemployment, targeted reductions in payroll taxes at the bottom end of the wage distribution where there is a binding floor to the wage may be more successful as well as being cheaper to implement. Thus selective reductions in payroll taxes present a useful second-best alternative where the impediments to wage adjustment cannot be removed for political reasons.

The final issue is how such a selective reduction in payroll taxes might be financed. First consider who, other than the workforce as a whole, could help finance a selective reduction in the payroll tax. There are a number of potential candidates. One option is to increase VAT accordingly, as has been recently advocated by the former French President Giscard d'Estaing. In practice, this would amount to requiring retirees to contribute to the financing of the payroll tax reduction, since they consume but do not work. Another option is simply to broaden the payroll tax to all forms of income: wages, pensions and income from capital. This is the so-called Generalized Income Tax favoured by the former French Prime Minister Rocard. To the extent that the reduction of the payroll tax is bound to raise profits initially, it seems only natural to prefer the Generalized Income Tax as the fairest way. So this is a way to shift the burden of the tax away from labour on to the owners of capital (which includes retirees, but not exclusively) to the benefit of labour at large.

A third option is to finance the payroll tax reduction at the bottom end by raising that on more highly paid workers, i.e. to make it more progressive than at present. There are three possible
justifications for this. The first rests purely on efficiency grounds. The supply curve for skilled workers is likely to be somewhat less elastic with respect to the wage than that for unskilled workers (for whom the wage may be quite near the opportunity cost of working). Standard theory then suggests that placing most of the tax burden on the inputs that are supplied inelastically – the skilled – will minimize the distortionary costs of the taxation. Second, unskilled workers have been subject to an unexpected adverse movement in the relative demand for their type of labour, e.g. that brought about by a bias in technological progress. In that case standard insurance arguments suggest the burden should be borne by labour as a whole. We discuss (but reject) this idea in the next section. The final justification is that the rise in the number of unskilled workers who are employed will raise the earnings of skilled workers (assuming they are cooperant factors).

7.2.4 Firing constraints

The empirical evidence on the impact of firing costs was discussed in Chapter 4 and the microeconomics in Chapter 5. In particular there is no reason to expect the presence of mandated severance pay to increase the average level of unemployment over the cycle. Their main effect is rather to reduce the amplitude of cyclical swings, and reduce the rate of sectoral reallocation. We also saw in Chapter 5 that there are reasons why some rigidities in firing may help offset informational deficiencies and asymmetries, and encourage human capital formation. This suggests that reducing firing costs ought not to be high on the list of priorities. Conversely, because they reduce job turnover and the exit rate from unemployment, they may have contributed to the build-up of long-term unemployment; if the outsider disenfranchisement mechanism of Chapter 3 is important this will also raise persistence. The biggest danger with firing costs, however, is that they protect incumbent workers from job loss and allow them to be more aggressive in their wage demands. If the wage of new hires is linked to that of the incumbents, then the result is lower employment. We saw in Chapter 6 that this is precisely what appears to have happened in Spain.

We are thus led to conclude that in some countries (such as Spain) a reduction in firing costs might be helpful in reducing unemployment, while in others it might not. Where we are agreed
is that there is no place for the state to impose additional administrative restrictions on layoffs for economic reasons, subject to the firm making the appropriate layoff payments. Extensive involvement by the state in the layoff process, as in Spain, reduces economic efficiency but does nothing to help address the market failures discussed in Chapter 5.

It is important to realize, however, that even where a relaxation in firing costs is deemed desirable, it cannot be expected to lead to a fall in unemployment in the short run. In fact the immediate effect is likely to be to raise unemployment as workers are dismissed who would otherwise still be in employment. Also it is very difficult to see that there is a natural constituency for removing firing costs during a recession, the only beneficiaries being the owners of capital, while the workforce, both employed and unemployed, gains nothing. Even a two-tier approach, as adopted in Spain between 1983 and 1994 and discussed earlier, is likely to run into trouble as the insiders on permanent contracts see the extent to which their power is being eroded. We therefore see little reason to place heavy emphasis on reducing firing costs at the present juncture, since it is neither an efficacious policy in the short run, nor a politically feasible one. Reducing state-mandated firing costs only makes sense as a long-term aim, to be introduced as the labour market tightens. Only then is the policy employment friendly, rather than employment unfriendly, since it is removed during a period of rising demand and falling unemployment. Furthermore, achieving enough political support to make the reform viable is only possible if the number of gainers is sufficiently large and the number of losers sufficiently small.

7.2.5 Union power and wage bargaining institutions

In the basic labour market picture of Figure 7.1 a reduction in union bargaining strength reduces the mark-up of the wage over the opportunity cost of working, and thus shifts the wage-setting schedule downwards, raising equilibrium employment. In an otherwise competitive market this is necessarily a good thing. We saw in Chapter 5, however, that where labour market frictions are present which result in job-specific rents that have to be split between capital and labour, it is no longer desirable that the relative bargaining strength of labour be at a minimum. More to the point,
the empirical evidence for the effect of union power on unemployment is somewhat mixed. In part this reflects the difficulties of measuring union power, the commonly used proxies such as union density being somewhat unsatisfactory. But more significantly it is not union power *per se* that is the issue, but rather the context in which it is exercised.

Our discussion of the 'corporatism' literature in Chapter 4 pointed out that a strongly centralized system of pay bargaining could be expected to work roughly as well as a competitive market, but that a system of fragmented bargaining could be expected to lead to the worst of all possible worlds. Some of the smaller European economies have in the past been relatively successful in operating centralized wage-setting systems that prevent individual unions trying to leapfrog ahead of others in the wage bargaining game. However, the sustainability of this sort of system is debatable. First, it usually forms part of a wider social pact or contract which contains undesirable or unsustainable features such as a continually rising share of public spending (*vide* our earlier discussion of the Swedish case). Second, the continuing movement away from traditional production line manufacturing towards services and small-scale niche production makes the relative inflexibility of centralized wage-setting in equilibrating the markets for a myriad of specialised labour types more of a handicap. Third, goods market integration between the European economies renders one of the arguments in favour of centralized wage-setting — namely that it internalizes the effect of higher wages on to the price of goods — of less importance, since the price of these goods will be determined by international, rather than purely national, market conditions. Consequently the operation of a centralized pay-bargaining system becomes more difficult and perhaps less advantageous.

Nevertheless, although we feel it has only a minor role to play in the fight against unemployment, it is worthwhile continuing to seek to attenuate the problems caused by decentralized pay bargaining. One way to do this would be to outlaw collective bargaining altogether; this does not strike us as a politically feasible option for the European economies since the constituency in favour of it is far too limited. Instead we favour building on the existing institutional structures in ways that reduce adversarial conflict between capital and labour, and instead emphasize their common interest. An example of this is the Social Chapter of the Maastricht Treaty.
which, among other things, aims to foster worker representation on company boards. In addition, where there are multi-level bargaining arrangements, as in Spain, we would favour replacing them with bargaining purely at the level of the firm.

7.2.6 Monopoly power

Just as the exercise of monopoly power on the part of unions can be expected to raise unemployment in our basic model, so also will the exercise of monopoly power on the part of firms. The presence of market power in the product market means that a profit-maximizing producer will set a price that is strictly above the marginal cost of production. As a consequence the labour demand schedule in Figure 7.1 will be lower than otherwise would have been the case, and unemployment higher. Increased competition in product markets should therefore act to lower unemployment, other things being equal. In principle this could be quite a large effect. For instance, a decline in the mark-up of price over marginal cost from 33% to 25% corresponds to a 6.7% increase in the real wage. If we assume that the elasticity of wages with respect to unemployment in the wage-setting schedule is around one-tenth, and for simplicity assume marginal production costs are constant, then this would translate into a fall in European unemployment of around 6–7 percentage points!

There are a number of points to be made here. First, as with our analysis of changes in payroll taxes, the beneficial effect on unemployment will be partially offset if the wage-setting schedule shifts upwards at the same time as the labour demand schedule shifts. Second, it is very difficult to see how governments can produce a general increase in product market competition, although clearly a vigorous anti-trust policy will help in particular industries. Consequently it is difficult to see a major policy option to reduce unemployment here. Third, and following on from this, the losers from any particular anti-trust action – the shareholders of the company concerned – are usually well defined, whereas the gainers are more diffuse. For this reason governments will usually be reluctant to pursue anti-trust cases vigorously and widely. Any reforms are more likely to gain enough political support if they are part of a larger package involving making a number of markets simultaneously more competitive. In this way the losers from one action may be compensated by gaining as a result of others. Fourth,
international competition, especially from the Far East, may fill in for the lack of an adequate domestic policy instrument to foster competition. Fifth, a change in market structure will affect the rate of innovation in the economy, and thus also the rate of job creation and destruction. While in principle more competition could be either good or bad for innovation, the empirical evidence suggests that more competition raises the rate of innovation, and thus probably the rate of both job creation and job destruction. Consequently there may be additional indirect effects on unemployment from increased product market competition.

7.3 Accentuating the positive

7.3.1 Training

Turning the unskilled unemployed into skilled workers seems to be the one policy that almost everybody subscribes to. Yet it is not immediately obvious why this should lead to reduced unemployment rather than merely raising national productivity and wages. Transforming the unskilled into skilled workers represents a change in relative factor supplies, and can be expected to lead to a rise in the wage of unskilled workers (because they are scarcer) and a decline in the wage of skilled workers (because they are more numerous). Thus training the unskilled should certainly tend to work against the widening of wage differentials noted in Chapter 2 and discussed in Chapter 3. In addition, because the total national quantity of skills has risen, the average wage would also be expected to rise. But why should all this affect unemployment?

The answer is that unemployment will also be affected if the unemployment experiences of skilled and unskilled workers are different. In fact, as we saw in Chapter 2, unskilled workers almost invariably experience higher unemployment rates than skilled workers. At first sight it might seem odd that unemployment rates are higher among unskilled workers because workers with specialist skills could be expected to spend more time in searching for the right job than unskilled workers for whom there may be little choice over what jobs they can do. But there are also a number of factors working in the other direction. First, skilled workers can also perform unskilled tasks, so that skilled workers
can always take unskilled jobs until they find the right skilled job. Second, the rates of both worker turnover and job turnover tend to be higher for unskilled labour (because it does not possess job-specific skills or require job-specific training). Third, low wages reduce the incentive to work in the regular economy, and encourage participation in the 'black' economy and even criminal activities. Finally, one view of European unemployment is that generous benefit levels and minimum wage regulations have placed a floor under the unskilled wage, and prevented it falling in the way it has in the United States, resulting instead in the unemployment of the unskilled (see the discussion in Chapter 3). This will be attenuated if the excess supply of unskilled workers is reduced. In this case training represents a second-best policy for tackling unemployment when the original impediment to wage adjustment cannot be removed.

Consequently training the unskilled should not only raise national productivity, but also reduce average unemployment, although its effectiveness at doing this may be rather less than proponents believe. There are also considerable practical questions to be faced in designing training programmes. Who among the unemployed should be trained? What training should be provided? What institutions are required to ensure its efficient delivery? These are difficult questions, but central to the effectiveness of any training programme.

Regarding who should be trained, it is clearly inappropriate that everyone who is unemployed should undergo training. It is natural to target training at two groups: the long-term unemployed; and young people. Yet members of the first group are likely to be those who are least adaptable and in a position to benefit least from training. Similarly unskilled young people are frequently those with poor scholastic records and little aptitude to learn. Again the benefits from training may be rather low. Furthermore, training is costly – something that is all too often forgotten in political debate – so that it is not obvious that the gains outweigh the costs. Recent evidence from the United States, for instance, points to the conclusion that the rate of return on programmes for training the unemployed is actually negative.87

Turning to the question of who provides the training, if the system is both paid for and run by government there is the risk that the
training will be inappropriate to firms' needs, because firms are probably better informed about the skills that are in short supply than the government. But if training is paid for by government and provided by firms there is an incentive to set up cosmetic schemes where no effective training takes place, so that it simply ends up as a disguised employment subsidy. It is quite difficult for governments to monitor whether effective training is occurring or not, and as was pointed out in Chapter 5 the firm has little incentive to provide training to the worker if future employers benefit without bearing the costs.

On the other hand, we should not be too negative about the potential contribution of training programmes. For one thing, they have a key role in keeping the unemployed, especially those who have been unemployed for a relatively long time, in touch with the world of work. This has both an economic purpose – it means they provide effective competition for jobs as the labour market tightens – and a social one in that they remain part of the community, rather than becoming an underprivileged underclass. For instance, a recent US study (quoted by the OECD) pointed to the fact that a key effect of participation in a training programme was to reduce the propensity to indulge in criminal activities. So, while expectations should not be too high, we believe that it is worth persevering with suitably targeted (primarily towards the young and the long-term unemployed) training programmes.

Turning from the issues of effectiveness and desirability, what chances are there for political implementation? Because training, like motherhood, is difficult to object to, it finds a place on the agenda of all political parties. Furthermore, unlike some of the other policies considered here, it is not apparent quite so immediately that it may actually be to the detriment of some segments of the electorate. But as discussed above this is not the case. First, to the extent that the training is successful at turning unskilled workers into skilled ones, the wages of skilled workers can be expected to suffer. Second, to the extent that they are unsuccessful and the overall rate of return is rather low, the electorate at large still have to pay the costs of the training. But this latter consideration means that governments are always likely to want to do training on the cheap, especially since the benefits may take some while to become apparent. So in practice any training schemes may turn out to be rather superficial and cosmetic in
nature. This invites the question of whether there are other policies that also achieve one of the primary objectives of training programmes, namely keeping the long-term unemployed in touch with the labour market.

7.3.2 Employment vouchers

One of the peculiarities of the unemployment benefit system is that it effectively subsidizes idleness. Surely it would make more sense to subsidize employment? One idea for doing this, while retaining the essential insurance aspect of unemployment benefits, is to allow unemployed workers to turn part, or all, of their benefit into a voucher which can then be cashed in by any firm that hires them. To all intents and purposes this acts as a marginal employment (or more strictly hiring) subsidy for an unemployed worker and thus acts to increase the supply of jobs. The recent UK Workstart scheme works along such lines, and plans have been announced for its future extension to all those who have been unemployed for more than two years.

Ideally with such a scheme the value of the voucher given to the firm should be related to the expected length of time for which the worker would otherwise be unemployed, so that it involves no net cost to the taxpayer. Because the exit rate from unemployment into jobs declines with the present length of the spell (state dependence), this would yield a low subsidy to a recently unemployed worker (who has a relatively good chance of finding a job), and higher one for the long-term unemployed (whose probability of finding a job is rather low). Furthermore, as the labour market tightens, and the bulk of the unemployed become short-term unemployed, the total value of the subsidy being paid to firms will fall so that the scheme would become self-liquidating.

There are clearly reasons why it will not work out quite this simply. First, some of these workers might have been hired anyway (deadweight), and if the value of the vouchers varies across the unemployed then the scheme may simply alter who firms hire (displacement). Because there will always be job turnover in a dynamic economy, deadweight is a serious issue that limits the value of the voucher, and therefore its impact on the number of jobs, if it is to remain self-financing. Displacement is less of a concern in that its effect is to favour those who have the worst
job-finding prospects; since the average spell of unemployment for those who remain unemployed is thereby reduced, so is the competitive pressure in the labour market, resulting in a lower equilibrium unemployment rate than would otherwise be the case.

Second, firms will want to take advantage of the system by firing their workers after any vouchers have been redeemed, and hiring others to replace them. But again, even if this ‘churning’ does take place, the effect is to lower the average unemployment spell length for the unemployed and boost competitive pressures in the labour market, so it does not render the scheme completely ineffective. Also churning of the workforce could be avoided if vouchers can only be redeemed by firms which expand their net labour force. But the net effect of all these qualifications is to reduce the feasible value of the voucher while still ensuring no net increase in expenditure.

Since the scheme involves no net cost to the taxpayer, and is also voluntary in the sense that the unemployed are not compelled to take any jobs that are on offer, it is unlikely that major portions of the electorate will object to it. Nevertheless, it is in fact the case that the employed unskilled can expect to suffer a decline in wages, as they will see their wages forced down by increased competition from the long-term unemployed. Also, to the extent that the short-term unemployed are displaced from being hired, or existing workers are churned, there will be losers. But again this is a policy that seems more politically viable than some.

7.3.3 Workfare
An alternative to the voluntariness of an employment voucher scheme is for the government to take a more active role in inducing the long-term unemployed to take jobs. We have already suggested above that it is desirable that benefits be payable for a short period only, but noted that introducing this at a time of high unemployment would in practice be politically very difficult, if not impossible. So any limitation on the period for which benefits can be received has to be linked to the government playing a role as ‘employer of last resort’. One possibility is thus to require that after a certain period of unemployment workers must either take a (possibly subsidized) job in the private sector, or take a state-supplied (temporary) job, or participate in a suitable training
scheme. At the end of their time in a temporary job or on a training programme the workers then re-enter unemployment, but the hope is that either the higher skills, or simply the fact that they have been kept in touch with the labour market, will enhance their employability. This is very much along the lines of the Swedish model.

Experience with the Swedish system suggests a number of problems with such a model. First, a lot depends on whether workers on training schemes or temporary government jobs would have been effective in the market for regular jobs. If they are workers who did not compete effectively before there is no problem. But if they are people who might have been able to find jobs if they kept on searching, then the effect is to reduce the available supply of labour to the private sector. This in turn will result in upward pressure on wages and the re-emergence of the unemployment that was mopped up by the scheme. All that will have happened in the end is that private-sector employment is lower and public-sector employment is higher. Furthermore, the latter will probably need to be financed from higher taxes, unless it is especially productive.

Second, if the unemployed know that they are guaranteed a state-supplied job or a state-sponsored training scheme then they may make little effort to find a job in the private sector unless the state offerings are sufficiently unattractive relative to a job in the private sector. But the Catch-22 here is that if the state run schemes are very unattractive then it will be politically difficult to introduce them. (For instance, the reintroduction of the workhouse would do the trick, but is hardly a politically viable policy!)

Third, if the employed know that they do not run the risk of suffering an extended period in unemployment, they will be less worried about pressing for higher wages and running an increased risk of job loss. Thus the presence of such a workfare scheme can lead to increased wage pressure (the wage-setting schedule in Figure 7.1 shifts up), and an increase in unemployment. Unemployment will only fall if the beneficial effects from the reintegration of the long-term unemployed into the effective labour force and the improved skills of retrained workers outweighs these three effects. This is a big 'if' unless any scheme is very carefully
designed so as to focus only on those workers who are, or are likely to become, disconnected from the labour market.

We strongly endorse the view that the long-term unemployed should be the primary focus of unemployment policies. One overall scheme that marries employment vouchers with workfare would seem to be as follows. First, employment vouchers should be available to the long-term unemployed. Second, as soon as unemployed workers become eligible for the voucher programme, they could not refuse a job offer more than, say, three times without losing benefits entirely. In the meantime, a state-run or state-sponsored training programme should be made available as an alternative option for these workers.

### 7.4 Macroeconomic policies

The conventional wisdom among governments and central bankers is that macroeconomic policies have little role to play in the fight against unemployment. Thus, according to the OECD *Jobs Study*, the appropriate objective for policy should be to maintain low and stable inflation, expanding demand when activity falls below the 'natural' rate and curtailing it when inflation threatens to accelerate. Alongside this, efforts to consolidate fiscal positions and ensure that financial policies are sustainable should continue. We would not want to dissent from the view that there is no long-run trade-off between activity and inflation, so that macroeconomic policies by themselves can do little to secure a lasting reduction in unemployment. Yet Chapter 3 showed that the short-run Phillips Curve is alive and well, so that there is still a trade-off between activity and inflation in the short term. Furthermore, the presence of important persistence mechanisms within the labour market means that the effects of policy can be quite long lived.

In such circumstances an excessive concentration on fighting inflation may be dangerous. Certainly so long as disturbances originate on the demand side of the economy a policy of keeping unemployment as close as possible to its natural rate is sensible, as it not only ensures inflation will be stabilized, but also that
unemployment will be kept as close as possible to sustainable levels. When there are also disturbances on the supply side, however, focusing only on inflation ceases to be sensible. The appropriate objective for policy should surely be to keep activity as close as possible to the equilibrium or sustainable level once wages and prices have fully adjusted. By contrast, stabilizing inflation means that the brunt of any adjustment in the short term is placed on to activity. Central bankers would no doubt claim that in the event of a major supply shock, such as another oil price hike, they would use their discretion, partially accommodating the inflationary impulse in the short run. But how should the objectives of macroeconomic policies be set if microeconomic policies to reduce unemployment are introduced?

The answer to this question depends in part on the particular policies that have been enacted. But many of the policies considered above ultimately work by increasing competition within the labour market and reducing wage pressure at any given level of unemployment. For instance, vouchers for the long-term unemployed work by making them relatively more attractive to employers and thus enabling them to compete more effectively with the short-term unemployed; the result is downward pressure on wages, resulting in increased employment. A similar argument applies if unemployment benefits or minimum wages are reduced. If money wages are set to increase in line with an expected rate of inflation that is determined, at least in part, in a backward-looking manner, it may take some time for the effects of this policy action on real wages and employment to be felt. But an expansion in demand and a temporary increase in inflation can hasten the required reduction in real wages and the associated increase in employment. In this case the dictum of keeping unemployment as close as possible to the natural rate (which has fallen as a result of the policy measures) results not in stable inflation, but rather in a period in which inflation is higher than the rate built into wage settlements. Note also that only a temporary increase in inflation is required, because the consequential fall in real wages is validated by the decline in the natural rate, and is not merely a consequence of an attempt to ‘surprise’ workers through an increase in demand and inflation alone.

How large an increase in inflation might be appropriate? Reducing unemployment by five percentage points by the end of the decade
through supply-side reforms might be a reasonable objective. Assuming this is spread over the period between now and then, and that the short-run elasticity of the demand for labour with respect to real wages is about unity (which econometric evidence suggests is a reasonable estimate), inflation would need to average about one percentage point per annum higher than that which is built into wage settlements. In practice this is well within the margin of discretion left to those who conduct monetary policy and need not raise issues of the potential loss of counter-inflationary credibility. But it does suggest the appropriateness of taking a somewhat more relaxed view of inflation in the aftermath of labour market reforms. It is a fortiori the case that central bankers should not be overly concerned to observe rapid growth in activity or monetary aggregates. A successful reduction in unemployment, of, say, one percentage point a year for five years, should be accompanied by faster growth in output than usual if the extra workers are producing more output. Even if the extra workers are half as productive as those currently employed, output will still need to grow half a percentage point per annum faster than if the unemployment rate remained stable. So the cardinal rule for central bankers should be to keep their eyes on inflation outturns, not on their intermediate targets and indicators.

Pursuing an appropriately supportive macroeconomic stance is all the more important in the light of the fact that the costs of many of the policy reforms we have considered, for example in terms of lower wages, are likely to come through quite rapidly. The benefit of lower unemployment, by contrast, may be uncertain in magnitude, and take more time to materialize. Supply-side policies are likely to be more successful in practice the sooner their benefits are clear to the electorate. Macroeconomic policies that ensure the benefits accrue as soon as possible thus have a role to play not only in maximizing the benefits from supply-side reforms, but also in ensuring that they are politically viable in the first place. An obvious example would be the reduction of firing costs, whose first impact is to raise unemployment by making it easier, for those firms that wish to, to lay off workers. The increased hires elsewhere, that should in due course offset the higher level of fires, will only materialize when those firms are confident that the demand for the output of the extra workers will be there.
This argument has implications for the desirability of a rapid movement to full monetary union in Europe, since clearly with a common currency countries will be unable to run independent monetary policies. Of course countries will still be able to use fiscal policy where budgetary conditions permit, so the argument does not carry the implication that monetary union should not proceed, even in those countries that are otherwise ready. We do, however, believe that countries should not subordinate the fight against unemployment to the goal of achieving monetary union. For some countries there will in any case be no conflict between the two. There may be others – and in particular we are thinking of Spain with its current very high levels of unemployment – where substantial movements in real exchange rates can be expected to accompany any fall in unemployment to the levels experienced elsewhere in the European Union, or lower. In such circumstances a premature locking of exchange rates would be inappropriate.
The high level of unemployment is widely regarded as the most important challenge facing European policy-makers today. The causes of this unemployment are still only imperfectly understood, yet the reasons for inaction have less to do with this ignorance, and more to do with the fact that it is an equilibrium outcome from an institutional framework that the electorates of Europe have shown little desire to change. To most people unemployment is an evil, but not one that touches them directly. Reducing it to more acceptable levels, however, is likely to require the introduction of policies that have adverse effects on at least some of those currently in work, and as a result they fail to command the necessary political support. The key point is that the decisive voters have little to gain, and possibly something to lose, from reform.

The fight against unemployment is thus first and foremost a political question, a question of building enough alliances among the various groups to command a political majority. The suggestion that Europe should abandon its relatively regulated labour markets and adopt wholesale a laissez faire approach on US lines may be theoretically appealing – although as we have seen the US model has its limitations too – but is in practice an unrealistic and unattainable objective. A practical approach requires a recognition of the need to work within the parameters of the existing framework, making marginal changes that work in the right direction.

That being said, the following policies seem to us to be both feasible and potentially effective:

- Where possible reduce the duration for which unemployment benefits are payable.
• Erode the relative value of the minimum wage, particularly for young workers, and use in-work benefits to tackle poverty instead.

• Where the minimum wage cannot be reduced restructure the pay-roll tax so as to reduce the cost of employing unskilled labour.

• Foster competition in product, as well as labour, markets.

• Improve training, but do not expect too much from it.

• Offer the long-term unemployed the option of turning their benefits into employment vouchers.

• Remember that macroeconomic policies can be a potent force, for both good and ill.
Notes

1. Throughout this report the term European Union refers to the pre-enlargement group of 12.

2. The collapse of trade with the former Soviet Union was, of course, a major adverse shock in the case of Finland, but it remains to be seen how quickly unemployment will fall.


4. This follows because flows between employment and non-participation, \((EN + NE)/E\), and between employment and unemployment, \((UE + EU)/E\), are larger in the United States than in Europe, but worker turnover, \(WT = (UE + NE + EU + EN + 2EE)/E\), is similar. These facts can only be reconciled if job-to-job movements, EE, are higher in Europe.

5. This analysis is borrowed from Cohen and Lefranc (1994). Note that the unemployment series used is consistent with the data on worker flows, and hence does not correspond exactly to the published OECD standardized unemployment rates.

6. Note that there is nothing in the methodology that prevents the calculated unemployment rate becoming negative if the labour force is declining \((n<0)\). Of course if unemployment did fall close to zero wages would be expected to rise, which would raise separations and reduce hirings. This is a warning that the methodology is useful only in understanding the proximate role of the various worker flows in the movements in unemployment. The large increase in the separation rate for Spain during the 1980s implied by the figure may seem odd given the high firing costs for regular workers there. But the introduction in 1984, and subsequent widespread use, of fixed-term contracts that are not subject to such costs has generated a high rate of total worker turnover. See Bentolila and Dolado (1994).

7. A couple of remarks are in order. First, individual jobs are not observed, merely the total employment level in a given plant. Since workers may be reallocated to new jobs within a plant, the measures understate the overall level of job creation and
destruction. Second, the lack of corresponding data on unfilled vacancies will lead to an underestimate of actual job creation (if the jobs are new) or an overestimate of job destruction (if they are a response to earlier dismissals or quits).

8. Strictly speaking, excess job turnover (EJ), defined as the difference between job turnover and the absolute value of net job change, is a better measure of job reallocation. Consider, for example, the following two cases. In the first all establishments contract by x%, while in the second x% of workers leave from half the establishments and get jobs in the other half. In both cases job turnover is x%, but only in the second case has there been genuine reallocation. Thus in an economy where all establishments together contract (or expand) by x%, job turnover will also be x%, while excess job turnover will be zero.

9. There are several potential pitfalls that arise in comparing job turnover rates across countries. First, it is important that the average job turnover rates refer to similar phases of the business cycle, given that the cyclical behaviour of gross job reallocation varies substantially with the cycle. Second, job turnover rates should be compared for the same sector (e.g. manufacturing or services) or for the whole economy, owing to the significant differences in job turnover rates across sectors. Lastly, comparisons need as far as possible to be made at the same organizational level: establishment, firm, or industry.

10. For instance, in some countries the takeover of a plant by another firm is treated as a simultaneous closure (job destruction) and entry (job creation), even though the jobs, and their occupants, are unchanged.


14. In the benchmark case of a Cobb-Douglas technology and competitive product markets, the labour share is a constant.


16. Since the tax systems in the United States and the United Kingdom have also become less progressive it follows a fortiori that the distribution of living standards has become more unequal.


19. For a survey of this literature see Bean (1994a).

20. When firms are price setters in the product market, rather than price takers, this schedule describes the joint determination of prices and employment, rather than making employment a function of the real cost of labour.

21. To decompose unemployment into its equilibrium and cyclical components we actually apply a statistical technique, known as the Hodrick-Prescott filter, which fits a smoothly evolving trend to the actual unemployment series. We then identify this smoothly evolving trend with the underlying equilibrium rate of unemployment, and the deviation of unemployment from this level as the cyclical component.

22. For symmetry we also apply the filtering technique to the United States data, although it has minimal effects on the results.

23. A regression of the change in inflation on our measure of cyclical unemployment gives a coefficient of −0.87 for Europe and −0.68 for the United States (the associated t-statistics are 3.74 and 4.21 respectively).

24. This ignores the fact that persistence mechanisms within the labour market may have converted (temporary) cyclical unemployment into more long-lasting equilibrium unemployment. See Section 3.7.
25. An increase in real interest rates also leads to increased discounting of the future in wage setting. The consequence of this may be an upward shift in the wage-setting schedule, WW, leading to a further increase in unemployment. This is the case in both standard efficiency wage models (see e.g. Shapiro and Stiglitz, 1984) and union bargaining models (see Manning, 1992).


28. We have also conducted some preliminary time series investigations relating movements in the separation and hiring rates for France (from Chapter 2) to productivity growth, g, and capacity utilization, cu. The latter variable captures cyclic influences on the separation and hiring rates, and ensures that any role for productivity growth is not simply the result of mismeasurement of underlying productivity due, for example, to labour hoarding during recessions. The regression result for the (male) separation rate is as follows (t-statistics in parentheses):

\[ s = 7.6 - 30.0g - 20.9cu \]
\[ (3.5) \quad (3.9) \]

Since more growth implies a lower separation rate this implies that the ‘capitalization’ effect dominates the ‘creative destruction’ effect. It is worth noting that neither lagged variables (including the lagged separation rate) nor other regressors such as an oil-price variable seem to be important.

With respect to the hiring rate, since the decision to open a job is forward-looking we use the growth rate of the capital stock, gk, rather than productivity growth. The result is:

\[ h = -1.7 + 2.92gk + 2.02cu \]
\[ (5.1) \quad (7.5) \]

Again neither lagged variables nor other regressors seem to be important.

29. For a lucid explanation of this thesis, see Krugman (1994).
30. See e.g. Katz and Murphy (1992) and Bound and Johnson (1992).

31. Econometric work by Nickell and Bell (1994) suggests that only about 20% of the rise of aggregate unemployment in the United Kingdom can be attributed to an exogenous shift in demand away from unskilled labour towards skilled labour.

32. For an eloquent statement of this view see Wood (1994).

33. See Bound and Johnson (1992), Katz and Murphy (1992) and Lawrence and Slaughter (1993).

34. For a fuller analysis see Bentolila and Bertola (1989).

35. For further discussion see Bean (1989).


38. See Bean (1994b).

39. See Blanchard et al. (1994).

40. For further details see OECD (1993, 1994a), and Gregg and Manning (1994).

41. See Emerson (1988, section 4) for more detailed information.

42. Even in more flexible labour markets, like the United States, large unionized firms are not granted freedom to 'employ at will': besides the protection accorded to specific categories against discriminatory discharge, even mass layoffs must generally occur by reverse seniority, so that labour shedding requires extensive reorganization of production (Piore, 1986). Moreover, experience rating of contributions to state unemployment insurance funds tends to penalize firms with highly volatile employment.

44. The data are drawn from Lazear (1990). Readers should be warned that Figure 4.1 provides only a very rough summary indication of the timing and direction of regulatory change in the countries considered. Lazear's data offer limited cross-sectional coverage and are not exhaustively documented by the author. No comparable data are available for the more recent period. The OECD (1993) reports maximum and minimum notice periods and severance pay for the same and other countries, noting, however, that service requirements to qualify for both vary tremendously across countries, so that Lazear's ten-year-tenure reference may be critical in determining the apparent stringency (if not the timing) of regulation.

45. See Bertola (1990) and OECD (1993).

46. See Bertola (1990).

47. See OECD (1993).

48. See Garibaldi et al. (1994).

49. The rank index is described in more detail in Bertola (1990).

50. See Gregg and Manning (1994).

51. See e.g. Lazear (1990).

52. See Gregg and Manning (1994).


54. See Bean, Layard and Nickell (1986).

55. For further discussion of the Swedish case see Lindbeck et al. (1994).
56. See e.g. Card (1992) for the impact of the minimum wage in California, or Machin and Manning (1994) for the impact of wages councils in the United Kingdom.

57. In this case the wage will lie somewhere between the 'outside option' (the wage they can get elsewhere, net of any mobility or retraining costs) of workers, and the 'outside option' (the cost, inclusive of any hiring and training costs, of alternative sources of manpower) of the firm, with the exact value depending on relative bargaining strength. Except by chance, the resulting *laissez faire* equilibrium can usually be improved upon by increasing the relative bargaining strength of one party or the other (Pissarides, 1990).

58. See Clark and Oswald (1994).

59. This is sometimes referred to as the 'hold up' problem, and it arises whenever sufficiently elaborate and enforceable contracts cannot be written over the appropriation of the returns from investment. For another example of the phenomenon see Grout (1984).

60. Well organized minorities can be sufficiently disruptive to be politically important, e.g. French farmers!


62. If skilled and unskilled labour are 'cooperant' in production (meaning that the marginal product of skilled labour increases with the level of unskilled employment), then the demand for skilled labour, and with it the skilled wage, will rise whenever employment of unskilled labour increases.

63. The argument that we build upon here is due to Fernandez and Rodrik (1992).

64. Specifically we assume a production function with a constant elasticity of substitution, where the elasticity is calibrated so as to generate the same degree of income inequality under *laissez faire* as is observed in the United States.
65. Even though a minimum wage may apply directly to only the low wage unskilled workers, it may have repercussions all the way up the income distribution as more skilled workers seek to restore differentials, or because the 'outside option' of a skilled worker may involve working as an unskilled one.

66. We are therefore assuming that only reason why the dispersion of wages in Europe is less than in the United States is the presence of labour market rigidities.

67. Although this may seem quite high for the top income groups, it should be remembered that these people will usually have substantial savings and other assets that they can draw upon. Also it is worth noting that although the income of an unemployed worker of a given skill level will be half that of an employed one, we still treat the unemployed one as belonging to the same quintile, i.e. the five divisions should be thought of as skill, rather than income, classes.

68. The transition rates between quintiles are taken from Quah (1994).

69. See, for instance, Drèze and Malinvaud (1994).

70. See Bentolila and Dolado (1994).

71. The thinking here is also relevant in the context of trade liberalization, and the transition process in the former communist countries of Eastern Europe.


73. See Romer (1987).

74. For simplicity, this ignores the fact that higher unemployment may also lead some of those without jobs to quit the labour force (the 'discouraged worker' effect).

75. See Blanchard and Summers (1987).
76. See Kiefer and Neumann (1989).

77. See Layard and Nickell (1986) and Dolado, Malo de Molina and Zabalza (1986).

78. Other factors, such as the elasticity of labour demand and the size of hiring and firing costs, are, of course, also important.

79. The analysis also ignores the repercussions on wages elsewhere as better-paid workers seek to restore differentials. This can lead to aggregate employment falling even though employment of the target group is unaffected or even benefits.

80. See Bazan and Martin (1991) who find a statistically significant effect upon youth unemployment (but no effect on adult unemployment).

81. See Bean (1994a) for discussion and a list of references.

82. See e.g. Nickell and Bell (1994).

83. See Newell and Symons (1986, 1987).

84. This argument is developed formally by Danthine and Hunt (1994).

85. Blanchflower and Oswald (1994) find that an elasticity of this magnitude applies to a wide range of countries, over a wide range of time periods.

86. See Nickell (1995).

87. See Heckman (1994). Similar evidence on the limited effectiveness of Swedish labour market programmes is provided by Edin and Holmlund (1989), who find that the probability of finding a job was not materially increased for participants.

88. The idea has been advanced and developed in particular by Snower (1994).
89. For a fuller analysis of this see Calmfors (1994) and Lindbeck et al. (1994).

90. Of course real wages need not be any lower in the long run, as the higher level of profitability will generate more investment which will push the economy's labour demand curve out. In fact if there are constant returns to scale it is easily shown that the final equilibrium involves no decline in real wages, and only an increase in employment.
References


Cohen, Daniel and Lefranc, Arnaud (1994), 'French Unemployment: Hysteresis or Adjustment to a New Equilibrium?', mimeo, CEPREMAP.


Emerson, Michael (1988), 'Regulation or Deregulation of the Labour Market', European Economic Review, 32, pp. 775-817.


Garibaldi, Pietro (1994), 'Job Creation and Job Destruction when Hiring and Firing Are Costly and Take Time', mimeo, Centre for Economic Performance, LSE.


Giersch, Herbert et al. (1994), 'Fighting Europe's Unemployment in the 1990s (Salzburg Manifesto)', mimeo, Institut fur Weltwirtschaft, Kiel.

Gregg, Paul and Manning, Alan (1994), 'Labour Market Regulation and Unemployment', mimeo, Centre for Economic Performance, LSE.


Krugman, Paul (1994), ‘Past and Prospective Causes of High Unemployment’, mimeo, MIT.


Manning, Alan (1992), 'Productivity Growth, Wage Setting and the Equilibrium Rate of Unemployment', Centre for Economic Performance, Discussion Paper No. 63, LSE.

Newell, Andrew and Symons, James S.V. (1986), 'The Phillips Curve is a Real Wage Equation', Centre for Labour Economics, Discussion Paper No. 246, LSE.


Piketty, Thomas (1994), ‘Social Mobility and Redistributive Policies’, mimeo, MIT.


High unemployment is widely regarded as the most important challenge facing European policymakers today. At unemployment rates of between 8% and 25% across the countries of the Union, Europe’s performance compares particularly unfavourably with that of the United States. But does this result from an inability to understand the fundamental causes of the problem and a failure to find the economic policies that will solve it? Or is there simply a lack of political will? CEPR’s fifth annual Monitoring European Integration report brings together a distinguished team of European economists to analyse unemployment and review the many policy choices that have been proposed.