Chapter 2

Effects of EU Enlargement-related Labour Migration
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Introduction
Is free movement of labour in the European Union (EU) an economic blessing or an economic burden? To answer this question, this chapter establishes the economic consequences of east-west migration, within the context of the 2004 EU enlargement round, for the economy in general and the labour market in particular of the receiving countries as well as the sending countries. The effects of net migration critically depend on the volume of migration, on what immigrants bring, on the size of the labour market and on the labour market situation. It is argued that the existing calculations might not only underestimate the total volume of migration, they also underestimate the disadvantages and overestimate the advantages of enlargement-related labour migration.

The chapter is structured as follows. The first section addresses the potential of immigration from the Central and Eastern European countries to Western Europe, after which the micro- and macroeconomic consequences of international migration due to the 2004 EU enlargement are reviewed. The discussion centres on economic growth and the levels of wages, employment and unemployment in the receiving and sending countries. The distribution effects are also reviewed. The implications of the presupposed economic convergence or divergence in economic models are subsequently examined, followed by the economic impact of free movement of services in the EU, and finally the external effects and the relation between immigration and emigration. The chapter closes with several conclusions.

Immigration potential
Economic theory does not provide a complete explanation of migration flows. Its starting point of completely free mobility of labour is not realistic. Apart from restrictive policy there are, for instance, also language and cultural barriers to migration. However, economic variables play a critical role in the migration decision. Economic theory starts from the assumption that migrants attempt to increase or maximise their utility over their remaining life course. One important way economists have contributed to the understanding of geographic mobility is through the development and testing of the human capital theory of migration (Sjaastad 1962; Harris and Todaro 1970). The human capital theory considers migration as an investment in which costs are presently borne in order to obtain returns over a longer period of time in the future. If the present value of the benefits associated with mobility exceeds the costs, both monetary and psychological, it is assumed that people will decide to migrate. If the discounted stream of benefits is not as large as the costs, then people will conclude that it is not worthwhile to migrate. In this respect the financial considerations include the difference in real and fringe benefits between the sending and the host countries, as well as the
probability of employment in both. The main costs are transportation expenses, forgone income during the move and the loss of seniority and pension benefits. Apart from financial considerations, social considerations also play a role. These social considerations include the psychological cost of leaving family and friends and differences in the cultural and physical environment and the political climate of the sending and the host countries that affect utility (see e.g. Coppel et al. 2001; Liebfritz et al. 2003). Psychological costs and uncertainty associated with migration may be partially reduced by chain migration, i.e. following the routes of earlier migrants. Migrant networks in the host country provide strong dynamic forces in the choice of destination country (Coppel et al. 2001). In line with the human capital theory, age, family circumstances, education, distance and unemployment are important determinants for migration from the Central and Eastern European countries (CEECs) (see e.g. Krieger 2004). Migration decreases with age. Married workers are less likely to migrate than singles. Age is probably the best predictor of who will move; education is the single best indicator of who will move within an age group. Migration rates rise with educational level. Human capital theory also clearly predicts that migration decreases with distance and that the specifics of business cycle play a role.

There are different views about the likely size of the inflow from CEECs to Western European countries as a result of EU enlargement. Surveys suggest that 10-30 per cent of the population in the CEECs have a preference to migrate to the EU 15 (Alvarez-Plata et al. 2003: 10). But most probably only a small fraction will actually move. There seems to be general consensus that annually between 250,000 and 333,000 people will move from the CEECs westward. The volume of flow depends upon the speed and the success of economic transformation in the origin countries. Based on extrapolating South-North migration in the 1960s and on econometric models’ estimates, it is expected that in the long run between 2 and 4 per cent of the population of the CEECs will migrate to the West. However, because the fourth EU enlargement is unprecedented, the extent to which estimations based on historical data are accurate is unclear. The historical distribution of immigration from the CEECs is the best predictor for the destiny of new migration streams. So it is more the volume than the distribution that is uncertain (see Salt 2005; Boeri and Brucker 2005; Alvarez-Plata et al. 2003; Leibfritz et al. 2003). These figures refer to gross inflows. Net migration, the difference between in- and out-migration, will be substantially lower, for part of the migrants will return to the CEECs and there also is migration of natives from the West to the CEECs. Estimations of potential net migration in 15 years’ time from the ten new member states to the EU-15 countries vary from 1 million to 13 million. From a review of over 15 studies it is concluded that 2-4 million immigrants is a plausible number, meaning an increase of the EU 15 population of 0.5 to 1 per cent. This immigration, however, is unequally distributed: the predictions indicate that the large majority will flow to Germany and Austria (see Alvarez-Plata et al. 2003; De Mooij and Nahuis 2003; Salt 2005).

Instigated by Germany and Austria, which feared large-scale inflows of workers from the CEECs, the Accession Treaty specifies a transitional period of seven years (till May 2011) during which governments of the incumbent 15 EU states can install restrictions on the free movement of labour from the 10 new member countries (Boeri
and Brücker 2005; Salt 2005). All but three EU-15 countries imposed restrictions on labour immigration from the new member states; exceptions are Ireland, Sweden and the United Kingdom. Apart from quantitative controls, qualitative controls for entry are imposed by governments, including the possession of scarce skills or having dependants already resident in the country. Economic models have difficulty in incorporating such arrangements, for they are very difficult to model. The European labour markets will continue to be characterised by a lack of skilled labour and high levels of unemployment among low-skilled workers. A selective immigration policy that tends to disqualify unskilled migrants and attract skilled foreign workers is a safe strategy to foster growth and to increase demand for unskilled native workers (Zimmerman 2005). To prepare for the global ‘battle for brains’ there is a move towards a more selective policy, for instance in Germany, the United Kingdom and France. Also the announced introduction of a ‘green card’ by the European Commission fits this trend.

With respect to migration from the new EU member states there is some evidence (see Boeri and Brücker 2005) of divergence of migration from countries with closed borders to countries with more liberal rules. The increasing number of work permits issued by the incumbent EU member states are mainly used to import workers to work in low-skilled occupations. The ‘race to the top’ in immigration restrictions observed just before the enlargement can be interpreted as an anticipation of these potential diversion effects of migration (Boeri and Brücker 2005). It may also signify a potential loss for the EU when it results in migration from Central Europe to migration overseas. Tighter border controls may also result in more illegal immigration and illegal work (Holzmann and Münz 2004). In Europe the growth of undeclared work by immigrants is mainly demand-induced (see Entorf and Möbert 2004).

The fourth EU enlargement of 1 May 2004 differs considerably from the previous three since the foundation of the European Economic Community (EEC) in 1957. The number of new countries is larger than the previous enlargements, with an increase of 67 per cent. Most of these ten countries, with the exception of Poland, are small. As a result, the population of the EU due to the fourth enlargement has increased only by 20 per cent, a population growth similar to the increase of the second enlargement involving the three southern European countries of Greece, Portugal and Spain in the 1980s. Moreover, the new eastern member states differ substantially in economic terms from the existing EU member states with regard to the new countries in previous rounds of enlargements. The 10 new member states are much poorer than the average of the 15 old EU countries. GDP per head of population in the South was 55-70 per cent of the EU average; in the East this is less than 40 per cent of the EU average (Lammers 2004).

The volume of the immigration from the east to the west is underestimated for a number of other reasons. Human capital theory predicts that migration will flow from areas with relatively poor earning possibilities to places where opportunities are better. Next to the fact that the income gap between the EU and the CEECs is well above the levels of the past enlargement rounds to admit Greece, Spain and Portugal in the 1980s (Alvarez-Plata et al. 2003; Lammers 2004), South-North migration was already liberalised long before accession: most immigrants from the South already came to the richer North of Europe in the 1960s (De Mooij and Nahuis 2003). Moreover, in the 1960s and 1970s a large majority of the migrants from these Mediterranean countries to
Europe were unskilled, while immigrants from the CEECs possess above-average educational qualifications (Alvarez-Plata et al. 2003; Lammers 2004). These differences imply that extrapolation of South-North migration might result in underestimations. Another uncertainty and source for underestimation of the volume of east-west migration flows is related to the future economic development, that is, the measure of economic convergence postulated in the various models. In empirical research the per capita income in the source country and the host country is often taken as a proxy for relative expected incomes. A tendency of convergence can be recorded. Since the end of the transition recession in the period 1993-2001, average annual GDP growth in the CEEC 10 at current exchange rates and purchasing power parities (PPP) were well above those of the EU 15 (Alvarez-Plata et al. 2003). However, considerable differences across countries exist. In the CEECs, gross monthly wage PPP is 40 per cent or less than the EU-15 average. Despite GDP per capita convergence, the unemployment rate in Poland, the Slovak Republic, Lithuania and Bulgaria is well above the EU average and rising. In none of the models, divergence is considered an option. Modern communication technology such as the internet and mobile phones will intensify chain migration, while cultural and language barriers to migration are smaller for east-west migration than for south-east migration. Moreover, the closer geographical proximity plays a role (Boeri and Brücker 2005). For 2006 and beyond, employment prospects in a number of EU countries, including Germany and the Netherlands, are improving. All these realities could have a cumulative and positive impact on the individual migration decision from which it may be expected that the volume of east-west migration will be larger than the estimates.

**Microeconomic effects**

Economic effects of immigration can be established at the micro and macro levels. Migration is accompanied by considerable uncertainties for the individual migrant. The income of the migrants is likely to be significantly higher than before (Leibfritz et al. 2003). The labour market performance of migrants from the CEECs does not reflect their high educational level (Alvarez-Plata et al. 2003). Immigrants often earn less than their local native counterparts. This may be related to the imperfect nature of labour markets: as employers have less information about migrants, employing the latter is considered to carry more risk. Also location-specific skills and direct and indirect discrimination partly explain why immigrants are not able to apply their skills. Immigrants from the CEECs are overrepresented in health care, agriculture, construction, private households and informal activity where jobs are unstable, unattractive or low-paid (Alvarez-Plata et al. 2003; Boeri and Brücker 2005; De Mooij and Nahuis 2003; Holzmann and Münz 2004; Salt 2005).

The relative distribution of earnings in the sending country as compared with the receiving country predicts which skill group within the sending country is most likely to emigrate. In areas with the same average wage, gross migration may be high, even if net migration is zero: workers with below-average productivity will move to an area with a more equal distribution of wages; migrants with above-average productivity tend to move to regions with less equal income distribution levels. One may expect that skilled
and professional workers are most likely to gain from migration from a country with compressed (equal) earning distributions to a country with more differentials between earnings of skilled and unskilled workers, for in the latter countries the returns to human capital investments are higher. Unskilled workers in countries with more equal earnings are well paid compared with skilled workers and thus have less incentive to move. In countries with large earnings differentials, skilled workers do relatively well, but there are large potential gains for the unskilled to emigrate. European welfare states with compressed wage distribution are likely to attract low-skilled workers and may induce people with above-average productivity to emigrate. Adverse selection may be the result. Factoring in the effects of social tourism (discussed later), welfare states not only affect the volume of migration, but also the composition of the immigrants (Boeri and Brücker 2005: 650).

The economic consequences of migration by unskilled workers may be quite different from migration by skilled workers. Boeri and Brücker (2005, p.642) found that most of the gain from migration is accrued by the migrants through higher (130-150 per cent) income. In the receiving country, wages of manual or non-manual workers decline from 0.04 to 0.56 per cent, depending on the assumption as to skill composition of the migrant population, while labour wins in the source country. Wage rigidity and unemployment benefits imply that despite substantial income gains in the whole region, the labour income in the host country declines, for without a drop in wages no additional jobs are created and unemployment will increase. Also income inequality increases as capital incomes and labour incomes move in opposite directions. At the same time, there is income per capita convergence in the whole region, as both wages and employment rise in the sending country (Boeri and Brücker 2005, p.645; Roodenburg et al. 2003).

Effects of migration depend very much on the economic characteristics of the migrants. The effect of immigration on the receiving labour market is often analysed by considering whether immigrant workers are complements or substitutes for natives. It may be expected that the wages of fellow workers in the host country will fall but the wages in the source country will rise. Where immigrant workers complement, the wages will increase in the host country and decrease in the source country (Coppel et al. 2001, p.14). Most empirical econometric studies have confirmed the theoretically predicted negative relationship between migration and wages and employment of low-skilled natives, and weak positive effects of immigration on wages and employment of high-skilled native workers. Hence, it is reasonable to assume that skilled and unskilled workers are complements (Zimmermann 2005). Empirical studies do not show a systematic relationship between immigration and unemployment, or these are pertinent only in the short term. However, in Europe unemployment rates among immigrants are two to three times higher than among their national counterparts. The educational attainment of foreigners has a large positive and significant impact on the probability of being employed. Also wages of immigrants are lower than those of the natives. Notably, unskilled workers may lose out in international migration. Apart from differences in economic characteristics between natives and migrants, direct and indirect discrimination also play a role (see Coppel et al. 2001; Boeri and Brücker 2005; Carillo et al. 1999; Drinkwater et al. 2003; Leibfritz et al. 2003).
Macroeconomic effects

In labour market clearing models, immigration increases aggregate income in the host country by more than the income of the immigrants themselves, as the existing population will gain an ‘immigration surplus’ (Borjas 1995). This is because in these models, with diminishing returns immigration will cause wages to fall so that workers are paid only according to the marginal product of the last immigrant. The gain of the host country depends on the extent to which migrants’ output exceeds their income. The effects on wages and employment and on aggregate output depend on labour market behaviour and institutions (Leibfritz et al. 2003). Theory suggests dealing with the distortions directly: reform labour market institutions in the host countries and do not restrict migration. However, in a ‘less than perfect’ world, eliminating labour market distortions could possibly exacerbate matters. To evaluate the costs and benefits of east-west migration, Boeri and Brücker (2005) apply a general equilibrium model in which larger migration flows generate higher income via a more efficient allocation of labour. Without increasing returns, the theoretical economic models predict that average wages will fall with immigration and rise with emigration. Migration flows are temporary because average wages between East and West Europe converge. Wage-setting institutions, minimum wages and unemployment benefits drive a wedge between demand and supply of labour and reduce the efficiency of the labour markets. In the model, natives will lose out in particular when wages are rigid due to institutions such as minimum wage, employment protection and generous unemployment benefits provided to the migrants, for these institutions prevent wages from adjusting to supply shocks. This wedge explains why immigration results in (structural) unemployment among natives and immigrants, higher taxes and social security contributions and illegal activities (Coppel et al. 2001). Boeri and Brücker (2005) conclude that migration of 3 per cent of the labour force from the CEECs can increase GDP in the EU 25 by up to 0.5 per cent. GDP in the receiving country increases because wages are reduced and employment increases. Employers benefit from this as their profits increase. The increased return to capital will increase investments in plant and equipment. As a result the income share of capital owners in the host country increases and the income share of labour in the host country drops. For the sending country the reverse impact applies: GDP decreases, the capital share decreases and the labour share increases. Furthermore, Drinkwater et al. (2003) conclude from the migration literature that immigration in the 1960s and 1970s contributed to economic growth in Europe. Its impact varies between studies and countries. If the labour market does not clear, that is, it is not fully flexible, and immigration increases unemployment among existing residents, an automatic gain in aggregate income of residents is less obvious.

The economic effects of migration vary widely. Many outcomes are possible depending on what migrants bring (Leibfritz et al. 2003). When migration changes both the size of the labour force and its skill composition, changes in average wages and the wage structure are likely to occur. For sending countries, the short-term economic benefit of emigration is found in remittances. At the same time, the sending countries can suffer from ‘brain drain’ – the loss of trained and educated individuals to
emigration – which is an example of the possible negative effects of emigration for the CEECs. For receiving countries, temporary programmes help to address (temporary) skills shortages and meet increased seasonal demand for labour, but may decrease domestic wages and add to public welfare burden.

Adverse selection is also likely to occur. Countries with relatively high protection (benefit) levels may attract people with a high risk of unemployment, disability and illness, resulting in increasing costs to the social security system. High benefit levels imply high tax and premium rates, and the latter would induce people with low risks to leave their area or country. Low risk migrants will be attracted to countries with low premium burden. As a result, the base to finance social security would shrink. One may expect that in Europe low-risk workers are much more mobile than high-risk workers. Countries may fear immigration of subsidised low-skilled workers and emigration of taxed high-skilled workers. If each country acts independently to these migration externalities, that is, it takes the migration flow into account, but treats the benefit levels of the other countries as given, this will result in inefficiency, namely, the underprovision of insurance (Drèze 2002). High personal tax rates may impede immigration, while high levels of per capita government spending on services may increase immigration. If an individual demands a high level of public care and schooling of his/her children, an extensive public social insurance, very good public transport facilities, and so on, that individual might be willing to pay a high tax or premium for such arrangements. EU citizens directly compare the public services they demand and the level of taxation. This will generate in- and outflow of mobile labour and of the most mobile production factor capita, but not necessarily towards the country with the lowest tax rate. This does not imply a race to the bottom, but a race to the most efficient use of tax receipts.

Social tourism (or welfare shopping), which entails increased flows of labour to the richer regions, may be reinforced by the enlargement of the EU and thereby may have a major impact on social security in the EU. Related to this, welfare shopping refers to migration from less generous to more generous welfare states. The free movement of people makes it increasingly difficult to maintain relatively high protection standards. Citizens from the new member countries with low levels of social security benefits may decide to make use of their rights under European Union law to settle in other member countries with more generous welfare payments. Potentially equal treatment in the presence of large income differences in the enlarged EU may involve some welfare shopping by citizens of the new member countries, potentially setting in motion a ‘race to the bottom’ in the welfare provisions in the enlarged EU. A successive dismantling of the European social welfare could be the likely result of the EU enlargement. Solutions are harmonisation of welfare systems, selective migration policies or limiting the access of migrants to the welfare system (Sinn 2002). As long as the standards of social services and public infrastructure in the old EU member states are of a far higher standard than in the accession countries, East-West migration is encouraged not only by market-oriented incentives, but also by state-induced enticements (Lammers 2004, p.140). This explains why apart from restriction on the free movement of people, access to state services and benefits for immigrants in an extended Union have also been limited. Given that there is some evidence of welfare shopping, unskilled or poor
natives would then be affected by immigration not only in terms of a reduction in their wages and employment opportunities, but also a reduction in redistributive programmes. There is some empirical evidence of such effects, especially in the EU countries (Coppel et al. 2001; Boeri 2002; Bertolila et al. 2001; Boeri and Brücker 2005; Leibfritz et al. 2003).

**Convergence or divergence?**

The materialisation of the potential for labour migration ensuing from EU enlargement largely depends on economic performance and the creation of new jobs in the new member states. Estimates of the impact of EU enlargement on worker migration are based on the assumptions that per capita GDP converges. This may explain the conclusion that east-west flows are unlikely to have a major impact on the labour markets of the EU-15 countries. However, convergence is a long-run process. One may expect that even if the accession countries continue to catch up significantly in terms of wages and living standards, the income differential between Western and Eastern Europe will still be large. Thus in this argument, immigration limitations will not substantially remove pressure on wages and jobs, but will merely exert a delaying influence (Lammers 2004). Moreover, there may be a tendency to increase wages in the economically weaker EU countries to the levels of those in the countries with stronger economies. Employers and employees in the richer countries will support this because they benefit from it. Trade unions and employees in the poorer countries will use the higher level of wages and social protection as the benchmark for their own wage claims. This convergence, namely upward harmonisation in social protection and wages, may result in costs increasing more than productivity gains. The unit labour costs in the business sector – an important measure for competitive power – will increase at the expense of the competitiveness of the poorer CEECs (see OECD 2005, p.21). As a consequence, the investment climate will deteriorate; it will become less attractive for firms to set up new production units in the CEEC. Job creation in the new member states will stagnate. Economic divergence instead of economic convergence may then be the result and east-west migration will increase.

While migration cannot substitute capital movement, capital movement can substitute migration. This asymmetry can be explained by the relative size of the capital and because the impact of migration is ambiguous. Capital inflow on the other hand increases GDP and wages in the receiving country and therefore unambiguously reduces incentives to migrate. The impact of migration on capital flows is negligible (Boeri and Brücker 2005, p.655-657). Holzmann and Münz (2004, p.26-27) argue that trade, capital flows and mobility of labour are not perfect substitutes. Unlike what international economic textbooks suggest, research on trade and migration indicates that trade liberalisation and migration control are not substitutes but complements, because of imperfect competition, differing technologies across countries and external economies of scale. Migration widens the wage gap between sending and receiving countries, reinforcing migration incentives. Holzmann and Münz conclude therefore that welfare gains from liberalisation of labour flows are expected to be far higher than effects from full liberalisation of trade. Related to migration from Eastern to Western...
Europe, relatively low migration costs and increased trade and foreign direct investments (FDI) already seem to have reduced migration flows considerably. Boeri and Brücker (2005, p.654-655) show that despite dramatic East-West trade and capital flows, differences in income per capita and factor prices did not decrease substantially. Even if trade and capital movements substitute migration, differences in wage levels will create monetary incentives for migration for decades.

When the EU member states increasingly specialise in producing goods and services in which they have comparative advantages, economic divergence instead of convergence may also be the reality. This is explained by scale effects as pointed out by Krugman’s (1981) new trade theory. In addition, the existence of ‘agglomeration economies’, where production tends to cluster geographically due to the existence of numerous production linkages, will lead to centres of production and core-periphery patterns (Krugman 1991). Economies of scale are also the driving force behind these agglomerates. Firms and workers cluster in certain regions when these regions integrate further: trade liberalisation stimulates migration streams. An increase in population has a scale effect: more consumption, lower fixed costs per unit of product and shorter connection lines creating agglomeration advantages. In cases where immigration results in economies of scale or concentration, average wages could increase. Emigration will then result in lower wages. Migration becomes a permanent phenomenon. Also in empirical research that allows for immigration in the context of increasing return in human capital accumulation, it is concluded that labour mobility may not be a balancing force as predicted by the standard neo-classical model. Moreover, an inflow of lower quality workers can lower the average human capital, forcing the host economy towards a lower welfare level; for highly skilled immigrants the impact is the opposite (see Carillo and Vinci 1999). Increasing returns imply that migration may not reduce wage differentials or the physical-human capital ratio between countries or regions. With increasing returns, regions with a higher level of both human and physical capital are more able to attract highly skilled immigrants. Divergence rather than convergence as suggested in the perfect market case may be the likely result.

**Free movement of services**

The activities of foreign independents or the self-employed and services rendered by foreign firms and its labour market implications are not dealt with in the simulations of expected labour migration and expected economic effects of the recent EU enlargement. Related to the free movement of workers in the EU, the host country principle applies. This principle prevents unfair competition and hence negative policy competition, namely social dumping and a ‘race to the bottom’. The host country principle avoids competition among employers and among employees, because equal treatment of employees and the self-employed is realised. This principle strengthens the position of the labour unions, encourages stable working relationships and industrial peace, and in turn increases labour productivity and competitiveness, and it creates an attractive business location climate. It also promotes the free movement of workers from poorer countries to richer countries and discourages migration from richer to poorer countries. The proposed Directive of the European Commission of 13 January 2004, the so-called
Bolkestein Directive, aims to promote cross-border service activities especially for SMEs and ultimately to create more jobs. The revised and final version of the Directive was approved by the European Parliament on 16 February 2006 and by the European Council of Ministers on 22 May 2006. The Directive, which will take full effect by 2010, will result in a considerable increase in temporary labour migration and has a major impact on the national labour markets of the EU member states.

The Bolkestein Directive replaces the host country principle by the country of origin principle. It allows service providers to temporarily cross the border and provide services at standards different from those in the origin country. The host country principle applies to posted workers. The Directive concerning posting of workers also applies to the self-employed. It implies that a foreign service company from the EU has to apply the labour conditions of the country where the service is delivered for its posted workers. A posted worker is a worker who, for a limited period, carries out his/her work in the territory of a member state other than the state in which he/she normally works. However, a posting shorter than 12 months is an exception to this rule: the origin country principle. There are plans to extend this to 24 months. The big differences in labour standards between the old and the new EU member states may result in unfair competition. Considerable cost advantages can be achieved by companies if they are able to circumvent the restrictions on labour mobility of workers, because the self-employed without personnel are not tied to minimum wage or collective agreements. Agencies providing temporary staff can circumvent considerable social security contributions by using legal constructions and posting people from a country with low contributions in a country with high contributions. Employment agencies will therefore have every interest in establishing themselves in countries where they have to pay the lowest taxes, and where social contributions are also the lowest. A free market for services implies that jobs in the EU need not only be filled by foreign employees, but also by foreign self-employed and their employees. The free market of services conflicts with the policy of member states to control or restrict the inflow of labour from the new member states. Furthermore, the role of the social partners is reduced. Institutions such as the minimum wage, the legal extension of collective agreements and compulsory branch pension funds loose their meaning.

External effects
In the migration literature, external effects receive little or no attention in the calculation of the economic effects of migration. For the EU 15, over the past decade migration has been a more important source of population growth than natural increase (Holzmann and Münz 2004; Drinkwater et al. 2003). However, the present level of immigration will be unable to sustain the level of working-age population in the EU since it is estimated by the United Nations that a ‘replacement migration’, namely, a net migration of around 1.5 million individuals per annum, is required in order to keep the level of the working population in the EU constant until 2050. The United Nations suggested that the EU should welcome more migrants (see United Nations 2000). Areas of dense population in Europe are also the economic core areas of Europe where the majority of the jobs, enterprises and provisions as well as the best physical
infrastructure are located. The other side of the picture is that these are also areas where pollution is the highest, congestion is high and access to nature is low. Scale effects imply that the unit costs go down, but other effects increase, for instance traffic congestion. Is there some optimal level of population?

Gross domestic product (GDP) per capita is often used as a criterion for measuring prosperity. Prosperity increases if environmental damage is kept to a minimum, for example by recycling waste or cleaning up contaminated areas. But these activities do not contribute to real prosperity. In fact, they merely reflect rising transaction costs required to allow the economic system to function. On the other hand, GDP is not related to the environmental pollution that destroys the environment (Delsen 2002). Here the case of the Netherlands is illustrative. According to international standards, with 470 people per km², population density in the Netherlands is high. In the Dutch case chances are high that immigration will have a negative external effect, namely, overpopulation and a deterioration of the environment. Over the past decade in several reports by Dutch institutions it has been concluded that immigration is not a solution to demographic ageing. Statistics Netherlands estimated that annually 150,000 immigrants would be required to counter the effects of ageing. In 1993, the Netherlands Scientific Council for Government Policy (WRR 1993) concluded that it was undesirable to encourage immigration to solve the ageing problem, because it would result in a very strong growth of the Dutch population. An annual net inflow of 125,000 people would be required to stabilise the dependency ratio. The labour market and society will not be able to accommodate and absorb such large numbers without paying a high social cost. Ten years later the CPB Netherlands Bureau for Economic Policy Analysis concluded that large-scale immigration is not effective in relieving the financial consequences of ageing and also that it is not a solution to the problems in the Dutch labour market brought on by ageing (Roodenburg et al. 2003). Indeed, the Dutch population density seems to have crossed a critical point. Between 2000 and 2004 population growth in the Netherlands dropped. This fall in population growth rates was mainly caused by a decrease in net migration, the difference between immigration and emigration. Over the past years fewer immigrants entered the Netherlands, while there was a marked increase in the number of Dutch citizens who permanently emigrated abroad. For the first time in 50 years there were more emigrants than immigrants. In 2004 the net migration was negative: on balance 16,216 people left the Netherlands (see ter Bekke et al. 2005). The Netherlands changed from an immigration country into an emigration country, a unique situation within the context of Western Europe. Partly this relates to the phase in the business cycle; partly to the restrictive Dutch immigration policy. However, it is argued that demographic pressure is the most important explanatory factor.

Environmental pressure in the Netherlands is high, both relatively and absolutely. Environmental pressure and population density are linked. The high population density, high income level, energy-intensive production and large emissions are responsible for intense environmental pressure in the Netherlands. Also the environmental quality in the Netherlands is poor. Environmental quality pertains to the state of natural resources, soil, water and air at a given moment (see Delsen 2002). Recent research by the Netherlands Interdisciplinary Demographic Institute (NIDI) shows that the increase in environmental pressure and demographic pressure are important reasons to emigrate.
Over 80 per cent of the Dutch citizens who want to emigrate, that is to live abroad permanently, consider the population density too high. It is not financial benefits but social considerations – demographic pressure – that induce Dutch people to emigrate (see Ter Bekke et al. 2005). The largest group of émigrés involve partner and children. People who leave the Netherlands are relatively young, relatively well educated and often earn a high income. This is in line with what the human capital theory predicts. It also confirms the human capital flight associated with emigration. Increasing competition resulting from the internationalisation of economies augments the importance of human capital as a competitive factor. The comparative advantages, which determine the competitive position of a country, are increasingly being shaped by investment in human capital. Human-embodied knowledge – human competences – is an important intangible asset that determines a firm’s competitive success. After all, if capital is completely mobile, the level of education of the labour force is the most prominent decisive factor of international trade. While policy may have control over the level of immigration, it has little or no control over emigration and hence net migration is difficult to influence (Coppel et al. 2001). The Dutch experience shows that immigration and emigration are related: they are communicating vessels.

Conclusions
The legal restrictions on the movement of labour by the old EU member states are temporary and are being eroded by the free movement of services. What this chapter has tried to do is to make clear that the economic advantages of migration for the host country as well as the sending country can be questioned. Free movement of labour in the EU has its social and economic price tag: crowding out, unfair competition, disturbance of industrial relations and employment relations and detrimental effects on the welfare state and the environment, as well as an increase in emigration. Benefits and losses from migration are unevenly distributed. Notably, unskilled workers may lose out from international migration. Promotion of immigration is not a solution to the ageing and depletion of the labour force. On the contrary, it may worsen labour market problems as a result of demographic development. The motives to emigrate deserve more attention in future research as well as in policy making.

Note
1 The 10 new member countries include: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

References
Lammers, K., 2004, ‘How will the enlargement affect the old members of the European Union?’, Intereconomics 39: 132-141.
Abstract

Is free movement of labour in the European Union an economic blessing or an economic burden? To answer this question, this chapter establishes the economic consequences of East-West migration for the economy in general and the labour market in particular of the receiving countries as well as the sending countries. The economic consequences critically depend on the volume of migration, on what immigrants bring, on the size of the labour market and on the labour market situation. It is argued that the existing calculations underestimate the disadvantages and overestimate the advantages of labour migration. It relates to the economic models used and to the methods of estimating the volume of net migration from the new EU member states. It also is related to how economists calculate prosperity. The cost-benefit balance may be negative when the external effects of migration and the labour market implications of free movement of services in the EU are taken into account. There also are considerable redistributive effects. Population density and environmental pressure explain why immigration and emigration are positively associated, and immigration is no answer to the problems due to demographic ageing.