



Chapter

8

*As the extent of economic integration approaches that of the United States, labour market institutions and labour market outcomes may also begin to resemble their American counterparts. . . . Full and irreversible economic integration may call for harmonization of social and labour-market institutions within the European Union.*

**Giuseppe Bertola, 2000**

# Economic integration, labour markets and migration

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## Introduction

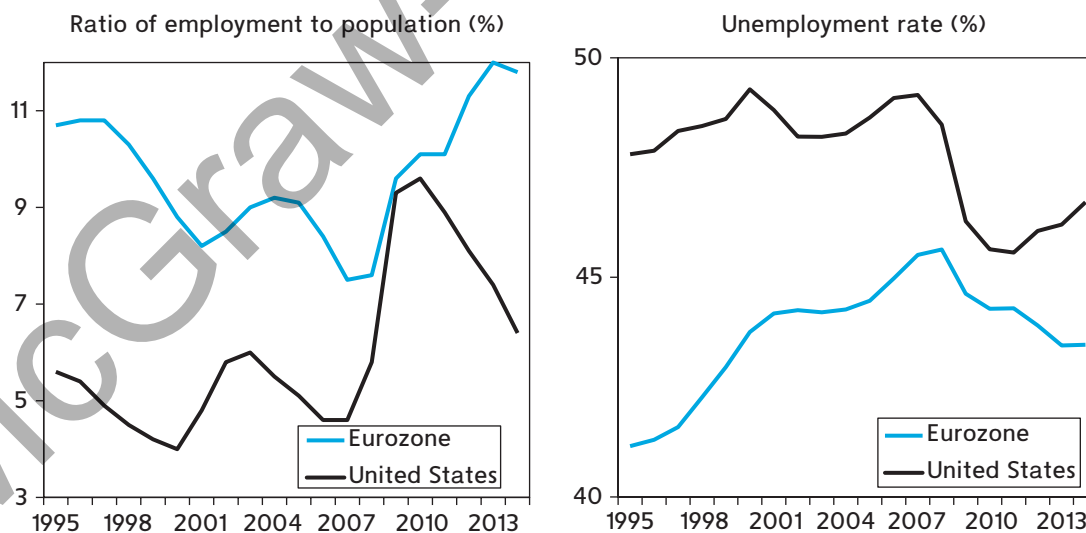
For most people, a good job is an essential element of a good life. This is why employment is a critical political and economic issue throughout Europe. Rightly or wrongly, European citizens expect Europe to improve their lot. The failure to deliver full employment throughout Europe, therefore, is a major failure. Even though labour market policies remain a national prerogative, this failure challenges the whole integration process. The rejection of the Constitution is a symptom of a widespread discontent that does not spare Europe and its institutions. The job difficulties faced by millions of people throughout the continent are due to poor national policies and institutions, but can European integration make the situation better, or worse? This chapter explores the linkages between jobs and European integration. It covers two main topics: unemployment, and how it is related to trade integration, and migration, one of Europe's four freedoms.

The chapter starts by describing the situation of the European labour markets. It shows that in many countries unemployment is high and employment is low. We next present a simple analytical framework that explains the unemployment phenomenon. This framework shows that socially desirable features of the labour market have serious economic costs. Put differently, social protection results in labour market rigidities. With these basics in place, we next examine the impact of European integration on Europe's labour markets. We show that economic and labour market integration encourages labour market flexibility. The last section looks at migration. Migration is another form of integration. From an economic point of view, it allows for a more efficient allocation of resources. But it also helps build up a better understanding of people. In contrast to widespread fears of huge migratory movements, the evidence is that Europeans move little.

## 8.1 European labour markets: a brief characterization

In contrast to goods markets, which are deeply integrated, the labour markets of the Eurozone remain distinct. There are two main reasons for that. First, there is not much 'trade' in labour, because migration within the EU is very limited. Second, each country has its own social customs, a historical heritage that leads to very different legislations and practices. As a result, we cannot talk of a 'European labour market'; there are as many markets as there are countries. Still, on average, the EU is generally not doing well. Figure 8.1 shows

**Figure 8.1** An EU–US comparison, 1995–2014



Note: Eurozone includes the 18 member countries in 2014.

Source: AMECO, European Commission

two measures of labour market performance (see Box 8.1 for an explanation of these and other definitions). The employment-to-population ratio is the percentage of the working-age population (conventionally set at 15 to 64 years) that has a job. The average employment-to-population ratio in the EU27 countries is growing, but remains significantly below the US rate. In 2008, the EU27 employment-to-population ratio stood at 69 per cent. This means that 31 per cent of the working-age population does not have a proper job. Some of these people may be disabled. The others are not working for two main reasons: some cannot find a job; others are not interested in looking for work, in some cases because they are taking care of the household. The right-hand chart shows the unemployment rate, the percentage of people who want to work but do not find a job. It is higher in Europe than in the USA. It is also the case that more Europeans are apparently not keen to work. Labour is a country's most precious input, because it is its people and their talents and because each country spends considerable resources to educate its population. A non-employment rate of 31 per cent thus represents a massive waste of talent and a huge loss in income. Just as bad is that those who do not have a job feel estranged from society.

### Box 8.1 Labour market concepts

#### Categories

A country's total population can be broken down into several categories (Table 8.1). The first distinction is between the total population and the working-age population, conventionally defined as all valid people from 15 to 64 years old. Thus the working-age population excludes the young, the retired and the invalid.

**Table 8.1** Decomposition of the population of the EU28 countries (millions), 2014

Employed (1)	Unemployed (2)	Labour force (3)=(1)+(2)	Out of the labour force (4)	Employment- age population (5)=(3)+(4)	Population (6)
225	35	259	76	336	510

Source: AMECO, European Commission

The working-age population ( $N$ ) can be decomposed into three groups: (1) those who are employed ( $E$ ); (2) those who are unemployed ( $U$ ); and (3) those who are out of the labour force ( $O$ ):

$$N = E + U + O$$

The labour force includes the employed and the unemployed:

$$L = E + U$$

and the working-age population is the sum of the labour force and the others:

$$N = L + O$$

People out of the labour force are those who do not want to work and those who are too discouraged even to seek a job and thus qualify as unemployed.

### Ratios

The unemployment rate ( $u$ ) is the ratio of the number ( $U$ ) of people who declare themselves unemployed (they have no job and are actively looking for one) to the labour force ( $L$ ):

$$u = \frac{U}{L}$$

The employment rate ( $e$ ) is the remaining proportion of the labour force, composed of those who hold jobs:

$$e = \frac{E}{L} = 1 - u$$

The participation rate ( $p$ ) is the ratio of the labour force to the working-age population:

$$p = \frac{L}{N} = 1 - \frac{O}{N}$$

The employment-to-population ratio, which is shown in Figures 8.1 and 8.2, is the proportion of people of working age who hold a job:

$$eR = \frac{E}{N} = \frac{E}{L} \frac{L}{N} = ep$$

### How are people counted?

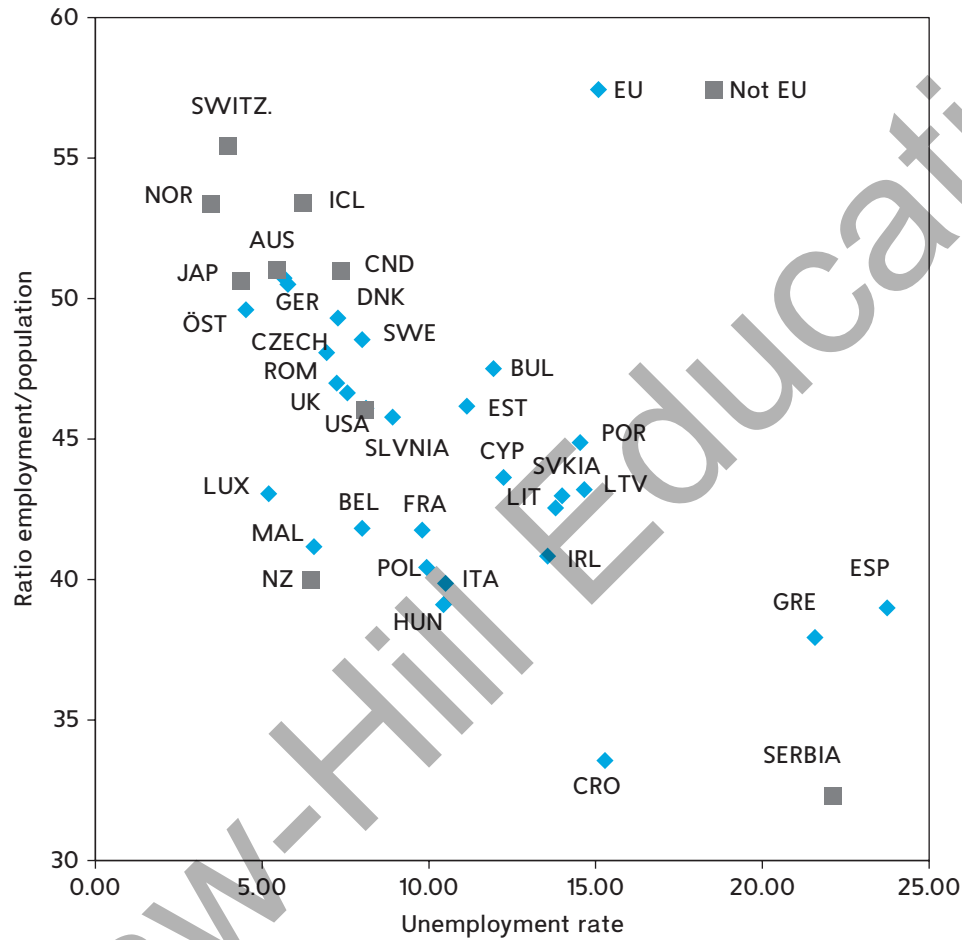
This is not an innocuous question. Each country carries out census polls and other formal population-counting procedures. The employed,  $E$ , are identified from firms reporting taxes and various welfare contributions, and from surveys. The unemployed,  $U$ , are identified either through polls or because they are officially registered as such (the difference matters as each country has its own procedure; the International Labour Office produces harmonized data based on surveys). This leaves those out of the labour force,  $O$ , as a residual ( $O = N - E - U$ ). Precision is not the name of the game as the black market can include 10 or 20 per cent of the working-age population.

An important distinction is between voluntary and involuntary unemployment. In principle, people who do not want to work are classified as out of the labour force ( $O$ ). In practice, however, things are less clear cut: some people counted in  $U$  are really voluntarily unemployed or actually employed, whereas others counted in  $O$  are involuntarily unemployed. Three main reasons explain this discrepancy. First, some unemployed people are really working in the black market (they are counted in  $U$  whereas they should be in  $E$ ). Second, being unemployed opens the door to a range of welfare payments, mainly unemployment insurance benefits. It is believed that these benefits enable workers to be choosier and to reject some job offers or to search less than would otherwise be the case; yet, they must identify themselves as involuntarily unemployed either by registering or when polled. Finally, some people who have searched for a job for a long time become discouraged and simply drop out of the labour force (i.e. they are counted in  $O$  whereas they really are in  $U$ ).

*Note:* These concepts are further defined and explained in International Labour Organization (ILO) publications. See [www.ilo.org](http://www.ilo.org).

While, on average, European labour markets underperform, the situation varies considerably from one country to another. This is illustrated in Figure 8.2, which displays the average employment-to-population ratios and the unemployment rates during 2010–14 for each EU country as well as for similar non-EU countries. The countries with the best-performing labour markets are closer to the top-left corner,

**Figure 8.2** Employment-to-population ratios and unemployment rates in 2010–14: EU28 and comparable non-EU countries



*Note:* Averaged over the period 2010–14. The non-EU countries are Australia, Canada, Iceland, Japan, New Zealand, Norway, Serbia, Switzerland and the USA.

*Source:* AMECO, European Commission

while poorly performing countries appear in the bottom-right corner. Most of the countries with the best performing labour markets are non-EU members. With the exception of Serbia, the poorly performing countries are all EU members.

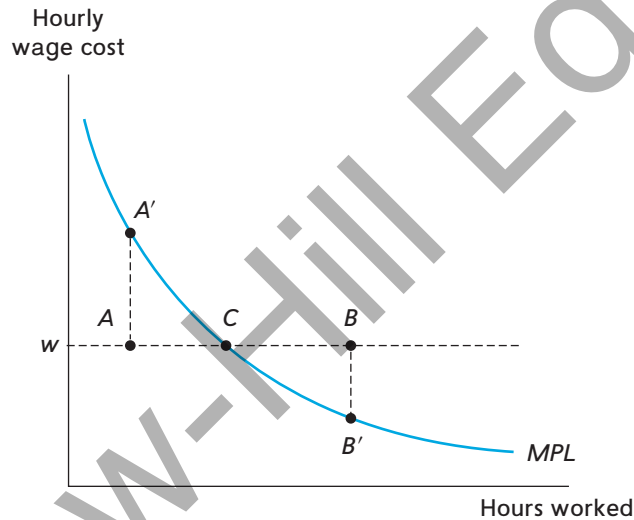
## 8.2 Labour markets: the principles

We start with the essential tools that will guide us throughout this chapter. We look at the demand for labour by firms, at the supply of hours of work by individuals, and ask why unemployment is a general feature. This question leads us to realize that the labour market is a very special market, similar to none other.

### 8.2.1 Demand

Jobs exist because firms employ people. When deciding whether to hire an additional worker, a firm looks at the cost and the benefit. The cost is the wage, to which must be added the various contributions that most governments impose (contributions to health, unemployment and retirement programmes). As we will think in terms of hours of work, let us call this total the hourly wage cost. The benefit is the additional output that the worker will deliver, which is called the marginal productivity of labour – because we look at the margin, the output from one more hour of work. A key feature of labour productivity is that it declines as more hours are being performed. One reason is that, at any point of time, the equipment available in the firm is given, so that more workers will have to share it. Another reason is that longer hours mean that workers get tired and equipment is used up faster and breaks down more often. The principle of declining labour marginal productivity is captured in Figure 8.3 by the downward-sloping curve labelled *MPL*.

Figure 8.3 Labour demand



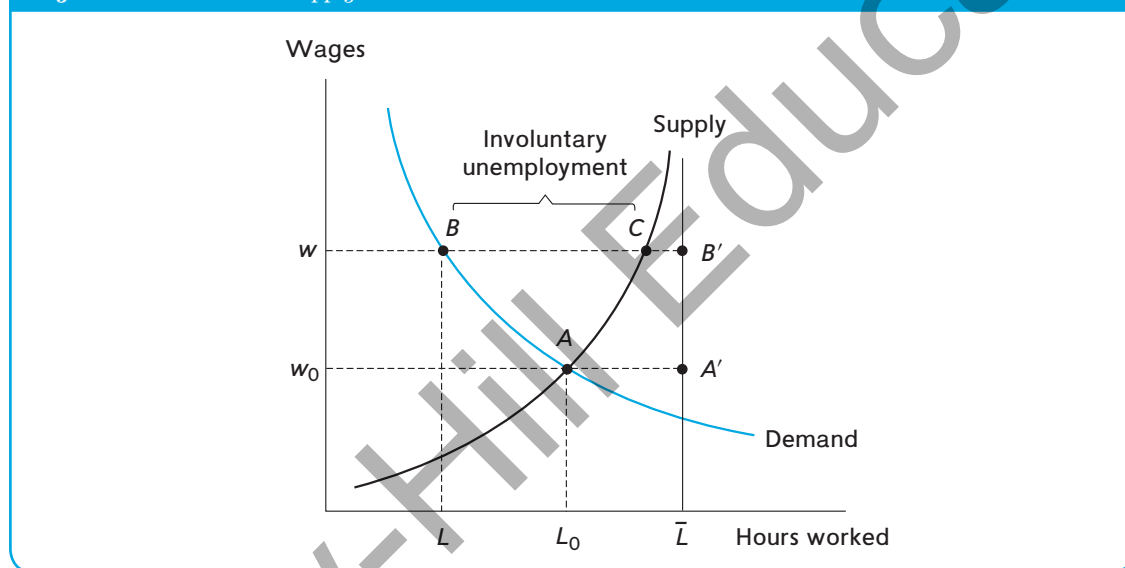
Now imagine a firm facing an hourly labour cost  $w$ . If it chooses to buy the number of hours corresponding to point  $A$  in Figure 8.3, its cost is lower than its benefit, which corresponds to point  $A'$ . Hiring one more hour is therefore highly profitable, and there is no reason for the firm not to do so and move rightward from point  $A$ . How far? Imagine that the firm goes all the way to point  $B$ , where the hourly labour cost is now higher than the marginal productivity of labour, as point  $B'$  indicates. Hiring more hours would entail losses. Reducing one hour would mean saving on the wage bill by  $w$  and giving up output by *MPL*, hence a saving for the firm. This means that the firm does well by moving leftward from point  $B$ . Clearly, the best position is at point  $C$ , on the *MPL* curve. If  $w$  rises, the point corresponding to point  $C$  will move up the *MPL* curve. This shows that the firm will always hire the number of hours that corresponds to the marginal productivity of labour. Put differently, the *MPL* curve represents the firm's demand for labour.<sup>1</sup>

<sup>1</sup> Note that the marginal productivity is measured in units of output. To be comparable, we also need to measure wage costs in the same units, e.g. one hour of work gets you three beers or one-thousandth of a car, more generally a portion of GDP. We consider here the real wage, which is represented as the ratio of the nominal wage  $W$  to the price level  $P$ ,  $w = W/P$ .

## 8.2.2 Supply

Labour is supplied by people. As we all know too well, work is tiring and less pleasurable than leisure. This is why we ask for remuneration. How much we ask will depend on our skills and personal characteristics, including our inclination to stay at home. We consider the ‘average’ worker, so we ignore these personal characteristics. Instead, we ask what has to happen to the wage to convince the average worker to work one more hour. If the worker is unemployed, ignoring for the time being any welfare income such as unemployment benefits, almost any salary is better than nothing. If the worker already works quite a lot, one more hour is not that attractive and it will take a fairly good salary to convince her to stay longer on the job. This reasoning suggests that the supply of labour can be represented by an upward-sloping curve, as shown in Figure 8.4. The curve is steeper, the choosier the worker is.

Figure 8.4 Demand and supply



## 8.2.3 Equilibrium and more realism

Equipped with the demand and supply apparatus, we are tempted to conclude that the outcome occurs at point  $A$  in Figure 8.4 where demand and supply meet.<sup>2</sup> Note that, in this situation, both firms and workers are perfectly satisfied with the situation. In particular, the total amount of work  $L_0$  corresponds precisely to what workers are willing to supply at the going wage  $w_0$ . That does not mean that every worker has a job or that every employed person works full time. Such a case of full employment corresponds to  $\bar{L}$ . The distance  $AA'$  represents unused labour or unemployment. This is a special form of unemployment, however, for these hours are voluntarily not worked. Given the wage rate, some people do not wish to work at all or to work long hours – this is the meaning of the supply curve.

If, as Figure 8.4 presumes, the labour markets operated like other markets, there would be no involuntary unemployment. This is why equilibrium at point  $A$  is unrealistic. Since in every country a number of people are involuntarily unemployed, we have to admit that this is not a good description of real-life labour markets. Indeed, labour markets are very special, and for a good reason. The goods that are bought and sold on this market are people's time, talent and effort. Quite obviously, these are not standard goods.

Looking at Figure 8.4, we see that involuntary unemployment can only occur if workers are not on their supply curve. More precisely, they must be kept involuntarily somewhere to the left of the supply

<sup>2</sup> Here, we ignore the various charges that make wage costs different from what workers take home. Section 8.3.3 shows how to deal with this issue.

curve. On the other hand, firms are usually on, or close to, their demand curve. True, firms can have more workers than they want because they are forbidden to dismiss workers or, on the contrary, they may be unable to find all the workers that they need. But these are transient and limited departures, and we can safely ignore them. This all means that, in order to explain involuntary unemployment, we have to imagine that the economy lies on the labour demand curve somewhere up above point  $A$ , for example at point  $B$ . In this case, employment is  $L$ , and the distance  $BC$  measures involuntary unemployment while  $CB'$  captures voluntary unemployment.

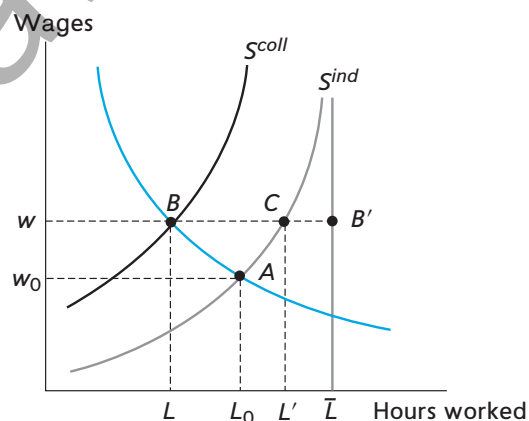
How can point  $B$  be a lasting equilibrium? The salient feature of point  $B$  is that the wage  $w$  is above its no-involuntary-unemployment level  $w_0$ . The challenge, therefore, is to understand why such an outcome is possible. If the labour market were a market like all others, the wage rate would decline until it reached  $w_0$ . This is not what happens. Somehow, wages do not move up and down, and they very rarely move down. A number of characteristics explain this feature:

- Salaries, the price of labour, are not set like the price of oil or corn, through bidding. They are collectively negotiated by representatives of employers and employees.
- Negotiations take place at more or less regular intervals and agreements hold for periods that usually extend to one year or more. Thus labour markets react slowly to changing conditions.
- Wage contracts are often regulated. For example, in many countries minimum wage legislation hampers downward adjustments.
- Conditions under which workers are hired and dismissed are also the object of specific legislation and customs.
- Unemployment benefits, designed to limit the hardship of becoming unemployed, can backfire, as explained below.

### 8.2.4 The economics of collective negotiations

The most crucial feature, perhaps, is the collective nature of labour negotiations. We now amend the demand–supply diagram to illustrate their economic effects. Workers resort to a collective representation – let’s call it a trade union for the sake of simplicity – because it allows them to achieve better wages. If the arrangement works – if it did not, it would not have survived – the trade union’s action delivers a higher wage than individual workers would achieve on their own. In Figure 8.5 we distinguish between the

Figure 8.5 The role of collective negotiations





individual supply curve  $S^{ind}$ , which describes how individuals trade off income from work against leisure time, and a collective supply curve  $S^{coll}$ , which lies above the previous one.

Point  $A$  shows the outcome of the free interplay of individual demand and supply in the labour market in the absence of any rigidity: employment is  $L_0$ , the real wage is  $w_0$  and there is no involuntary unemployment. With collective negotiations, the outcome of the negotiation is now represented by point  $B$ . As collective negotiations raise the real wage to  $w$ , firms respond by aiming at production processes that are less labour intensive and employment declines to  $L$ . Note that, at the new, higher wage level  $w$ , the amount of labour that workers wish to supply increases to  $L'$ , corresponding to point  $C$ . The result is involuntary unemployment represented by the distance  $BC$ . This unemployment is collectively voluntary, however.

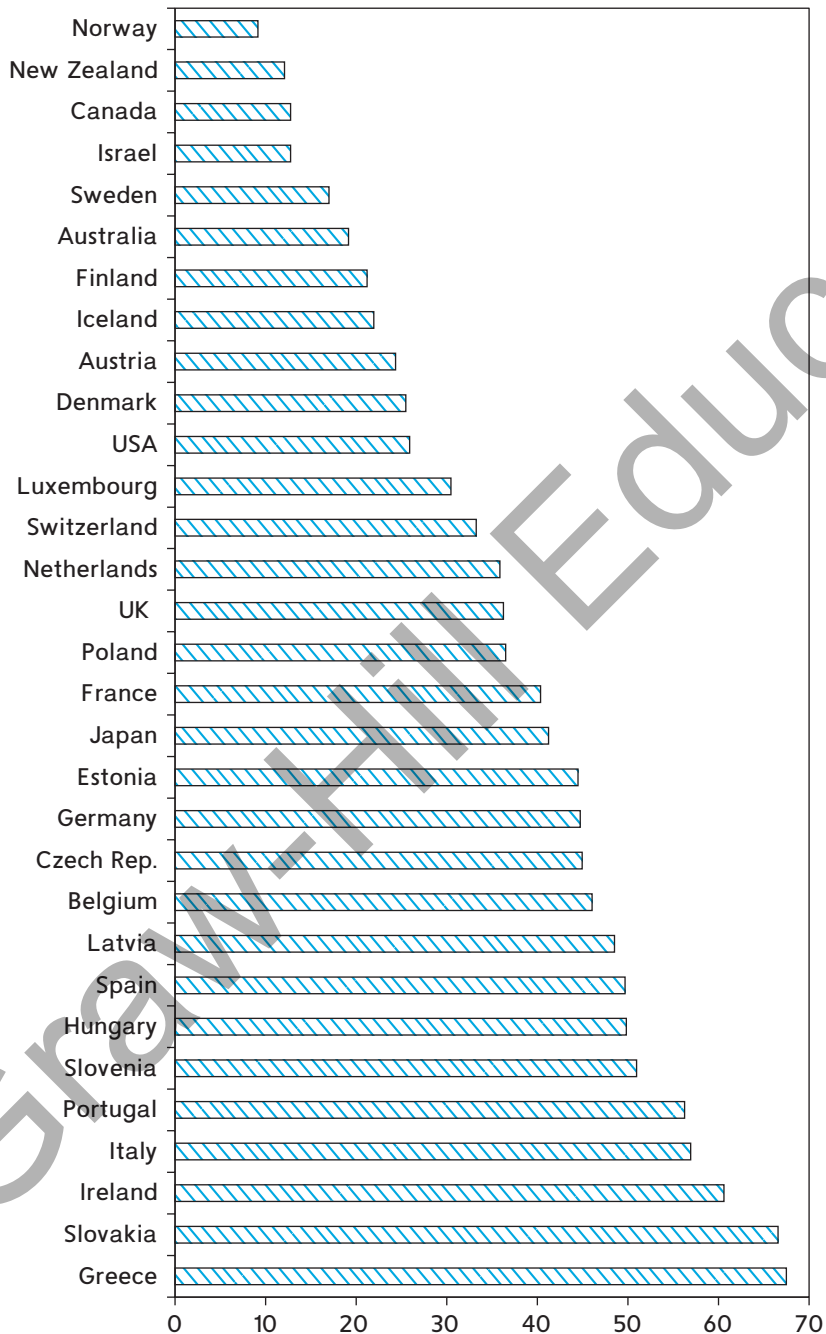
Why is this feature of labour markets so widespread? The workers who negotiate wages are, by definition, those who hold a job. They are the insiders. Reducing their own wages would allow some of those currently unemployed, the outsiders, to find jobs. But outsiders have no voice in the negotiations and the insiders have no interest in accepting wage cuts. This is why point  $B$  is stable in the sense that there is no mechanism that would change the situation. From a social and political viewpoint, this is understandable. The overwhelming majority of workers are employed since the highest unemployment rates rarely exceed 10–15 per cent, at least in the developed countries. Democratically, therefore, they support an institution that delivers higher wages, even at the cost of unemployment. In return, the insiders ask for assistance for the unemployed. Unemployment benefits are usually financed, partly at least, through taxes paid by the employed, who then feel that the outcome is beneficial to them and fair to the unemployed. Yet, from a strict economic point of view, these arrangements can be analysed as rigidities that prevent the labour markets from being flexible enough to avoid involuntary employment, sometimes on a very large scale, as Table 8.1 shows.

Collective negotiations provide a first explanation of the involuntary unemployment phenomenon, but many other common features conspire to make things worse. This is the case of high and, especially, long-lasting, unemployment benefits. These benefits have an obvious justification. Losing a job is already a traumatic experience; at least those who face this hardship, and their families, should live decently until they find a new job. But experience shows that a by-product of these benefits is that unemployed people feel less pressure to take up new jobs, and therefore remain unemployed for longer periods of time, which further lessens the pressure on insiders to allow for more wage flexibility. Figure 8.6 shows that, in many EU countries, a large number of people remain unemployed for more than one year. This is an important example of the fact that many European countries have long attached more weight to social protection than to economic efficiency. They tend to run socially generous but economically inefficient unemployment programmes. Some countries have found a way of combining both concerns. This is the case in the Scandinavian countries, which provide generous unemployment benefits coupled with the obligation to take up job offers.

### 8.2.5 The cyclical impact of wage rigidity

An important implication of wage rigidity can be seen by considering the case of a cyclical downturn when the wage is fixed at  $w$ . We start in Figure 8.7 from a situation where employment takes place at point  $B$ , with involuntary unemployment measured by  $BC$ . Now imagine that the economy slows down, for reasons explained in Chapter 17. Firms cannot sell all their products. Given that their equipment is in place anyway – their stock of capital cannot be reduced – the marginal product of labour declines and the demand for labour shifts down from  $D$  to  $D'$ . If the wages were perfectly flexible, we would have started at point  $A$  and moved to point  $A'$ . Employment and wages would have declined, voluntary unemployment would have risen but there would still be no involuntary unemployment. With wages rigidly maintained at  $w$ , we move to  $B'$ , employment declines from  $L$  to  $L'$  and involuntary unemployment rises to  $B'C$ . It is easy to imagine the opposite case of an economic expansion, which would result in higher employment and lower involuntary unemployment. We see that wage rigidity explains the fact that cyclical fluctuations are accompanied by variations in involuntary unemployment.

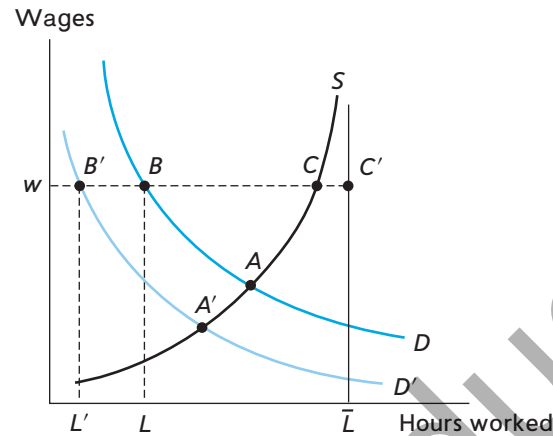
Figure 8.6 Long-term unemployment, 2014



Note: Percentage of unemployed who have been unemployed for more than one year.

Source: *Employment Outlook*, OECD online database

Figure 8.7 A cyclical downturn



### 8.3 Effects of trade integration

The previous chapters have focused on the effects of the Single Market on the goods and services markets and on overall economic growth. This section looks at the effects on the labour markets. In order to compete in the goods and services markets, producers must fight on all fronts; first and foremost, their production costs. Production costs include three main components: labour costs, the price of equipment and the price of materials.

Both equipment and material costs are largely determined internationally (since domestically produced goods must compete with imports) and therefore are not a source of comparative advantage. Labour costs, which typically amount to over 50 per cent of total production costs, on the other hand, are a key source of competitiveness. Competition in the goods market, in turn, has deep implications for the labour markets. Through goods markets, national labour markets indirectly compete against each other. This section examines some implications of this observation.

#### 8.3.1 Economic effects of trade integration

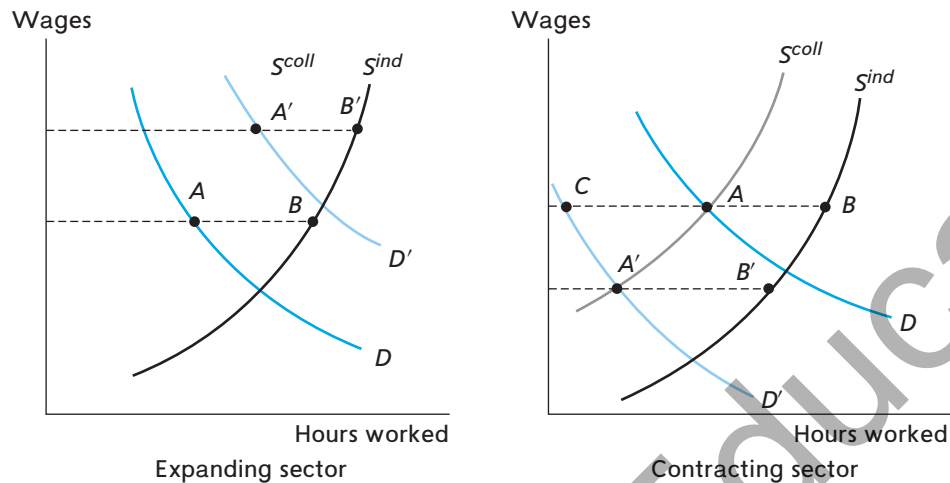
Chapter 4 shows the distortionary effects of barriers to trade. When these barriers are eliminated, Chapter 5 shows that protected import-competing industries shrink while export industries expand. In terms of the analysis above, this can be seen as shifts in the labour demand curve that take place at the sectoral level.

If the labour markets are fully flexible, wages should rise in the industries that expand and they should decline in the industries that shrink. This, in turn, should trigger workers to move from the shrinking to the expanding industries, until wages are the same in both sectors. Wages could rise or decline, depending on the relative importance of the various adjustments, but there would still be no involuntary unemployment.<sup>3</sup>

A more realistic description must recognize the labour market rigidities presented in Section 8.2. As an illustration, we can either assume that wages are downward-rigid, as in Section 8.2.3, or think of the distinction between individual and collective labour supply, as in Section 8.2.4. We do both in Figure 8.8, where we imagine that trade opening separates out the economy into two broad sectors, an expanding one and a contracting one. Additionally, we take the extreme case where workers are specialized and cannot move from one sector to the other, at least not until they have undergone retraining.

<sup>3</sup> The Heckscher–Ohlin theory predicts that wages will increase if the country is capital-intensive relative to its trading partners and that wages will decrease if labour is relatively more abundant. This reasoning ignores the subsequent impact on capital accumulation.

Figure 8.8 Trade integration and the labour markets



The initial situation is represented by point  $A$  in both charts. With collective labour bargaining, involuntary unemployment is measured by  $AB$  in each sector. The left-hand chart describes the expanding industry, where the demand for labour increases and the curve shifts from  $D$  to  $D'$ . The opposite happens in the contracting sector, shown in the right-hand chart. The new situation is represented by points  $A'$  in both charts and involuntary unemployment is measured by  $A'B'$ . It is not clear whether involuntary unemployment increases or decreases, both in each sector and in total. If the  $S^{coll}$  and the individual labour supply  $S^{ind}$  curves are parallel, there is no unemployment effect. There is a priori no reason to expect trade integration to raise or lower unemployment. This lines up with the facts. As previously noted, the tighter integration of European markets has been accompanied by steady or rising unemployment rates in some EU members such as France and Germany, but falling unemployment rates in members such as the UK, Sweden and Spain.

The only clear effect is that wages rise in the first sector and they decline in the second one. This may be seen as a source of growing inequality if wages were previously higher in the now-expanding sector, but inequality could be declining in the opposite case. At the very least, workers in the contracting sector may see the impact of trade integration as unfair.

We can briefly also consider what happens if, in addition, wages are downward-rigid, meaning that they can rise but not decline, because of legislative arrangements, social customs or the prevalence of minimum wage legislation. This does not matter for the expanding sector, since wages there increase. In the contracting sector, however, downward wage rigidity implies that the outcome is found at point  $C$  and involuntary unemployment, measured by  $CB$ , unambiguously increases.

In the end, trade integration does affect unemployment, unless the rigidities are severe. In that case, unemployment and inequalities are likely to rise. Yet trade is being blamed for creating unemployment. In fact, trade is only the messenger, which reveals the adverse effects of underlying distortions. This message, however, is very difficult to convey – the analysis presented here is far from trivial – and protectionism is never far below the surface. This is one reason why Europe's ability to dismantle *all* trade barriers is rather exceptional.

### 8.3.2 Institutional effects of trade integration

Labour market distortions are almost always related to institutional arrangements that reflect a country's political and social history. These institutions imply various degrees and forms of rigidity, with various effects on productive efficiency and unemployment. Such a deep change as European integration is unlikely

to leave the institutions untouched. This section shows that labour market institutions and economic integration interact, with influences running in both directions:

- Economic integration affects the nature of labour market institutions. These institutions arise from a compromise between economic and social imperatives, reached under conditions that prevail at some point in time. When faced with deep economic integration, labour market institutions become a strategic characteristic in the quest for competitiveness, i.e. economic effectiveness. The ability of firms to compete across borders on the Single Market depends on the ability of employers and employees to react adequately to adverse shocks. In addition, if the labour markets are too inflexible, integration may result in job losses with no job gains and possibly even no general economic gain either. This changes the incentives that justified the initial institutional arrangements and, quite likely, opens the way to labour market reforms that raise the effectiveness of labour markets. Figure 8.1 shows that, indeed, some progress has been achieved in the EU.
- Labour market institutions affect integration. Economic integration almost always creates winners and losers, but typically the winners win more than the losers lose. Europeans' willingness to elect leaders who push ever-deeper integration hinges critically on their belief that labour market institutions along with social safety nets will spread the net benefits of integration and dampen the pain felt by the losers. In the absence of some degree of fairness, broad political support for ever-closer economic integration is unlikely to be maintained in EU nations.

One important question is how national labour market institutions stand to be affected by the process of EU integration. In principle, since trade competition becomes competition among national social arrangements, survival of the fittest should guarantee that, eventually, all European states will gravitate towards the most efficient arrangements. This principle, however, must face the fact that European integration can be challenged, and even possibly reversed, if it is perceived as unfair.

### 8.3.3 Economics of 'social dumping'

A good example of this situation is the widely held view that European integration undermines valuable social protection, a view summarized as 'social dumping'. Indeed, workers in many of the older Member States (EU15) are convinced that competition from the 12 new Member States (EU12) will force a reduction in the level of social protection that they enjoy today. At the time they joined, wages were much lower in the EU12 countries (see Table 8.2) and in some of them the level of social protection was also considerably lower than in the EU15.

There is nothing new here; it is an old, old concern. It was, for example, the crux of a major debate over the shape of the Treaty of Rome in the 1950s. In the early 1950s, French workers worried that lax social policy in Italy and Germany would undermine French social policy. Half a century later, in 2005, French workers voted against the European Constitution, partly because they feared competition from the famed 'Polish plumber'. As history would have it, since the 1950s social protection of workers rose spectacularly throughout western Europe despite (or maybe because of) the deep integration between nations that initially had very different wage and social protection levels. Much the same is happening now in the EU12 countries. Table 8.2 shows that the wage gap is often narrowing.

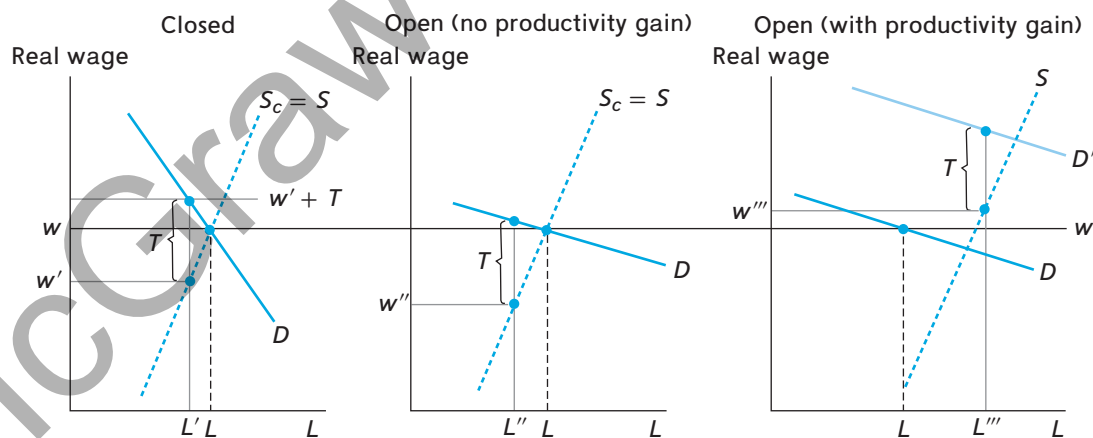
Such fears lead to calls for social harmonization. The leaders of the six founding nations of the European Union already worried about 'social dumping'. Yet, they decided that harmonization of most social policies was not a necessary component of European integration. The economic logic behind this judgement continues to affect EU policy, so it is worth considering in some detail.

To get a handle on the basic issues, we start by making strong assumptions to radically simplify the range of issues at hand. We will add back in some important aspects of reality after having established the basic points. Taking the example of France, we start by supposing that, as in Section 8.2.3, labour markets operate like other markets, so the wage adjusts to make sure that there is no involuntary unemployment. Moreover, to keep things simple, suppose France starts without any social policies and initially is closed to trade. The equilibrium, shown in the left-hand panel of Figure 8.9, is where the real wage is  $w$  and the employment level is  $L$ .

**Table 8.2** Median net earnings (annual), 2004–13

	2004	2006	2008	2010	2012
Bulgaria	729	961	1,308	1,536	1,799
Czech Republic	2,617	3,427	4,671	4,897	5,103
Estonia	–	–	4,046	4,041	4,588
Latvia	1,393	1,916	3,109	2,919	3,219
Lithuania	1,602	2,074	2,967	2,798	2,982
Hungary	2,724	3,061	3,560	3,457	3,113
Poland	2,229	2,776	3,717	3,515	3,599
Romania	944	1,431	2,066	2,068	2,084
Slovenia	–	–	5,953	6,513	6,758
Slovakia	–	–	3,715	4,035	4,133
Germany	13,129	13,267	14,098	14,706	15,254
France	11,968	12,745	13,672	14,050	14,443
UK	17,133	18,256	16,733	16,036	18,170
EU27	10,729	11,300	11,662	11,986	12,697

Source: [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Wages\\_and\\_labour\\_costs](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Wages_and_labour_costs)

**Figure 8.9** Social policy and distortions

Now suppose the French government adopted a whole series of social policies, e.g. limits on working hours, obligatory retirement benefits, maternity leave, sick leave, 6 weeks of annual holiday, etc. These policies would undoubtedly be good for most workers. Indeed, most Europeans view these as necessities, not luxuries. Yet, however good these policies are for workers and society at large, they are expensive for

firms. To be specific, suppose that they raise the cost of employing workers by  $T$  euros per hour. What happens to wages and employment? The demand schedule shifts vertically down by  $T$ , since labour cost has increased by that amount. The new equilibrium wage paid to workers – this is called the ‘take-home’ pay – with the general policy will be  $w'$ .<sup>4</sup> It is useful to think of the social policy ‘tax’ being paid partly by consumers (in the form of higher prices) and partly by workers (in the form of lower take-home wages). The firms we consider here are competitive and so cannot bear any part of  $T$  (they earn zero profits both before and after  $T$  is imposed).

Why does the take-home wage fall when social policies are imposed? Firms hire workers up to the point where marginal labour productivity is equal to the wage cost, as explained in Section 8.2.1. This cost includes wage and non-wage costs, such as the cost of social policies. Firms cannot pay higher labour costs if they want to avoid losing money. Given this iron law of the labour market – firms hire workers up to the point where all included employment costs equal the workers’ value to the firm – everything that raises non-wage labour costs must force down the take-home pay of workers. In essence, the social policies are a way of ‘forcing’ workers to take part of their remuneration in the form of non-wage ‘payment’, e.g. 4 weeks of paid holiday or generous sick leave, instead of in the direct form of take-home pay.

Next, consider the impact of freeing trade in goods between France and other nations. As far as the labour market is concerned, freer trade has two main impacts:

- 1 As discussed at length in Chapters 4, 5, 6 and 7, trade tends to boost the productivity of an economy. It does so by allowing a nation’s capital and labour to be allocated more efficiently. For example, Chapter 6 showed how freer trade produced fewer, larger, more efficient firms that faced more effective competition from each other.
- 2 Trade also tends to flatten the demand curve since it heightens the competition between national firms and foreign firms. For example, if real wage costs rise by €100 per week, firms will have to raise prices. The negative impact of higher prices on output, and therefore employment, is greater in the presence of foreign competition. Or, to put it more directly, greater integration of goods markets means that workers in different nations compete more directly with each other.

We begin with the second concern since this is closest to the everyday concerns of many workers in Europe. The middle panel in Figure 8.9 shows the impact of the flatter demand curve on French labour. The way the diagram is drawn, openness per se would have no impact if there were no social policy. Without the tax  $T$ , wage and employment levels would be as in the closed economy case (i.e.  $w$  and  $L$ ). The non-wage costs, i.e.  $T$ , however, change things. Since labour demand is now more responsive to total labour costs, the take-home wage of French workers will fall more, to  $w''$  rather than  $w'$ , when  $T$  is imposed. The reason is simple. Greater openness gives consumers a wider range of options. When  $T$  is imposed, more of it gets paid by workers than by consumers. In other words, the greater price sensitivity forces workers to bear more of the burden of the social-policy ‘tax’.

The result that greater openness reduces wages flies in the face of Europe’s experience. The incomes of European workers have been growing steadily as European markets have become more tightly integrated. Moreover, as discussed in Chapter 7, some of the fastest income growth occurred in the 1960s when European trade integration was proceeding at its fastest pace. How can we explain this? The efficiency-enhancing effects of trade integration are the answer.

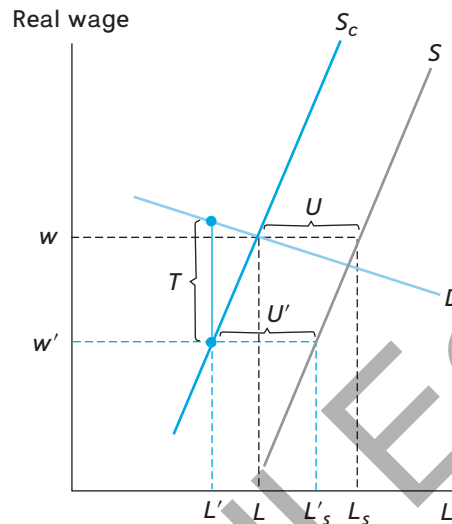
The third panel in Figure 8.9 shows the labour market implications of trade-induced efficiency gains. As productivity rises, the value of workers to firms rises and this is demonstrated as a shift up the demand curve to  $D'$ . Now we see that, even if trade integration makes the demand curve flatter, the shift up in the labour demand curve more than offsets flattening. In the figure, the take-home wage has risen to  $w''$  and employment has increased to  $L''$ .

So far we have put the issue of unemployment to the side by assuming that the labour market clears. To consider unemployment, we allow the ‘collective’ labour supply curve ( $S^{coll}$ ) and the individual labour supply curve ( $S^{ind}$ ) to differ, as in Section 8.2.4. This is done in Figure 8.10, which corresponds to the second panel of Figure 8.9. The initial position is characterized by unemployment  $U$ , with employment  $L$  and supply

<sup>4</sup> Readers who have taken a good course in microeconomics will recognize this as the analysis of the ‘incidence’ of the ‘tax’  $T$ .

$L_s$ . The social policy distortion reduces employment to  $L'$  and supply to  $L'_s$ . The effect on unemployment is not clear, however, and this is also the case of the trade-opening effect, as we have already seen in Section 8.3.1. Here again, trade integration has no direct impact on unemployment, only on employment.

**Figure 8.10** Social policy distortions with involuntary unemployment



What has all this got to do with social dumping? What we have shown is that the total cost of employing workers – wage and non-wage costs – is tied to the productivity of workers. If governments raise social policy standards, the economy will adjust by lowering employment and reducing the wages (of course, wages rarely fall; what would happen is that wages would rise more slowly than productivity for a number of years, as happened in France when the 35-hour week was introduced). When an economy is more open, the wage and employment adjustments tend to be greater, other things equal. Or, to put it more colloquially, the anti-employment effects of social policies are magnified by greater openness.

This does not necessarily put pressure on social policies. The key point is that the same mechanism is at work in France's trade partners. If the other nations have lower social policy standards, their workers will have higher take-home pay than otherwise, since the foreign firms hire workers up to the point where their total labour cost matches their workers' productivity. Social harmonization would result in lower wages in these countries but would have little impact on the competitive pressures facing French employers. Turning this around, the same logic tells us that lowering French social policy standards would not boost French competitiveness in anything but the short run.

The upshot of all this should be clear. The logic of competition ties the sum of wage and non-wage costs to workers' productivity. The founders of the EU therefore believed that the division between wage and non-wage costs could be left to the choice of each Member State exactly because this division has only a moderate impact on external competitiveness.

## 8.4 Migration

Along with the other freedoms of movement (goods, services, capital), the free movement of workers is the cornerstone of EU integration and has been so since its inception in the 1950s. The goal is both economic and political. Allowing workers to move freely within the Union should enhance economic efficiency by allowing workers to find the jobs that best suit their skills and experience, while simultaneously allowing firms to hire the most appropriate workers. On a political level, the architects of the EU hoped that mobility

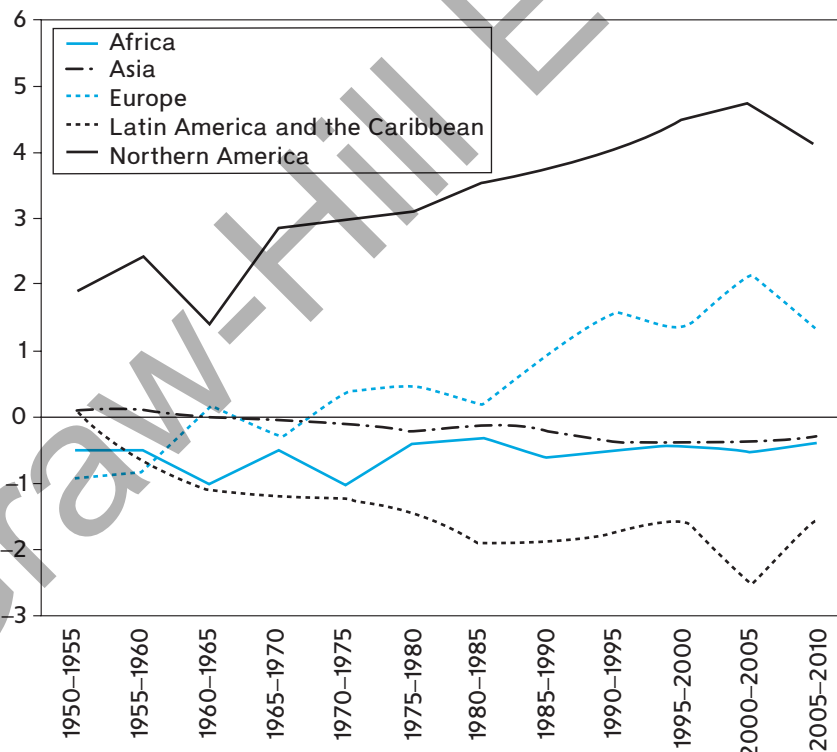


would foster mutual understanding among the peoples of Europe. As many readers will know from first-hand experience, the fact that many young Europeans spend some time living, studying or working in other EU nations has had a big impact on the way Europeans view each other. This section considers European migration. We start with some facts.

### 8.4.1 Some facts

We start with global migration patterns. Figure 8.11 presents the net migration record – the excess of immigrants over emigrants, so that negative numbers indicate an outflow of workers while positive numbers mean an inflow – of continents since the 1950s, with forecasts for the period 2005–10. The figure confirms that people move from ‘the South’ to ‘the North’ and increasingly so. It also shows that Europe has switched from net emigration to net immigration. This is explained by Europe’s spectacular growth during the late 1950s and the 1960s, which brought about conditions of full employment and led governments and firms to seek out foreign labour. The turnaround of Europe’s economic fortunes, starting with the 1973 recession, temporarily stopped the evolution, but the trend has been resumed. This pattern reflects the two basic reasons why people leave their countries: (1) they flee poverty and (2) they flee political instability and related violence. In general, political instability breeds poverty.

**Figure 8.11** Net migration rates, 1950–2010



*Note:* The net migration rate is the ratio of number of net migrants (immigrants less emigrants) to the local population.

*Source:* World Population Prospects, UN

Global numbers should not conceal important differences within Europe. For decades, southern Europe (Italy, Spain, Portugal and Greece) and south-eastern Europe (mainly Turkey) were prime sending nations, while the northern European nations (the EEC6 less Italy plus the Nordic and Alpine countries) were big

receiving nations. Since the early 1980s, with growth picking up, the southern European nations have become net importers as well. Some of this migration involves the return of Spanish, Italian and Portuguese workers who had previously emigrated, but it also reflects an increasing inflow of non-European workers from places such as Africa or Latin America. Within Europe, Turkey has been joined in its role as a provider of migrants by central and eastern European nations that dropped, by the end of the 1980s, general restrictions on emigration imposed by their previous regimes.

Migration within the EU is, in principle, free. Yet, when the EU was expanded in 2004, special provisions were temporarily imposed on the 10 new members to limit migration from these countries to the incumbent 15 members. Similar restrictions were imposed on Bulgaria and Romania upon accession in 2007. We return to this issue in Section 8.4.4. Box 8.2 explains why fears of massive immigration from central and eastern Europe have been unjustified. In fact, seven out of ten foreign workers in EU Member States are from non-EU countries. The policies that govern labour flows from non-member nations are entirely national – the EU does not try to impose what might be called a common external migration policy. To put it differently, being part of the EU's common labour market does not seem to matter very much for migration.

### Box 8.2 The flood that was not to be

The 2004 and 2007 enlargements brought 12 countries and about 100 million new citizens into the European Union. Table 8.2 shows that most workers in the EU12 countries are paid substantially less in their home nations than they would get if they held similar jobs in the EU15. According to the principles laid out in Section 8.2.1, this difference is primarily due to higher labour productivity in the EU15. The income gap between the east and the west in Europe is approximately 50 per cent when adjusted for higher prices in the west; at current exchange rates, the income gap is even larger. This raised the prospect of massive east–west migration, but this possibility has not become reality.

Direct bilateral flow numbers are not available (and data on migration are notoriously unreliable), so we proceed in an indirect way. Table 8.3 reports net migration flows. It is likely that gross outflows from the EU12 to the EU15 countries were significantly larger, since most EU12 countries have also witnessed immigration from the rest of the world, including from the CIS (Commonwealth of Independent States) countries of the former Soviet Union, as well as from some southern European countries. Net outflows have declined in all EU12 countries, several of which have actually become net immigration countries. Looking at the EU15 countries, net inflows mostly declined between 1997–2003 and 2004–07, in spite of sustained flows from the rest of the world. A good example is Spain, which has seen rising immigration from Latin America. The main exceptions are Austria, Finland and Ireland, each one being a special case of its own.

Why didn't the flood happen? One possible reason is that most EU15 nations negotiated long transition periods during which EU12 citizens cannot move freely into their labour markets. But countries that opened their borders, such as Ireland, Sweden and the UK, report no or little increase in net inflows. Most likely, the low migration numbers reflect the fact that the 'New Europeans' share much of the 'Old Europeans' resistance to moving (see Chapter 11). With the prospect that the EU12 countries are likely to catch up with the EU15 countries, the incentives to leave home, family and friends, to wade into a new culture with another language, have been too limited to trigger large-scale migration.

Being part of a common labour market does not seem to be the key to determining the origin of migrants. Migrants from EU nations make up a much higher percentage of foreign workers in Norway and Switzerland than they do in France and Germany. This shows that the discriminatory liberalization implied by the free mobility of workers within the EU (i.e. workers from one EU nation are free to work in any other EU nation, but they need special permission to work in non-EU nations such as Norway) is not a dominant factor in determining migration patterns. This contrasts sharply with discriminatory liberalization of goods. As Chapter 5 shows, the composition of imports is strongly influenced by implementation of the customs union.



**Table 8.3** Net immigration before and after enlargements (1000s of people)

	Belgium	Denmark	Germany	Ireland	Greece	Spain	France	Italy
1997–2003	164	71	1146	193	302	2596	853	1197
2004–2007	202	42	237	245	162	2558	358	1753
	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	Total EU15
1997–2003	27	266	164	344	32	143	924	6522
2004–2007	12	–60	179	131	40	157	842	5557
	Bulgaria	Czech Rep.	Estonia	Cyprus	Latvia	Lithuania	Hungary	
1997–2003	–213	32	–14	41	–33	–96	97	
2004–2007	–1	174	1	52	–5	–28	71	
	Malta	Poland	Romania	Slovenia	Slovakia			
1997–2003	17	–497	–592	18	–14			–186
2004–2007	7	–79	–23	29	17			262

Note: A positive number indicates net immigration; a negative number signals net emigration.

Source: Eurostat online database

There is nothing really new here. We already mentioned that, in the 1950s and 1960s, nations across north-western Europe were experiencing such rapid growth that industry found itself short of workers. Individual nations responded by facilitating inward migration from many different nations. Not surprisingly, nations that wanted to ‘import’ workers found it easiest to induce migration from nations with low wages and relatively high unemployment. The fact that Spain, Portugal and Greece were not at the time members of the EU did little to hinder the flow of their workers into EU members such as Germany. Indeed, German immigration policy in the 1960s was at least as welcoming to Turks and Spaniards as it was to southern Italians. Moreover, nations such as Sweden and the UK, whose industries also experienced labour shortages, managed to attract migrants – including some migrants from EU nations such as Italy – even without being part of the Common Market. In short, the western European policies that fostered the big migration flows in the 1960s were basically unrelated to the policies of the Common Market.

### 8.4.2 Economics of labour market integration

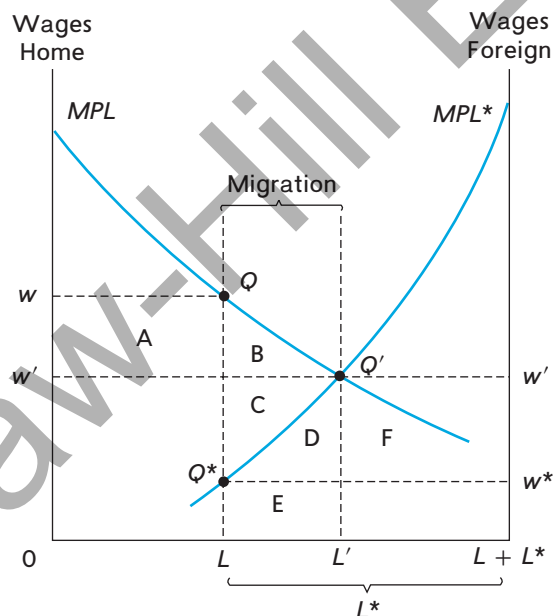
Labour migration is probably the most contentious aspect of economic integration in Europe. In most western European nations, popular opinion holds immigrants responsible for high unemployment, abuse

of social welfare programmes, street crime and deterioration of neighbourhoods. As a result, a number of explicitly anti-immigration political parties have fared well in elections. How does immigration affect the sending and receiving nations, and who gains and who loses from it?

### Simplest framework

We start with the simplest analytical framework that allows us to organize our thinking about the economic consequences of labour migration. We start with the case where migration is not allowed between two nations (Home and Foreign) that initially have different wages. Figure 8.12 shows a situation in which workers initially earn better wages in Home than in Foreign. The length of the horizontal schedule represents total labour available in both countries,  $L$  in Home and  $L^*$  in Foreign. For the time being, we will assume full employment,  $L + L^*$  in total, for both countries. The marginal productivity of labour in Home is measured on the left vertical axis. The corresponding  $MPL$  curve is downward sloping as employment in Home is measured along the horizontal axis from left to right. The foreign marginal productivity of labour is measured on the right vertical axis. The corresponding  $MPL^*$  curve seems upward sloping, but it is not, since employment in Foreign is measured in the opposite of the usual direction, from right to left. Initially, the situation in Home is represented by point  $Q$ , with wage  $w$  and employment  $L$ . Point  $Q^*$  describes the initial situation in Foreign, with wage  $w^*$  and employment  $L^*$ .

Figure 8.12 Simple economics of labour migration

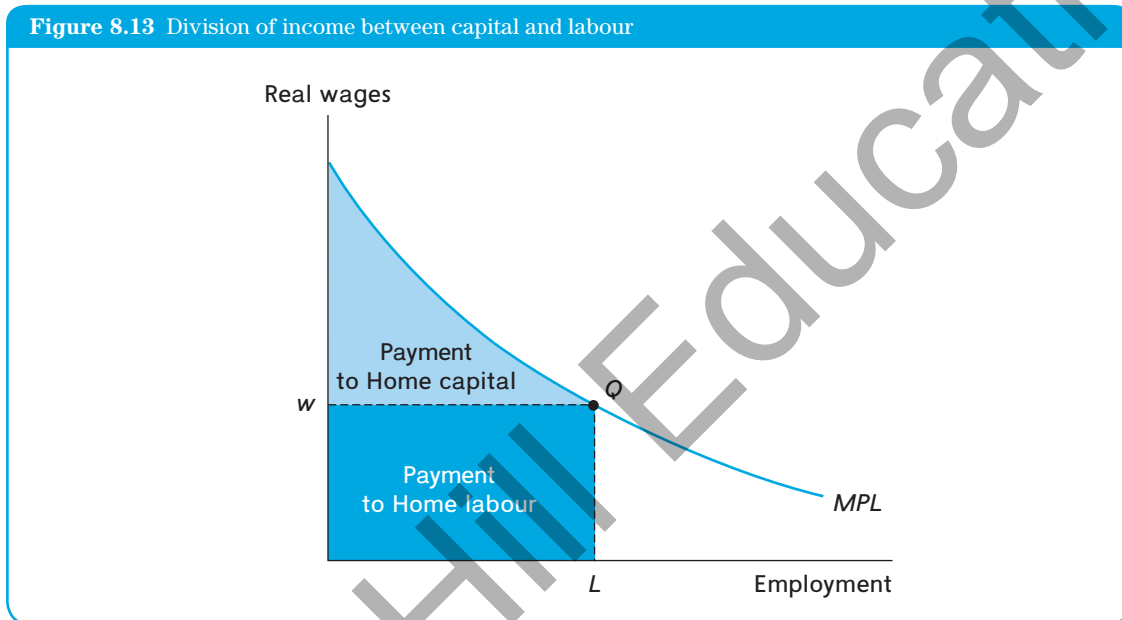


Now allow migration. Given the wage difference, labour will flow from Foreign to Home. This will push down wages in Home and thus harm the Home workers – while benefiting Home capital owners. The opposite happens in Foreign. As some Foreign labour moves to Home, Foreign wages tend to rise, making the remaining Foreign workers better off – and Foreign capital owners worse off. If there is no impediment – legal, personal reticence or other – migration will go on until wages are equalized. This is represented by point  $Q'$ , with wages  $w'$  in both countries.

We find that, in each country, some lose and some gain from migration, but what about each country? Start with Home country. We need to understand the impact of migration on the earnings of workers and

capital-owners. To that effect we look at Figure 8.13, which enlarges the Home country situation around point  $Q$ . The area under the  $MPL$  curve represents total Home output. The reason follows directly from the definition of the marginal product of capital. The first unit of labour employed produces output equal to the height of the  $MPL$  curve at the point where  $L = 1$ . The amount produced by the second unit of capital is given by the level of  $MPL$  at the point where  $L = 2$ , and so on. Adding up all the heights of the  $MPL$  curve at each point yields the area under the curve.

**Figure 8.13** Division of income between capital and labour



The total earnings of Home labour is just the wage rate  $w$  times the amount of labour  $L$ , which is measured in Figure 8.13 by the rectangle below and to the left of point  $Q$ . Since we are assuming that capital and labour are the only two factors of production in this simple world, capital receives all the output that is not paid to labour. Graphically this means that capital's income corresponds to the triangle between the  $MPL$  curve and the  $w$  line.

With this in hand, we turn now to the welfare effects of capital flows. We saw that the 'native' Home workers lose. As they move from  $Q$  to  $Q'$ , their wages decline by  $w - w'$ . Their loss is represented by the rectangle marked A in Figure 8.12. Home capital-owners increase their earnings by area A plus the triangle B. Thus the total economic impact on Home citizens is positive and equal to the triangle B. Another way of seeing that Home gains from migration is to note that the immigrant workers raise total output in Home by the areas  $B + C + D + E$ , but some of it, equal to areas  $C + D + E$  (i.e.  $w'$  times the labour flow  $L^* - L'$ ), does not benefit 'native' workers since it is paid out to the immigrants.

The Foreign workers who remain in their country see their wages rise from  $w^*$  to  $w'$ . The size of this gain is shown by rectangle F. With production falling, Foreign capital-owners lose by  $D + F$ . Combining all these losses and gains, the factors of production that remain in Foreign lose overall by an amount measured by triangle D. However, if we counted the welfare of the emigrant workers as part of Foreign's welfare, the conclusion is reversed. Foreign workers abroad used to earn E, now they receive  $C + D + E$ , so they gain  $C + D$ . Altogether, Foreign gains by an amount equal to the triangle C.

In short, while migration creates winners and losers in both nations, collectively both nations gain. The deep reason for this has to do with efficiency. Without labour mobility, the allocation of productive factors was inefficient. For example, on the margin, Foreign workers were less productive. Migration improves the overall efficiency of the EU economy and the gains from this are split between Home and Foreign. Foreign

gets area C; Home gets area B. This all assumes that there is no unemployment to start with and therefore seems unrealistic; we return to this issue in Section 8.4.3 below.

### Broader interpretation: complementarity vs. substitutability

The analysis above classifies all productive factors into two categories: capital and labour. It is important to note, however, that for most EU nations we should interpret 'capital' as including 'human capital', i.e. highly educated workers. The reason has to do with the economic notion of 'complementarity' versus 'substitutability'. Consider the example of how productive factors combine to produce hotel services. Apart from material inputs such as food and bed linen, hotels require unskilled workers (cleaners, etc.), skilled workers (managers, marketing people, etc.) and capital (the building, furniture, etc.). In a country such as Norway, unskilled labour is very costly so hotels are very expensive; consequently there are relatively few hotels. If Norway allowed hotels to hire foreign workers at lower wages, some factors would be hurt – the unskilled workers who earned high wages before the immigration – but other factors would be helped. Skilled workers and capital would find that their rewards rise. As the price of hotel rooms fell, the hotel industry would expand, raising the demand for highly skilled workers and capital. In this situation, we say that unskilled workers are complements to skilled workers and capital: demand for skilled workers and capital rises as the supply of unskilled workers increases and their price falls.

The point of this is to put the losses to domestic labour in perspective. Immigrants often have a skill mix that is very different from that of domestic workers. Skilled domestic workers can thus be thought of as belonging to 'capital' in Figure 8.12 and thus winning from immigration. In France and Germany, for example, immigrants often work at jobs, e.g. in factories, that boost the productivity of native workers in related fields such as management, finance, sales and marketing. Indeed, immigrants often fill jobs that no native would take, such as kitchen workers, street sweepers, etc.; this is an extreme form of complementarity in which there are no economic losers in the receiving nation.

We can look at the opposite case, when immigrants have higher skill levels than the average native worker. In these cases, the analysis of immigration is somewhat different. Instead of shifting  $L$  from Foreign to Home, migration shifts 'capital'. Graphically this raises the  $MPL$  curve in Figure 8.12 for Home and lowers it for Foreign. The reason is that the presence of more skilled workers tends to raise the productivity of unskilled workers. If you want a mental picture of this process, think of American entrepreneurs coming into Ireland and starting businesses that hire Irish workers away from the farm sector. Again, we see that immigration can be a win-win situation for the receiving nation.

Another insight from the notion of complementarity is that of micro-level matching. Some immigrants may have very specific skills that are lacking in the receiving nation. Since these workers do not compete with native workers, or compete with very few native workers, such immigration is usually less contentious since it creates few losers. This level of matching among countries can proceed to an even lower level. For example, even within a single company, the experiences of workers vary, and free mobility of labour may make it easier to move workers into jobs that best fit their experience. Again, it is entirely possible that everyone gains from such matching. More generally, immigrants who have skills that are complementary to the skill mix in the receiving nation are typically less likely to create losers in the receiving nation.

### Empirical evidence

So much for the theory. What does the evidence tell us? Given the importance of immigration in the various national debates in Europe, economists have done a great deal of work estimating the impact of migration on the wages of domestic workers. Generally, these studies find that a 1 per cent rise in the supply of workers via migration changes the wages of native workers by between 1 and -1 per cent, with most studies putting the figure in the even narrower range of  $\pm 0.3$  per cent. There are two key points to take away from these findings. First, it is not obvious that immigration always lowers wages. Since nations tend to let in workers who have skills that are complementary to those of domestic workers, the impact is often positive. Second, whether it is slightly positive or slightly negative, the impact is quite small. Again, this outcome is due in part to the fact that countries tend to restrict the types of labour inflow that would have large negative effects on wages.

Table 8.4 provides some information regarding the complementarity/substitutability issue. It shows the education levels of workers employed in the EU15 countries, according to where they come from, in percentages of all employed workers. Immigrants from the other EU15 countries are generally better educated and occupy higher-skill jobs than the natives. This suggests micro-level matching and explains why this type of immigration is not controversial. Immigrants from outside the EU are complementary in the opposite direction: they are often less educated and fill in elementary tasks/jobs. Immigrants from the EU10 – the 10 countries that acceded in 2004 – are in-between as far as education is concerned and they tend to accept less-skilled jobs.

**Table 8.4** Education level and skills of immigrant workers in the EU15 countries in 2005 (% of total)

	Overall EU employed	Immigrant workers from:		
		EU15	EU10	Outside EU
Education				
Low	27	15	15	36
Medium	47	41	63	40
High	26	44	22	23
Occupation				
High-skilled white collar	40	55	16	20
Low-skilled white collar	26	24	28	25
Skilled manuals	25	12	27	21
Elementary tasks	10	9	30	35

Source: Survey of the European Union, OECD, September 2007

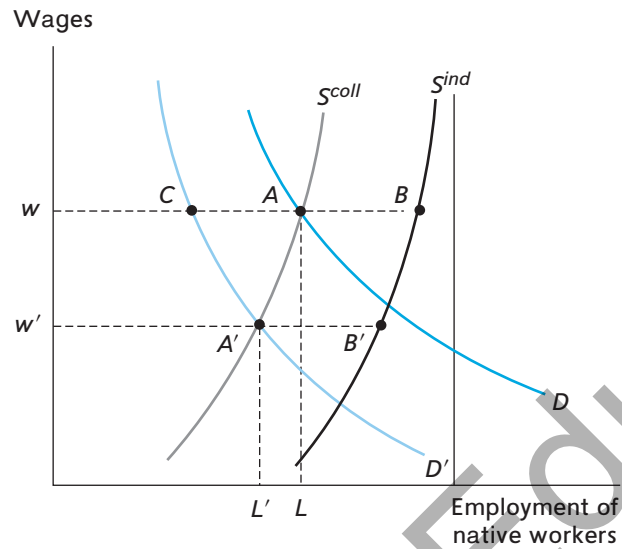
### 8.4.3 Unemployment

#### Framework

One common belief is that immigrants cause unemployment. The framework presented in the previous section cannot help us assess this view since it explicitly assumes that all workers get jobs. Instead, we use the framework presented in Section 8.2.4 and apply it to the employment of native workers. In Figure 8.14, in the absence of immigration, the labour market is at point *A* and involuntary unemployment is *AB*.

Now suppose that some immigrants enter the country. We have to imagine how the immigrants will operate in the labour market. One extreme assumption is that the immigrants are willing and able to perform the same jobs as natives but at a wage that is below the union-set wage  $w$ . Being cheaper, they displace the native workers. The demand curve for native workers shifts to the left from  $D$  to  $D'$ . The idea here is that firms first hire cheap immigrants and then turn to the native market to fulfil any remaining demands. The distance  $AC$  measures the share of employment taken over by immigrant workers. The result is that the market moves to point  $A'$ . The union-set wage and native employment fall to  $w'$  and  $L'$ , respectively. Two points are worth stressing. First, even in this extreme case – where firms are able to hire immigrants at below market wages – the drop in native employment ( $L - L'$ ) is less than the number of immigrants ( $AC$ ). As a consequence, total employment, counting both natives and immigrants, rises. This dampening is due to the drop in native wages, which allows firms to produce more output and therefore expand jobs.

Figure 8.14 Unemployment and migration



Second, there may be no change in unemployment. Because unemployment is a result of the labour market's structure, immigration will affect unemployment only to the extent that it affects the structure of the labour market. In the particular example shown in the diagram, where the two labour supply curves  $S^{ind}$  and  $S^{coll}$  are drawn as parallel, there is no change in the number of unemployed natives. In that case, the drop in wages from  $w$  to  $w'$  decreases the number of native workers who want to work at the going wage by as much as the drop in native employment. If we had not drawn the two supply curves as parallel, we would have got a different answer.<sup>5</sup> The main point, however, is that if immigration is to affect unemployment, it must do so by altering labour market structure.

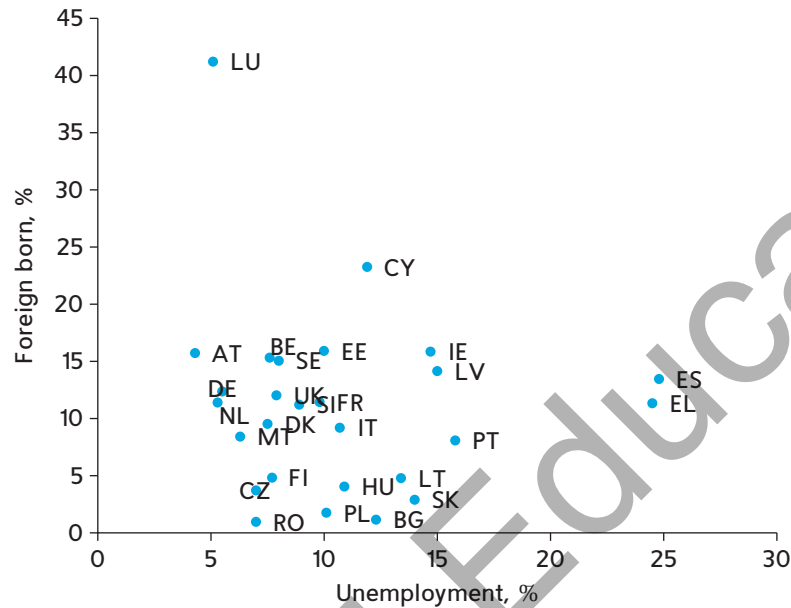
Another possible assumption is the opposite one: that immigrants participate in the labour market in exactly the same way as do native workers. In this case (not shown in the diagram), both curves  $S^{ind}$  and  $S^{coll}$  shift to the right. The results would be qualitatively identical to those shown in Figure 8.14. There would be some drop in the wage and some increase in employment. Since the true impact of immigrants on national labour markets is probably somewhere between these two extremes, it seems reasonable to believe that the standard impact of immigration will be some increase in employment, some decrease in wages and an ambiguous effect on unemployment.

### Empirical evidence

The empirical evidence on the effect of immigration on unemployment is mixed. A visual inspection of Figure 8.15 does not suggest any link. Some studies have found that immigrants increase the chance of unemployment for some groups of workers, but have the opposite effect on other groups of workers. This is clearly linked to the complements and substitutes analysis. Other authors find little or no effect of immigration on the risk of being unemployed. In summary, the empirical evidence we have to date does not support the notion that immigration has large, negative effects on European labour markets. As usual, this lack of convincing evidence is due in part to the fact that countries tend to pick and choose their immigrants, presumably with a view to avoiding large negative effects on employment and/or unemployment.

<sup>5</sup> How are the curves in reality? Truth is, we don't know. The proof of the pudding is in the eating, namely, in the empirical evidence discussed below.



**Figure 8.15** Foreign population and unemployment, 2007

Note: Foreign population as a percentage of total population and rate of unemployment.

Sources: Eurostat and AMECO, European Commission

#### 8.4.4 Barriers to mobility

Two key results emerge: (1) immigration is likely to raise employment and national income; and (2) immigration is unlikely to affect unemployment in either direction. These results provide a strong endorsement for the fundamental principle of freedom of movement of workers within the EU. Few people take advantage of this opportunity as can be seen from the low share of the foreign-born population in most EU nations (Figure 8.15, vertical axis). One reason is that EU citizens do not regard freedom of establishment as an attractive option. Another is that, in spite of the stated policy, there remain a large number of barriers, some explicit, most implicit.

The first barrier is the explicit temporary arrangement concerning the new EU members, except Cyprus and Malta. Starting in 2004, all countries may apply restrictive measures for up to seven years following accession. Except Ireland, the UK and Sweden, all EU15 countries and Hungary chose to implement this clause. In 2006, obviously reassured that migration was moderate, a number of countries allowed unrestricted entry from the 2004 acceding countries.

Other implicit barriers concern social protection. Health insurance does not raise serious difficulties since any EU worker is allowed to enter the local system upon settlement, paying local dues and receiving equal treatment. In order to simplify the transition process, a European Health Card was introduced in 2004.

The situation is more complicated as far as pension rights are concerned. The principle is simple: workers collect pension rights wherever they go; upon retirement, they apply to their country of residence to establish their pension rights on the basis of work performed anywhere in the EU. However, the rights acquired in each country of previous residence are assessed on the basis of that country's system. This 'detail' means that pension rights act as a strong barrier to mobility. The reason is that rules to accumulate rights differ widely from one country to the next. This concerns, in particular, the length of time required

to receive a pension and the age at which pensions can be claimed. For example, Finns work until 67 while Italians are often encouraged to retire before age 60. A Finn who moved to Italy when she was 50 may thus be pushed into retirement at age 57, with a minimal Italian pension, and she will not receive the complement from Finland until ten years later. The situation is even worse than that. The agreement concerns general pensions, not those tied to a company or a profession. In several countries, such occupational pensions represent the larger share of retirement income.

Similarly, unemployment benefits discourage mobility. Existing agreements allow an unemployed worker who moves elsewhere within the EU to keep receiving the benefits for up to three months. Imagine the case of a worker who moves from a high to a low unemployment country after having lost his job. If he does not find a job within three months of arrival, he loses his unemployment benefit and is without income. This is a powerful deterrent to migration. The rule might seem strange, but it is designed to discourage 'welfare tourism' – the possibility that people move not to seek jobs but to gain access to generous welfare payments.

A last barrier worth mentioning concerns the regulated professions. Obviously, not everyone can set himself up as a medical doctor. In principle, the EU countries recognize each other's qualifications, so doctors, architects, nurses or lawyers can practise anywhere they wish. But the rule does not apply to all regulated professions. For instance, in order to open a hairdressing salon in France, one has to satisfy surprisingly exacting conditions, which rule out all other European hairdressers.

These are examples of the many barriers that limit labour mobility within Europe. Add languages and customs, distance from home, frequent housing shortages, and you start understanding why the freedom of establishment is not delivering. The European Commission is regularly advancing proposals to beat back all regulatory barriers, but many initiatives fail because myriads of local private interests – such as French hairdressers – are opposed to the free entry of competitors.

## 8.5 Summary

This chapter has dealt with two related topics: the link between trade integration and labour markets and migration, and the view that the EU may be moving to a single integrated labour market. Both issues are politically sensitive but there is surprisingly little substance behind widely held fears that workers systematically get the wrong end of the stick.

Relative to comparable advanced economies, many European countries exhibit low rates of employment and high rates of unemployment. This represents a waste of our most precious resources and a source of anxiety. The situation, though, is very uneven, reflecting the diversity of labour market arrangements inherited from each country's history. Labour market regulations are needed to protect workers but many of them introduce rigidities that prevent the achievement of full employment.

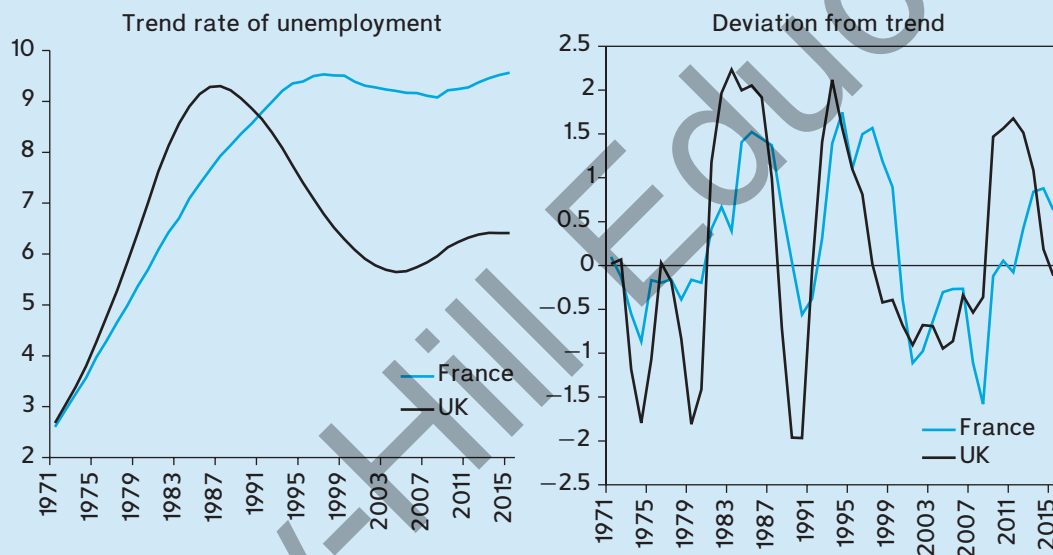
European integration affects the labour markets in two main ways:

- Trade integration indirectly leads to competition between labour markets. It affects the labour markets in two ways. It creates winners and losers and it shifts production patterns, which require labour market flexibility to avoid job losses. In general, countries with more flexible labour markets have a comparative advantage in goods markets. This has led countries with more rigid markets to complain about social dumping, as they resist economic pressure to reform their labour markets. The principle remains that labour markets and social policies are a national prerogative. Theory and evidence support this principle.
- The EU treaty guarantees the freedom of movement of workers. Here again, many citizens fear that competition from foreign workers will lower wages and create more unemployment. The fear is commonplace in the EU15 countries where wages are much higher than in the EU12 countries. Theory and evidence suggest that these fears are largely misplaced. In fact, for a number of cultural and institutional reasons, there is too little mobility of workers in Europe, in spite of the general principle of freedom of movement.

### Self-assessment questions

- 1 Explain what happens to a firm's profits as it moves in Figure 8.3 from point A to point B.
- 2 Using Figure 8.4, explain what happens to voluntary and involuntary unemployment as workers individually ask for higher wages for the same amount of work. Answer the same question using Figure 8.5, assuming that there is no change in the collective supply of labour.
- 3 The following figure depicts the evolution of the unemployment rate in France and in the UK, distinguishing between a trend and deviations from the trend. In the UK, the rate tends to deviate more from its trend than in France. Can you explain this pattern?

#### Unemployment rates in France and the UK (% of labour force)



Source: *Employment Outlook*, OECD

- 4 Figure 8.8 shows the effect of trade integration in the presence of collective bargaining. What would things look like in the absence of collective bargaining but when wages are downward-rigid?
- 5 Same question as (4) but looking at the effects of migration in Figure 8.14.
- 6 Explain why the immigration of low-skilled workers can hurt native low-skilled workers and benefit high-skilled workers.
- 7 Capital accumulation and technological innovations raise the marginal productivity of capital. Graphically, in Figure 8.13 the  $MPL$  curve shifts up. Starting from point  $Q$ , consider two cases: (a) wages rise but employment remains unchanged at  $L$ ; (b) employment increases but wages rise. Compare the changes to the income shares of capital and labour and interpret your results.
- 8 Looking at Figure 8.2, there seems to be a weak inverse relationship between the unemployment rate and the employment-to-population ratio. Why? And why is this relationship not tighter?

### Essay questions

- 1 'Compared to Americans, Europeans care more about equity than efficiency.' Comment.
- 2 It is argued – and it is the case in some countries – that the minimum wage should be set at different levels for the young, for the older, for the unskilled or for particular industries. Evaluate this argument.
- 3 The distinction between voluntary and involuntary unemployment is not as clear-cut as presented in this chapter. Explain why, providing examples.
- 4 'Hard line' trade unions push for higher wages while 'cooperating' trade unions push for more jobs. What do these differences imply for the working of the labour market and for output? (Hint: Capture the distinction in terms of the shape of the  $S^{coll}$  curve.)
- 5 'Social magnets' are countries that offer generous unemployment and other welfare benefits. This is one key reason why unemployment benefits are not served to migrants for more than three months. Explain why, otherwise, this could be a serious problem in Europe in view of the freedom of movement of workers.
- 6 'The poorer EU countries should reduce their welfare programmes to better take advantage of accession.' Evaluate this advice.
- 7 Use the distinction between complementarity and substitutability to evaluate the effects of immigration in your country from neighbouring countries.

### Further reading: the aficionado's corner

For general overviews, see:

- Bean, C., S. Bentolila, G. Bertola and J. Dolado** (1998) *Social Europe: One for All?*, CEPR Monitoring European Integration 8, Centre for Economic Policy Research, London.
- Blanchard, O.** (2006) 'European unemployment: the evolution of facts and ideas', *Economic Policy*, 45: 5–60.
- Boeri, T., M. Burda and F. Kramarz** (2008) *Working Hours and Job Sharing in the EU and USA*, Oxford University Press, Oxford.
- Freeman, R.B.** (2004) 'The European labour markets: are European labour markets as awful as all that?', *CESifo Forum*, 5(1): 34–39.
- Nickell, Stephen** (2006) 'A Picture of European Unemployment: Success and Failure' in: Martin Werdning (ed.) *Structural Unemployment in Western Europe: Reasons and Remedies*, MIT Press: 9–52.
- Portugal, P. and J.T. Addison** (2004) 'The European labour markets: disincentive effects of unemployment benefits on the paths out of unemployment', *CESifo Forum*, 5(1): 24–30.
- The articles collected in: **Bertola, G., T. Boeri and G. Nicoletti (eds)** (2001) *Welfare and Employment in a United Europe*, MIT Press, Cambridge, MA.

On the trade-off between economic efficiency and social concerns, see:

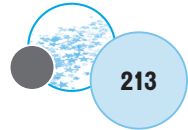
- Atkinson, A.** (1999) *The Economic Consequences on Rolling Back the Welfare State*, MIT Press, Cambridge, MA.

On trade unions, see:

- Calmfors, L., A. Booth, M. Burda, D. Checchi, R. Naylor and J. Visser** (2001) 'What do unions do in Europe? Prospects and challenges for union presence and union influence', in T. Boeri, A. Brugiavini and L. Calmfors (eds) *The Role of Unions in the Twenty-first Century*, Oxford University Press, Oxford.
- Cecchi, D. and C. Lucifora** (2002) 'Unions and labour market institutions in Europe', *Economic Policy*, 35: 361–408.

On migration, see:

- Boeri, T. and H. Brücker** (2005) 'Why are Europeans so tough on migrants?', *Economic Policy*, 44: 629–704.
- Diez Guardia, N. and K. Pichelmann** (2006) *Labour Migration Patterns in Europe: Recent Trends, Future Challenges*, Economic Papers No. 256, European Commission. Download from [http://ec.europa.eu/economy\\_finance/publications/publication644\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication644_en.pdf).



**European Commission**, *Job Mobility Action Plan*. Download from [http://europa.eu/rapid/press-release\\_IP-07-1879\\_en.pdf](http://europa.eu/rapid/press-release_IP-07-1879_en.pdf)

**Hatton, T.** (2007) 'Should we have a WTO for international migration?', *Economic Policy*, 50: 339–84.

**Nickell, S.** (2007) *Immigration: Trends and Macroeconomic Implications*, Nuffield College, Oxford. Download from [www.bis.org/publ/bppdf/bispap50f.pdf](http://www.bis.org/publ/bppdf/bispap50f.pdf)

**OECD** (2007) *Survey of Europe*, September.

To find a job in the EU, go to the European Commission's job mobility portal EURES: <https://ec.europa.eu/eures/page/homepage>.

### *Useful website*

The website of the Rodolfo de Benedetti Foundation, dedicated to European labour market issues; [www.frdb.org](http://www.frdb.org).

### *Reference*

**Bertola, G.** (2000) 'Labour markets in the European Union', *Ifo-Studies*, 46(1): 99–122.

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