



# IV

## Chronic Unemployment in the Euro Area: Causes and Cures

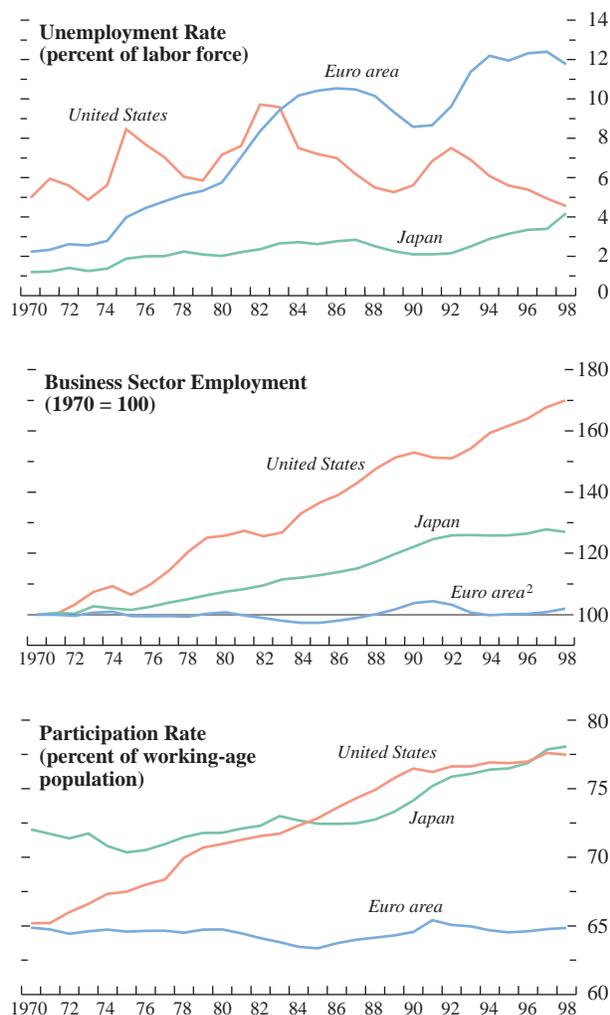
Despite some modest improvement since 1997, persistently high unemployment remains a major problem in Europe, especially among most of the economies that entered monetary union on January 1, 1999. The election of new governments in many of these countries in recent years and the change in the policy framework associated with the formation of monetary union have given renewed impetus to policy discussions and efforts to reduce joblessness and promote employment growth. The issues involved are wide-ranging: short-term concerns center on the recent slowdown of growth that has reduced the likelihood of a decline in cyclical unemployment in 1999 and threatens to exacerbate unsustainable global current account imbalances. In the medium and long run, the dramatic increase in the old-age dependency ratio makes the low employment ratios that go hand in hand with high European unemployment increasingly costly and unsustainable.

The precipitous deterioration in the labor market performance of the area over the past three decades is manifest in the strong trend increase in the unemployment rate, which rose from around half the average U.S. rate during the 1960s to more than twice the U.S. rate in the 1990s (Figure 4.1). The underlying weakness in the labor market performance of the euro area is even more striking when comparing private sector employment growth, although this partly reflects differences in growth of the labor force: nongovernment employment in the United States increased by 70 percent between 1970 and 1998, while the increase was well below 5 percent in the euro area over the same period. Finally, the relatively low participation rate in the euro area suggests that the unemployment rate actually underrepresents the magnitude of the problem, since government training, employment, and early retirement schemes have kept the unemployment rate artificially low, and many discouraged workers have simply dropped out of the labor force in response to low chances of finding employment.<sup>1</sup>

<sup>1</sup>Those countries that provide sufficient information to allow calculating a more comprehensive measure of “labor market slack” arrive at estimates of underutilization of labor greatly exceeding official unemployment rates. The following estimates have been reported in the context of the OECD *Jobs Study* follow-up: Netherlands (1996), 27 percent; Germany (1997), 23 percent; Belgium (1998), 23 percent. See OECD, *Economic Surveys: Netherlands* (Paris, 1997), Germany (Paris, 1998), Belgium/Luxembourg (Paris, 1999).

**Figure 4.1. Euro Area, the United States, and Japan: Comparative Labor Market Performance<sup>1</sup>**

Rising unemployment rates, stagnant private sector employment, and flat participation rates all document the weak record of job creation in the countries now forming the euro area.



Sources: OECD, Analytical Database; and IMF staff estimates.

<sup>1</sup> Although the euro area did not come into being until January 1, 1999, the term is used in this chapter, including in this and subsequent figures, to refer to the group of countries that now form the area, before as well as after the area's inception.

<sup>2</sup> Adjusted for increase in employment stemming from extending coverage to eastern Germany in 1991.

The remarkable failure of European economies to provide adequate levels of employment for the potential labor force presents a critical policy problem. It represents a major loss of output that—if avoided—could significantly raise domestic standards of living or provide resources for other purposes, such as international development aid. It also exacerbates fiscal pressures on account of lost tax revenue, transfer payments to the unemployed, and high rates of taxation for employed persons to finance transfers to the jobless, which contribute to distorting incentives. And it is a major source of inequality, both in current income and in opportunities for human development, which in turn threatens social cohesion.

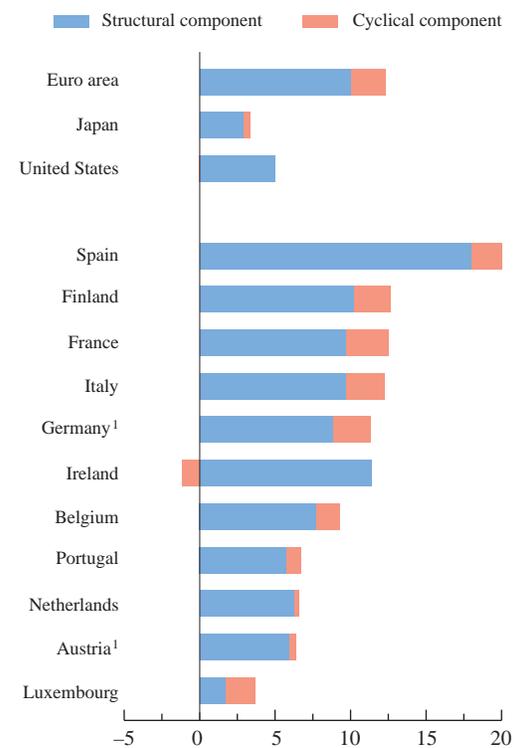
While there is general agreement that both the pecuniary loss and the nonpecuniary hardship entailed in European unemployment are high, it is difficult to quantify these social costs with precision. As a rough indication of the scale of the loss, it can be calculated that reducing unemployment from the current level of 11 percent to around 5 percent would increase GDP by around 4 percent.<sup>2</sup> Given prevailing tax rates and unemployment-related benefits, this would, apart from its other benefits, suffice to eliminate the remaining structural budget deficits in the area. Alternatively, the resulting fiscal improvements could be used to reduce the average income tax rate or value-added tax rate by substantial proportions. Black (or gray) market activity by the nominally unemployed tends to reduce the welfare cost of (official) unemployment, but it contributes little to alleviate the fiscal burden.

The large social costs of high European unemployment provide strong reasons for immediate remedial policy action. Because current unemployment comprises both a cyclical and a structural component, both structural and demand management policies have a role to play in restoring better labor market equilibrium. Such a two-handed approach is also warranted because the crisp conceptual distinction between structural and cyclical unemployment is blurred in practice by the strong persistence effects in European unemployment, which are discussed below (Box 4.1). But even though the precise split of total unemployment into its cyclical and structural components is controversial, most estimates of the split imply that the bulk of European unemployment is of a structural nature and thus cannot be eliminated by a cyclical recovery alone (with or without active demand management) (Figure 4.2). This

**Figure 4.2. Euro Area, the United States, and Japan: Cyclical and Structural Components of Unemployment, 1997**

(Percent of labor force)

Most unemployment in the euro area is structural rather than cyclical.



Source: IMF staff estimates.

<sup>1</sup>Unemployment as percent of dependent labor force.

These numbers are not strictly comparable, since the methods of calculating these “broad” unemployment rates differ among countries. Narrower estimates that cover a larger number of countries can be found in Table 2.18 of OECD, *Employment Outlook* (Paris, 1995)

<sup>2</sup>This assumes that the capital stock rises as required with the expansion of employment, and that the average productivity of the unemployed equals about two-thirds the average of the employed labor force.

### Box 4.1. Labor Market Slack: Concepts and Measurement

The unemployment rate is a key variable in macroeconomics, being used as a measure of the underutilization of labor, and as the principal indicator in the pursuit of high levels of employment, a declared objective of most governments.

#### *Actual Unemployment: Concept and Measurement*

But despite its importance, the definition and measurement of unemployment are neither very precise nor uniform among countries, so that a cross-country comparison of unemployment rates requires some adjustment to transform national measures into a reasonably standardized indicator.<sup>1</sup> Official national and standardized unemployment rates are shown in columns 1 and 2 of the *table*; differences between these rates can be substantial (over 3 percentage points) in some cases.

The standardized unemployment rates, which are based on labor market surveys, greatly improve comparability among countries, since official national measures are in some cases based on other information, such as the number of claimants of unemployment benefits. The standardized measure, however, still has its limitations as a measure of labor market slack, particularly since it excludes discouraged workers—persons without work who would like to work, but who have stopped looking actively for a job. It also takes no account of individuals in part-time employment who would prefer full-time jobs. Column 3 in the table shows estimates of these types of underutilization of labor, indicating considerable differences among countries. It can be argued that this measure of additional labor market slack, not captured by the unemployment rate, is still an underestimate since it excludes persons in early retirement, government training and employment schemes and invalidity or disability schemes.<sup>2</sup> Column 4 shows an even broader measure of unutilized labor: the percentage of people of working-age

<sup>1</sup>Standardized unemployment rates are computed and published by both the International Labor Office and the OECD.

<sup>2</sup>Early retirement and invalidity schemes have been used in the past in some European countries to ease elderly unemployed workers out of the labor force if their chances of finding employment were considered low.

not employed. This is clearly not an appropriate measure of labor market slack—many people of working age are without employment voluntarily and for good reasons (for example, students in tertiary education). But the international differences in nonemployment rates are nevertheless impressive: the rate is more than twice as high in Italy as it is in Switzerland, with the average for the euro area being well above the average for all advanced economies covered in the table, a reflection of high unemployment, low participation rates, or both.

#### *Unemployment: Cyclical and Structural*

Even more controversial than the overall measurement of labor market slack is the decomposition of the unemployment rate into “cyclical” and “structural” unemployment, a distinction that is important for analytical and policy purposes. The structural unemployment rate (SUR) is defined as the equilibrium rate of unemployment, or the rate of unemployment at which there is no tendency emanating from the labor market for inflation to either increase or decrease. This is why the SUR has also been called the nonaccelerating-inflation rate of unemployment (NAIRU). Unlike the cyclical component of unemployment, and abstracting from “hysteresis” effects (see below), the SUR cannot be reduced by macroeconomic policy without causing wage growth and thus inflation to increase.

#### *Unemployment Persistence and “Hysteresis”*

The distinction between structural and cyclical unemployment is complicated by unemployment persistence effects or “hysteresis.” The concept of unemployment hysteresis can be succinctly explained by reference to the Phillips curve. Abstracting from nonlabor market influences on inflation, the conventional Phillips curve can be written as

$$P = L(P) - a(U - SUR), \quad (1)$$

where

$P$  = rate of inflation

$L(\dots)$  = lag operator; that is,  $L(P)$  represents lagged value(s) of  $P$

$U$  = actual rate of unemployment

$SUR$  = structural rate of unemployment.

implies that structural reforms are required to restore reasonable labor market performance in Europe. Attempts to reduce unemployment by more than its cyclical component through demand management policies would risk the resurgence of macroeconomic imbalances (inflation or fiscal deficits) that plagued many advanced economies during the 1970s and 1980s.<sup>3</sup>

<sup>3</sup>Figure 4.2 also documents the considerable diversity among euro-area member countries with respect to both the severity of the unemployment problem and differences in cyclical positions, with unemployment rates ranging from under 4 percent (Luxembourg) to

As will be argued below, the key objective of structural labor market reform is to increase the flexibility of European labor markets—that is, to increase their responsiveness and ability to adapt rapidly to changes in the economic environment and conditions. This is of particular relevance and urgency for the 11 countries that entered monetary union on January 1, 1999, since the introduction of a common currency elimi-

close to 20 percent (Spain) in 1997. Nevertheless, most of these countries consider their prevailing rates of unemployment a major source of inefficiency and a priority policy problem, as recognized in the Amsterdam Treaty of 1997.

### Alternative Measures of Labor Market Slack 1997

(Percent of labor force)

| Country/Area         | Unemployment Rate       |                             | Additional Slack <sup>1</sup> | Nonemployment Rate <sup>2</sup> | Estimates of the NAIRU <sup>3</sup> |         |
|----------------------|-------------------------|-----------------------------|-------------------------------|---------------------------------|-------------------------------------|---------|
|                      | National definition (1) | Standardized definition (2) |                               |                                 | OECD (5)                            | IMF (6) |
| <b>Euro area</b>     |                         |                             |                               |                                 |                                     |         |
| Austria              | 6.4 <sup>4</sup>        | 4.4                         | ...                           | 32.8                            | 5.4                                 | 6.0     |
| Belgium              | 12.7                    | 9.2                         | 5.3                           | 43.0                            | 11.6                                | 7.7     |
| Finland              | 12.6                    | 13.1                        | 4.4                           | 36.4                            | 11.3                                | 10.2    |
| France               | 12.4                    | 12.4                        | 5.0                           | 41.2                            | 10.2                                | 9.7     |
| Germany              | 11.4 <sup>4</sup>       | 10.0                        | 1.5 <sup>5</sup>              | 36.5                            | 9.6                                 | 8.9     |
| Italy                | 12.3                    | 12.1                        | 4.9                           | 49.5                            | 10.6                                | 9.7     |
| Ireland              | 10.3                    | 10.1                        | 3.8                           | 43.9                            | 11.0                                | 11.4    |
| Luxembourg           | 3.6                     | 2.6                         | ...                           | 40.9 <sup>6</sup>               | ...                                 | 1.7     |
| Netherlands          | 5.5                     | 5.2                         | 6.2                           | 32.5                            | 5.5                                 | 6.3     |
| Portugal             | 6.8                     | 6.8                         | 1.9                           | 36.6                            | ...                                 | 5.8     |
| Spain                | 20.8                    | 20.8                        | 1.2                           | 51.0                            | 19.4                                | 18.0    |
| Average <sup>7</sup> | 12.4                    | 11.8                        | 3.3 <sup>8</sup>              | 42.0 <sup>9</sup>               | 11.0 <sup>10</sup>                  | 10.0    |
| <b>Other EU</b>      |                         |                             |                               |                                 |                                     |         |
| Denmark              | 7.7                     | 5.5                         | 6.4                           | 24.6                            | 8.4                                 | 8.5     |
| Greece               | 10.3                    | ...                         | 3.4                           | 45.2                            | 9.6                                 | 10.1    |
| Sweden               | 8.0                     | 9.9                         | 8.2                           | 29.3                            | 6.2                                 | 6.5     |
| U.K.                 | 6.9 <sup>11</sup>       | 7.0 <sup>11</sup>           | 3.8                           | 29.2                            | 7.2                                 | 7.0     |
| <b>Memorandum</b>    |                         |                             |                               |                                 |                                     |         |
| Norway               | 4.1                     | 4.1                         | 1.2 <sup>12</sup>             | 22.7                            | 4.5                                 | 4.5     |
| Switzerland          | 5.2                     | 4.2                         | ...                           | 21.9                            | 2.9                                 | 3.0     |
| United States        | 4.9                     | 4.9                         | 5.9                           | 26.5                            | 5.6                                 | 5.0     |

Source: OECD, *Economic Outlook* (Paris, December 1998), Tables A21 and A22; *Employment Outlook* (Paris, 1998), Table B; *Employment Outlook* (Paris, 1995), Table 2.18; OECD Analytical Databank; *World Economic Outlook* database.

<sup>1</sup>Discouraged workers and involuntary part-time workers as percent of the labor force, 1993.

<sup>2</sup>Working-age persons without employment as percent of the working-age population.

<sup>3</sup>Estimates can differ for a number of reasons, including—in some cases—different underlying unemployment concepts.

<sup>4</sup>Registered unemployed as percentage of dependent labor force.

<sup>5</sup>Excluding discouraged workers.

<sup>6</sup>1996.

<sup>7</sup>Labor-force-weighted.

<sup>8</sup>Excluding Austria and Luxembourg.

<sup>9</sup>Weighted by working-age population.

<sup>10</sup>Excluding Luxembourg and Portugal.

<sup>11</sup>Derived from the labor force survey.

<sup>12</sup>Excluding involuntary part-time workers.

(Box continues on next page.)

nates nominal exchange rates as a policy instrument that might have been used to help adjustment at the national level in the face of potential asymmetric shocks (Box 4.2).

## Underlying Causes

The seriousness of the European unemployment problem has long been recognized, and countless theoretical and empirical studies have been undertaken to determine its causes. Contributions to this research have come from national administrations, universities,

and think tanks, as well as from the IMF and other international or regional organizations—the European Commission, the International Labor Office, and especially the Organization for Economic Cooperation and Development (OECD), whose work this chapter draws on extensively. Although there is not complete consensus concerning the relative importance of the various underlying causes for the trend increase in the European unemployment rate, there is broad agreement on key elements and contributing factors. This conventional wisdom is summarized in the following sections and further illustrated in Box 4.3 using a conventional analytical framework.

**Box 4.1 (concluded)**

In this basic version, the SUR is identical to the NAIRU, the rate of unemployment at which inflation is stable.

Under full hysteresis, this equation changes to:

$$P = L(P) - a[U - L(U)]. \quad (2)$$

With this specification, the SUR will no longer be uniquely defined, while the NAIRU will equal the lagged unemployment rate. This implies that there will be a permanent trade-off between inflation and unemployment, but no permanent long-term equilibrium rate of unemployment; the latter will be the result of cumulative past shocks to the economy.<sup>3</sup>

An intermediate variant, including both a stable SUR and hysteresis (“persistence”) effects, can also be specified as follows:

$$P = L(P) - a(U - SUR) - b[U - L(U)]. \quad (3)$$

Introducing a persistence element into the Phillips curve results in a deviation between the SUR and the NAIRU. The latter will now be a linear combination of the SUR and the lagged actual unemployment rate:

$$NAIRU = a/(a + b)SUR + b/(a + b)L(U). \quad (4)$$

This opens the possibility that inflation increases even if  $U > SUR$ , which will happen if the actual unemployment rate drops too fast. This is why the hysteresis effect

is also referred to as “speed-limit” effect. The SUR and the NAIRU will be equal only in long-term equilibrium, when  $SUR$  equals  $L(U)$ . It is therefore justified to refer to the SUR and the NAIRU as the “long-run” and “short-run” structural (or equilibrium) rates of unemployment, respectively. Two alternative estimates of the NAIRU are presented in columns 5 and 6 of the table, indicating that considerable uncertainty attaches to such estimates.<sup>4</sup> The distinction between the SUR and the NAIRU is rarely made in practice in the context of policy formulation, reflecting the difficulties of measuring either concept with precision.

For the great majority of countries, equation (3), which embodies both the concept of a (constant or time-variant) SUR and persistence effects, gives the most satisfactory estimation results in terms of conventional regression statistics, dominating both the “pure” hysteresis version (2) and the version ignoring persistence effects (1).<sup>5</sup> Both Layard, Nickell, and Jackman and Scarpetta have shown that the size of parameter  $b$  in equation (3), which reflects the importance of speed-limit or hysteresis effects, is influenced by the same structural parameters and institutional characteristics (for example, wage setting variables, job protection legislation, benefit generosity) that help to determine the level of the structural unemployment rate (SUR).<sup>6</sup>

<sup>3</sup>See Olivier J. Blanchard and Lawrence H. Summers, “Hysteresis in Unemployment,” *European Economic Review*, Vol. 31 (February–March 1987), pp. 288–95.

<sup>4</sup>Apart from purely statistical uncertainty, alternative empirical measures of the NAIRU can differ for a number of reasons, including differences in estimation methods and unemployment concepts used. The two estimates of the NAIRU listed here actually underrepresent the degree of uncertainty about the “true” value of the NAIRU. A study by the International Labor Office—*World Employment 1996/97—National Policies in a Global Context* (Geneva, 1996), p. 51—compares NAIRU estimates for several large industrial countries and shows differences of up to 4 percentage points or more for some countries; only for Japan does the difference never exceed 1 percentage point.

<sup>5</sup>See Jorgen Elmeskov, “High and Persistent Unemployment: Assessment of the Problem and Its Causes,” OECD Economics Department Working Paper 132 (Paris, 1993), and Claude Giorno, Alain Deserres, and Peter Sturm, “Macroeconomic Policy and the NAIRU in European Economies,” European University Institute Working Paper RSC 97/50 (Florence, 1997) for a discussion of various econometric tests for hysteresis effects.

<sup>6</sup>See Richard Layard, Stephen Nickell, and Richard Jackman, *Unemployment—Macroeconomic Performance and the Labor Market* (Oxford and New York: Oxford University Press, 1991), and Stefano Scarpetta, “Assessing the Role of Labor Market Policies and Institutional Settings on Unemployment: A Cross-Country Study,” *OECD Economic Studies*, No. 26 (Paris, Spring 1996), pp. 43–98.

Perhaps the most prevalent, or “dominant,” view is that the current unsatisfactory situation in European labor markets is a result of the interaction of labor market rigidities and a series of adverse shocks since the early 1970s. Both these elements are essential to a satisfactory explanation of the current predicament: structural rigidities alone fail to explain developments in Europe, since by most standards these rigidities were already largely in place during the 1960s, when the European unemployment rate was significantly lower than that of the United States. And the negative shocks hitting the European economies in the 1970s do not by themselves provide a satisfactory explanation

of the persistent deterioration in Europe’s labor market performance, since similar shocks hit other advanced economies (the United States and Japan) without causing comparable trend increases in unemployment rates (see Figure 4.1, top panel).<sup>4</sup>

<sup>4</sup>An example of the “dominant view,” explaining the European unemployment situation with a sequel of supply and demand shocks interacting with structural labor market rigidities, can be found in Olivier J. Blanchard and Jean-Paul Fitoussi, *Croissance et chômage* (Paris: La Documentation française, 1998). The policy response proposed by the authors is a two-handed approach employing both structural reform and growth-oriented demand management.

### A Sequence of Adverse Shocks

The adverse shocks include the fall in productivity growth that started at the beginning of the 1970s; the large deterioration in the terms of trade, stemming from the steep oil price increases in 1973 and 1979;<sup>5</sup> and the rise in real interest rates, especially at the long end of the term structure, at the beginning of the 1980s (Figure 4.3). While the deterioration in the terms of trade has been partially and gradually reversed since 1985, the slowdown in productivity growth persists,<sup>6</sup> and the rise in the real interest rate—compared with rates prevailing during the low unemployment decade of the 1960s—has only recently shown signs of abatement, albeit partly for cyclical reasons.

What these shocks had in common was that they undermined the European economies' ability to sustain real wage growth at the rate experienced earlier in the postwar period, in particular during the exceptional growth performance between 1960 and 1973 (the "golden age"). While—other things remaining equal—the deceleration in productivity growth necessitated "only" a reduction in the growth rate of real wages to maintain full employment, the deterioration in the terms of trade entailed by the steep increase in the price of oil and other raw materials during the 1970s actually warranted a decline in the level of real wages. Finally, the enduring rise in real interest rates observed in the 1980s implied—all else remaining equal—a decline in the equilibrium capital-labor ratio and thus the (equilibrium) real wage.<sup>7</sup>

The initial labor market reaction to the supply shocks was similar in the United States and Europe: the first oil shock led to a large increase in cyclical unemployment, as effective demand slumped on account of both reduced purchasing power of consumers and a fall in investment in reaction to greatly increased uncertainty and reduced future growth expectations.<sup>8</sup> However the long-term labor market repercussions differed drastically between Europe and the United

<sup>5</sup>While the two oil shocks were its most conspicuous manifestation, the deterioration in the terms of trade was more broadly based. This deterioration has been fully reversed for Europe since 1985, but not for the United States, reflecting the real depreciation of the U.S. dollar vis-à-vis the European currencies since 1970.

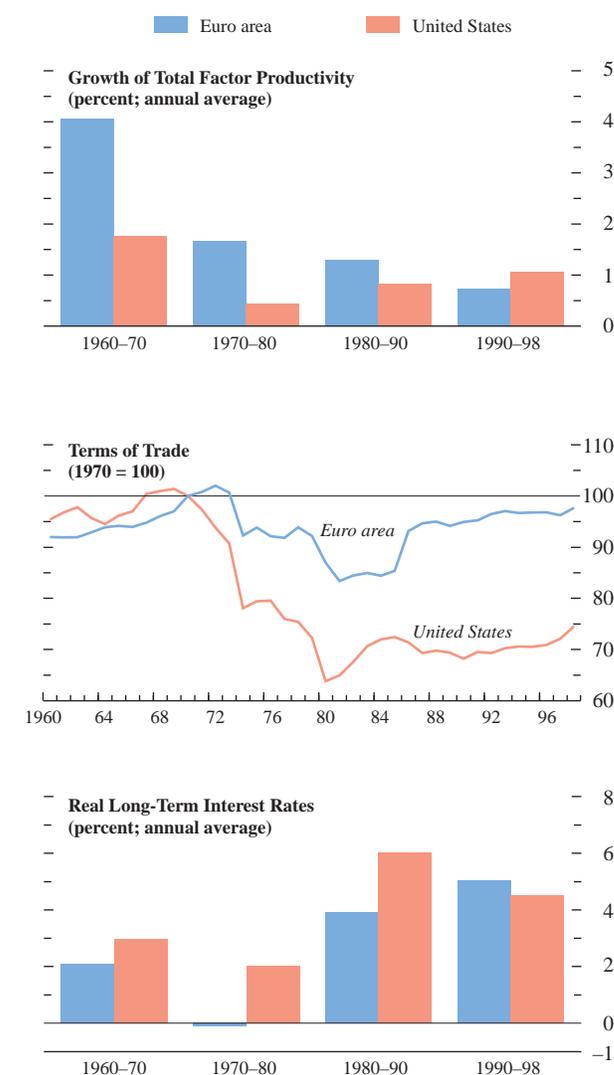
<sup>6</sup>There is an unresolved puzzle concerning the apparent contradiction of the slowdown in the measured growth of total factor productivity and the widely perceived acceleration of technical change, related to advances in information technology and computerization. A possible explanation for the "puzzle" lies in the difficulty of correctly measuring productivity in the service sector, which now accounts for well over 60 percent of aggregate output in the advanced countries.

<sup>7</sup>Why the reversal of some of these adverse shocks has so far failed to restore previous low levels of unemployment is explored below in the discussion of unemployment persistence.

<sup>8</sup>Inflation outcomes did, of course, differ among countries depending on policies adopted in the face of inflationary pressures associated with the increase in costs. See Chapter VI, "The Rise and Fall of Inflation—Lessons from the Postwar Experience," in the October 1996 *World Economic Outlook*, pp. 100–31.

**Figure 4.3. Euro Area and the United States: Productivity Growth, Terms of Trade, and Real Interest Rates**

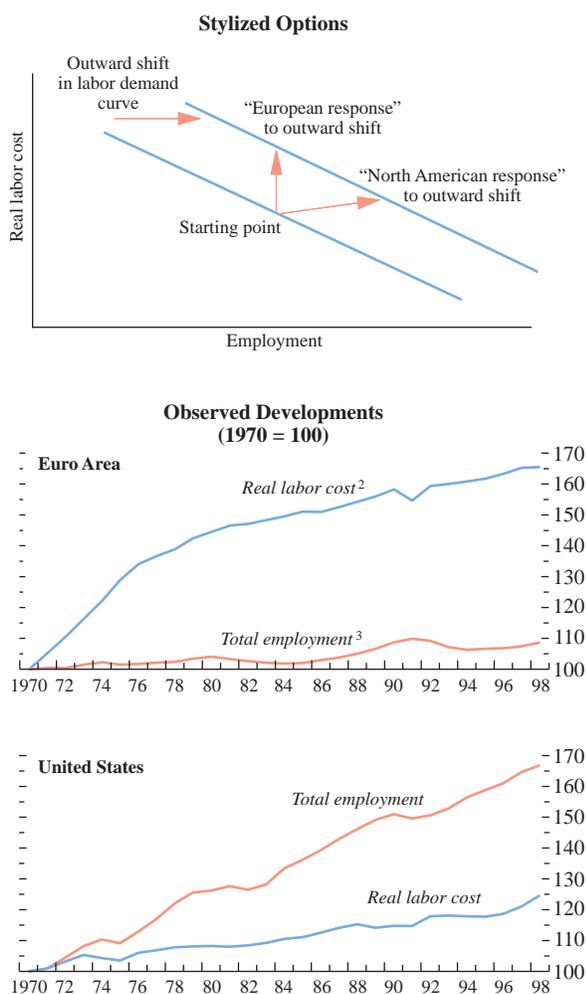
Over recent decades, major adverse shocks affected both the United States and the countries now forming the euro area.



Sources: OECD, Analytical Database; and IMF staff estimates.

**Figure 4.4. Euro Area and the United States: Changes in Real Labor Cost and Employment<sup>1</sup>**

The downward-sloping labor demand schedule implies a trade-off between the level of employment and real labor costs.



Sources: OECD, Analytical Database; and IMF staff estimates.

<sup>1</sup>Real labor cost is compensation per employee in the non-government sector, divided by the GDP deflator.

<sup>2</sup>1991 value affected by extension of coverage to include eastern Germany.

<sup>3</sup>Adjusted for increase in employment associated with extension of coverage to eastern Germany in 1991.

States: while real wage growth lagged behind labor productivity increases in the United States—as required to maintain full employment in the face of adverse supply shocks and the growth of the labor force—the real cost of labor in Europe continued to increase in line with labor productivity growth. In other words, the positive effect on aggregate labor demand from rising labor efficiency was “used” in Europe to raise real wages (with little growth in employment), while in the United States it translated primarily into rising employment, with only a modest increase in the real wage (Figure 4.4).

The difference in the willingness of labor to accept the slowdown—or even decline—in real wages required to maintain full employment in the light of the various adverse supply shocks had different and partly offsetting effects on investment and capital formation. High labor costs encouraged capital-intensive production in those areas where employment remained profitable despite high labor costs, leading to a faster rise in capital-labor ratios of actual employment in Europe than in the United States. However, the high cost of labor in Europe also made many activities in Europe unprofitable, reducing investment in these areas, a development that has been characterized as “capital shortage” by some analysts.<sup>9</sup> Since the marginal productivity of low-skilled labor did not match high real wage demands, this led to a rise in structural unemployment in Europe. And because profitable employment was not feasible for this segment of the labor force at existing effective real wage floors, business did not install physical capital to provide employment for these workers. This mechanism is depicted in Figure 4.5, where the unemployment rate is plotted against an aggregate capacity utilization index.<sup>10</sup> While the relationship between the output gap and the unemployment rate is clustered around a stable “Okun curve” for the U.S. economy, the unemployment rate associated with full (or “normal”) degrees of capacity utilization has steadily crept upward in Europe—another way of saying that structural unemployment has risen.

These developments are clearly reflected by changes in unemployment rates in the United States and

<sup>9</sup>The “capital shortage” approach to explaining European unemployment is discussed in Jacques H. Drèze, and Charles R. Bean, eds., *Europe’s Unemployment Problem* (Cambridge, Massachusetts: MIT Press, 1991). For an alternative view, see the discussion of the relation between capital formation and employment in Box 4 of the May 1995 *World Economic Outlook*, pp. 32–33. The key flaw in the “capital shortage” approach is that it assumes that excess real wage claims can be offset by increased productivity achieved through more investment and increased capital intensity. It ignores the fact that such investment would be unprofitable and thus not forthcoming. In contrast, lower real wages create profitable investment opportunities and thus additional jobs.

<sup>10</sup>This diagram is robust with respect to the measurement of capacity utilization, including measures based on deviations of output from trend, output gaps calculated using production functions, or survey-based indicators of capacity utilization.

Europe, which increased by roughly similar amounts in the wake of the two oil shocks of 1973 and 1979, albeit from a lower initial level in Europe.<sup>11</sup> However, in the subsequent recoveries the unemployment rate fell back close to its preshock level in the United States, while the European unemployment rate showed a distinct ratchet effect, with each successive unemployment trough above that of the previous cycle.

Identifying the causes underlying this different pattern of labor market behavior is crucial to understanding and remedying the current European labor market problem. At a basic level, the reason for the different labor market outcomes has already been referred to above: it is the “choice” in Europe to use ongoing productivity increases and the concomitant outward shift of the aggregate labor demand curve to raise real wages rather than to increase the number of employed persons. But this is more a description of what happened than an explanation. The pertinent question is why the outward shift in Europe’s aggregate labor demand curve has primarily translated into real wage growth in the face of rising unemployment, while in America it has fueled rapid employment growth.

### Labor Market Rigidities

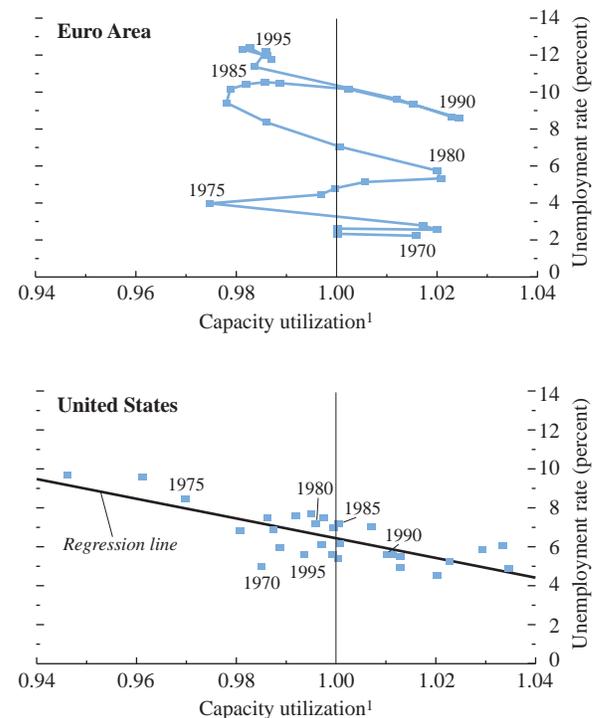
The contrasting labor market developments in Europe and the United States can be linked to differences in institutional arrangements and regulations that affect the functioning of the labor market. Potential explanatory factors include differences in the wage-bargaining framework, the severity of various types of labor market regulations (job protection legislation, the flexibility of work arrangements), and the generosity of income replacement in unemployment benefit or welfare schemes. European economies are far from homogeneous with respect to many of these characteristics. It is therefore necessary to supplement the aggregate analysis with country-specific information.

A key feature of the institutional frameworks surrounding *the wage formation process* is the degree of centralization of the decision process, and in this respect large differences can be observed among advanced economies. At one end of the spectrum are countries like the United States (and Canada), where wage formation is highly decentralized, both across industries and even within individual firms. At the other end of the spectrum are some Scandinavian countries as well as Belgium and Austria, where highly centralized wage negotiations determine wage

<sup>11</sup>This is in stark contrast to events in Japan, where the unemployment rate varies little in response to external shocks and cyclical fluctuations. This difference in labor market behavior is even more evident from recent events in Japan, where several years of output stagnation and a record negative output gap have caused an increase in the (open) unemployment rate of only 1 percentage point. This implies a rising amount of hidden unemployment in the Japanese economy that may be difficult to sustain in the future.

**Figure 4.5. Euro Area and the United States: Unemployment and Capacity Utilization**

A rising unemployment rate at normal rates of capacity utilization indicates increasing structural unemployment in the euro area, but not in the United States.



Sources: OECD, Analytical Database; and IMF staff estimates.  
<sup>1</sup>“Normal” utilization equals 1.

### Box 4.2. EMU and European Labor Markets

On January 1, 1999, following a decade of preparation, 11 of the 15 member countries of the EU entered the third and final stage of the process leading to the formation of the European Economic and Monetary Union (EMU).<sup>1</sup> As of this date the exchange rates between the currencies of the participating countries were irrevocably fixed in relation to the new single currency, the euro, and the newly formed European Central Bank (ECB) has taken over responsibility for monetary policy in the euro area. As a consequence, individual member countries no longer have at their disposal either monetary policy or exchange rate policy. This implies that country-specific monetary conditions can no longer cushion differences in cyclical positions among euro area member countries, nor help them to adjust to asymmetric shocks (shocks that affect euro area countries with different intensities). In contrast, disruptive exchange rate shocks can no longer occur as a result of diverging national economic policies or sudden currency substitution within the area. In addition to foregoing national monetary policies, member countries' use of fiscal policy for demand management is constrained by the Stability and Growth Pact (SGP), which imposes financial penalties on countries exceeding a 3 percent fiscal deficit limit.<sup>2</sup> Given that structural deficits in member countries remain large, the SGP may actually constitute a binding constraint on the operation of built-in stabilizers in case of a near-term weakening of activity in the area.

Although nominal exchange rate changes cannot substitute for adjustments in the real economy that are called for by asymmetric shocks, they may in many cases facilitate

<sup>1</sup>Of the four EU countries not joining the monetary union on January 1, Greece did not meet the entry requirements, while Denmark, Sweden, and the United Kingdom decided not to join at this stage. For a detailed background discussion of the formation and operation of EMU and its likely implications for the world economy, see Chapter III of the October 1997 *World Economic Outlook*, "EMU and the World Economy," pp. 51–77, and Chapter V of the October 1998 *World Economic Outlook*, "Economic Policy Challenges Facing the Euro Area and the External Implications of EMU," pp. 123–57.

<sup>2</sup>The SGP and its implications for the conduct of fiscal policy in the EU are discussed in Box 3 of the October 1997 *World Economic Outlook*, pp. 58–59, and Box 5.2 of the October 1998 *World Economic Outlook*, pp. 136–7.

the transition to a new equilibrium. Thus an overvaluation of a currency may be corrected more rapidly (and more efficiently) through a nominal depreciation than by relative domestic deflation, especially if inflation abroad is low.<sup>3</sup> But within the euro area, real exchange rate changes required will now have to be achieved by real wage changes directly, rather than indirectly via changes in the nominal exchange rate. The need for an efficient correction of present or future macroeconomic imbalances specific to member countries of the euro area will therefore have to be met through the flexibility of the member countries' economies to a larger degree than before, although lack of flexibility is generally recognized to have been a key factor in Europe's adjustment difficulties prior to monetary union.

Indeed, high structural unemployment in euro area countries as well as the high regional concentrations of unemployment within several of them strongly suggests that labor market flexibility in the area is not currently up to this requirement. Likewise, the geographic mobility of the labor force is low, not only among but also within member countries, reducing the likely role of migration as a labor market adjustment mechanism.<sup>4</sup> This implies a risk that asymmetric shocks will entail prolonged depressed employment in the country or region most adversely affected. With monetary union and the SGP limiting the ability of individual countries to respond to such a situation through demand management,

<sup>3</sup>Whether increased flexibility in labor and goods markets can substitute for the dampening effects of countercyclical demand management on business cycles is less clear: in fact, empirical evidence suggests that cyclical fluctuations in countries with more flexible markets may well be larger on average than in countries with highly regulated markets.

<sup>4</sup>Apart from labor market regulations, language (and—more generally—cultural) barriers as well as high transaction costs in the housing market (linked to regulation and taxation) also contribute to low regional and international labor mobility in the euro area. Labor mobility among different states of the United States has been estimated to be three times larger than labor mobility between France and Germany; see Barry Eichengreen, "Labor Markets and European Monetary Unification," in Paul R. Masson and Mark P. Taylor, eds., *Policy Issues in the Operation of Currency Unions* (Cambridge and New York: Cambridge University Press, 1993), pp. 130–62.

levels and relatives for the great majority of workers.<sup>12</sup> Other European countries are located at some intermediate position in the spectrum.

<sup>12</sup>Institutions are not necessarily constant over time: some countries, like Sweden, that used to have highly centralized wage setting have switched to increasingly decentralized bargaining, while the degree of centralization seems to have risen in other countries (for example, Ireland). An extensive discussion of changes in industrial relations and the factors underlying them can be found in ILO, *World Labour Report 1997–98: Industrial Relations, Democracy and Social Stability* (Geneva: International Labor Organization, 1997).

There are various dimensions to the concept of "centralization" in wage bargaining. One measure is the extent of unionization of the labor force ("union density").<sup>13</sup> Another relevant criterion is whether the wage negotiations are carried out at the enterprise, sectoral, or national level, with an additional important aspect being the degree of coordination, on both

<sup>13</sup>See Ezio Tarantelli, "The Regulation of Inflation and Unemployment," *Industrial Relations*, Vol. 25 (Winter 1986), pp. 1–16.

the country's inability to alleviate the problem by adjusting its nominal exchange rate may lead voters to blame the monetary union for the result, putting EMU's success at risk.<sup>5</sup>

The potential size of the burden imposed on member countries by the loss of country-specific monetary and exchange rate policies will partly depend on the likelihood of asymmetric shocks in the area. This issue has been explored in a previous issue of the *World Economic Outlook*.<sup>6</sup> The broad picture emerging from this analysis is that the asymmetry of shocks was more pronounced in the euro area than in the continental United States over the period 1962–88. Within the euro area, shocks were more symmetric for a core group of countries comprising Germany, France, Austria, and the Benelux countries than for countries at the periphery (Finland, Ireland, Italy, Portugal, and Spain). The relevance of this past experience would, however, seem limited because the establishment of monetary union has eliminated a major cause of asymmetric shocks in the area—inconsistent monetary policies and resulting exchange rate fluctuations.

Even in the absence of asymmetric shocks, differences in the sensitivity of national economies to a unified monetary policy may cause problems, owing to differences in monetary transmission mechanisms among EU countries, an issue that has been investigated by Ramaswamy and Sloek.<sup>7</sup> Their conclusion is that, while there are differences in the real effects of monetary policy, they do not seem to be very large. Furthermore, such differences can be expected to diminish over time as banking systems and financial instruments within the euro area tend to become more similar. Because monetary policy af-

<sup>5</sup>It has been noted that this risk is especially large during stage 3 of EMU because national currencies will still be in circulation, making it less costly for member countries to reverse monetary union membership; see Norbert Berthold, Rainer Fejn, and Eric Thode, "Real Wage Rigidities, Fiscal Policy, and the Stability of EMU in the Transition Phase," IMF Working Paper (1999, forthcoming).

<sup>6</sup>See Box 4 in the October 1997 issue and the various sources cited therein.

<sup>7</sup>See Ramana Ramaswamy and Torsten Sloek, "The Real Effects of Monetary Policy in the European Union: What Are the Differences?" *IMF Staff Papers*, Vol. 45 (June 1998), pp. 374–96.

fects different sectors of the economy differently, the impact of monetary policy on regions within the euro area will also depend on changes in the pattern of regional specialization that may result from the completion of a single European market. Whether this will increase or decrease the likelihood of asymmetric shocks is not clear.<sup>8</sup>

Whatever the importance of these factors, there is no doubt about the desirability of strengthening the ability of both goods and—especially—labor markets in the euro area to adjust more rapidly to economic change. This is an important objective in its own right, and the formation of monetary union has increased the urgency of reforms to achieve it. In the run-up to monetary union, member countries have made unexpectedly rapid progress toward fiscal consolidation and price stabilization. Is it possible that the implementation of monetary union will provide a similar stimulus to accelerate the implementation of overdue structural reforms to combat Europe's chronic unemployment problem?<sup>9</sup>

There are forces at work pulling in opposing directions. On the one hand, increasing competitive pressures generated by the accelerating trend toward a single market and globalization will have significant repercussions for enterprises, making the need for more flexible labor markets

(Box continues on next page.)

<sup>8</sup>For opposing views on this issue, see Paul R. Krugman, *Geography and Trade* (Leuven, Belgium: Leuven University Press, 1991); Antonio Fatás, "EMU: Countries or Regions? Lessons from the EMS Experience," *European Economic Review*, Vol. 41 (April 1997), pp. 743–51; and Alan C. Stockman, "Sectoral and National Aggregate Disturbances to Industrial Output in Seven European Countries," *Journal of Monetary Economics*, Vol. 21 (March–May 1988), pp. 387–409.

<sup>9</sup>Some optimism seems justified, based on the experience of deregulation in the areas of transportation, telecommunications, and financial services. In the process of completing a single European market, member countries' commitment to the objective of European integration (and outside pressure from Brussels) helped governments to overcome opposition from well-organized and powerful interest groups and to successfully reduce the privileges and protection from competition that these groups had enjoyed. The European Commission played an active and constructive role in this process, as did peer pressure among EU members.

the employees' (union) and on the employers' sides.<sup>14</sup> Even if bargaining is carried out predominantly at the enterprise or plant level, the resulting wage determination process can be thought of as centralized if these negotiations are accompanied by a high degree of coordination among unions, employers, or

<sup>14</sup>In most countries the degree of coordination on the unions' and the employers' sides seem highly correlated: the more centralized the union movement, the closer the coordination between employers in the wage bargaining process.

both. Table 4.1 shows for the period 1980–94 the classification of 18 advanced economies according to the two criteria of negotiating level and degree of coordination.<sup>15</sup>

The relationship between the degree of centralization in wage formation and labor market outcomes is

<sup>15</sup>Changes in bargaining structures since 1994 would alter the classification of some countries in Table 4.1. For example, in Australia there has been a shift toward wage determination at the enterprise level and toward an intermediate degree of coordination.

**Box 4.2 (concluded)**

evident and inducing a change in both institutions and behavior.<sup>10</sup> Indeed, EU member states have started to take pertinent action, even though reforms to date have been less determined and comprehensive than would appear desirable. On the other hand, unlike in the case of fiscal consolidation and price stabilization, the cause of comprehensive and deep labor market reform seems to lack similarly powerful advocacy and political support among member country governments and in the European Commission. In fact, there is a risk that the increasing competitive pressure may induce efforts to shelter labor markets against perceived “unfair competition” and “wage dumping,” which could lead to increased regulation and the introduction of minimum standards.<sup>11</sup> While uniform labor standards make eminent sense in some areas (such as job safety and health legislation), they can be detrimental to full employment when aimed at suppressing effective competition—as in the imposition of a uniform minimum wage on regions with differing levels of productivity and costs of living.<sup>12</sup> It is important to guard against such risks in the application of the enlarged competencies for employment policies at the EU level under the employment chapter of the 1997 Amsterdam Treaty.

As far as wage bargaining is concerned, one way to achieve a rapid reduction in unemployment in Europe

<sup>10</sup>See Jeffrey A. Frankel and Andrew K. Rose, “The Endogeneity of the Optimum Currency Area Criteria,” *The Economic Journal*, Vol. 108 (1998), pp. 1009–25.

<sup>11</sup>For a general and a country-specific discussion of such efforts, see John T. Addison and W. Stanley Siebert, eds., *Labor Markets in Europe: Issues of Harmonization and Regulation*, (Manchester: Dryden Press, 1997).

<sup>12</sup>Doing so would raise unemployment in low-productivity regions, which in turn would lead to advocacy of more EU development and regional assistance. Financing these programs is also likely to restrain the economic dynamism of the remaining areas. German political and economic unification provides an example of an extreme case of wage and welfare benefit unification. The extension of the west German collective bargaining system to the eastern Länder, aiming at swift wage equalization, turned out to be harmful for east German employment: wage determination was largely decoupled from productivity and turned east Germany into a high-cost location. As a result, more and more east German firms tried successfully to get out of the collective wage-bargaining system. Still, the east German unemployment rate remains almost twice as high as that of west Germany.

would be to remove barriers that prevent employers and employees from reaching mutually beneficial employment and wage contracts at the local level.<sup>13</sup> Where the resulting wage level is deemed unsatisfactory on equity grounds, it could be supplemented by in-work benefits, financed from the resulting reduction in passive transfer payments.<sup>14</sup> The case for decentralized wage policy is reinforced by the complex and comprehensive processes of reform in business organization going on in many enterprises. The wage-bargaining system needs to provide sufficient scope and opportunity to agree on appropriate idiosyncratic employment contracts, covering both wages and working conditions, given the increasing heterogeneity of enterprise needs and the diverse preferences of employees.<sup>15</sup> Shaping pay systems in a more performance-oriented way, organizing working hours more flexibly, forging agreements and contracts on guaranteeing employment and location security, and adopting measures for a long-term oriented manpower policy—all of this can be done most effectively at the enterprise level.<sup>16</sup>

<sup>13</sup>An alternative approach of highly centralized wage bargaining (often embedded in an incomes policy framework) has contributed to *aggregate* real wage restraint in some smaller economies (Austria, Ireland, the Netherlands) but may be difficult to apply to larger, more heterogeneous entities. It may also be less well-suited to facilitating changes in *relative* wages that would be conducive to better labor market performance.

<sup>14</sup>For a detailed discussion of this issue, see OECD, *Making Work Pay: Taxation, Benefits, Employment and Unemployment* (Paris, 1997); and Robert Haveman, “Reducing Poverty While Increasing Employment: A Primer on Alternative Strategies and a Blueprint,” *OECD Economic Studies*, No. 26 (Paris, 1996/I), pp. 7–42.

<sup>15</sup>See Paul Milgrom and John Roberts, “Continuous Adjustment and Fundamental Change in Business Strategy and Organization,” in *Trends in Business Organization: Do Participation and Cooperation Increase Competitiveness?* Horst Siebert, ed., (Tuebingen: J.C.B. Mohr, 1995), pp. 231–58; also see Frank Bickenbach and Rüdiger Soltwedel, “Produktionssystem, Arbeitsorganisation und Anreizstruktur: Der Paradigmenwechsel in der Unternehmensorganisation und seine Konsequenzen für die Arbeitsmarktverfassung,” in *50 Jahre Soziale Marktwirtschaft*, edited by Dieter Cassel (Stuttgart: Lucius & Lucius, 1998), pp. 491–533.

<sup>16</sup>The experience in the United Kingdom provides a useful example of possible reductions in both the overall unemployment rate and its regional concentration following the decentralization of wage negotiations; see OECD, *Economic Survey of the United Kingdom* (Paris, 1996).

nonlinear: at low degrees of centralization (for example, in the United States), outcomes approximate those to be expected under competitive market conditions, with market-clearing levels of real wages. As the degree of centralization rises, outcomes show a tendency toward higher real wages and increased structural unemployment, reflecting increased union (or “insider”) power. However, in countries with high degrees of unionization and centralization of wage bargaining (or with a high degree of coordination of local and regional bargaining), these negative externalities of ex-

cessive real wages (in the form of unemployment) seem to be taken into account in the bargaining process, and labor market outcomes reflect real wage moderation and lower unemployment. This stylized “hump-shaped” relationship between the centralization of wage bargaining and labor market outcomes helps to explain the superior labor market outcomes in countries where wage bargaining is either decentralized (for example, the United States) or highly centralized (for example, Austria and Ireland), while bargaining outcomes in many European countries in an

**Table 4.1. Wage Bargaining Structure in 18 Industrial Countries, 1980–94<sup>1</sup>***(Negotiating level and degree of coordination)*

| Degree of Coordination | Predominant Negotiating Level <sup>2</sup> |   |                         |
|------------------------|--|---|-------------------------|
|                        | National                                   | Sectoral  | Enterprise/<br>plant    |
| <b>Low</b>             |  | New Zealand →<br>United Kingdom →   | United States<br>Canada |
| <b>Intermediate</b>    | Sweden →                                   | Belgium<br>Denmark<br>France<br>Netherlands<br>← Portugal<br>Spain<br>Switzerland |                         |
| <b>High</b>            | Finland →                                  | Australia<br>Austria<br>Germany<br>← Norway                                       | Japan                   |

Source: OECD, *Employment Outlook* (Paris, 1994), Table 5.1.<sup>1</sup>Changes in the bargaining structure since 1994 are not reflected in this table.<sup>2</sup>←, → Arrows indicate direction of change during the reference period.

intermediate position (for example, France and Spain) are far less satisfactory.<sup>16</sup>

An additional complication in assessing the centralization of wage formation is the custom (in many European countries) of “administrative extension” of wage agreements. This describes a situation in which the results of wage negotiations reached for a subset of the labor market are applied to other parts of the economy not directly involved in the negotiations. In euro-area countries there is often a large difference between the number of workers represented by the unions carrying out the wage negotiations and the number of workers to which the negotiated results apply (Figure 4.6). The obvious danger of such a framework is that the interests of both employers and employees who are not involved in the bargaining process are not taken sufficiently into account.<sup>17</sup> While this seems indeed to entail high rates of unemployment in countries like Belgium, France and Spain, this risk seems to be reduced in countries like Austria and the Netherlands that use a national consensus approach to wage determination.

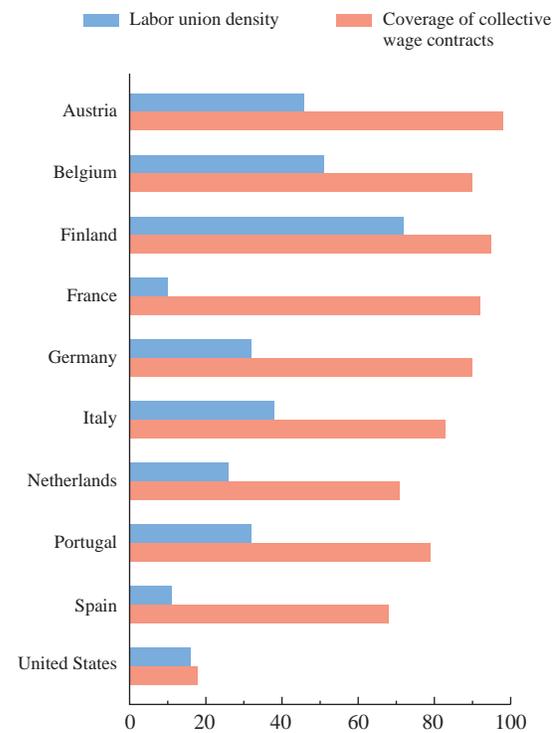
The concept of labor market flexibility is not only linked to the wage formation process but also

<sup>16</sup>The “hump-shaped” relationship was originally discerned by Lars Calmfors and John Driffil, “Bargaining Structure, Corporatism and Macroeconomic Performance,” *Economic Policy*, No. 6 (April 1988), pp. 13–61.

<sup>17</sup>The positive correlation between the strictness of job protection legislation and “excess coverage” of wage contracts (that is, administrative extension of limited negotiations) suggests that insiders protected by such legislation press for administrative extension of wage agreements to prevent underbidding by outsiders. See Jorgen Elmeskov, John Martin, and Stefano Scarpetta, “Key Lessons for Labour Market Reforms: Evidence from OECD Countries’ Experience,” *Swedish Economic Policy Review* (1999, forthcoming).

**Figure 4.6. Euro Area and the United States: Labor Union Density and Coverage of Collective Wage Contracts<sup>1</sup>***(Percent of dependent employment)*

In all euro-area countries, the coverage of collective wage agreements greatly exceeds labor union representation.

Sources: OECD, *Employment Outlook* (Paris 1994, Chart 5.7; and 1997, Chart 3.1).<sup>1</sup>All data are for 1990, except for France (1985), Germany (1992), Italy (1992), and Portugal (1991).

**Box 4.3. Labor Markets—An Analytical Framework**

The discussion in the text of labor market performance in the countries of the euro area over the past quarter century can be illustrated using an analytical framework developed and popularized by Layard, Nickell, and Jackman, which is summarized in the *figure*.<sup>1</sup> The key element in this framework is the “wage-setting schedule” (*WS*), which shows how the real wage acceptable to labor (adjusted for trend growth in labor efficiency) varies with the unemployment rate (measured from the vertical full employment line [ $e = 1$ ] towards the left). The wage-setting curve implies that the higher is the unemployment rate, the lower will be the real wage acceptable to labor, reflecting the fact that the real wage is the opportunity cost of leisure—voluntary or involuntary. The *WS* schedule thus differs from the conventional labor supply curve, every point on which implies zero unemployment.<sup>2</sup> The size of the unemployment wedge between the conventional labor supply curve and the wage-setting curve (at any given real wage) is determined by the location of the wage-setting schedule, which in turn will be influenced by a number of structural characteristics and institutional arrangements—in particular, the degree of trade union monopoly power, the generosity of unemployment benefits, the severity of conditions and controls under which a given level of benefits is paid, the stringency of job protection legislation, and so on.<sup>3</sup> Changes in any of these determinants will shift the wage-setting schedule.

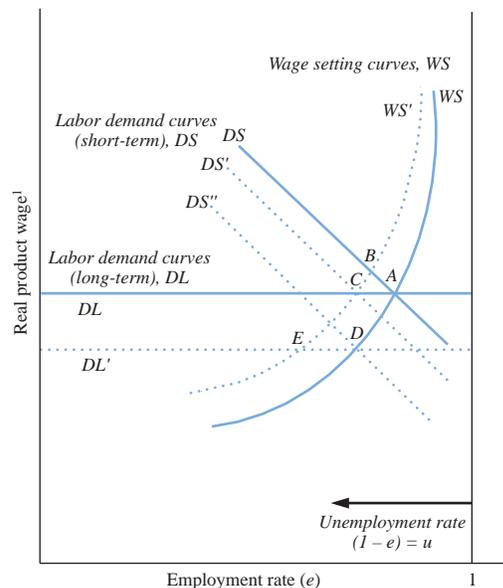
Another key assumption in this framework is that the supply price of capital is determined exogenously; under profit maximization, it will in equilibrium equal the (risk-adjusted) rate of return to capital. Investment and the capital stock will therefore be endogenous, since entrepreneurs will invest up to the point where the marginal rate of return on capital matches its (exogenous) supply price.

The labor demand curve (called “price-setting schedule” by Layard, Nickell, and Jackman) corresponds to the conventional labor demand schedule and is derived from the underlying production technology and the profit-

<sup>1</sup>Richard Layard, Stephen Nickell, and Richard Jackman, *Unemployment—Macroeconomic Performance and the Labour Market*, (Oxford and New York: Oxford University Press, 1991).

<sup>2</sup>The traditional labor supply schedule is represented in this framework by the vertical full employment line at the right side of the diagram, where the ratio of employment to the labor force ( $e$ ) equals unity.

<sup>3</sup>Other institutional factors influence the wage-setting curve as well—for example, the efficiency of the labor market “matching process,” which determines the degree of frictional unemployment.

**The Analytical Framework**

<sup>1</sup>Adjusted for trend growth in labor efficiency.

maximizing condition. There is a short-run labor demand curve (*DS*), for which the capital stock is fixed, and a long-run labor demand curve (*DL*), along which the capital stock is allowed to adjust to its optimal level. Assuming constant returns to scale, this long-run labor demand schedule will be horizontal. This implies that in the long run the equilibrium real wage is independent of the position of the wage-setting curve: the latter will determine the equilibrium unemployment rate, but not the real wage level.<sup>4</sup> An important implication of the horizontal (long-run) labor demand schedule is that ultimately all ad-

<sup>4</sup>As long as the position of the long-run labor demand curve remains unchanged, the equilibrium share of wages in total value added will likewise remain unchanged in the long run, independently of the elasticity of substitution in the aggregate production function.

comprises a host of *regulations* and legislation constraining labor market contracting. These often originate from attempts to ensure that the work environment satisfies minimum health and safety standards. In practice, however, they have also limited the adaptability and adjustment of employment structures to changes in economic conditions facing an enterprise or the economy in general. And in some cases

such legislation has the effect of protecting individuals in employment from competition from the unemployed, reducing the moderating influence of unemployment on wage increases and thereby weakening an important adjustment mechanism in the economy.

Labor market regulation covers many different aspects of employment relations and contracts. Four of

verse shocks—such as a fall in labor efficiency (relative to trend), an increase in taxation, or a deterioration in the terms of trade—will be borne by employees in the form of a lower real wage. The short-run labor demand schedule is downward-sloping because of decreasing marginal returns to labor for a given capital stock.

The labor market is in equilibrium at the point of intersection of the wage-setting curve  $WS$  and the long- and short-run labor demand schedules  $DL$  and  $DS$  (point  $A$  in the diagram). At this point the capital stock will have adjusted to its optimal level consistent with the target rate of return on capital (the supply price of capital), which in turn will—together with the production technology—determine the level of the equilibrium real wage. In summary, the location of the  $WS$  and  $DL$  schedules are determined by exogenous factors, while the  $DS$  schedule shifts endogenously, in line with the endogenous adjustment of investment and capital stock levels (see below). It follows that the equilibrium unemployment rate is the result of the structural (or exogenous) factors that determine the location of the  $DL$  and the  $WS$  schedules.

The equilibrium unemployment rate at point  $A$  equals unity minus the equilibrium employment rate. It may

change as a result of shifts in either the  $WS$  schedule or the  $DL$  schedule. While in the long run a shift in the  $WS$  schedule will not change the real wage, in the short run more aggressive wage bargaining, represented by a shift of the  $WS$  curve to the left (to  $WS'$ ), can indeed achieve a (temporary) increase in the real wage at the cost of increased unemployment (point  $B$ ). But at  $B$  the rate of return on capital will be lower than the (exogenous) supply price of capital, and therefore firms will reduce investment, leading to a downward shift in the  $DS$  schedule until it intersects the  $WS'$  and  $DL$  schedules at point  $C$ . That is, the  $DS$  schedule shifts to  $DS'$  as the scale of activity is gradually reduced. At point  $C$  the capital-labor ratio equals that prevailing at point  $A$ . Thus, the real wage is unchanged, but the unemployment rate is higher, “persuading” the more aggressive wage bargainers (represented by the  $WS'$  schedule) to accept an unchanged equilibrium real wage.

The *table* presents a synopsis of how various relevant external shocks will affect the long- and short-run equilibrium values of the real wage (adjusted for trend growth in labor efficiency) and the unemployment rate within this framework. All shocks are defined so as to increase the unemployment rate.

(*Box continues on next page.*)

#### Effect of Various Shocks on Labor Market Outcomes

| Type of Shock <sup>1</sup>                | Resulting Shift in    |                       | Change in Capital-Labor Ratio ( $K/N$ ) |          | Change in Real Product Wage ( $W/P$ ) |                   | Change in Unemployment Rate ( $UNR$ ) |          |
|---|-----------------------|-----------------------|---|----------|---------------------------------------|-------------------|---------------------------------------|----------|
|   | Labor-demand schedule | Wage-setting schedule |   |          |                                       |                   |                                       |          |
|   | $DL$                  | $WS$                  | Short run <sup>2</sup>                  | Long run | Short run <sup>2</sup>                | Long run          | Short run <sup>2</sup>                | Long run |
| Increase in the real interest rate        | Down                  | None                  | None                                    | Fall     | None                                  | Fall              | None                                  | Rise     |
| Fall in labor efficiency growth           | Down                  | None                  | None                                    | Fall     | None                                  | Fall              | None                                  | Rise     |
| Increase in “tax wedge” <sup>3</sup>      | Down (none)           | None (up)             | Rise                                    | None     | Fall <sup>4</sup>                     | Fall <sup>4</sup> | Rise                                  | Rise     |
| Terms of trade loss                       | None <sup>5</sup>     | Up <sup>5</sup>       | Rise                                    | None     | Rise <sup>6</sup>                     | None <sup>6</sup> | Rise                                  | Rise     |
| Increase in “wage pushiness” <sup>7</sup> | None                  | Up                    | Rise                                    | None     | Rise                                  | None              | Rise                                  | Rise     |

<sup>1</sup>All shocks are defined as increasing long-term unemployment; opposite shocks would have symmetric effects on the real wage and the unemployment rate.

<sup>2</sup>The short run is defined as the period during which the capital stock remains constant.

<sup>3</sup>An increase in the tax wedge can be alternatively depicted as an upward shift in the  $WS$  schedule or a downward shift in the  $DL$  schedule (or some combination of the two), with identical effects on unemployment and the real wage.

<sup>4</sup>After tax.

<sup>5</sup>If the consumption wage (rather than the product wage) were measured along the ordinate in the figure, a terms of trade deterioration would lead to a downward shift in the  $DL$  schedule (rather than an upward shift in the  $WS$  schedule); the effect on unemployment would be identical.

<sup>6</sup>In the short run, the increase in the product wage compensates (partly) for the loss in purchasing power owing to the terms of trade deterioration. In the long run, the consumption wage (product wage) will fall (remain constant).

<sup>7</sup>The increase in “wage pushiness” (upward shift in  $WS$ ) can be caused by various factors—for example, an increase in union militancy, an increase in unemployment benefits, and the like.

these aspects, judged to be of primary importance for labor market outcomes, are reported in Table 4.2. They include:<sup>18</sup>

- *working time regulation* (comprising legislation on the maximum length of the work week, minimum number of holidays, and regulations on work at night, on weekends, and on official holidays);

<sup>18</sup>Areas not covered in the table include job safety legislation and workers’ codetermination, according workers or their representatives a (limited) role in enterprise decision making. A detailed country-by-country listing of the pertinent labor market rules and regulations

can be found in David Grubb and William Wells, “Employment Regulation and Patterns of Work in EC Countries,” *OECD Economic Studies*, No. 21 (Winter 1993), pp. 7–58.

**Box 4.3 (concluded)**

European labor market developments over the past 25 years can be illustrated using this framework, as follows.<sup>5</sup> The initial condition is characterized by the long-term equilibrium at point *A*. The decline in the trend growth of labor efficiency (technical progress), which set in during the 1970s, reduced the “warranted” real wage, corresponding to a downward shift in the long-term labor demand schedule.<sup>6</sup> Similarly, the increase in the real interest rate in the early 1980s raised the target rate of return on capital, also shifting the *DL* curve downward. The gradual increase in the “tax wedge” (a rise in direct taxes on labor or of indirect taxes on consumption, or both) can also be depicted in this framework as a downward shift in the *DL* schedule (as relevant from employees’ perspective).<sup>7</sup> The combined effect of these three shocks lead to the new position *DL'* of the long-term labor demand curve. For a given degree of “wage pushiness” embodied in the *WS* schedule, this downward shift of the long-run labor demand curve implies an increase in equilibrium unemployment at the new equilibrium point *D*.

This is consistent with the observed increase in the NAIRU in Europe, even without any major changes in union power, benefit generosity, or any other determinant of the position of the wage-setting curve. Of course, there may have been shifts in the *WS* schedule in addition to the shifts in the *DL* schedule: if labor’s “wage pushiness” or the generosity of unemployment benefits (or both) had increased, the *WS* schedule would have shifted to the left, making the increase in unemployment caused by downward shifts in the labor demand schedule even larger (equilibrium point *E*). In fact, the deterioration in the terms of trade observed during the 1970s can be represented in this framework as an upward shift in the *WS* schedule, reflecting efforts by labor to compensate for losses in purchasing power due to deteriorating terms of

trade by increasing real product wages (that is, raising its share in domestic value added).<sup>8</sup>

The new equilibrium points *D* and *E* both imply a lower capital-labor and employment ratio than those observed at point *A*, reducing overall capital requirements on both accounts. Therefore the economic shocks that shifted the *DL* schedule downward were followed by a slump in investment, caused by the adjustment of the capital stock to its new equilibrium (optimal) value. This entailed a gradual downward shift in the short-run labor demand curve to *DS''*, which intersects *DL* and *WS* at *D*. This is consistent with the weakness of business investment following the decline in labor efficiency growth and the two adverse oil shocks experienced during the 1970s. A reacceleration of labor efficiency growth (technical progress) or a fall in the real interest rate (the supply price of capital) should thus lead to an upward shift of the *DL'* curve, which will raise the rate of return on capital, leading to an increase in investment and the capital stock. The *DS''* curve will shift gradually upward as a result, permitting a simultaneous increase in the equilibrium real wage and a decline in the unemployment rate (a shift from *D* toward *A* along the *WS* schedule). Similarly, the reversal of the adverse terms of trade shocks can lead to a downward shift in the *WS* schedule (and, thus, a decline in unemployment) unless such a windfall gain is appropriated by “insiders” to improve their purchasing power, in which case it will lead to higher real consumption wages but not to a reduction in the unemployment rate.

The long-run invariance of the real wage (adjusted for labor efficiency growth) in response to shifts in the wage setting curve *WS*, implied by the analytical framework described above, seems in contradiction to the analysis in the main text, which implies a trade-off between the growth of real wages and employment (see Figure 4.4 and the corresponding discussion). The two results can be reconciled by recognizing the heterogeneity of the labor force in terms of different skill levels. If the structure of relative wages is rigid, biased technical progress favoring the demand for skilled workers will lead to an increase in unemployment among the low-skilled workers. As a result, their share in employment will decrease while the average real wage will go up. This is indeed the scenario that underlies the developments depicted in Figure 4.4.

<sup>8</sup>Alternatively, such behavior would lead to a downward shift in the *DL* schedule if the consumption rather than the product wage is measured along the ordinate of the figure.

<sup>5</sup>The framework presented here is restricted to comparative static analysis. Though it comprises both short- and long-run equilibria, it does not cover the dynamic disequilibrium adjustment process likely to characterize “real world” developments, where fluctuations of aggregate demand are superimposed on the various structural shocks analyzed in this framework.

<sup>6</sup>Note that this “downward” shift in the real wage is relative to trend growth and does not necessarily imply an absolute decline; it means that the speed of real wage increase is reduced.

<sup>7</sup>Alternatively, it can be depicted as an upward shift in the *WS* schedule, meaning that workers resist the reduction in their real after-tax wage, with identical effects on unemployment in either case.

- *regulation of part-time work and time-limited employment;*
- *job protection legislation* (regulating the conditions under which employees can be laid off); and
- *minimum wages* (enforced either through legislation or through administrative extension of collective bargaining results).

The most tightly regulated labor markets by these criteria are found in Greece, Italy, and Spain, while the least regulated are those of the United States, the United Kingdom, and Denmark. On average, countries within the euro area have more regulated labor markets than other advanced economies outside the area.

**Table 4.2. Evaluation of the Strictness of Labor Market Regulation<sup>1</sup>**

| Country              | Working-Time Regulation | Regulation of Time-Limited Contracts | Job Protection Legislation | Minimum Wage Regulation | Aggregate Index <sup>2</sup> |
|----------------------|-------------------------|--------------------------------------|----------------------------|-------------------------|------------------------------|
| <b>Euro area</b>     |                         |                                      |                            |                         |                              |
| Austria              | 1                       | 1                                    | 1                          | 0                       | 3                            |
| Belgium              | 0                       | 1                                    | 1                          | 1                       | 3                            |
| Finland              | 1                       | 1                                    | 1                          | 1                       | 4                            |
| France               | 1                       | 1                                    | 1                          | 2                       | 5                            |
| Germany              | 1                       | 1                                    | 1                          | 1                       | 4                            |
| Ireland              | 2                       | 0                                    | 2                          | 0                       | 4                            |
| Italy                | 1                       | 2                                    | 2                          | 2                       | 7                            |
| Netherlands          | 1                       | 0                                    | 1                          | 1                       | 3                            |
| Portugal             | 1                       | 1                                    | 1                          | 1                       | 4                            |
| Spain                | 2                       | 1                                    | 2                          | 2                       | 7                            |
| Average <sup>3</sup> | 1.1                     | 0.9                                  | 1.3                        | 1.1                     | 4.4                          |
| <b>Other EU</b>      |                         |                                      |                            |                         |                              |
| Denmark              | 0                       | 0                                    | 0                          | 0                       | 0                            |
| Greece               | 2                       | 1                                    | 2                          | 2                       | 7                            |
| Sweden               | 1                       | 2                                    | 1                          | 1                       | 5                            |
| United Kingdom       | 0                       | 0                                    | 0                          | 0                       | 0                            |
| <b>Memorandum</b>    |                         |                                      |                            |                         |                              |
| Norway               | 1                       | 2                                    | 1                          | 0                       | 4                            |
| Switzerland          | 1                       | 1                                    | 1                          | 0                       | 3                            |
| United States        | 0                       | 0                                    | 0                          | 0                       | 0                            |

Source: OECD, *Employment Outlook* (Paris, 1994) Table 4.8; for a detailed discussion of labor market regulations in the EU, see David Grubb and William Wells, "Employment Regulation and Patterns of Work in EC Countries," OECD *Economic Studies*, No. 21 (Winter 1993), pp. 7–56.

<sup>1</sup>Subjective measure, ranging from 0 (nonexistent or weak) to 2 (strict).

<sup>2</sup>Simple sum of the preceding four columns.

<sup>3</sup>Simple arithmetic average.

All industrial countries have some form of *income support for the unemployed*, which aims at protecting workers from complete loss of income in the case of sudden job loss. Such unemployment benefits facilitate more careful job search, raise labor mobility, encourage risk taking, and thus improve the matching process in the labor market and increase allocative efficiency. However, these programs also tend to reduce the cost of unemployment to the unemployed, thereby risking a longer average duration of unemployment episodes and thus a higher average level of unemployment.

An international comparison of income support levels for the unemployed is complicated by the fact that these transfer schemes differ in a number of relevant dimensions. For example, the replacement ratio and the maximum duration of unemployment benefits typically vary according to the family status of the recipient, his or her age, and other characteristics. Table 4.3 presents representative figures of replacement ratios and benefit duration (for a standardized category of recipients), as well as a synthetic "generosity indicator," which averages replacement ratios over various family types and benefit duration periods.<sup>19</sup> The figures in the

<sup>19</sup>In many countries the replacement ratio of unemployment-related transfers varies with the duration of the benefit: after the maximum period of unemployment benefit entitlement, these benefits are replaced by less generous means-tested welfare benefits.

table suggest considerable differences in benefit generosity among industrial countries. In particular, benefits in many continental European countries are substantially higher and of significantly longer duration than those in non-European advanced economies.<sup>20</sup>

How these benefits affect job search behavior and thus the length of unemployment spells and the average level of unemployment depends not only on their generosity, but also on the way they are administered. Some countries (for example, Denmark, the Netherlands, and Switzerland) with relatively generous benefits impose strict criteria for eligibility or for availability for work that appear to reduce the negative effects on job search. Reforms in the United Kingdom have also moved in this direction, replacing unemployment benefits by a "job seeker allowance," combined with tighter eligibility and mandatory periodic review of applicants' search efforts. The use of a limited waiting period before benefits are granted, which introduces an element of self-insurance, goes in the same direction. Differences in these characteristics

<sup>20</sup>The figures presented in Table 4.3 do not include supplementary income support at the regional and local level or related food, housing, or family subsidies, which are important in some countries. They also do not reflect the possibility of requalifying for unemployment benefits through participation in active labor market programs once the maximum entitlement period has passed.

**Table 4.3. Comparison of Unemployment Benefit Generosity, 1994–96**

| Country           | Initial Net Replacement Ratio <sup>1</sup> | Minimum–Maximum Benefit Duration <sup>2</sup> (months) | Summary Measure of Benefit Generosity <sup>3</sup> |
|-------------------|--|--|--|
| <b>Euro area</b>  |  |  |  |
| Austria           | ...  | 5–12   | ...  |
| Belgium           | 57   | 12– <sup>4</sup>                                       | 59   |
| Finland           | 63   | 24–24  | 59   |
| France            | 70   | 27–54 <sup>5</sup>                                     | 55   |
| Germany           | 61   | 6–32   | 54   |
| Ireland           | 49   | 15–15  | 37   |
| Italy             | 42   | 6–6  | 19   |
| Netherlands       | 69   | 6–54   | 69   |
| Portugal          | ...  | 10–30  | ...  |
| Spain             | 73   | 4–24   | 49   |
| Average           | 60.5 <sup>6</sup>                          | 11.5–30.9  | 50.1 <sup>6</sup>                                  |
| <b>Other EU</b>   |  |  |  |
| Denmark           | 70   | 60–60  | 81   |
| Greece            | ...  | 5–12   | ...  |
| Sweden            | 75   | 12–18  | 67   |
| United Kingdom    | 36   | 12–12  | 51   |
| <b>Memorandum</b> |  |  |  |
| Norway            | 67   | 46–46  | 62   |
| Switzerland       | 73   | 8.5–20   | 62   |
| United States     | 60   | 6–6  | 16   |

Source: OECD, *The Jobs Study—Making Work Pay* (Paris, 1997), Table 7 and Figure 3; OECD, *Implementing the OECD Jobs Strategy—Member Countries' Experience* (Paris, 1997), Table 4.

<sup>1</sup>Initial benefit level divided by previous earned income, both after tax; couple without children.

<sup>2</sup>Depending on various criteria (age, family status, employment record); after maximum benefit period, welfare benefits (often means-tested) will usually apply.

<sup>3</sup>Average net replacement ratio over two income levels, three duration categories, three types of family situation; it does not take into account social assistance at the regional and local level.

<sup>4</sup>Unlimited for family with dependents.

<sup>5</sup>Gradual reduction every four months.

<sup>6</sup>Excluding Austria and Portugal.

help to explain why some countries with relatively generous benefits nevertheless manage to keep unemployment rates low. The most serious unemployment problems are encountered in countries whose unemployment benefit systems are relatively generous, especially with respect to benefit duration, but who only provide limited active labor market policies or administrative pressure to bring people back into employment.

There are three major government revenue components that drive a wedge between the effective consumption wage (the purchasing power of after-tax wages) and the effective labor cost to the employer: *income taxes*, *social security contributions* (both employers' and employees'), and *indirect taxes* on consumption goods. The size and composition of this tax wedge differ greatly among countries. Table 4.4 shows the size of the overall tax wedge as well as its components for 16 European countries and the United

**Table 4.4. Overall Tax Wedges, 1994**

(Percent of average production-worker earnings)

| Country           | Overall Tax Wedge | Of Which                |                          |                   |
|-------------------|-------------------|-------------------------|--------------------------|-------------------|
|                   |                   | Income tax <sup>1</sup> | Payroll tax <sup>2</sup> | Consumption tax   |
| <b>Euro area</b>  |                   |                         |                          |                   |
| Austria           | ...               | 16                      | 19                       | ...               |
| Belgium           | 61                | 19                      | 26                       | 16                |
| Finland           | 55                | 36                      | 4                        | 15                |
| France            | 59                | 15                      | 26                       | 18                |
| Germany           | 59                | 23                      | 16                       | 20                |
| Ireland           | 55                | 21                      | 11                       | 23                |
| Italy             | 57                | 16                      | 32                       | 9                 |
| Netherlands       | 55                | 35                      | 7                        | 13                |
| Portugal          | 47                | 12                      | 20                       | 15                |
| Spain             | 47                | 10                      | 24                       | 13                |
| Average           | 55.0 <sup>3</sup> | 20.3                    | 18.5                     | 15.8 <sup>3</sup> |
| <b>Other EU</b>   |                   |                         |                          |                   |
| Denmark           | 63                | 37                      | 0                        | 26                |
| Greece            | ...               | 13                      | 22                       | ...               |
| Sweden            | 60                | 24                      | 23                       | 13                |
| United Kingdom    | 44                | 22                      | 9                        | 13                |
| <b>Memorandum</b> |                   |                         |                          |                   |
| Norway            | 58                | 21                      | 11                       | 26                |
| Switzerland       | ...               | 15                      | 9                        | ...               |
| United States     | 35                | 18                      | 7                        | 10                |

Source: OECD, *The OECD Jobs Strategy—Making Work Pay* (Paris, 1997), Table 25; and OECD, *Implementing the OECD Jobs Strategy—Member Countries' Experience* (Paris, 1997), Table 12.

<sup>1</sup>Including employees' social security contributions.

<sup>2</sup>Employers' social security contributions.

<sup>3</sup>Excluding Austria.

States.<sup>21</sup> The way governments raise revenue differs considerably among countries. However, income taxes and social security contributions, whether paid by employers or employees, are close substitutes, and differences in the overall tax wedge are therefore more significant than differences in the components.

While the *composition* of the overall tax on labor is unlikely to have a significant effect on aggregate employment and output,<sup>22</sup> the *level* of taxation will affect these variables: by driving a wedge between the prices of labor as seen by the worker and the employer, taxes on labor will hamper the mutually beneficial exchange of labor services for income.<sup>23</sup> Large tax wedges are

<sup>21</sup>The rates shown are average tax rates. Marginal rates, which are relevant for incremental work versus leisure decisions (but not for participation decisions), will usually be higher.

<sup>22</sup>This is known as the "invariance of tax incidence" proposition. It is, however, not strictly applicable to the indirect tax component of the tax wedge, since its tax base includes all private consumption and thus differs from the tax base of income tax and social security levies on labor income. Moreover, payroll and income taxes may cease to be close substitutes in countries that operate funded, actuarially fair pension schemes, rather than pay-as-you-go schemes.

<sup>23</sup>With a tax wedge of 55 percent—the average for euro-area countries—production for market needs to be more than twice as efficient (as measured by hourly labor productivity) as own production ("do it yourself") to make market exchange advantageous.

**Table 4.5. Marginal Effective Tax Rates (METR) in Selected Industrial Countries, 1994–95***(One-earner couples)*

| Country           | METR<br>(percent) | Earnings Range Over Which<br>This METR Is Applicable<br>(percent of APW earnings) <sup>1</sup> | Number of Employed Persons<br>Subject to a METR<br>>80 percent, as percent of |              |
|-------------------|-------------------|--|---|--------------|
|                   |                   |  | Employment  | Unemployment |
| <b>Euro area</b>  |                   |  |   |              |
| Austria           | 100               | 0–12 and 18–72   | ...   | ...          |
| Denmark           | 102               | 2–47   | ...   | ...          |
| Finland           | 100               | 0–64   | 1.2   | 6            |
| France            | 76                | 49–89  | ...   | ...          |
| Germany           | 103               | 80–91  | 2   | ...          |
| Ireland           | 106               | 62–76  | ...   | ...          |
| Netherlands       | 100               | 0–22   | ...   | ...          |
|                   | 91                | 22–58  | ...   | ...          |
|                   | 112–114           | 58–64  | ...   | ...          |
| <b>Memorandum</b> |                   |  |   |              |
| Norway            | 100               | 0–76   | ...   | ...          |
| Sweden            | 91                | 0–100  | 4.0   | 47           |
| United Kingdom    | 97                | 46–65  | 4.1   | 40           |
|                   | 85                | 65–77  | ...   | ...          |
| United States     | 72                | 62–71  | ...   | ...          |

Source: OECD, *Implementing the OECD Jobs Strategy—Member Countries' Experience* (Paris, 1997), Table 10; and OECD, *The OECD Jobs Strategy—Making Work Pay* (Paris, 1997), Tables 16 and 19.

<sup>1</sup>As percent of the earnings of an “average production worker” (AWP).

<sup>2</sup>Ten percent of families with at least one member in the potential labor force.

therefore likely to reduce formal employment and give rise to increased home production and “black market” activities that evade taxation. They may thus at least partly explain relatively low participation rates as well as the apparently large difference in the prevalence of small-scale service activities between Europe and the United States. How this will affect overall levels of unemployment and real wages will depend on the wage elasticities of the wage-setting, labor supply, and labor demand schedules. (The wage-setting schedule represents the combination of real wages and unemployment rates acceptable to labor in the wage-bargaining process. See Box 4.3 for a more detailed discussion of this concept.) The more elastic is the wage-setting schedule, the more the tax wedge will eventually be reflected in lower levels of employment rather than in lower real wages. Whether this will spill over into higher unemployment will depend on whether labor supply is more or less sensitive to changes in real wages than the wage-setting curve.<sup>24</sup>

<sup>24</sup>Economic theory suggests—and empirical research tends to confirm—that in the (very) long run taxes on labor do not affect the rate of unemployment, even though they may permanently affect participation rates for the reasons outlined above. In the short run, however, changes in labor taxation are likely to affect the rate of unemployment because of a combination of sticky consumption wages (partly a result of fixed nominal wage contracts) and slowly adjusting expectations. Effects of both the level and the structure of taxes on labor market outcomes are discussed in detail, for example, in OECD, *Employment Outlook* (Paris, 1990), Chapter VI.

A serious impediment to a quick return of the unemployed into employment arises from the interaction of means-tested transfer payments and the tax system. By withdrawing benefits when individuals receive earned income, the *effective marginal rate of taxation* (METR)—the sum of the marginal tax rate and the benefit withdrawal rate—can be very high, reducing the individual’s incentives either to take up employment or to aim for better paying employment. High METRs are prevalent throughout the advanced economies, including in countries that have undertaken radical reforms to improve labor market performance (for example, the United Kingdom), and they also exist in the United States, though at a somewhat lower level than in Europe (Table 4.5).

### Econometric Evidence

The “dominant view” outlined above appears to be consistent with observed developments. The secular rise of unemployment in Europe has been concentrated in periods of slow growth or recession when output and demand fell below potential. The failure of employment to increase symmetrically during the subsequent recoveries—in contrast to the experience of the United States—coincided with real wage increases picking up well before unemployment had returned to its previous trough. This is consistent with the “insider-outsider” model of unemployment and real wages, where unions negotiate on behalf of employed

individuals (or union members, an even narrower constituency), rather than representing the interest of the wider labor force or the entire economy.<sup>25</sup> The bargaining position of insiders is strengthened by job protection legislation, which reduces the (immediate) threat of job loss, while generous unemployment benefits reduce the pressure on the unemployed to price themselves into employment. The latter disincentives are reinforced by the presence of unemployment traps in the form of high marginal effective tax rates on labor.

Econometric analysis provides considerable support for this interpretation of differential labor market performance across time and among different advanced economies. A recent comprehensive study in this area—applying mixed cross-section and time-series analysis to data for 17 advanced economies—tries to “explain” both the differences in structural (that is, cyclically adjusted) unemployment rates among countries and the increase of structural unemployment rates in these countries over time.<sup>26</sup> The most striking finding is the strong impact that the generosity of the unemployment benefit system is estimated to have on the structural unemployment rate (SUR). Institutional factors (the wage-bargaining framework and job protection legislation) are also estimated to have a statistically significant and quantitatively important effect on the SUR. For some countries (for example, Belgium, France, Portugal, and Spain), the sizable country-specific component suggests that factors omitted from this study play an important role.<sup>27</sup> Finally, this analysis also indicates that active labor market policies, discussed below, may reduce the SUR.

As to the rise in structural unemployment between 1973 and 1993, the analysis suggests that the rise in real interest rates has contributed more than one-third of the observed average increase in the SUR. The contribution of changes in the terms of trade, though statistically significant, is found to have been less important,<sup>28</sup> and the trend decline in total factor productivity growth is not included in this analysis. The generosity of unemployment benefits as well as union density, both of which were not constant over the period of analysis, also help to explain the measured change in the SUR in many countries, with a stark contrast be-

tween the negative contribution in the United Kingdom (where generosity was curtailed significantly) and the positive contributions in the other European countries, especially Finland, Ireland and Spain. In contrast, the average contribution of changes in union density to the changes in the SUR were negative over the observation period, reflecting declining union membership in many countries.

This study largely confirms and expands on earlier findings by Layard, Nickell, and Jackman.<sup>29</sup> While these and other studies largely agree on the important role of a host of institutional and regulatory characteristics in explaining high and persistent unemployment in Europe, the estimated quantitative importance of each of these characteristics can differ substantially between individual studies, and even for a given study, depending on the specification of the estimation equation and country coverage. Strong interaction effects and nonlinearities are likely to be part of the reason for the difficulty in pinning down the role of specific characteristics in quantitative terms. And though consistent with the dominant view, the statistical evidence does not fully account for international differences in structural unemployment, or for the entire increase in structural rates in Europe. The pertinent question is whether further policy-relevant insights can be gained from different analytical approaches.

### The Role of Unemployment Persistence (“Hysteresis”)

Underlying the “dominant view” of European labor market performance presented above is the concept of a “natural” (or structural) rate of unemployment, albeit one that can move over time, and has indeed done so in all European countries during the past three decades. This structural rate of unemployment has long been equated with the non-accelerating-inflation rate of unemployment (NAIRU)—that is, the rate at which the labor market exerts no pressure on the prevailing rate of inflation to either rise or fall. When the concept was introduced in 1968,<sup>30</sup> the SUR was (implicitly) perceived as a stable parameter of the economy, and the failure of the unemployment rate to re-

<sup>25</sup>The causes and operation of insider-outsider mechanisms in labor markets are analyzed by Assar Lindbeck and Dennis J. Snower, *The Insider-Outsider Theory of Employment and Unemployment* (Cambridge, Massachusetts: MIT Press, 1988).

<sup>26</sup>See Stefano Scarpetta, “Assessing the Role of Labor Market Policies and Institutional Settings on Unemployment: A Cross-Country Study,” *OECD Economic Studies*, No. 26 (1996/1), pp. 43–98.

<sup>27</sup>For example, minimum wage legislation and some forms of labor market regulation (for instance, restrictions on working time) have not been taken into account.

<sup>28</sup>This can probably be explained, at least partly, by the fact that Europe’s terms of trade deteriorated only during the initial part of the observation period but improved from 1985 onward, while the SUR kept rising in many countries.

<sup>29</sup>See Richard Layard, Stephen Nickell, and Richard Jackman, *Unemployment—Macroeconomic Performance and the Labour Market* (Oxford and New York: Oxford University Press, 1991). In a subsequent study, Nickell and Layard have systematically analyzed the effect of a large number of variables on (un-)employment. Their conclusion is that the key issues on which policy should focus are union power and social transfers, with effective product market competition playing a major role in eliminating negative repercussions of union power. See Stephen Nickell and Richard Layard, “Labour Market Institutions and Economic Performance,” Center for Economic Performance, Discussion Paper No. 23 (Oxford: University of Oxford, November 1997).

<sup>30</sup>The concept of a natural rate of unemployment was introduced by Milton Friedman, “The Role of Monetary Policy,” *The American Economic Review*, Vol. 58, No. 1 (March 1968), pp. 1–17.

turn to its pre-1973 trough, following the first oil shock, in virtually all European countries (and initially also in North America) was widely interpreted as a rejection of the natural rate hypothesis. This led to a search for alternative interpretations of European labor market developments, the most influential among which has been the hysteresis hypothesis.

The hysteresis view of unemployment is that shock-induced changes in the actual unemployment rate tend to become permanent because the SUR follows the actual rate. This implies that the equilibrium rate of unemployment is determined by the sequence of shocks that have affected the economy in the past (see Box 4.1). There are various mechanisms that can account for such labor market behavior:

- *insider-outsider mechanisms*, resulting in wages being set to stabilize employment at current (that is, postshock) levels;
- *loss of human capital*, resulting from loss of skills and pertinent work habits if workers are subjected to unemployment of significant duration; and
- *capital constraints*, resulting from subdued investment during periods of recession, and leading to supply bottlenecks (and thus inflation) before the previous unemployment trough has been reached.

Two of these three mechanisms will cause hysteresis to be asymmetric, with negative demand shocks entailing increases in unemployment, but positive demand shocks leading to increases in real wages rather than increases in employment. This is clearly the case with strong insider-outsider mechanisms, where unions negotiate wages on behalf of incumbent employees.<sup>31</sup> And it will also happen if unemployment leads to the loss (actual or perceived) of skills and work habits. As elaborated in Box 4.1, empirical analysis rejects the strong version of the hysteresis hypothesis—that is, that equilibrium unemployment is entirely history dependent and not determined by structural characteristics of the economy. However, adjustment in the labor market is sluggish, and this drives a wedge between the SUR and the NAIRU, making the latter a weighted average of the SUR and the lagged actual unemployment rate. This implies that actual unemployment can only be gradually reduced to the (long-term) structural rate of unemployment. Trying to do so too rapidly will lead to a rise in inflation, even if actual unemployment is still above the SUR, a phenomenon referred to as “speed limit effect.”

There is a sense in which the hysteresis hypothesis complements rather than replaces the dominant view.

<sup>31</sup>In this case a demand expansion can reduce unemployment only if it comes as a surprise to the insiders; otherwise, it will lead to increased wage demands. See Olivier J. Blanchard and Lawrence H. Summers, “Hysteresis in Unemployment,” *European Economic Review*, Vol. 31 (February–March, 1987), pp. 288–95, for a formal model of this type of “full” hysteresis.

In particular, the empirically more relevant phenomenon of speed limits, also known as unemployment persistence (or “partial hysteresis”) simply describes specific transmission mechanisms behind the symptoms of the “dominant view,” namely that unemployment, once having increased, failed to return to previous levels in Europe. The reasons for this behavior, however, have to be found in the institutional arrangements in each economy. In particular, the role of union power and job protection legislation in facilitating insider-outsider mechanisms, and that of generous unemployment benefits in reducing work incentives, are crucial in this context.<sup>32</sup> Where the hysteresis view makes an independent contribution is by pointing out the danger of loss of human capital resulting from prolonged unemployment, and the endogenous adjustment of the capital stock to the level of real labor cost, given the target rate of return on capital.<sup>33</sup>

### Dissenting Views

The “dominant view” has been challenged by two alternative interpretations that play down the relevance of market imperfections for Europe’s unsatisfactory labor market performance. The first of these alternatives is the proposition that the persistence of high unemployment represents a chronic shortfall of effective demand from capacity output. A second attempt to explain the rise in European unemployment has been to link it to globalization, especially as a result of increased competition from low-wage countries.

The view that high unemployment in Europe reflects persistent aggregate demand deficiency rather than an increase in the structural rate of unemployment is difficult to reconcile with the observed developments, since the alleged slack in the labor and goods markets has not persistently led to falling prices or wages. In fact, during several periods since 1970 there has been an increase in both labor costs and inflation in Europe, despite the fact that unemployment exceeded the estimated NAIRU of the preceding years, strongly suggesting that the NAIRU has indeed increased over time. The “Okun curve” (Figure 4.5) implies a similar conclusion: the unemployment rate has moved up continuously in Europe at constant levels of capacity uti-

<sup>32</sup>See Scarpetta, “Assessing the Role of Labor Market Policies,” and Layard, Nickell, and Jackman, *Unemployment*, for pertinent econometric evidence.

<sup>33</sup>Ljungqvist and Sargent have constructed a general equilibrium model that is capable of mimicking the European unemployment experience as a result of increased economic turbulence (accelerated structural change) in combination with generous unemployment compensation (which prolongs unemployment duration) and skill loss owing to prolonged unemployment. An interesting aspect of the model is that it is consistent with very low levels of unemployment in the absence of rapid change in the structure of the economy. See Lars Ljungqvist and Thomas J. Sargent, “The European Unemployment Dilemma,” *Journal of Political Economy*, Vol. 106 (June 1998), pp. 514–50.

lization, implying that the rising slack in the labor market was not associated with any rising slack in output markets—that is, that the increase in unemployment was of a structural and not a cyclical nature.

Nevertheless, the countries that have been most successful in reducing their structural unemployment rates in the 1990s are those where the measured output gap was small or where output was above capacity (Box 4.4). This is consistent with two (not mutually exclusive) hypotheses: that structural reforms are easier to implement in conditions of buoyant demand, and that hysteresis may be less asymmetric than the preceding analysis has suggested. In fact, the relevant policy implication of speed limits is that aggregate demand management is much less likely to reignite inflation under conditions of labor market slack if persistence effects are weak.

Considerable attention has focused on the perceived adverse effects on European labor markets from globalization, the phenomenon that encompasses the increasing interdependence of national economies and the rising volume of economic transactions that transcend national boundaries.<sup>34</sup> Import competition and capital mobility are both seen by some as contributing to the declining share of manufacturing employment in Europe, a process referred to as deindustrialization. This belief is strengthened by the concentration of unemployment in Europe among low-skilled workers, a large proportion of whom traditionally have found employment in manufacturing industries that now face increased import competition from developing countries.<sup>35</sup>

Contrary to this perception, however, there is strong evidence that the output shift in the European economies from manufacturing to services is part of a secular change in countries' economic structure—driven not by increased trade or capital mobility, but rather by the faster growth of productivity in manufacturing than in services, which releases labor from manufacturing for productive use in other sectors, and relatively income-inelastic demand for manufactured goods. Evidence from the same studies indicates that only a small part of the deindustrialization that has occurred in the advanced economies is attributable to competition from developing countries.<sup>36</sup> Structural

rigidities in Europe hinder the redeployment of workers, so that deindustrialization in Europe has been associated with rising overall unemployment, but globalization is not in itself the cause of this outcome.

Similarly, statistical evidence supports the view that there have been only small effects of import competition on wages and employment in the advanced economies, including the small open economies in Europe likely to be most affected by imports from low-wage competitors.<sup>37</sup> In fact, the largest share of changes in employment in European manufacturing has occurred as jobs have shifted from low-skilled to high-skilled workers *within* the same industries, rather than *across* industries, as would be expected if import competition were a major factor in sectoral reallocation.<sup>38</sup> The increased share of skilled workers in employment despite the increase in the wages of these workers relative to unskilled workers implies that the demand for labor has shifted strongly in favor of skilled workers, and it appears that this shift has been driven by technological innovations that have had a stronger positive effect on the productivity of skilled workers than of unskilled workers. This “skill-biased technological change” has been found to account for a large portion of the increase in wage and employment inequality that has occurred in many of the advanced economies in recent decades. And it is unlikely that the rising pressure of imports has spurred employers to introduce technological change biased toward the displacement of low-skilled workers: if import competition were the major cause driving down the relative wages of these workers, then firms would tend to utilize more low-skilled labor rather than less and to adopt technological improvements that complement rather than replace low-skilled labor.

Increased capital mobility has the potential to affect employment in Europe, through changes in the location of foreign direct investment. While there is so far only anecdotal evidence on this question for Europe, the data for the United States indicate that employment in U.S. multinational firms' domestic plants tends to rise or fall together with employment in affiliates in developing countries rather than being negatively correlated with it.<sup>39</sup> However, even if the “outsourcing” of production does not lead to a re-

<sup>34</sup>See Chapter III of the May 1997 *World Economic Outlook* for a comprehensive discussion of the economic implications of globalization.

<sup>35</sup>For example, the European Commission in its White Paper on how to combat European unemployment has linked competition from newly industrialized countries to the rise of unemployment in Europe; see Commission of the European Communities, *Growth, Competitiveness, Employment: The Challenges and Ways Forward into the 21st Century* (Brussels, December 1993), p. 11.

<sup>36</sup>See Robert Rowthorn and Ramana Ramaswamy, “Deindustrialization: Causes and Implications,” in *Staff Studies for the World Economic Outlook* (Washington: IMF, December 1997), pp. 61–77; also published as *Economic Issues*, No. 10 (Washington: IMF, September 1997).

<sup>37</sup>See Matthew J. Slaughter and Phillip Swagel, “The Effect of Import Competition on Wages and Employment: Evidence from the Advanced Economies,” IMF Working Paper (1999, forthcoming).

<sup>38</sup>See Eli Berman, John Bound, and Stephen Machin, “Implications of Skill-Biased Technological Change: International Evidence,” *Quarterly Journal of Economics*, Vol. 113 (November 1998), pp. 1245–79.

<sup>39</sup>Moreover, the competition for employment actually seems to be between affiliates in different developing countries. See David Riker and Lael Brainard, “U.S. Multinationals and Competition from Low-Wage Countries,” NBER Working Paper 5959 (Cambridge, Massachusetts: National Bureau of Economic Research, March 1997).

duction in overall employment, this aspect of globalization does tend to favor skilled workers in the advanced economies at the expense of the unskilled, since these changes in the global pattern of manufacturing will tend to concentrate high-skilled jobs such as design and management in the advanced economies and low-skilled production in developing countries.

## Cures: An Integrated Approach

The substantial social cost of high European unemployment puts economic policies to reduce labor market slack high on the economic policy agenda. Extensive empirical analysis, as well as the experience of those countries that have succeeded in reducing their unemployment rate significantly in recent years, suggests that structural reforms are key to a significant and sustainable reduction in joblessness and a reinvigoration of employment growth. However, macroeconomic policies have to play an important supporting role in the process, not only because there remains a significant cyclical component in European unemployment, but also because strong persistence effects to some degree blur the distinction between structural and cyclical unemployment. Hence, the elimination of cyclical slack will lead to a gradual reduction in the unemployment rate consistent with stable inflation (the NAIRU; see Box 4.1). The link between macroeconomic policies and structural unemployment via the effect of public debt on the level of real interest rates has similar implications. Moreover, self-adjustment mechanisms in the labor market seem to be weak; although successful structural reforms should lead to an amelioration, judicious macroeconomic management may be required to translate effective structural reforms into improved labor market outcomes. And the political constraints on structural labor market reforms may vary over the cycle: job protection legislation may be easier to curtail when unemployment is low, while reforms to increase wage flexibility may be easier to implement during a recession. These considerations imply that a significant and sustainable reduction in European unemployment will require careful attention to both macroeconomic and structural policies.

### Microeconomic (Structural) Reforms

Many of the labor market distortions causing high structural rates of unemployment, as well as slow labor market adjustment and speed limit effects, interact with each other. This in turn implies that structural reforms aimed at modifying the institutions underlying these distortions may in many cases be complementary, with the potential to reinforce each other's effec-

tiveness.<sup>40</sup> This may explain why many of the marginal or piecemeal reforms that have been implemented in Europe in the 1990s have had little impact on overall unemployment, while significant reductions in structural unemployment have been achieved only in countries where labor market reforms have been both radical and comprehensive.

The objective of structural reform is to remove the various rigidities that prevent the unemployed from reentering profitable employment reasonably quickly. The specific structural reforms required will vary from one country to another depending on both the particular rigidities that have developed in each economy and each country's social preferences. But the overall thrust of the reform agenda will be similar, aiming at:

- eliminating (or at least reducing) distortions in incentives;
- removing regulatory constraints that prevent employers and employees from reaching mutually beneficial contracts; and
- reintegrating the unemployed and disenfranchised workers into the working population.

Detailed reform proposals that take into account the diversity of institutional structures have been elaborated for all European countries in the framework of the OECD Jobs Study. The reform proposals resulting from this analysis are summarized in the table in Box 4.4. But countries' responses to these proposals have so far been timid. The few countries that have implemented comprehensive labor market reforms had already done so before the Jobs Study results were published in 1994, and only a minority of the Jobs Study proposals have been fully implemented so far, while in some instances countries have taken backward steps (Table 4.6).

What makes the implementation of many of these reforms difficult is that the underlying arrangements targeted for reform have typically been introduced in pursuit of specific policy objectives, in particular the desire to protect employees from the inherent income and employment uncertainties of a market economy undergoing continuous change,<sup>41</sup> and equity objectives. Since the trade-off between equity (or job security) and efficiency can be influenced by the type of

<sup>40</sup>Coe and Snower have constructed a formal model of interaction effects between institutional labor market constraints. They conclude that the beneficial effects from comprehensive reform exceeds the sum of effects from individual reform measures taken in isolation and argue that this makes comprehensive reform more likely to succeed. See David Coe and Dennis J. Snower, "Policy Complementarities: The Case for Fundamental Labor Market Reform," *IMF Staff Papers*, Vol. 44 (March 1997), pp. 1–35.

<sup>41</sup>Rather than eliminating this inherent uncertainty, these policies have usually entailed a reallocation of their consequences by facilitating the formation of groups of "insiders" holding jobs that may (at least in the short run) be better paid and more secure than under more flexible labor market arrangements, and "outsiders," who are often unemployed or work in less advantageous employment conditions.

### Box 4.4. The OECD Jobs Study

In 1992, the OECD launched a major research project to analyze the causes of, and identify potential remedies for, the poor and deteriorating labor market performance in much of the OECD area—particularly the secular rise in unemployment to postwar highs in most of western Europe since the first oil shock. Initial results of the project were published in 1994.<sup>1</sup> The main conclusion was that the root of the problem was the failure of OECD economies and societies to adapt quickly and innovatively to the rapid, technology-driven transformation of the world economy.

The OECD Jobs Study produced over 60 detailed policy recommendations, summarized in a list of 10 basic policy guidelines referred to as the “Jobs Strategy” (see first table). These guidelines concern not only labor market policies, but also policies on how to foster technical progress, raise product (and service) market competition, promote entrepreneurship, and conduct macroeconomic policies so as to stimulate noninflationary growth. The interdependence and complementarity of the different recommendations was emphasized.

Subsequently, the Ministerial Council mandated the OECD to follow up on the initial Jobs Study by elaborating detailed policy recommendations for individual coun-

<sup>1</sup>See OECD, *The OECD Jobs Study—Evidence and Explanations*; Part I: *Labour Market Trends and Underlying Forces of Change*; Part II: *The Adjustment Potential of the Labour Market* (Paris, 1994).

### The OECD Jobs Strategy

- Set *macroeconomic policy* such that it will both encourage growth and, in conjunction with good structural policies, make it sustainable, i.e. noninflationary.
- Enhance the creation and *diffusion of technological know-how* by improving frameworks for its development.
- Increase *flexibility of working time* (both short-term and lifetime) voluntarily sought by workers and employers.
- Nurture an *entrepreneurial climate* by eliminating impediments to, and restrictions on, the creation and expansion of enterprises.
- Make *wage and labor costs* more flexible by removing restrictions that prevent wages from reflecting local conditions and individual skill levels, in particular of younger workers.
- Reform *employment security* provisions that inhibit the expansion of employment in the private sector.
- Strengthen the emphasis on *active labor market policies* and reinforce their effectiveness.
- Improve labor force *skills and competencies* through wide-ranging changes in education and training systems.
- Reform unemployment and related *benefit systems*—and their interactions with the tax system—such that societies’ fundamental equity goals are achieved in ways that impinge far less on the efficient functioning of the labor markets.
- Enhance *product market competition* so as to reduce monopolistic tendencies and weaken insider-outsider mechanisms while also contributing to a more innovative and dynamic economy.

### Country-Specific Recommendations for Structural Reform to Increase Employment<sup>1</sup>

| Country          | Reform of Unemployment Benefits |                                 |                     | Reduce Incentives For Nonparticipation |                    | Reduce Taxation of Labor <sup>2</sup> |                                   |
|------------------|---------------------------------|---------------------------------|---------------------|--|--------------------|---------------------------------------|-----------------------------------|
|                  | Reduce generosity <sup>3</sup>  | Tighten work availability tests | Tighten eligibility | Early retirement                       | Invalidity schemes | Overall                               | Targeted on low-income recipients |
| <b>Euro area</b> |                                 |                                 |                     |  |                    |                                       |                                   |
| Austria          |                                 |                                 |                     | X                                      |                    |                                       |                                   |
| Belgium          | X                               | X                               |                     | X                                      |                    |                                       | X                                 |
| Finland          | X                               | X                               | X                   | X                                      |                    |                                       | X                                 |
| France           | X                               | X                               |                     | X                                      |                    |                                       | X                                 |
| Germany          | X                               | X                               | X                   | X                                      |                    | X                                     | X                                 |
| Ireland          |                                 |                                 |                     |  |                    |                                       | X                                 |
| Italy            |                                 |                                 |                     |  | X                  | X                                     |                                   |
| Luxembourg       | X                               |                                 |                     | X                                      | X                  |                                       | X                                 |
| Netherlands      | X                               | X                               |                     | X                                      | X                  |                                       |                                   |
| Portugal         |                                 |                                 |                     |  |                    | X                                     |                                   |
| Spain            | X                               | X                               | X                   |  |                    |                                       |                                   |
| <b>Other EU</b>  |                                 |                                 |                     |  |                    |                                       |                                   |
| Denmark          | X                               |                                 |                     | X                                      |                    | X                                     |                                   |
| Greece           |                                 |                                 |                     |  |                    |                                       | X                                 |
| Sweden           | X                               | X                               |                     |  |                    | X                                     |                                   |
| United Kingdom   |                                 |                                 |                     |  |                    |                                       |                                   |

Source: OECD, *Implementing the OECD Jobs Strategy—Lessons from Member Countries’ Experience* (Paris, 1997), condensed from annex tables A1–A6.

<sup>1</sup>OECD Jobs Study follow-up: recommendations formulated in OECD *Economic Surveys* published following the 1994 publication of the OECD Jobs Study.

<sup>2</sup>Income and payroll taxes.

<sup>3</sup>Replacement rate, maximum duration, or both.

<sup>4</sup>Including the curtailment of administrative extension of “key” negotiation results.

tries and monitoring progress in implementing these recommendations.<sup>2</sup> While recognizing the multidimensional nature of the problems underlying high and persistent unemployment, the policy recommendations acknowledge the key role of the operation of labor markets and how it is affected by institutional arrangements. The OECD's Job Strategy surveillance work has paid due attention to the differences among countries, both with respect to their labor market performance and how the related problems manifest themselves, as well as with respect to the proposed remedies. The country-specific policy recommendations emanating from this work for EU countries are summarized in the *second table*, and countries' responses to these recommendations are recorded in Table 4.6.

### Country Experiences<sup>3</sup>

During the 1990s, different countries of the EU have adopted different approaches to structural reform and put in varying degrees of effort in this area. There have also been

<sup>2</sup>This work has been—and continues to be—carried out as part of the multilateral surveillance process in the OECD's Economic Development Review Committee (EDRC).

<sup>3</sup>This section draws heavily on the OECD's extensive work on multilateral surveillance in the context of the Jobs Study followup and published in *OECD Economic Surveys*. Also see Jorgen Elmeskov, "The Unemployment Problem in Europe: Lessons for Implementing the OECD Jobs Strategy," *European Investment Bank Papers*, Vol. 3 (No. 1, 1998), pp. 29–54.

a number of country-specific shocks. As a result, changes in labor market outcomes have been uneven, as documented in the *figure*, which depicts changes in total and structural unemployment rates between 1990 and 1997.<sup>4</sup> Countries are ordered according to the size of the change in the structural rate of unemployment (SUR), from the largest decline at the top to the biggest increase at the bottom. Three broad groups of countries can be distinguished: those that succeeded in lowering their SURs (Ireland, the Netherlands, the United Kingdom, Denmark, and Spain); those where the SUR increased by a large amount (more than 2.5 percentage points—Finland, Germany, and Sweden), and an intermediate group, where the increase in the SURs was relatively small. The figure also shows that changes in SURs were highly correlated with those in actual unemployment rates (the correlation coefficient is 0.9).

<sup>4</sup>The concept of "structural" unemployment referred to here is the nonaccelerating-wages-rate of unemployment. The methods used to measure this concept, based on actual changes in wages and unemployment, are described in Claude Giorno, Pete Richardson, Deborah Roseveare, and Paul van den Noord, "Estimating Potential Output, Output Gaps and Structural Balances," OECD Economics Department Working Paper 152 (Paris, 1995). The robustness of this measure and how it compares with alternative indicators are discussed in Jorgen Elmeskov, John P. Martin, and Stefano Scarpetta, "Key Lessons for Labour Market Reform: Evidence from OECD Countries' Experiences," *Swedish Economic Policy Review* (1999, forthcoming).

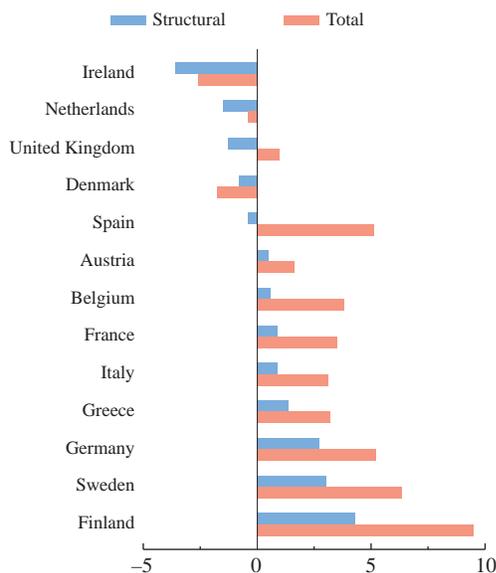
| Liberalize Job Protection Legislation | Reform of Wage Formation           |                                 |                                      |                     | Increase Work Time Flexibility |                |
|---------------------------------------|------------------------------------|---------------------------------|--------------------------------------|---------------------|--------------------------------|----------------|
|                                       | Facilitate greater wage dispersion | Decentralize wage determination | Facilitate "opting out" <sup>4</sup> | Reduce minimum wage | Daily hours                    | Part-time work |
| X                                     | X                                  |                                 | X                                    |                     | X                              | X              |
| X                                     | X                                  |                                 | X                                    | X                   |                                |                |
| X                                     |                                    |                                 | X                                    | X                   |                                | X              |
| X                                     |                                    |                                 | X                                    | X                   | X                              |                |
| X                                     | X                                  | X                               | X                                    |                     |                                | X              |
| X                                     | X                                  |                                 | X                                    |                     |                                |                |
| X                                     |                                    |                                 | X                                    |                     |                                |                |
| X                                     |                                    | X                               | X                                    | X                   |                                |                |
| X                                     | X                                  | X                               | X                                    | X                   | X                              |                |
| X                                     | X                                  |                                 |                                      |                     |                                |                |

(Box continues on next page.)

## Box 4.4 (concluded)

### Selected European Union Countries: Changes in Structural and Total Unemployment Rates, 1990–97

(Percentage points)



Source: OECD, Analytical Database.

The countries in which both structural and actual unemployment have risen the most were those hit by clearly identifiable idiosyncratic shocks. In Finland this was the collapse of traditional export markets, related to the disintegration of the Soviet Union in the early 1990s; in Germany it was the unification shock and the modalities under which the east German economy was integrated into that of west Germany; and in Sweden it was the abandonment of a policy under which the public sector had acted as the “employer of last resort,” which became unsustainable in the face of a severe recession in the early 1990s.<sup>5</sup> As far as the middle group is concerned, most countries did make some eclectic efforts to reform their labor markets, but the measures taken were neither strong nor comprehensive. As a result, structural unemployment tended to creep up further in the context of relatively tight demand management in the run-up to phase 3 of EMU. The most interesting group of countries, from a policy perspective, is composed of the following economies in which the SUR has been reduced.

<sup>5</sup>Another European country—not shown in the figure—where structural unemployment increased significantly (from 0.5 percent to 2.9 percent) was Switzerland. This increase coincided with the introduction or extension of unemployment insurance arrangements, and an extended period of near stagnation in output.

#### United Kingdom

The EU country that undertook the deepest and most comprehensive labor market reforms is the United Kingdom.<sup>6</sup> These reforms started at the beginning of the 1980s under a newly elected Conservative government, and the decline in the structural rate of unemployment has been uninterrupted since 1984.<sup>7</sup> Key elements of the reforms were a curtailment of trade union power, and a concomitant decentralization of wage bargaining. At the same time, active labor market policies were stepped up, in particular to integrate the long-term unemployed and young people into employment. A reduction in the generosity of unemployment benefits was also part of the reforms, but it was accompanied by a shift from passive benefit payments to in-work benefits (“family credit,” recently replaced by the “working families tax credit”). The Labour government that took office in 1997 has continued reforming the labor market, in particular through welfare reform to shift people off benefits and into employment. The “New Deal” to promote transition from welfare to work focuses on replacing open-ended benefits with wage subsidies, educational opportunities, and public employment. The national minimum wage to be introduced in April 1999 may have adverse effects on employment, but the decision to have a lower minimum for youth will mitigate this negative effect.

#### The Netherlands

The other EU country that initiated a comprehensive policy response to poor labor market performance was the Netherlands. Unlike the U.K. approach, the Dutch reforms were based on a tripartite consensus approach, with close consultations among unions, employers’ organizations, and the government. Reforms were initiated in 1982 (the “Wassenaar Agreement”), and the SUR has declined steadily since 1985. Policy focused initially on expanding labor demand, but over time emphasis shifted to strengthening labor supply as well. Labor demand was increased through wage moderation, cuts in taxes on labor, and the lowering of real minimum wages, in particular for youth. Labor supply was strengthened by a tightening of the eligibility for and generosity of unemployment and disability benefits—though these remain among the highest in the industrial world. Labor cost restraint led to an improvement in the country’s international competitiveness, since it was combined with an exchange rate peg to the deutsche mark. Initially this translated into an increase in profitability; but since the mid-1980s it has also been reflected in more labor-

<sup>6</sup>Only New Zealand, among the advanced economies outside the EU, embarked on labor market reforms of similar depth and scope, also resulting in a significant decline in the SUR, comparable to that experienced in the United Kingdom.

<sup>7</sup>Structural unemployment (as measured by the NAIRU) did increase in the early years of reform, when actual unemployment rose to a postwar high of 11.8 percent in 1986; but subsequently the United Kingdom has become one of the few European economies where the upward trend in successive cyclical unemployment peaks has been reversed.

intensive growth. Two major components of the Dutch reforms were the tightening of entry conditions to the generous early retirement and disability schemes, and the liberalization of working-time arrangements. The latter was crucial in facilitating a sizable increase in (female) labor participation, and the Netherlands now has the highest percentage of (voluntary) part-time employees among industrial countries (11 percent and 55 percent of male and female employment, respectively, in 1997).

#### Denmark

Denmark greatly intensified its reform efforts in the early 1990s, later than the United Kingdom and the Netherlands. The SUR peaked in 1993, after a gradual rise since 1969. Much of the reform effort was concentrated on neutralizing adverse incentive effects of generous unemployment benefits by tightening eligibility and—especially—availability-for-work requirements, supported by “compulsory activation.” The maximum duration of benefits was drastically reduced for unemployed youth, resulting in a marked decline of the unemployment rate in this segment of the labor market (from 13 percent to 5 percent), bringing it below the national average.<sup>8</sup> The rapid success of Danish reforms can be partly attributed to the high flexibility accorded to enterprises to adjust their workforces to changing market conditions, since job protection legislation is minimal.<sup>9</sup> Additional planks of the Danish reform program were a reduction in the tax wedge and abolition of the early retirement option for the long-term unemployed. Finally, wage negotiations have shown a tendency toward decentralization.

#### Spain

Another EU country where recent reform efforts may have started producing tangible results in terms of a reduction in structural unemployment is Spain. Despite a significant relaxation of restrictions on fixed-term employment contracts in 1984, the structural rate of unemployment had risen continuously until 1994, when it peaked at a rate of around 20 percent.<sup>10</sup> A more comprehensive approach to reform started in 1992, when eligibility requirements for unemployment benefits were tightened and the maximum duration of benefits was reduced, although unemployment protection and sickness benefits remain relatively generous. Reforms introduced in 1994 aimed at improving firms’ flexibility by reducing admin-

istrative restrictions on firing and virtually eliminating certain job-demarcation rules (*ordenanzas laborales*), though high levels of severance pay were maintained. At the same time rules restricting working time flexibility were softened, and opting-out of collective wage agreements was made easier—though its use remains rare. Subsequent reforms in 1997, which created a new type of permanent employment contract with reduced (but still relatively high) severance pay and aimed at enhancing the decentralization of wage formation, should diminish the excessive labor market segmentation in the longer run.

#### Ireland

Ireland is the country that has experienced the largest decline in structural unemployment during the 1990s. This success seems primarily the result of an extraordinary spurt in economic growth.<sup>11</sup> The rapid increase in output was prevented from spilling over into accelerating wage demands partly by a renewable three-yearly tripartite incomes policy agreement, permitting a rapid expansion of employment. Another important plank of the Irish reform agenda has been the reduction of unemployment and poverty traps through a reduction in both marginal tax rates on low-income earners and benefit withdrawal rates for persons reentering employment. And the supply side was strengthened by significant improvements in workers’ skills.

#### Summary

The overall conclusions from the European experience in the 1990s are that structural unemployment can indeed be significantly reduced by determined and persistent policy action; but that this appears to require a major effort, rather than marginal tinkering; and that the positive results are rather slow in manifesting themselves.<sup>12</sup> Significant progress can be made under different approaches, but none of them appear particularly easy politically. While reform of the unemployment benefits system has been an integral part of successful labor market reform in Europe, reducing the generosity of them is not a necessary part of such reform: the negative incentive effects of high generosity can be significantly reduced by strict eligibility and availability-for-work conditions.<sup>13</sup> Finally, most progress in reducing structural unemployment has been made in countries where substantial structural reforms were implemented in conditions of robust growth, though the direction of causality is unclear.

<sup>11</sup>Over the last decade, Irish GDP increased by 93 percent, compared with an average increase of 27 percent in the entire euro area.

<sup>12</sup>In both the United Kingdom and the Netherlands, generally considered the most successful reformers among EU countries, the SUR in 1997, despite more than a decade of gradual decline, was still above its 1980 level.

<sup>13</sup>Even in the United Kingdom, the postreform generosity of unemployment benefits greatly exceeds that in the United States—as does the scale of active labor market policies (as measured as a percentage of GDP) to help especially vulnerable segments of the labor market (long-term unemployed and young people) to find employment.

<sup>8</sup>This result reflects both an increase in the youth employment rate and an increase in the percentage of young people prolonging school attendance in response to the changes in pertinent incentive structures.

<sup>9</sup>Generous unemployment benefits and other transfers are considered a substitute for job protection legislation in Denmark.

<sup>10</sup>The 1984 reforms are an example of how partial reforms may actually increase labor market rigidities: following the reforms, most new hiring was done under fixed-term contracts, creating a segmented labor market which strengthened the position of insiders (workers with permanent contracts).

**Table 4.6. Implementation of OECD Jobs Study Recommendations**

| Country              | Number of Recommendations |                |      |         |            |
|----------------------|---------------------------|----------------|------|---------|------------|
|                      | Total                     | Implementation |      |         |            |
|                      |                           | Opposite       | None | Partial | Sufficient |
| <b>Euro area</b>     |                           |                |      |         |            |
| Austria              | 12                        | —              | —    | 10      | 2          |
| Belgium              | 13                        | —              | 7    | 6       | —          |
| Finland              | 22                        | —              | 9    | 9       | 4          |
| France               | 14                        | 2              | 5    | 5       | 2          |
| Germany              | 24                        | 2              | 3    | 16      | 3          |
| Ireland <sup>1</sup> |                           |                |      |         |            |
| Italy                | 10                        | —              | 2    | 7       | 1          |
| Netherlands          | 17                        | —              | 5    | 8       | 4          |
| Portugal             | 6                         | —              | 4    | 2       | —          |
| Spain                | 17                        | —              | 8    | 7       | 2          |
| <b>Other EU</b>      |                           |                |      |         |            |
| Denmark              | 8                         | —              | 3    | 5       | —          |
| Greece               | 10                        | —              | 8    | 2       | —          |
| Sweden               | 12                        | 1              | 5    | 6       | —          |
| United Kingdom       | 6                         | —              | —    | 3       | 3          |

Source: OECD, "The OECD Jobs Strategy: Progress Report on Implementation of Country-Specific Recommendations," OECD Economics Department Working Paper, No. 196 (Paris, 1998), Table 2; OECD, *Economic Survey of Belgium/Luxembourg* (Paris, 1999), pp. 54–57, and OECD, *Economic Survey of France* (Paris, 1999), pp. 79–80.

<sup>1</sup>Not available (no review since elaboration of country-specific recommendations).

policy measures adopted, an important aim of structural reform is to pursue legitimate social objectives with minimal negative implications for the operation of incentives and market mechanisms. An example of such reforms is the shift from passive unemployment benefits to employment-conditional in-work benefits, such as the "family credit" in the United Kingdom, the "earned income tax credit" in the United States, and similar arrangements in other advanced economies.<sup>42</sup>

### The Role of Macroeconomic Management

The ultimate objective of structural labor market reforms is to reduce the equilibrium rate of unemployment to more acceptable levels—say to around 5 percent or lower<sup>43</sup>—and to increase productive employment by a corresponding—or probably even larger—

<sup>42</sup>See OECD, *Making Work Pay—Taxation, Benefits, Employment and Unemployment* (Paris, 1997).

<sup>43</sup>It is difficult to pin down a precise target level for the equilibrium unemployment rate; the 5 percent level referred to here is based on outcomes in countries (e.g., the United States and the United Kingdom) where labor markets are as flexible as they can optimistically be expected to become in continental Europe in the foreseeable future. In the 1950s and 1960s unemployment in many European countries was considerably lower than this, with low and stable inflation. This suggests that rates below 5 percent are feasible under optimal policies and circumstances.

amount.<sup>44</sup> Since the capital stock has adjusted to the current high level of structural unemployment, an increase in the capital stock may be required to actually create jobs for the increase in the effective labor force entailed by successful structural reform.<sup>45</sup> Furthermore, the increase in the effective labor force and any associated increase in productive capital will raise potential output, which will require a corresponding increase in effective demand for reform to translate into increases in output and employment: The successful implementation of comprehensive structural reform may depend on the ability of macroeconomic policies to facilitate this process.

A relevant question is whether policymakers can rely on the self-adjustment mechanisms of the economy to translate structural reform into higher output, or whether active demand management is required. Although comprehensive structural reform will strengthen the automatic adjustment mechanisms of the economy and thus tend to reduce the need for demand management, history suggests that even in flexible market economies these mechanisms may work only slowly, and that accommodative policies are required to permit an expansion of demand to match the increase in potential output that results from structural reform. Such accommodative demand management should, however, be cautiously timed: the experience of countries that have implemented comprehensive structural reforms suggests that the beneficial impact on potential output materializes only gradually, partly owing to the slow process of reengaging the long-term unemployed and the lags involved in the investment response needed to create jobs for the newly profitable economic activities.

While recognizing the complementarity of structural reform and macroeconomic policies, the medium-term objectives and obligations of macroeconomic policies cannot be ignored. Particularly in the European context, this has important implications for the relative roles of monetary and fiscal policies in securing appropriate growth of aggregate demand. The ratios of public expenditure and taxation to GDP are already high by historical and international standards in most European countries, and the process of fiscal consolidation has not yet been completed. This makes

<sup>44</sup>The presence of discouraged workers and their likely reentry into the labor force whenever job prospects improve mean that the rise in employment will actually exceed the reduction in unemployment resulting from successful labor market reform. The rise in employment may thus be a better gauge of the effectiveness of labor market reforms than the decrease in unemployment, especially in the short run.

<sup>45</sup>This point is emphasized by Robert Rowthorn, "Unemployment, Capital-Labor Substitution and Economic Growth," IMF Working Paper (1999, forthcoming). In practice the required increase in the capital stock may not need to be proportional to the increase in employment because much of the additional employment may occur in sectors and activities with a capital intensity below the current average.

it difficult to argue that public spending should play any substantial role in securing adequate demand growth.<sup>46</sup> Nor should there be excessive worry about insufficient private demand if labor market reforms succeed in raising employment. The household saving ratio is still high and can be expected to decline if unemployment falls. In addition, the reintegration of hitherto idle labor into employment may require sizable business fixed investment in the transition, with the resulting increase in demand easily matching the expected increase in potential output. And while a reduction in the saving ratio and rising fixed investment imply a fall in the current external balance, the latter is currently in significant surplus, posing no obstacle to domestic expansion. The argument for public expenditure restraint is reinforced by the projected increases in demands on the public purse associated with population aging and the need to reduce tax burdens, which are generally perceived as being excessive and highly distortionary. The increase in output resulting from the reintegration of (a large part of) the currently jobless into employment will eventually bring much needed relief for the fiscal predicaments of European economies. This prospect should be seen as a welcome opportunity for accelerating fiscal consolidation or for reducing excessive tax burdens.<sup>47</sup>

What role can monetary policy then play? At first glance, the answer appears to be a relatively modest one, given monetary policy's primary emphasis on price stability. However, it is precisely the emphasis on price stability that suggests a potentially greater role for monetary policy in facilitating the expansion of aggregate demand in step with the rising potential output entailed by structural reforms. The preconditions for accommodative monetary policy are satisfied at the present time: inflation has been reduced well below the 2 percent ceiling of the target range in the euro area, and leading indicators of inflation are generally benign. And successful reform in the labor market will reduce wage pressure further. Indeed, it may become the task of monetary management to prevent deflation. This may require a change in the focus of policy, which over the past quarter century had to deal with inflation as the major threat to sustainable growth. But in present circumstances, if governments

succeed in implementing the comprehensive and deep labor market reforms required, failure to accommodate the resulting positive supply shock would risk entailing deflationary pressure. Accommodating it could require growth of monetary aggregates in excess of past trend growth of potential output plus the target rate of inflation, because potential output growth will, for a time, be raised by the structural reforms. This need for an easy monetary policy to accommodate the absorption of labor market slack is consistent with the need to stimulate complementary business investment. However, the existence of the "slack" referred to is conditional on the successful implementation of structural labor market reforms: maintaining an expansionary monetary policy for an extended period without such reform would run a much larger risk of reigniting inflation as cyclical unemployment is absorbed.

The introduction of the euro precludes participating countries from pursuing independent monetary policies geared to their individual progress in structural reform. This makes it highly desirable for European countries to proceed jointly with labor market reform, giving both weight and urgency to the recent EU initiative asking Germany to elaborate a common agenda for policies in this area.<sup>48</sup> However, insisting on coordinated joint action risks delaying reforms or reducing them to the lowest common denominator, which—based on past experience—may not amount to anything near actual requirements. On the one hand, proceeding with reform at different speeds in individual countries is equivalent to asymmetric national supply shocks in the euro area, which makes an optimal monetary policy response difficult.<sup>49</sup> On the other hand, the introduction of the common currency still allows the real exchange rate to operate as an adjustment mechanism for countries proceeding unilaterally with structural reform: relative wage restraint in a member country or region of the euro area will improve its cost competitiveness, and structural reform aims at revitalizing this mechanism.

### Supporting Policy Measures

Apart from structural reforms and macroeconomic policies, incomes policies and active labor market policies may also be used to improve labor market performance. While both are controversial with respect to their long-term effectiveness and sustainability, the experience of successful reformers suggests that both can play a useful role in the adjustment period, when reform measures are implemented and comprehensive

<sup>46</sup>In any case, it may be argued that the role of fiscal policy should generally not go beyond the operation of built-in stabilizers because of the well-known difficulties of effective fiscal fine-tuning. This general principle does not preclude the required expansion of the capital stock from including public investment, which may need to be temporarily stepped up to avoid infrastructure bottlenecks in the wake of rapid slack absorption.

<sup>47</sup>The reluctance to use fiscal policy to provide demand stimulus does not preclude an active support of structural reforms through deficit-neutral fiscal measures, in particular the simultaneous reduction of excessive transfer payments (and subsidies) and taxation.

<sup>48</sup>Proceeding "jointly" here refers not to the identity of reforms, but rather to the simultaneity of country-specific actions.

<sup>49</sup>See Tamim Bayoumi and Eswar Prasad, "Currency Unions, Economic Fluctuations, and Adjustment: Some New Empirical Evidence," *IMF Staff Papers*, Vol. 44 (March 1997), pp. 36–58.

labor market reform needs to be translated rapidly into rising employment.<sup>50</sup>

*Incomes policies* have been used in most countries at various times to help fight inflation, but they fell out of favor in many cases after the 1970s, owing to problems with their effectiveness and to the distortions to which they gave rise. They may reduce the “sacrifice ratio” (the loss of output and employment per gain in reducing inflation) in the transition to a less inflationary environment. Correspondingly, they may help to raise employment with less associated inflationary pressure in the transition to enhanced labor market flexibility. In fact, in several countries that have made significant progress in reducing structural unemployment, some sort of consensus building, usually in the form of tripartite agreements on wage restraint involving trade unions, employers’ organizations, and the government, has played a prominent role (see Box 4.4). A justification for recourse to such a consensus approach is the strength of insider-outsider mechanisms. While from a purely economic viewpoint the first-best policy might be to remove the institutional arrangements, such as union monopoly power and job protection legislation, that underpin the bargaining power of insiders, it is usually politically difficult to do so instantaneously. In this situation, incomes policies may constitute a useful second-best policy to help ensure that rising demand translates into increasing employment rather than rising real wages for the insiders, while the pertinent reforms are progressively implemented.<sup>51</sup> If successful, this approach will gradually raise the proportion of insiders, making wage bargaining more representative of the labor force. But unless the root causes of insider power are eliminated, the problem will reappear during the next business cycle.<sup>52</sup>

*Active labor market policies* (ALMPs) comprise measures such as job placement assistance, counseling and vocational guidance, mobility support, training, employment subsidies, and direct job creation. Market imperfections and informational asymmetries provide an efficiency rationale for ALMPs aiming to develop employment-related skills and improving the matching process in the labor market. And the case for

ALMPs is greatly strengthened in the initial phase of labor market reform, when the (long-term) unemployed, whose skills and broader employability have been eroded, need to be reintegrated into employment. Given the diversity of various ALMP programs, it is not surprising that judgment on their effectiveness has been mixed. The results of comprehensive evaluations of existing programs provide some guidance about which measures hold most promise for success.

Despite the difficulties of evaluating the effectiveness of ALMP programs, the empirical evidence suggests that on average ALMPs have made a positive contribution to the reduction of structural unemployment in reforming countries.<sup>53</sup> Policies with the greatest success seem to be intensive placement assistance and on-the-job training for disadvantaged categories of unemployed.<sup>54</sup> In contrast, classroom training and direct job creation by the government seem to have been less effective in permanently improving the employability of participants, and employment subsidies may carry sizable deadweight costs. Moreover, public employment schemes, apart from their high budgetary costs, may lead to increased wage pressure in the private sector (because of reduced open unemployment) unless accompanied by other structural reforms that reduce the equilibrium rate of unemployment.

### Questionable Policies

There is mounting pressure on politicians to “do something” about labor market performance in many European countries. At the same time, many of the measures that would seem to be essential in making significant and sustainable progress in fighting unemployment are unpopular among many of the insiders who benefit from the status quo, making it difficult for politicians, concerned about their reelection, to implement them. This creates a temptation to focus on measures that raise the least opposition from the electorate in which insiders hold a majority. This would be harmless if these measures were effective. Unfortunately, some of them risk being ineffective or even counterproductive.

The emphasis of the coordinated and comprehensive policy approach discussed above is on increasing the demand for labor by lowering unit labor costs, increasing the incentives of the unemployed to respond

<sup>50</sup>At a meeting in February 1999 organized by the ILO, labor ministers of the G-8 countries (the seven major industrial countries and Russia) expressed the view that an effective full employment strategy “requires strong partnerships, including social dialogue” (Labor Ministers’ Conference, “Labor Policies in a Rapidly Changing Global Economy,” Washington, D.C., February 1999, Chair’s conclusions).

<sup>51</sup>However, incomes policies usually focus on aggregate wage restraint but often hinder relative wage adjustment, which may be crucial in times of rapid structural change.

<sup>52</sup>Not all sources of insider power are easily or rapidly modified by government reform. A case in point are efficiency wages; see Carl Shapiro and Joseph E. Stiglitz, “Equilibrium Unemployment as a Worker Discipline Device,” *American Economic Review*, Vol. 74 (1984), pp. 433–44.

<sup>53</sup>See Layard et al. and Scarpetta, op. cit. ALMPs have been used most extensively in Sweden, which is also where their effectiveness has been most contested. While it is indeed possible that their excessive use leads to decreasing returns and even waste, this does not contradict their usefulness when they are judiciously applied. A survey of the literature evaluating ALMP effectiveness and proposals to increase it are presented in OECD, *Enhancing the Effectiveness of Active Labour Market Policies* (Paris, 1996).

<sup>54</sup>The incremental cost of such programs can be kept low in countries with generous passive transfer schemes by simply redirecting the latter to support ALMP measures proven to be effective.

positively to labor demand, and removing obstacles erected by insiders that prevent the unemployed from finding employment: these policies are all employment augmenting. An alternative approach that has been suggested to attempt to reduce unemployment is to curtail the supply of labor, and such policies were actually pursued by many European countries during the 1970s in the form of *early retirement and invalidity schemes*. While these policies initially succeeded in moderating the increase in unemployment, they did little to address the underlying causes of rising unemployment but instead added to fiscal problems by raising the dependency ratio and transfer payments. By reducing labor market slack and increasing public debt, these policies are likely to have indirectly contributed to the current level of high unemployment through increased real wage pressure and higher real interest rates. With pressure for fiscal consolidation mounting in the run-up to EMU, and with rising dependency ratios looming with the aging of populations, these policies have been deemphasized or abandoned during the 1980s and 1990s, and in many cases reversed through increases in the statutory retirement age.<sup>55</sup>

In contrast, policies aimed at spreading work over a larger number of workers by reducing statutory working time (“*work sharing*”) are still being pursued in some countries: France is currently aiming at the general introduction of a 35-hour work week, with the explicit objective of reducing unemployment, and a similar initiative is being discussed in Italy; German trade unions also motivate their demands for reduced work hours as a means to create jobs. Ideally, subject to minimum health and safety standards being satisfied, each individual should be able to choose his or her working time (daily, weekly, yearly, and over one’s lifetime) so as to equate the benefits of additional work (income) with those of more leisure at the margin. In practice, human interaction and coordination at work require certain work schedules to be adopted, so that most people in paid employment are constrained with respect to their work-leisure choice. It is thus difficult to deduce in general terms, a priori, whether a change in existing arrangements (for example, for the purpose of work sharing) will make people on balance better or worse off.<sup>56</sup>

<sup>55</sup>The pertinent policy changes have curtailed the inflow into early retirement and invalidity, but they have not reduced the stock of individuals who have previously taken advantage of more liberal entry conditions. This has left the continent with a legacy of low participation rates and high dependency ratios, which are difficult to reverse and are partly responsible for the large tax wedge, which itself contributes to weak labor market performance.

<sup>56</sup>On the one hand, the steady decline in average working hours over recent decades in most countries suggests that, on balance, employed people favor reductions in working time with rising real incomes. On the other hand, that private contracting fails to bring about large-scale work-sharing arrangements suggests that they do not correspond to private sector preferences or needs.

There are obvious obstacles to work sharing: if the skills of the unemployed differ greatly from those of the employed and the substitutability between skill groups is low (or wage relatives do not match relative skill scarcities), a general reduction in statutory working time will do little to induce additional employment. The lack of substitutability across skill groups is likely to be a key problem for this approach. More generally, if existing unemployment is largely of a structural nature, the reduction in unemployment through work sharing will lead to increased wage pressure. Unless accompanied by structural policies that lower equilibrium unemployment, work sharing is unlikely to achieve its objectives, even if the unemployed are perfect substitutes for those in employment. This is because the resulting wage pressure will trigger adjustment processes in the economy that will tend to bring unemployment back to its equilibrium level.

An alternative approach to work sharing consists of splitting full-time jobs between two or more part-time employees. The considerable increase in the relative importance of part-time work in many advanced economies in recent years seems to stem partly from an increasing preference for part-time employment—a development probably related to the increasing number of two-earner families—and partly from an increase in the flexibility of work arrangements with regard to working hours. In the Netherlands, where this approach has been pursued aggressively, about 35 percent of total employment is now in part-time occupations. Where such arrangements are based on voluntary contracting, they clearly increase labor market flexibility. Institutional arrangements (including labor market legislation and regulations) can influence the amount of part-time work in various, partly offsetting ways: fixed employment costs (whether related to labor market regulations or not) will discourage part-time work, while an income threshold below which earnings are not subject to taxation (including social security contributions) may tend to raise the incidence of part-time work.<sup>57</sup>

A rational approach to work sharing—whether in the form of reduced daily working hours or increased part-time employment—would aim at accommodating different needs for work coordination (depending on the nature of the job) and different preferences of individual workers by decentralizing decision making on working time arrangements, making the latter a subject of individual employment contracts rather than universal labor legislation. Recent advances in information technology may indeed have greatly increased the scope for individually tailored working time arrangements. A centralized blanket reduction

<sup>57</sup>Widening the availability of part-time work may also increase labor supply, with an uncertain net result on the unemployment rate.

in work hours, especially if not matched by corresponding income reductions, risks raising unit labor costs and will thus reduce demand for labor. If matched by income sharing, it may curtail the welfare of those affected, unless they can compensate by working overtime—which of course would both reduce the employment creation effect and introduce the problem of increasing unit labor costs through the back door.<sup>58</sup>

Since structural reforms are politically difficult to adopt and implement, with positive results slow in manifesting themselves, the temptation to look for “quick fixes” in macroeconomic policy is considerable.<sup>59</sup> However, the experience of the past three decades suggests that aggregate demand stimulation without accompanying structural reform cannot succeed in reducing structural unemployment and faces the risk of causing rising inflation or fiscal deficits rather than achieving a sustainable reduction in unemployment.<sup>60</sup> This skeptical appraisal of demand management as a substitute for structural reform to reduce unemployment is consistent with the policy experience since 1973: attempts to return unemployment to its preshock level by expansionary macroeconomic policies following the first oil shock led to a rapid rise in both inflation and fiscal deficits in most European countries, with little reduction in unemployment to show for it. The major lesson from this experience—that unemployment generated by adverse supply shocks cannot be eliminated by demand stimulation—was learned by the majority of countries when the second oil shock hit in 1979 and led to a reversal in the macroeconomic policy stance. The new policy approach, which gained ground progressively among advanced economies, became

known as the “medium-term strategy” at the beginning of the 1980s.<sup>61</sup>

The risks of ignoring this lesson were dramatically demonstrated when in the early 1980s a newly elected French government tried to combat the country’s deteriorating labor market performance by aggressive expansionary demand management policies. Within a few quarters, the experiment had to be aborted in the face of mounting domestic inflation, a rapidly deteriorating external balance, and massive pressure on the exchange rate. In 1983 the same government, after being forced to devalue the French franc, reversed its macroeconomic policy stance and joined the “Strategy.” Although the high degree of international trade interdependence and the liberalization of international capital flows no doubt imposed constraints on French policy at the time, these were not the ultimate reasons making the French “dash for growth” unsustainable. This can be inferred from the experience in the latter part of the 1980s, when monetary policies were greatly relaxed simultaneously in most advanced economies in order to prevent the global stock market crash of September 1987 from turning into a global recession. While the resulting demand stimulus did indeed avoid the recession, it failed to reduce European unemployment to its earlier trough before igniting inflationary pressures. This confirmed that the structural unemployment rate had indeed increased in Europe and was the binding constraint on a sustainable (non-inflationary) reduction of labor market slack.<sup>62</sup>

## Overcoming Obstacles to Labor Market Reform

Although virtually all European governments profess to consider the fight against unemployment a top policy priority, and notwithstanding widespread agreement concerning the policy actions required—as indicated, for example, in OECD Ministers’ commitment to the Jobs Strategy—policymakers have so far failed to implement many of the policies agreed to be needed.<sup>63</sup> Perhaps the most commonly mentioned obstacle to labor market reform in Europe is the fear that the necessary changes will have adverse effects on income distribution and threaten the social cohesion at

<sup>58</sup>For a skeptical view about whether a mandatory reduction in work hours can reduce unemployment, see Jennifer Hunt, “Hours Reductions as Work-Sharing,” *Brookings Papers on Economic Activity*, No. 1 (Washington: Brookings, 1998), pp. 339–76. A specific case study by the author is presented in Jennifer Hunt, “Has Work-Sharing Worked in Germany?” NBER Working Paper 5724 (Cambridge, Massachusetts: National Bureau of Economic Research, August 1996). Analyzing cross-industry variation in standard hours reductions, the author finds that work sharing in Germany over the period 1984 to 1994 actually reduced employment, while hourly wages rose to offset income reductions from the decline in hours worked.

<sup>59</sup>It is often reinforced by election cycles, which make it desirable for incumbent governments to create favorable economic conditions in advance of periodic elections.

<sup>60</sup>This is not to belittle the important constructive role that demand management—in particular monetary policy—has to play in reducing cyclical unemployment and in assisting effective structural reform to translate rapidly into employment growth, which has been discussed above. In fact, once structural reforms have made European labor markets more flexible, monetary policy can possibly pursue the goal of full employment more aggressively, since any error due to uncertainty about the “true” level of the structural rate of unemployment can be more easily corrected, making it less risky for the monetary authorities to “test the water.”

<sup>61</sup>See Chapter VI, “The Rise and Fall of Inflation—Lessons from the Postwar Experience,” in the October 1996 *World Economic Outlook* for a detailed discussion of the inflation experience following the supply shocks of the 1970s.

<sup>62</sup>By 1989, inflationary pressures had become so strong (and the danger of a world recession had receded sufficiently) that OECD countries decided to reverse their monetary policy stance in order to curtail inflation.

<sup>63</sup>Commission of the European Communities, *Growth, Competitiveness, Employment*, emphasizes the common view of EU member states on the urgent need to combat unemployment, and all European governments support the OECD Jobs Strategy.

the core of the European welfare state.<sup>64</sup> This concern is frequently expressed as an avowed preference for the security and solidarity of the welfare state over an economic system more akin to that of the United States, with its emphasis on rewards for risk taking, innovation, and individual initiative, but also with greater income inequality and a less generous social safety net for the unsuccessful.<sup>65</sup> Given that a majority of voters in Europe appear to be opposed to radical changes to the welfare state, it is not surprising that politicians are reluctant to adopt such measures. This leads back to the question of why such reforms should be undertaken, especially if the majority of European voters do in fact prefer the existing system with its perceived trade-off between economic efficiency and job security (and other welfare state benefits).

The economic and social costs of unemployment were referred to earlier. Another part of the answer is that changes in the welfare state seem inevitable, since the current system of generous benefits to the unemployed and comfortable state pensions at an early retirement age cannot be sustained because the aging of the population means that in the coming years a declining share of the population will be available to support a growing dependent population. Although labor force participation did not fall in the 1970s and 1980s owing to the steady entry of women into the European workforce, rising unemployment in recent years has meant that a falling share of employed in the population has shouldered the burden of the expanding welfare state (Figures 4.7 and 4.8). In many industrial countries, the fiscal burden of unfunded pension liabilities will be felt within the next two decades.<sup>66</sup> While labor market reforms alone are incapable of solving this particular problem, achieving high employment ratios is an important ingredient of any comprehensive solution.

More immediately, change is required to maximize the benefits, and minimize any threat to the success, of the monetary union among 11 EU members, which entered operation at the start of 1999: without flexible labor markets, asymmetric shocks within the euro area will entail persistent labor market disequilibria that may be blamed on monetary union, since it eliminated the safety valve of nominal exchange rate adjustment.

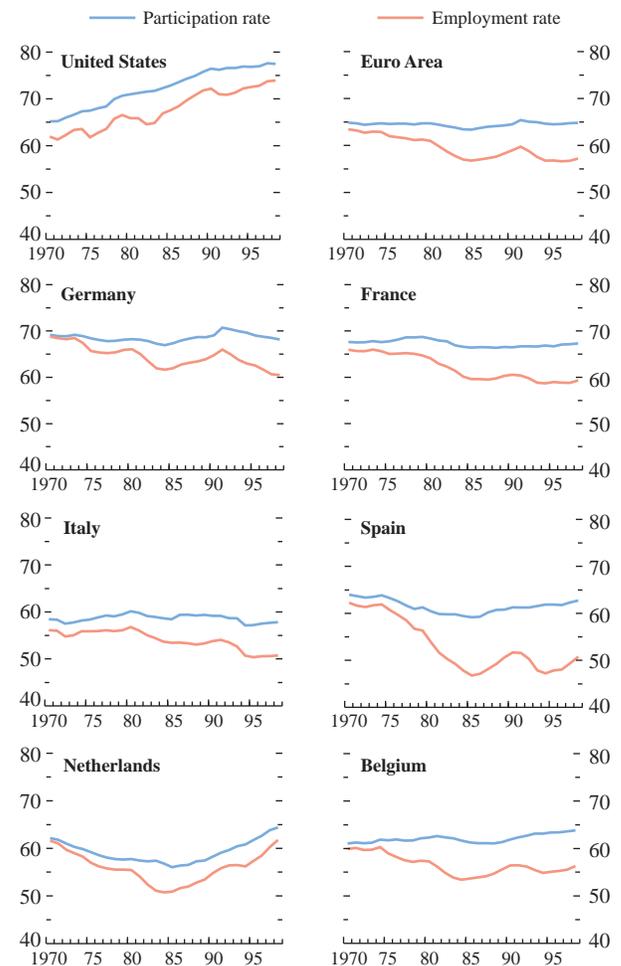
<sup>64</sup>There also seem to be some doubts about how effective such policy measures—including drastic structural reforms—are likely to be, since the partial measures taken so far in many countries have failed to make significant inroads into high unemployment.

<sup>65</sup>With particular reference to Germany, the relevance of the U.S. experience is discussed in Flemming Larsen, “The United States as a Job Creation Machine: An Example for Germany?” Paper presented at a conference organized by the Christian Social Union (1997), accessible at [www.imf.org](http://www.imf.org).

<sup>66</sup>See Sheetal K. Chand and Albert Jaeger, *Aging Populations and Public Pension Schemes*, Occasional Paper 147 (Washington: IMF, December 1996).

**Figure 4.7. Euro Area and the United States: Participation and Employment Rates**  
(Percent of working-age population)

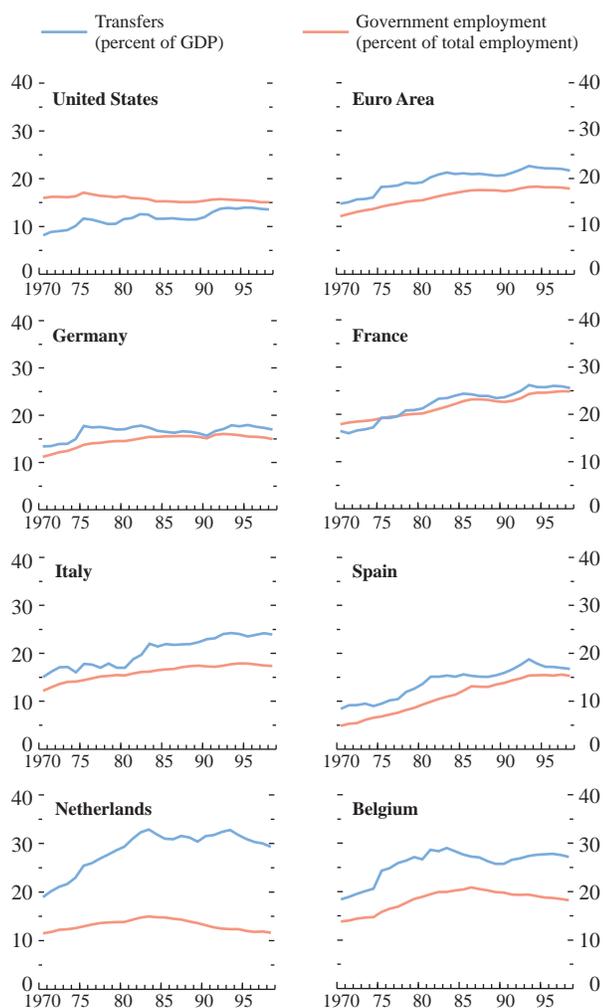
Although labor force participation has not fallen in the advanced economies since the 1960s, rising unemployment in Europe implies that a falling share of the population has had to shoulder the burden of providing resources to fund generous social benefits.



Source: OECD, Analytical Database.

**Figure 4.8. Euro Area and the United States:  
Size of the Welfare State**

The welfare state has expanded in European countries since the 1960s.



Source: OECD, Analytical Database.

Another pertinent question is whether the labor market institutions and regulations currently prevailing in Europe do in fact deliver the kind of job security and equitable income distribution desired by the electorate, or whether the effects of high and persistent unemployment on income distribution and social cohesion may be as bad or worse than the likely outcome under comprehensive labor market reform. Instead of inequality being determined largely (apart from wealth transfers) by education, skills, and other determinants of labor's earning power, as in the United States, European countries also face social and economic inequality based on whether or not a person is able to become an "insider" by securing a job. Although income inequality in the United States is greater than in Europe, the higher returns to education in the United States provide incentives for the accumulation of skills that lead to income growth. Indeed, young Europeans with high education levels increasingly appear to be moving to the United States and United Kingdom to take advantage of those countries' strong demand and great rewards for highly skilled workers. A related challenge to the viability of the "European system" is the increasing aversion of enterprises to undertake new activities and create new jobs in Europe: attempts to save existing jobs have led firms to concentrate new investment in countries with greater flexibility and less interference with the right to manage.

It may, in fact, be argued that preserving social cohesion is often a politically convenient pretext for defending the interests of insiders, who are more numerous and politically more powerful than the "outsiders" (comprising the unemployed, discouraged workers, and people in precarious employment). An important step in implementing effective reforms is thus the creation of a national consensus that changes are necessary. In some instances, this consensus has been forged by a crisis, as was the case in Spain when an unemployment rate of 24 percent in 1984 led to the introduction of measures to facilitate hiring through fixed-term contracts in response to the perceived consequences of the country's excessively rigid job-security rules. In the United Kingdom, reforms were implemented in the 1980s, including measures to reduce the power of trade unions, on the basis of a majority view, evidenced by the election of a new government, that trade union power and the use of industrial action had become excessive. Reforms in Ireland and New Zealand in the 1980s were similarly brought about at times when there was widespread agreement that the prevailing institutional arrangements were not providing acceptable labor market outcomes in these countries.

A major obstacle to the formation of a majority view in favor of substantial reform is that the necessary elements of such reform—weakening the protection of insiders from effective competition and reducing the work disincentives of unemployment benefits—are

considered direct attacks on accrued rights (*acquis sociaux*) by those directly concerned, who consider the benefits of such reform in terms of increased output, lower tax burdens, and making the system sustainable more diffuse and uncertain. And the stronger the impediments to more competitive labor markets, the stronger the political resistance to effective reform by the “beneficiaries” (real or perceived) of existing distortions.<sup>67</sup> One possibility to overcome this stalemate may be to leave existing contracts intact, but to allow current “outsiders” to opt out of existing arrangements and conclude mutually beneficial contracts with employers willing to do so.<sup>68</sup> And this approach can be strengthened on the labor supply side by transforming current passive unemployment benefits into in-work benefits conditional on accepting employment, thus subsidizing work rather than unemployment, whether voluntary or involuntary.<sup>69</sup>

<sup>67</sup>The political economy of labor market reform and reasons for the difficulties in implementing them are discussed in more detail by Gilles Saint Paul, “High Unemployment from a Political Economy Perspective,” in Dennis J. Snower and Guillermo de la Dehesa, eds., *Unemployment Policy—Government Options for the Labor Market* (Cambridge and New York: Cambridge University Press, 1997), pp. 54–73.

<sup>68</sup>There is indeed a trend in the eastern part of Germany for an increasing number of enterprises to opt out of collective agreements and conclude enterprise- or firm-based contracts with their staff, with the explicit objective to stay in business (see Susanne Kohaut and Klaus Schnabel, “Flächentarifvertrag im Westen sehr viel weiter verbreitet als im Osten,” Institut für Arbeits- und Berufsforschung, *Kurzbericht Nr. 19/1998*). Of course, current insiders will (correctly) see this as an indirect attack, which threatens to gradually erode their privileged position, and are thus likely to oppose such a move; see Gilles Saint Paul, “High Unemployment.”

<sup>69</sup>The attractiveness of such an approach in terms of reducing the dependency (and raising the self-esteem) of marginalized members of the labor force, but also the considerable obstacles to (and likely cost of) implementing such a scheme, are discussed in some detail in Robert Solow, *Work and Welfare* (Princeton, New Jersey: Princeton University Press, 1998).

Whatever the specific approach individual European governments will take, an essential condition for successful reform is that any social assistance provide incentives toward market participation and remove institutions and regulations that hamper the market-based reallocation of resources that enhance productivity and growth. Tripartite agreements between government, firms, and workers have also been helpful in some instances. In the series of labor market reforms undertaken by the Netherlands throughout the 1980s, for example, coordinated wage bargaining was used to ensure wage moderation that was then balanced by tax reductions on businesses and increased social assistance to displaced workers. Similarly, reforms in New Zealand in the 1980s included trade liberalization that left workers and firms more exposed to international competition but combined this with reduced government intervention that allowed businesses to respond more rapidly to changing economic conditions.

The experience of countries that have undertaken reforms has been that the full benefits can take a considerable time to materialize. This was the case in the United Kingdom and the Netherlands, for example, where reforms that began in the early 1980s succeeded in lowering unemployment only gradually and with some delay. In Spain, a large proportion of the new jobs created since the 1984 reforms has been governed at least initially by fixed-term contracts, and the share of salaried workers with fixed-term contracts has now risen to around one-third. And job creation across the advanced economies has been strongest in new, dynamic sectors such as information technology, where flexibility is the norm. With the benefits of reform spread over a long horizon, further such changes in the structure of the economy and the makeup of the labor force may be Europe’s best chance for generating the political support to undertake comprehensive reform.