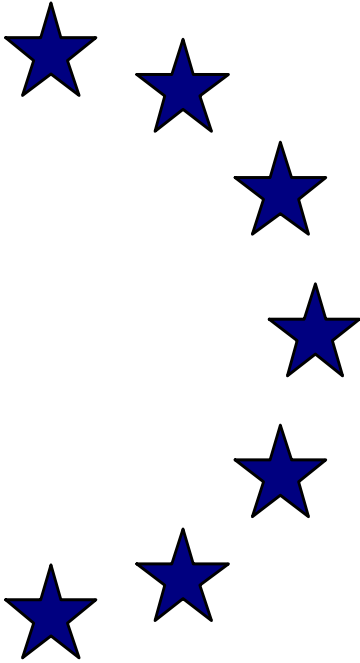


EUROPEAN ECONOMY

EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ECONOMIC
AND FINANCIAL AFFAIRS

ECONOMIC PAPERS



ISSN 1725-3187

http://europa.eu.int/comm/economy_finance

N° 256

September 2006

**Labour Migration Patterns in Europe:
Recent Trends, Future Challenges**

by

N. Diez Guardia and K. Pichelmann
Directorate-General for Economic and Financial Affairs

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European Commission
Directorate-General for Economic and Financial Affairs
Publications
BU1 - -1/13
B - 1049 Brussels, Belgium

ISBN 92-79-01197-9

KC-AI-06-256-EN-C

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Labour Migration Patterns in Europe: Recent Trends, Future Challenges *

Nuria Diez Guardia⁺ and Karl Pichelmann⁺⁺

September 2006

* This paper is the revised version of a background document prepared to inform the discussion at the informal meeting of the Economic Policy Committee in Copenhagen, 26-27 June 2006. We are indebted to Herbert Brücker, Martin Hallet, Jürgen Kröger, Jacob von Weizsäcker and participants of the above mentioned meeting for helpful comments and suggestions. Obviously, the usual disclaimer applies.

⁺ European Commission, Directorate-General for Economic and Financial Affairs

⁺⁺ European Commission, Directorate-General for Economic and Financial Affairs and Institut d'Etudes Européennes, Université Libre de Bruxelles.

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1. Introduction

In the last few years, issues related to international migration are receiving increasing attention from policy makers. This reflects mainly the changes in the magnitude and composition of migration flows. Net migration into the EU has risen again during the period 1998 to 2003. With an overall level of around 4 per thousand, relative immigration levels into the EU appear to be at present somewhat higher than those into the US (3.3 per thousand). High irregular migration, with estimates of the relation between regular and irregular immigration running between 1:0,3 and 1:1, and high numbers of asylum applicants indicate an increase in migration pressure during the last decade. Major changes in the source and destination of migrants have also taken place: traditional receiving countries have lost prominence while Southern European countries, who were sending countries until fairly recently, have become receiving countries, and some Eastern European Member States are now both sending and receiving migrants.

Still, it is not straightforward to answer questions such as what is the size of the immigrant population, how many of them are labour migrants, what their skills are and how do successive cohorts perform in their host countries. The data generally available do not provide a clear idea about the number of immigrants across countries, mainly because countries have different concepts of who is an immigrant depending on whether migration is temporary or permanent, or whether immigrants are considered to be foreigners or foreign-born people who have immigrated into their country of residence at a point in their lives. When the criterion used is nationality, immigrants who are naturalised cease to be counted and they become difficult to distinguish from the majority of native citizens. Moreover, the people born in a country, such as the children and grand-children of immigrants, do not always acquire that country's nationality.

Using foreign country of birth has several advantages: first, it conforms to the international standard definition of immigrant, second, it is not affected by return migration of those who lived abroad and come back to their home country (who are counted as immigrants if the variable used is "previous foreign country of residence") and, third, it is not affected by naturalisation. From a European perspective, it is appropriate to further distinguish nationals from other Member States, for whom free movement within the EU is in place, from third country nationals, subject to the immigration and asylum legislations of each Member State. In most Member States, over 20% of immigration flows currently originate from another Member State and over 15% are nationals returning from abroad.

A Community immigration and asylum agenda is under development under the area of freedom, security and justice created by the treaty of Maastricht of 1991/93. Immigration and asylum of third-country nationals was inserted in the Treaty of Amsterdam of 1997/99 (Title IV). The European Council, at its meeting in Tampere in October 1999, provided an important input and agreed that «the (...) issues of asylum and migration call for the development of a common EU policy». It also stressed the assessment of the economic and demographic developments within the Union, as well as the situation in the countries of origin, as a basis for decisions on «the approximation of national legislations on the conditions for admission and residence of third country nationals».¹

In November 2000, the Commission published a Communication on a Community Immigration Policy² in which it recognised that immigration has an important role to play in increasing

¹ In 1994, a European Council Resolution prescribed that "Member States will refuse entry to their territories of third-country nationals for the purpose of employment", see Council Resolution of 20 June 1994 on the limitation of admission of third-country nationals to the territory of the Member States for Employment.

² COM(2000) 757.

Europe's growth potential and realising the goals of the Lisbon Strategy more generally. In addition, it notes a growing recognition that the «zero» immigration policies of the past 30 years are no longer appropriate and that channels for legal immigration to the Union should be made available for labour migrants. In its Communication of June 2003 on Immigration, Integration and Employment³, the Commission explored the role of immigration in the context of demographic ageing and outlined policy orientations and priorities to promote the integration of immigrants. The Thessaloniki European Council of June 2003 welcomed this Communication and stressed «the need to explore legal means for third country nationals to migrate to the Union, taking into account the reception capacities of the Member States». As a follow-up, the Commission adopted its first Annual Report on Migration and Integration in June 2004, where it announced its intention to work towards the definition of common basic principles for integration at EU level. It has commissioned a number of studies on this topic⁴ and reported on the labour market situation of immigrants in 2003 and 2004.⁵

The European Council adopted the Hague Programme in November 2004, which sets out an EU work programme for 2005-10 in the field of justice, freedom and security. It asked the Commission to formulate a policy plan on legal migration, including issues such as admission procedures that can respond promptly to fluctuating demands for migrant labour. In response, the Commission first issued a Green Paper⁶ on how to manage economic migration at EU level, in January 2005. The Green Paper launched a wide consultation on which rules should be proposed and adopted at EU level concerning the conditions of entry and residence of third-country nationals for economic reasons. Second, the Commission proposed a Policy Plan on legal migration in December 2005. The later events in Ceuta and Melilla and the situation in Lampedusa and Malta, as well as in the Canary Islands and some Greek Islands, reinforce the need for a common and integrated approach to address the international flows of people, taking into account both migration and development policies.

Economists can advise the debate on migration, as a growing body of literature examines the characteristics of migrants, their economic integration and the consequences of their migration on both sending and receiving countries. Work on the determinants of migration flows also shows how migration is driven by economic and demographic factors and by policy. This note focuses on several economic aspects of immigration. It first reviews recent trends and patterns in migration to the EU; it then turns to examining the economic impact of migration, in particular the overall gains and pains from immigration and the labour market consequences for receiving countries; finally, it discusses some factual policy approaches.

2. Characterising migration in the EU

2.1 Recent trends in migration

2.1.1 Flows and stocks of immigrants

From an historical perspective, immigration to Europe is a relatively new phenomenon. Most European countries have been countries of emigration, some of them until fairly recently. The second half of the 19th century was an era of mass emigration from Europe: over 50 million people emigrated to the US, Canada and South America between 1820 and 1914. Initially,

³ COM (2003) 336 final.

⁴ See the studies commissioned by the European Commission Directorate General for Employment, Social Affairs and Equal Opportunities, in particular, Münz (2004), Münz and Fassmann (2004) and Boswell et al (2004).

⁵ See European Commission (2003) and European Commission (2004).

⁶ COM (2004) 811 final

migrants mainly originated from Britain, they were joined by a stream of emigrants from Germany in mid-century and then from Scandinavia and other parts of north-western Europe. Finally, a large wave of migration from Southern and Eastern Europe started in the 1880s. European emigration declined after 1914, as part of the general reverse in globalisation during the interwar period (Hatton and Williamson, 2003; O'Rourke, 2004). Renewed prominence of migration within Europe can explain part of this drop.

European countries have gradually become a destination for migrants, starting in the 1950s in countries with post-war labour recruitment needs and with colonial past. Southern countries became receiving countries during the 1990s and several countries in Central and Eastern Europe are currently both source and origin of migrants. Three distinct phases of immigration can be identified in the last half century, see

Graph 1:

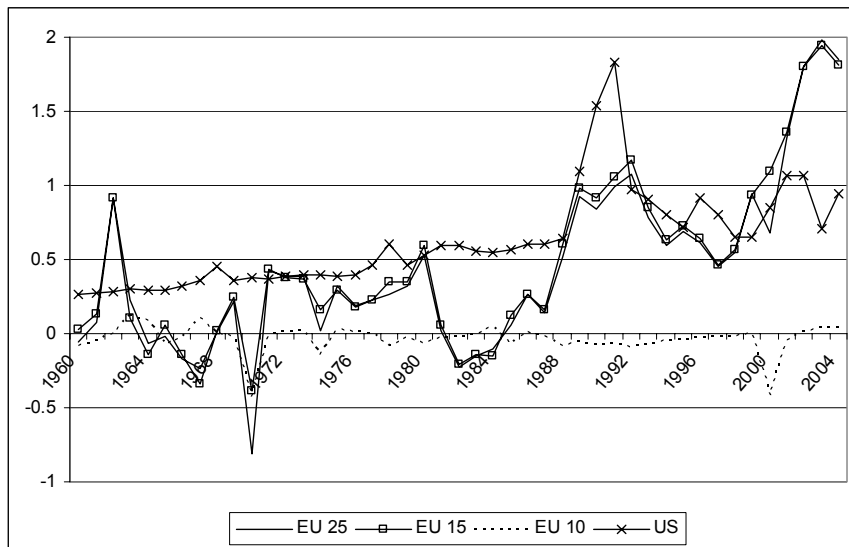
- the guest worker phase, with programmes to recruit foreign workers to cope with increasing labour demand during the economic boom in the 1950s and 1960s in Austria, Denmark, Germany, Luxemburg, Belgium, France, the Netherlands and the UK. They turned to other European countries, such as Italy, Portugal and Spain, and/or to former colonies or neighbouring countries: North Africa in the case of France and Belgium; the Caribbean and the Indian subcontinent for the UK; and Yugoslavia and Turkey for Germany. Foreign labour recruitment stopped in 1974, after the first oil price shock and subsequent rise in unemployment;⁷
- immigration continued, mostly due to family reunification: net migration flows during the 1970s were of 240,000 people per year on average as immigrants who were present in these countries decided to stay and were joined by their families from their home countries;
- the asylum seekers phase, after a brief period of net outflows during the early 1980s recession. Net migration flows rose again, peaking in 1991-1992, as the fall of the "iron curtain" and a number of wars and ethnic conflicts, such as in former Yugoslavia, pushed upwards the number of people seeking asylum. Net inflows dropped significantly between 1992 and 1997, partly due to tighter controls over migratory flows in the main receiving countries, but they resumed their growth at the end of the 1990s. Overall, the average annual net entries for the EU25 more than tripled from around 198,000 people per year during the 1980s to around 750,000 people per year during the 1990s. High clandestine migration also marks the decade of the 1990s.

Net inflows started rising at the end of the 1990s until 2003, from over 500,000 people in 1998 to close to 2 million in 2003. Some of this increase, however, does not only reflect new entries of migrants, but also large-scale regularisation programmes which made parts of the migrant

⁷ Measures of macroeconomic conditions, such as unemployment rates, are typically not helpful in explaining *long-run* immigration policy changes; however the *timing* of their introduction is strongly influenced by short-run macroeconomic conditions (Hatton and Williamson, 2004).

population residing illegally in the EU visible in official statistics. Net flows show a recent tendency to stabilise, decreasing to a level of 1,800,000 in 2004 and 1,600,000 in 2005.

Graph 1 Net migration, in millions



Note: Net migration is measured as the difference between the total population on 1 January and 31 December for a given calendar year, minus the difference between births and deaths (or natural increase).

Source: Eurostat, US Census/Office of Immigration Statistics.

Key drivers of migration flows

The economic theory of migration is based on the assumption that migrants try to maximise the net gains from migration, calculated as the difference in present value of alternative earnings streams, minus migration costs. An individual is more likely to migrate the higher is the wage in the destination country and the lower the source country wage and the migration cost. Policies that restrict immigration can be seen as raising the migration cost. The likelihood of migration tends to decline with age because the remaining working life is shorter. Thus, for a given incentive to migrate, migration will be higher the younger is the population of working-age in the source country.

New economic theories have expanded this framework to incorporate the idea that migration decisions are taken in a household context rather than by an individual. The family member in a foreign labour market sends a stream of remittances to improve the economic situation of the family which can either stay in the country or follow via family reunification.

Hatton and Williamson (2002) identify four main economic and demographic factors generating migration:

- the gap in income per capita between rich, high-wage countries and poor, low-wage countries;
- emigration from poor countries may increase as economic development takes place, which does not seem consistent with the fact that migration is driven by the gap between income in the source and destination regions. This is due to the relaxation of the poverty constraints to migrate. Indeed, for the very poor it may be difficult to finance migration so income gains have a positive effect on migration, which may dominate the negative effect associated with a reduction of the income gap between sending and receiving countries. A hump shaped relationship between economic

development in sending countries and emigration has been observed: emigration rates out of very poor countries are very low, whilst they are much higher out of moderately poor countries (Hatton and Williamson, 1998); this could be explained by catching up that relaxes the poverty constraint.

- the share of young adult population in a receiving country has a negative effect on immigration, whilst a bigger young adult share in sending countries increases emigration.
- networks (friends and relatives) drive dynamic effects of migration through the stock of previous migrants from the sending country residing in the receiving country.

On the demand-side, the policies of receiving countries are factors of migration, notably the promotion of immigration to fill labour shortages.

Net migration flows do not show the size of inward and outward movements due to temporary and return migration that are becoming much more common (Hatton and Williamson, 2003). Therefore, net migration flows tend to increase much slowly than gross flows. In particular, Germany, Denmark, Luxemburg and Sweden record a comparatively large number of arrivals, but the high number of outflows keeps net migration, as a share of total population, relatively low, see Table 1. Sinn et al. (2001) estimate that only 40 per cent of immigrants were still living in Germany 10 years after their arrival and less than 35 per cent after 25 years.⁸ In Sweden, over a quarter of immigrants are estimated to leave within 5 years of their arrival (Edin, LaLonde and Aslund, 2000).

Table 1 Gross migration flows relative to the total population, per thousands

	Immigration						Emigration				
	1985	1990	1995	2000	2001	2002	1985	1990	1995	2000	2001
BE	4.8	6.3	6.2		7.6		5.5	3.3	0.4		4.1
CZ						4.4					
DK	7.1	6.5	12.1	9.9	10.5	9.8	5.2	6.0	0.7	8.1	8.2
DE	6.6	20.9			10.7		5.5	7.7			7.4
EE											
GR	3.4	4.2									
ES	0.5	0.9	0.9	9.1	10.2	11.8				0.0	
FR											
IE		9.5	8.7	11.2	12.0	12.9		16.1			5.2
IT	1.5	2.9	1.7	4.0		3.7	1.5	1.0	0.1	1.0	
CY				18.5	25.0	20.4					16.3
LV				0.7	0.6	0.6				1.5	2.8
LT				0.4	1.3					0.7	2.1
LU	18.0	27.1	25.4	27.1	27.6	27.2			1.4	18.7	
HU				2.0		1.7				0.2	
MT				1.2	1.2						
NL	5.5	7.9	6.2	8.4	8.3	7.5	3.8	3.9	4.3	4.2	4.3
AT				10.2	11.2					8.1	9.1
PT				0.5	0.5						0.6
SI				0.6	0.8	0.9				1.8	
SK					1.0						
FI	2.0	2.6	2.3	3.1	3.5	3.4	1.6	1.3	1.8	2.9	2.7
SE	6.8	12.1	9.0	11.3	11.7	12.3	2.6	3.0	4.1	4.1	3.8
UK	27.8	31.3	27.8	41.1			3.1	4.1	3.4	4.9	4.4

Note: Gross flows do not add up to net flows in the statistics due to the different approaches to estimate the two types of flows. Gross immigration and emigration flows are derived from migration statistics. Net migration is estimated using population statistics, as the total population for a given calendar year, minus the natural increase, see Table 4. The approach is different from that of subtracting recorded flows of emigration from immigration flows, which are shown in this table. More details are provided in the box on migration statistics.

Source: Eurostat

The stocks of migrants and the change in their composition reflect different migration waves over a long period of time. The proportion of foreigners in the total population has increased in most countries since the early 1990s. It shows wide cross-country differences: it is the highest in Luxemburg, close to 10 per cent in Austria, Germany and Belgium and around 5 per cent in most

⁸ These figures exclude “ethnic Germans” and asylum seekers.

other Member States except Italy, Finland and new Member States, where foreigners account for less than 3% of the population. Due to high recent inflows, the share of foreign population has sharply increased in Greece, Spain, Italy, Portugal and Ireland.

Table 2 Foreign population and labour force

	Foreign population		Foreign labour force		
	in thousands		as a % of total population		as a % of total labour force
	1990 (1)	2004 (2)	1990 (1)	2004 (2)	2004 (2)
BE	881	871	8.9	8.4	8
DK	151	268	2.9	4.9	3.9
DE	5,343	6,739	6.7	8.2	9
GR	226	762	2.2	7	6.4
ES	398	1,977	1	4.6	9.3
FR	3,597	3,263	6.3	5.4	5.4
IRL	81	223	2.3	5.5	5.9
IT	490	1512	0.9	2.6	3.2
LU	106	177	27.9	39	45
NL	642	699	4.3	4.3	3.6
AT	518	777	6.6	9.5	8.4
PT	101	449	1	4.3	2.9
FI	21	108	0.4	2.1	1.5
SE	456	463	5.3	5.1	4.5
UK	2,416	2,857	4.3	4.8	5.4
CZ	:	254	:	2.5	0.7
HU	:	142	:	1.4	0.7
SK	:	22	:	0.4	:
EU15	<i>15,426</i>	<i>23,836</i>	<i>5.1</i>	<i>7.7</i>	<i>8</i>

Note: (1) A, D: data for 1991

(2) GR data refer to foreigners who entered Greece for employment purposes

Source: OECD/Sopemi

Information on the foreign-born gives a more accurate picture of the extent of migration. Recently, over 300,000 people per year have acquired the citizenship of a Member State of the EU15. In France, Belgium, the Netherlands and the UK, the share of foreigners in the total population has not varied much during the 1990s, despite high inflows of foreign-born, partly reflecting a relatively high number of naturalisations. Data on the foreign-born population has recently become available from the OECD, for a limited number of years.⁹ The foreign-born population accounts for close to 9 per cent of total population in the EU (for the countries for which data are available), a markedly low proportion as compared to 20 per cent of foreign-born population in Australia and Canada and 12 per cent in the US.¹⁰ The percentage of the foreign-born is generally higher than the percentage of foreigners, see Table 3. In many EU Member States, it approaches the levels observed in the US and using data on foreigners leads to a severe under estimation of the immigrant population. It is also important to note that the foreign-born population includes nationals from other EU Member States, see next section.

⁹ However, as some foreign-born people were born abroad with the citizenship of their country of current residence, they would normally not be considered as immigrants. This can be ignored in most countries without risk of distorting the picture of the immigrant population (Dumont and Lemaître, 2005). For Belgium and France, it is possible to exclude foreign-born citizens from the foreign-born population.

¹⁰ The proportion of foreign born population is lower in the US relative to Australia and Canada. However, around 34 per cent of the US population belongs to an ethnic minority due to a past history of immigration (OECD, 2002).

Table 3 Percentages of foreign-born and non-citizens in the total population

	year	Percentage of	
		foreign-born	non citizens
BE	2002	10,7 (9,3)	8,2
DK	2002	6,8	5
DE	1999-2002	12,5	
GR	2001	10,3	7
ES	2001	5,3	3,8
FR	1999	10 (7,4)	5,6
IE	2002	10,4	5,9
LU	2001	32,6	36,9
NL	2001	10,1	4,2
AT	2001	12,5	8,8
PT	2001	6,3	2,2
FI	2000	2,5	1,7
SE	2003	12	5,3
UK	2001	8,3	
CZ	2001	4,5	1,2
HU	2001	2,9	0,9
PL	2002	2,1	0,1
SK	2001	2,5	0,5

Note: Figures in parentheses indicate the percentage of foreign-born in total population after excluding foreign-born citizens at birth.

Source: Dumont and Lemaître (2006).

Migration statistics

The principal sources of migration statistics are population registers, residence or work permits, censuses and, in some cases, surveys (household surveys and other surveys such as the International Passenger Survey). The main purpose of these sources is not the recording of migration flows or stocks.

There is a significant lack of comparability in international migration statistics, stemming from various reasons:

- the use of different sources gives very different results;
- there are wide differences across countries about who is considered a migrant, whether the criteria used is nationality or country of birth;
- a migrant can be defined as a person obtaining the right of permanent or limited duration residence or as a person who registers in a population register and intends to stay for more than a specified period (which can vary from 3 months to one year). There are also differences in permit durations across countries for migration movements of the same type. Often, foreign students who enrol on a population register are counted as immigrants;
- the data on inflows are incomplete: illegal inflows are missing or underestimated;
- there is a lack of consistency between data on flows and stocks;
- there is a lack of meaningful data on emigration flows in many countries.

A process of harmonisation of migration statistics is underway: Eurostat collects data on both migratory flows (immigration, emigration and net migration) and stocks (measured as non-national population). The information needs to be updated (the latest data available are for 2002). Progress to include more countries, notably Romania, Bulgaria and Turkey would also be necessary. The OECD (2005) presented the results of a new database on the immigrant stock, where statistics for foreign-born people are available by country of residence (of which 18 EU Member States) and country of birth (for 29 countries). The European Labour Force Survey (LFS) also allows distinguishing between foreign-born and native-born residents of the EU. Eurostat is currently designing an ad-hoc module in the 2008 LFS, focusing on immigrants and their immediate descendents. The survey could be used to estimate the stock of migrants and for integration purposes.

2.1.2 Destination and source countries of migration in the EU

Traditionally, the largest number of arrivals was in Germany, France and the UK, but migration flows to Italy, Spain and Ireland have risen recently. During the period 1990 to 1996, Germany concentrated over half of the net migration flows into the EU. Over the period 1997 to 2003, the share of Germany as a recipient was 14%, with Spain receiving close to 30% of net inflows and the UK and Italy close to 15%. Since 2000, Spain receives the highest net inflows in the EU25, after recording net outflows during the 1960s and most of the 1970s and 1980s, see Table 4. Since 2000, net migration rates have turned positive in most EU10 new Member States, except in Latvia and Lithuania where the reverse pattern took place and Slovenia, where the net migration rate is positive since the 1960s. In 2005, the migratory balance was positive in all Member States except Latvia, Lithuania, Poland and the Netherlands.

Table 4 Net migration rate, per thousands

	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005
BE	:	1.7	0.8	3.2	-3.4	2.5	-0.2	-0.1	2.0	0.2	1.3	3.5	3.9	3.4	3.4	3.2
CZ	:	:	-11.1	0.4	-12.3	0.2	-4.0	0.2	-5.7	1.0	0.6	-4.2	1.2	2.5	1.8	3.5
DK	:	:	-0.9	-0.4	4.3	-2.0	0.1	1.9	1.7	5.5	1.9	2.2	1.8	1.3	0.9	1.4
DE	8.8	1.2	2.2	4.3	-3.5	-2.7	3.9	0.9	8.3	4.9	2.0	3.3	2.7	1.7	1.0	1.2
EE	:	:	4.6	5.5	4.4	4.0	4.1	4.1	-3.6	-10.9	0.2	0.0	0.1	0.2	-0.2	:
GR	:	:	-4.1	-3.9	-5.3	6.5	5.8	0.6	6.3	7.3	2.7	3.5	3.5	3.2	3.2	3.1
ES	:	:	-4.7	-1.6	-1.5	0.4	3.0	-0.3	-0.5	1.8	9.7	10.8	15.7	14.9	14.3	15.0
FR	:	:	3.1	1.5	3.6	0.3	0.8	0.7	0.5	-0.3	1.7	2.0	2.2	2.2	1.7	1.7
IRL	:	:	-14.8	-7.5	-0.9	5.4	-0.2	-11.1	-2.2	1.7	8.4	10.1	8.3	7.8	11.8	11.4
IT	:	:	-1.9	-1.7	-2.0	0.4	0.1	-0.4	0.4	0.6	1.0	0.8	6.1	10.6	9.6	5.8
CY	:	:	-12.9	-4.7	-1.5	7.4	0.6	2.0	16.4	10.1	5.7	6.6	9.7	17.2	21.2	27.2
LV	:	:	9.2	5.9	2.8	4.9	1.0	4.7	-4.9	-5.6	-2.3	-2.2	-0.8	-0.4	-0.5	-0.5
LT	:	:	1.8	1.8	4.5	1.8	0.6	3.5	-2.4	-6.5	-5.8	-0.7	-0.6	-1.8	-2.8	-3.0
LU	:	:	1.9	5.4	3.2	9.8	3.7	2.5	10.5	10.5	8.0	7.6	5.7	4.7	3.4	3.4
HU	:	:	0.1	0.5	-0.2	-0.9	-0.7	-7.6	1.8	1.7	1.6	1.0	0.3	1.5	1.8	1.8
MT	:	:	-21.7	-19.4	-6.3	6.2	2.5	0.0	2.3	-0.5	25.8	5.7	5.1	4.1	4.5	5.0
NL	:	:	-1.1	1.4	2.5	5.1	3.6	1.4	3.3	1.0	3.6	3.5	1.7	0.4	-0.6	-1.2
AT	:	:	-0.3	1.5	1.4	-3.2	1.2	0.8	7.6	0.3	2.2	5.4	4.3	4.7	7.6	7.4
PL	:	:	-4.4	-3.2	-9.0	-0.3	-0.7	-0.5	-0.3	-0.5	-10.7	-0.4	-0.5	-0.4	-0.2	-0.3
PT	:	:	-6.3	-19.5	-14.0	38.2	4.3	-1.9	-3.9	2.2	4.6	6.3	6.8	6.1	4.5	3.9
SI	:	:	-2.7	4.4	2.2	10.4	2.8	1.9	-0.2	0.4	1.4	2.5	1.1	1.8	0.9	3.6
SK	:	:	34.4	-1.6	-7.8	-0.7	-2.3	-0.6	-0.5	0.5	-4.1	0.2	0.2	0.3	0.5	0.8
FI	:	:	-2.1	-4.6	-7.9	-0.8	-0.5	0.5	1.7	0.8	0.5	1.2	1.0	1.1	1.3	1.7
SE	:	:	-0.1	4.2	5.8	2.0	1.2	1.3	4.1	1.3	2.8	3.2	3.5	3.2	2.8	2.7
UK	:	:	2.1	-0.8	-0.3	-0.8	-0.6	1.0	0.4	1.1	2.4	2.6	2.7	3.0	3.4	3.3
EU25	:	:	-0.2	0.0	-2.0	0.8	1.2	0.1	1.9	1.5	1.5	2.9	4.0	4.3	4.0	3.7
EU15	:	:	0.1	0.2	-1.1	0.8	1.7	0.4	2.5	1.9	2.9	3.6	4.7	5.1	4.7	4.2
EU10	:	:	-1.4	-1.2	-6.3	0.4	-0.9	-0.9	-1.0	-0.4	-5.6	-0.6	0.1	0.5	0.5	-0.1

Source: Eurostat

On average over the second half of the 1990s, 18 per cent of people moving into an EU Member State were nationals from other Member States, 27 per cent were nationals returning from abroad and 54 per cent were nationals of non-EU countries.¹¹ Currently, the proportion of other EU15 citizens in immigrant flows is very high in Luxemburg (close to 70 per cent), Belgium (40 per cent) and Ireland (30 per cent). In the other countries, the share of foreigners originating from other EU15 Member States is below 25 per cent. Returning nationals account for at least 15 per cent of inflows, reaching 35 per cent in Ireland and over 40 per cent in Denmark and Finland. Non-EU15 nationals account for between 25 per cent and 70 per cent of immigration flows, reaching 40% in Germany, 50% in Sweden, about 60% in Austria, the UK and the Czech Republic and over 75% in Spain and Slovenia. The main source countries of immigration in the EU15 in 2004 are Romania, Poland, Morocco, Bulgaria, Turkey, Ukraine, Germany, the Russian Federation and the UK (OECD, 2006).

The geography of migration flows is in constant evolution. Inflows have become more diversified, with increasing numbers of immigrants from new sources in Central and Eastern Europe, Asia (especially China), Africa and Central and Latin America (the latter mostly to Spain). Ukraine and the Russian Federation have appeared as major new source countries since

¹¹ Eurostat; the data series is incomplete since 2000.

2000. There has also been a dispersion of flows of immigrants from the same country of origin into different destination countries. For example, nationals from the former Yugoslavia are long-term residents in Germany and Austria and, more recently, Italy and Sweden. Nationals from Morocco first arrived to France, then Belgium and the Netherlands and more recently to Spain and Italy. Recent data indicate that migration flows from neighbouring countries have increased, notably from Romania to Hungary and Italy, from Poland and Turkey to Germany, from the Maghreb countries to France and from Germany to Switzerland and Austria (OECD, 2005).

The relative size of flows by countries of origin has changed to a great extent since the early 1990s. The proportion of immigrants from the traditional leading source of immigration has fallen in several countries, for example Russians and Estonians in Finland, Moroccans and Turks in the Netherlands and nationals of Serbia-Montenegro and Bosnia-Herzegovina have decreased in most countries. Some receiving countries have experienced a complete change in the main source of inflows. For example, in Denmark the top sending country in 2002 was Iraq. Two years later, Iraq was not among the top-ten, while the opposite was true for China.

In most countries, the stock of foreign population originates from traditional immigration sources, reflecting historical ties. Movements between EU Member States continue to have a significant impact. Currently, the proportion of nationals from other EU15 Member States in the foreign population ranges from less than 5% in Italy and Greece to about 60% in Belgium and Ireland and 85% in Luxemburg. They account for 40% in Sweden, about 30% in Germany, France, the Netherlands, Finland, Slovakia and the UK, and 15 to 20% in Spain, Poland and Denmark (OECD, 2006).

In 2002-03, excluding nationals from other EU Member States, the largest groups of foreigners in Germany originate from Turkey and in the UK from Southeast Asia. In France and Belgium, the bigger groups of foreign citizens come from Northern Africa; in the Netherlands, they originate from Turkey and Africa; in Sweden and Finland they come from Central and Eastern Europe and the former Soviet Union. In Spain and Portugal, the biggest group of foreign citizens originate from Latin America and Africa, respectively. In Italy, they come from Africa. US, Canadian and Australian nationals account for about 15% of the foreign population in Ireland and the UK. Some significant groups have emerged recently, such as Central and Eastern Europeans in Germany, Africans in the UK and Spain and Asians in the Nordic countries and Italy. Citizens from current EU-10 Member States and other countries in Central and Eastern Europe¹² make over 60 per cent of foreign residents in Greece, Austria and Finland. They account for around 20 per cent in Denmark, Germany, Spain, Austria, Portugal and Sweden and for less than 8 per cent in Belgium, France, the Netherlands and the UK.

2.1.3 Types of migration

Four broad types of migration flows can be distinguished:

- labour migration, including short- and long-term migrants and seasonal workers;¹³ students form a special sub-group, where it is unclear what proportion of them will enter the labour force of their host country during or after their studies;
- family-linked migration, both accompanying family members from the beginning and family unification;

¹² The data include citizens of candidate countries, the Balkans, Russia, Belarus, Ukraine, Caucasus and Central Asia.

¹³ In traditional settlement countries (Australia, Canada, New Zealand and the US), people who are granted temporary residence may not figure in the statistics (OECD, 2005).

- asylum seekers who, once they are granted asylum, are classified as refugees; and
- illegal immigrants, who may enter the country illegally, or stay after the expiration date in their visa or, having applied for asylum, stay in the country despite not having been granted refugee status.

The distinction between these categories remains somewhat blurred, however, because the factors driving a migration decision can be numerous. Moreover, policy changes such as amendments to the conditions of entry and residence of immigrants, naturalisation decisions and regularisation of illegal immigrants affect the flows of entries and their composition. For example, the closing of labour migration and family reunification channels will put pressure on other forms of immigration, increasing the arrivals of asylum seekers and illegal immigrants. A tightening up of measures aimed at asylum applicants may also lead to increased illegal immigration.

Labour immigrants only constitute a fraction of total flows, in most Member States between 10 and 35 per cent of the permanent immigrant flow in 2004, as a significant number of entrants arrive via family reunification or as asylum seekers, see Table 5. The proportion of entries for employment purpose is lowest in France and Sweden, at 10 to 15 per cent of total entries and the highest in Denmark and Portugal, where it exceeds 40%. About a half of permanent or long-term immigration flows into the EU arise from family reunification.¹⁴ The main reason for entry by foreigners is family-linked: inflows in 2004 account for close to 40 per cent of the permanent immigrant flow in the UK, Denmark, Germany and Portugal and between 50 and 70% in the Netherlands, Austria, Finland, France, Italy and Sweden.¹⁵ Entries for humanitarian reasons account for between 2 per cent and 23%. Between the early 1970s and the late 1990s, the number of asylum applications in today's EU increased twenty-fold, from about 15,000 per annum to more than 300,000 per annum (Hatton, 2004). More recently, the flows in asylum seekers have diminished in some Member States.

Table 5 **Distribution of long-term migration inflows by type, in percentage, 2004**

	Work	Family <i>(including accompanying family)</i>	Humanitarian <i>(including accompanying family)</i>	Other
DK	43.6	39.7	9.4	7.3
DE	19.1	44.7	7.0	29.2
FR	11.9	64.3	6.5	17.3
IT	31.9	61.7	2.0	4.4
NL	27.5	49.8	22.8	:
AT	20.5	63.5	13.6	2.4
PT	56.7	36.2	:	7.1
FI	34.1	52.1	9.1	4.7
SE	17.1	67.8	15.1	:
UK	35.5	37.8	18.9	7.7

Note: The data concern foreigners.

Source: OECD/Sopemi, 2006

¹⁴ Brückner (2001). This is also the case in the US, where family migration accounted for about 75% of permanent migration in 2004 (OECD, 2006).

¹⁵ OECD (2006).

Inflows of workers have increased in most countries since the second half of the 1990s. Their growth was fastest in Denmark, the UK and Sweden, where they rose by over 20 per cent, reflecting the strong economic growth and the shortage of skilled and highly skilled workers in some sectors, especially in the information technology sector.

The asylum-seeker flow increased continuously after 1989, more markedly in Germany, France, the Netherlands, the Nordic countries and the UK. The UK, France and Germany receive the highest number of applications. The trend reversed in 2001-2002 and inflows declined in all EU15 countries except Greece. The top source countries of asylum seekers in the EU since 1995 are Serbia and Montenegro, Iraq, Turkey and Afghanistan. Since 2003, the Russian Federation accounts for the largest group with over 30,600 applications filed in EU15 countries. However, many asylum seekers are not given refugee status; in the UK for example, two-thirds of applications are refused. Asylum seekers account for about 15 to 20 per cent of total immigration flows in the Netherlands, the UK, Sweden and Austria and for less than 10 per cent in Denmark, France, Finland, Germany and Italy (OECD, 2006).

Estimates based on the responses to regularisation programmes and other assessment efforts have produced ratios between legal and illegal immigration in Europe in the range of 1:0.3 up to 1:1. Moreover, short-term temporary gross flows (both in and out) of clandestine immigrants may be even higher. Thus, there can be little doubt that significant stocks of irregular foreign residents may have built up over time which, in particular when clustered locally, add to serious concerns. According to estimates reported by Ghosh (2000), the proportion of irregular flows in total immigration is higher in Western Europe, at a third of total flows, than in the US, where it accounts for a fourth of total yearly flows.

Regularisation

Some 500,000 undocumented migrants are estimated to arrive in Europe each year (IOM, 2006). Four main waves of regularisation have occurred in Europe, in the 1980s, in the early and late 1990s and in early 2000. In total, around 3,719,200 regularisations occurred during the period, but the 4th wave has been the largest, with 2,151,100 migrants regularised in France, Greece, Italy, Portugal and Spain.

Number of regularisations, in thousands

	1981-88	1990-93	1996-98	2000-05	<i>total</i>
FR	121.1		77.8		198.9
GR			371	351	722
IT	118.7	217.7	461.6	634.7	1432.7
PT		39.2	21.8	182.2	243.2
ES	43.8	110.1	21.3	947.2	1122.4
total	283.6	367	953.5	2115.1	3719.2
US			405	400	805

Source: OECD/Sopemi, 2006

The composition of non-EU nationals by gender, age and education level varies across countries and also within countries from that of nationals. In France, Belgium and, to a lesser extent, Sweden and the Netherlands, the age structure of foreigners is relatively close to that of nationals, except that the share of people aged 65 and above is still lower for foreigners than for nationals. In Southern European countries and Finland, which are more recent receiving countries, as well as in the UK, the proportion of working-age people is higher for foreigners than for nationals and

the older-age groups are under-represented in the foreign population relative to the national population.

Female migration inflows are typically associated with family reunification, but comparatively high percentages of women in the foreign population are found in the UK and the Nordic countries, where the relative proportion of refugees and asylum seekers is high and employment-related movements often involve women, especially in the health care sector. Whereas women used to be under-represented in the immigrant population, their proportion in the total foreign-born population in 2004 is higher than that of men in most EU15 countries.

Overall, the EU tends to attract immigrants in largest proportion among the less educated: the distribution of foreign-born by education attainment tends to concentrate in the lower levels, whereas for nationals the proportion of the adult population with upper secondary attainment tends to be the highest, see Table 6. This partly reflects past labour demand for low skilled workers in the manufacturing sector. The proportion of foreigners with tertiary education level tends to be similar or higher than that of nationals, except in Belgium, Germany, France, Finland and Austria.

Table 6 **Distribution of foreign and national population aged 25 to 64 years, by level of education, 2002-2003**

	Less than upper secondary		Upper secondary		Tertiary level	
	Foreigners	Nationals	Foreigners	Nationals	Foreigners	Nationals
BE	52.3	37.8	25.7	33.5	22	28.7
DK	30.7	27.6	41.7	46.7	27.5	25.7
DE	47.1	13.6	38.2	62.4	14.7	24
GR	42.1	46.8	40.9	35.3	17	17.9
ES	43.3	58.3	28.5	17.2	28.2	24.6
FR	63.9	33.5	20.6	42.5	15.5	23.9
IRL	21.3	40.1	28.6	35.4	50.1	24.5
LU	43.8	27.5	38	56.7	18.2	15.8
NL	43.7	31.9	31.5	43.3	24.8	24.9
AT	42.9	19.3	43.4	63.7	13.7	17
PT	55.4	79.1	28.1	11.1	16.6	9.8
FI	29.1	24.8	46	42.4	24.9	32.8
SE	23.7	18	45.4	55.5	30.9	26.5
UK	30.9	17.4	25.5	53.1	43.6	26.2
CZ	25.9	11.7	52.5	76.6	21.5	11.7
HU	20.2	27.4	52.6	58	27.2	14.5
SK	13.2	13.8	67.8	75	19	11.2

Note: For DK and NL 2002 data.
7.4%, 13%, 6% and 43.4% of the foreign population did not respond to the question on education attainment in Germany, Ireland, Sweden and the UK respectively.

Source: OECD/Sopemi, 2005

Overall, most international migrants are medium and low skilled people (OECD, 2005b). Peri (2005) finds that the immigrant population in the US, Canada, Australia and Switzerland has an educational distribution that is complementary to that of the native born. In contrast, the EU lags behind in its ability to attract skilled immigrants, with the exception of the UK.

Over half of the highly-skilled from non-OECD countries go to the US. The US, the UK, France, Portugal and Spain seem best able to attract highly skilled workers from non-OECD countries, which can be explained by a colonial past and/or a linguistic advantage. In the EU as a whole,

mobility of the highly skilled primarily takes place within the EU, although traditional flows from North Africa and Central and Eastern Europe are significant.

In 2002, the US hosted 79,000 foreign doctoral students, the largest number in the OECD (OECD, 2005b). The second major host is the UK (22,000 students). The share of foreign doctoral students in total enrolment exceeds a quarter in the UK and Belgium, a similar level as in the US. It is around 15 per cent in several EU Member States but hardly exceeds 5 per cent in Eastern Europe, Finland and Portugal. In the past 5 years, the number of international students has increased in most EU Member States, in particular in Spain. This increase is likely to continue in the near future, in particular in view of international study providing a potential gateway for entry into the labour market, notably in fields where there are labour shortages.

Future net migration flows: assumptions underpinning the population projection made by Eurostat (EUROPOP2004)

Eurostat projects net migration flows to fall from some 870,000 people in 2004 to about 800,000 until 2010. Thereafter, net flows would remain around about 750,000 people until 2050. Over the period 2004 to 2050, net migration to the EU25 would cumulate to 39.7 millions of people, of which the bulk would concentrate in the EU15 (37.1 millions), see Eurostat (2004).

Net migration flows are projected to concentrate in a few destination countries: Germany (8.9 millions cumulated over 50 years), Spain (6.2 millions), Italy (5.8 millions) and the UK (4.9 millions). In the remaining EU15 countries, cumulated net flows are projected to range between 0.1 million in Luxembourg and 2.8 millions in France. According to the assumptions made by Eurostat, the recent change of Spain and Italy from origin to destination countries would be confirmed in coming decades, and similarly for Greece, albeit to a lesser extent with cumulated net flows of 1.7 million until 2050. In comparison, net migration flows to traditional destination countries such as France, Belgium, Luxemburg or the Netherlands would decrease in importance.

Net migration into the EU10 is projected to turn positive in 2019, reaching 100,000 people in 2026 and remaining broadly constant thereafter. Hungary and the Czech Republic are projected to attract the bulk of migration flows to EU10 Member States (0.8 and 0.6 million respectively).

2.1.4 EU enlargement

Given that barriers to trade, foreign direct investment and other capital movements had already been largely removed prior to enlargement, the free movement of people and workers was probably the most significant dimension of economic integration to change after accession, compared to the status-quo. As of 1st of May 2004, the movement of people within the enlarged EU is a matter of internal mobility.

It goes without saying that any projection of east-west migratory flows following enlargement has been subject to a considerable degree of uncertainty, and analysis of developments thus far is hampered by data limitations. Certainly, the large gaps in per capita income and wages across the enlarged EU provide high incentives for east-west mobility, which are likely to persist for quite some time; furthermore, geographical proximity and established historical and cultural ties may ease migration flows.

There have been more than thirty studies on the potential migration effects of enlargement with most estimating the long run migration potential to between 2-4% of the source populations. Cumulated over 15 years, the absolute net number of migrants has been estimated at around 3 million people. This would correspond to about 1.2 percent of the projected working-age population of the former EU15 in 2020. The short-run annual impact under the assumption of a

completely unrestricted flow of workers was estimated at 300,000 to 350,000 in the first few years following enlargement (ECFIN, 2001; Boeri and Bruecker, 2003).

Even allowing for a significant upward margin of error, these numbers are simply not large enough to affect the EU labour market in general. In summary, thus, these projections suggest that from an overall economic perspective, potential east-west net flows of labour following enlargement do not appear to pose any serious threat to jobs and wages in the EU as whole. However, assuming that migration streams from the EU-8 could flow along existing immigration networks and geographic distance, there were serious concerns that some countries and regions, in particular Austria and Germany, could face some short-run adjustment problems to cross-border labour flows, including commuting, which were feared to cause labour market disturbances.

As in previous enlargements, temporary arrangements with respect to labour mobility have been agreed upon and included in the accession treaties to ensure a smooth process of integration. The system of provisional arrangements combines a two-phased transition period of 5 years (with a review after 2 years) and a possibility for a prolongation for individual Member States, if requested, of a maximum period of 2 years. As a result, the "*acquis communautaire*" will be fully applied in all Member States after a maximum period of 7 years.

However, the economic rationale for maintaining restrictions on the free movement of workers after the date of accession is weaker than often assumed in the popular debate. While the income gap between the new Member States and the EU15 is likely to diminish to some extent over the transition period, the basic incentives to migrate will – in all likelihood – not be fundamentally different from now. In any case, applying temporary curbs on labour mobility from the new Member States will only delay the overall movement of workers and, in the meantime, introduce “biased” destination patterns of the flows into the EU-15, with the risk to distort mobility even on a more permanent basis.¹⁶

Temporary restrictions on the free movement of labour could actually be in the interest of the new Member States, to avoid emigration and shortages of labour or wage push in a number of sectors. The departure of the population, mostly of working-age, from small new Member States reaches levels of 2 to 3 per cent of the population. Labour shortages in a number of sectors of the economy are reported in several EU10 Member States. Poland is easing the employment of non-EU nationals to ease labour shortages.

Transitional arrangements on the free movement of workers

Free movement of people is one of the most fundamental freedoms guaranteed by Community law. It includes the right for EU nationals to move to another EU Member State to take up employment and to establish themselves in the host State with their family members. EU Member States are precluded from directly or indirectly discriminating against migrant workers and their families on the basis of their nationality. EU migrant workers and their families are entitled to equal treatment not only in employment related matters, but also as regards public housing, fiscal and social advantages. Removing barriers to mobility between and within Member States has also a central place in the Renewed Lisbon Agenda.

The transitional arrangements (TA) set out in the Accession Treaty of 2003 allow for limited derogations from the principles set out in the preceding paragraph, during a transitional period which

¹⁶ Moreover, restrictions on legal work could actually lead to a proliferation of undocumented work, bogus "self-employed" work, and fictitious service provision and sub-contracting.

will irrevocably come to an end on 30 April 2011. The restrictions can only be applied to migrant workers, and not to other categories of EU citizens. Furthermore, restrictions can only apply to obtaining access to the labour market, and can only limit the eligibility for employment in a particular Member State. Once a worker has obtained access to the labour market of a particular Member State, Community law on equal treatment as regards remuneration, other employment related matters, and access to social and tax advantages applies. In other words, no discrimination whatsoever is allowed on the ground of nationality between legally employed workers, regardless of whether they come from EU15 or EU10 Member States. Further, there are no transitional arrangements for the application of Community law on the coordination of social security schemes.

The transitional period is divided in three distinct phases, according to the "2-plus 3-plus 2 years" formula. Different conditions apply during each of these phases. The Accession Treaty provides that for the first two years of the TA, EU15 Member States will apply national measures, or those resulting from bilateral agreements, to regulate access to their labour markets by EU8 nationals. The diverse national measures taken during this first phase of the TA resulted in different legal regimes for access to the labour markets of the EU25. Sweden and Ireland decided not to apply restrictions on access to their labour markets by EU8 nationals. The UK had no ex-ante restrictions either, but has a Workers Registration Scheme. All other EU15 countries maintained a work permit regime, sometimes combined with quotas. No TA exists for Cyprus. Malta issues work permits for monitoring purposes. Poland, Slovenia and Hungary apply reciprocal restrictions to nationals from the EU15 Member States applying restrictions. All EU10 Member States have opened their labour markets to workers of EU10 Member States.

The first phase of the transitional arrangements started on 1 May 2004 and ended on 30 April 2006. The Accession Treaty states that before the end of this phase, the Council shall review the functioning of the TA on the basis of a Commission report. On completion of this review, and no later than at the end of the two-year period following the date of accession, the EU15 Member States had to notify the Commission of their intentions with regard to the second phase of the TA. Those who wish to continue applying national measures are still allowed to do so. Four Member States (Greece, Portugal, Finland and Spain) have decided to lift restrictions for the second three-year phase of the transitional arrangements, while six others (Belgium, Denmark, France, Italy, the Netherlands and Luxembourg) have decided to alleviate them.

As a general principle all national measures relating to labour market access should cease to apply by 30 April 2009. Nevertheless, a Member State may continue applying national measures (subject to the notification procedure as above) for a maximum period of two further years, but only in case of serious disturbances of its labour market or a threat thereof.

In any event, the Accession Treaty provides that Member States that decide to lift restrictions from 1 May 2006 will have, throughout the remainder of the transitional period, the possibility to reintroduce restrictions using the safeguard procedure set out in the Accession Treaty, should they undergo or foresee disturbances on their labour markets. The Accession Treaty also lays down that, notwithstanding restrictions applied by Member States, they shall give preference to workers who are nationals of EU8 Member States over workers who are nationals of third countries as regards access to their labour market.

Note: Freedom of movement of workers (Art. 39 EC) must legally be distinguished from freedom of establishment (Art. 43 EC) and freedom to provide services (Art. 49 EC). The posted workers' Directive, which relates to the latter freedom, is not subject to transitional arrangements although Germany and Austria are allowed to apply restrictions on the cross-border provisions of services in certain sensitive sectors involving the temporary posting of workers. The posted workers' Directive applies to undertakings established in a Member State which in the framework of the cross-border provision of services, post workers to work temporarily in a Member State other than the State in which they habitually carry out their work in performance of their contract. The Directive seeks to guarantee that posted workers enjoy, whatever the law applicable to the employment relationship, the application of certain minimum protective provisions in force in the Member State to which they are posted. To this end, Article 3(1) of the Directive provides that posted workers have to be guaranteed, during the period of posting, a number of terms and conditions of employment in force in the host Member State such as the minimum rates of pay, the maximum work periods and minimum rest periods and the rules regarding health, safety and hygiene at work.

Moreover, an important conclusion from both the studies on east-west migration potential and the developments so far is the need to differentiate between various types of migration, in particular distinguishing between short-term and more permanent movements. Available survey studies have suggested, for example, that the propensity for permanent emigration is fairly small for Czechs, Poles and Hungarians, while the preference for short-term migration, including cross-border commuting, and seasonal and casual work is clearly much higher. Such patterns of "incomplete migration", with frequent short-duration trips abroad to earn a living while maintaining a home in the origin country, already existed before enlargement, in both legal and illegal forms.¹⁷ They are eased by the rapid growth of low-fare air carriers. Thus, it is not implausible to assume that, following accession, incomplete migration will continue to be a more important type of east-west labour flows than conventional migration.¹⁸

Developments so far indeed broadly correspond to prior expectations; for a comprehensive analysis, see European Commission (2006) and ECAS (2006). On the whole, permanent migration remained low with the number of EU8 nationals residing in EU15 countries at only around 0.2% of the total EU15 population. Indeed, overall, the percentage of EU8 nationals in the resident population of each EU15 Member State was relatively stable before and after enlargement, with increases in the UK and, more conspicuously, in Austria and in Ireland.¹⁹

Yet, since enlargement there has been a significant increase in the number of EU8 citizens working in EU15 Member States. However, despite this increase, the relative impact, as measured by the number of permits issued for reason of employment as a proportion of the host country's working-age population, is rather limited. Furthermore, the number of resident and work permits issued at any point in time overestimates the actual number of EU8 nationals who have settled in the host country, because it does not take into account people returning to their countries of origin, i.e. the outflows, and the length of the work permits. The same is true in view of the fact that the data may reflect temporary factors such as regularisation of illegal migrants who have moved to EU15 Member States over several years.

According to the Ministry of Labour in Poland, in the first year of Poland's EU membership the volume of emigration amounted to 407,150, including 340,530 seasonal workers. The largest number of Poles, 250,000 people, worked in Germany. Some 15 per cent of the total number of Poles working abroad found employment in countries which fully opened their labour markets: 10,000 in Ireland, 12,000 in Sweden and 40,000 in the UK. Overall, including short-term stays the UK registered some 450,000 workers from the new Member States in the first 26 months since May 2004, mainly from Poland and Lithuania; in Ireland, around 200,000 Social Security numbers were issued to people from the new member States.²⁰

There is no evidence that migration flows from the EU8 have caused significant labour market disturbances in the EU15 countries. However, the emerging destination patterns lend some support to the view that mobility flows may have to some extent been "diverted" to countries with unrestricted access and highly absorptive labour markets such as Ireland and the UK. It may also be interesting to note that in most Member States the percentage of foreign nationals from

¹⁷ Salt et al. (1999) distinguish two types of so-called labour tourists: (a) short-term income-seeking workers, often without appropriate documents whose average stay is 2-4 months, estimated to number 600,000 to 700,000 annually (Morawska, 1999); and (b) a smaller group of contracted temporary workers, about 300,000 in number.

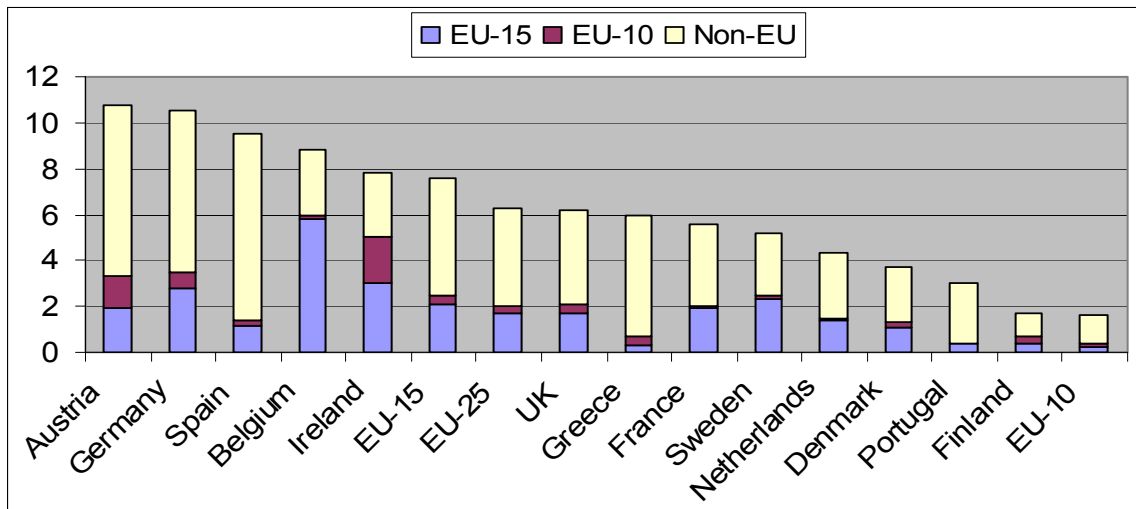
¹⁸ A strong reduction in transport costs, with in particular low cost airline companies linking major Polish cities to UK, Ireland and Sweden, makes these migration patterns feasible even when the destination country is not in the immediate geographic vicinity of the country of origin.

¹⁹ It should be acknowledged that even in countries maintaining transitory restrictions labour market access has not been completely blocked for workers from the new Member States; typically, access has been governed by some sort of a quota system.

²⁰ However, the Central Statistical Office reports that the total number of foreign nationals employed in Ireland in 2005 and the first quarter of 2006 was 198,000 of which just over 74,000 workers were from the new Member States.

non-EU countries is significantly higher than the one for EU nationals. This implies that migration from third countries is a much more important phenomenon than intra-EU mobility, both within the EU15 and the EU25.

Graph 2 Share of foreign nationals in resident working-age population, 2005



Given the unique combination of long common borders with almost no geographical barriers and high permeability between countries with very different income levels, one might also envisage an upsurge in cross-border commuting, perhaps on a weekly or even longer-term basis. Indeed, combining the high wage levels in economies such as Austria or Germany with the low cost of living at the original place of residence may form a fairly attractive option for workers from the neighbouring Central and Eastern European Countries (CEECs). It is fairly difficult, however, to project the potential cross-border commuting; in particular, historical experience offers little guidance, since earlier EU enlargements did not encompass the integration of high wage and low wage economies with such high population densities in the immediate vicinity. Existing estimates of the commuting potential between Austria and its CEECs neighbours, for example, put the numbers at between 40,000 up to 110,000 over the first five years, with some estimates as high as 200,000 and above over a ten-year period.

A related phenomenon, probably again particularly affecting border regions adjoining the CEECs, could be a significant increase in the cross-border provision of services, including construction, through posted workers or self-employed. Following the "Rush Portuguesa" judgement, the EC Directive 96/71/EC has introduced an obligation to uphold certain minimum wage and working conditions prevailing in the countries receiving temporarily posted workers. However, recent EU experience clearly suggests that legal enforcement may be difficult to achieve; but perhaps more important, even when the respective minimum requirements as regards wage rates and other employment conditions are honoured, the labour cost of posted workers may fall considerably short of the ongoing effective wages of native workers.

Obviously, the likely types of east-west labour flows are intimately related to the personal profiles of the migrants. If the assertion is correct that labour flows will continue to be predominantly of the temporary, incomplete type, the majority of migrants can be expected to be young, single males, while family migration may be of somewhat less importance, at least in the initial years. However, concurrent with EU enlargement, about 1 million citizens of new EU members now lawfully residing in one of the old EU15 Member State have acquired the right to bring in dependent family members, representing a considerable potential for family

reunification. The same will be true for another 650,000 legal residents of Bulgarian, Romanian and also Croatian nationality after their accession.

An important question concerns the skill distribution of migrants. In general, emigration is selective, in the sense that the better off move: the old adage that "migrants move from positions of strength" seems to be applicable. However, the jobs taken in destination countries are frequently of a lower qualification level than those left, with migrants going into construction, manufacturing and low skill service jobs. Morawska (1999), putting together evidence from various studies, suggests that 12 to 14 per cent of post-1989 westbound migration could be classified as highly skilled comprising, *inter alia*, managers, scientists and researchers, and students (cited in Salt, 1999).

In general, the human capital endowments of new Member States, measured by formal indicators such as school enrolment rates and average years of schooling, are higher than those of countries with comparable income levels, exceeding those of the Southern EU Member States and almost matching those of the other EU Member States. However, formal enrolment rates may not be comparable given the fairly different educational systems; moreover, there is evidence that the quality of education falls considerably short of average standards in the EU.

At the risk of over-simplification, it is tempting to speculate based on historical experience about a potential polarisation of migrants' jobs along the qualification dimension, with the far bigger pole formed by low-skilled, low-paid, flexible and often atypical jobs, probably quite regularly also associated with some sort of "brain waste". EU10 nationals currently in the EU15 are disproportionately in the medium skill category (up to 60%). In general, lower reservation wages, in the sense of accepting jobs of a lower calibre than, in principle, being qualified for, may put immigrants on a competitive advantage relative to the indigenous workforce. However, both insider-outsider and efficiency wage considerations do suggest that "underbidding" may not be a real-world option in many cases. At the upper end of the job spectrum, one might find a group of highly skilled immigrants, comprising for example professional support personnel and managerial representatives or scientists, researchers and specialists in various fields, in particular where a "common language of understanding" can be easily established.

A special migrant group is likely to be formed by students from the EU8 receiving tertiary education in countries of the EU15. At present, their number is still relatively low. While a trend increase in these numbers appears fairly likely, the proportion of foreign students who will enter the labour force of their host country during or after their studies is unknown.

2.2 Economic impact of migration

2.2.1 The overall gains and pains from immigration

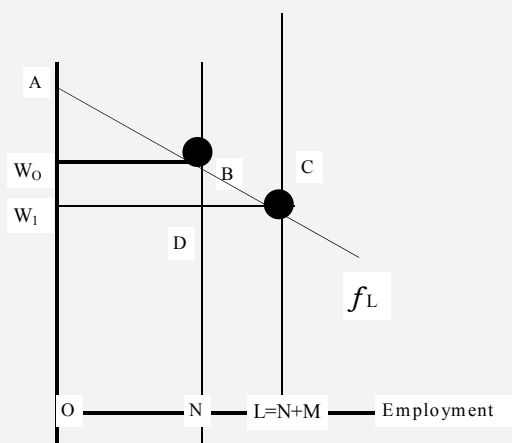
Immigration, in so far as it constitutes additions to the labour force, increases the amount of available labour inputs in an economy, thereby raises potential output and allows for faster sustainable growth. However, the positive impact of immigration is perhaps less evident on an income per capita basis, given that most of the income gains probably accrue to the immigrants themselves. Nonetheless, economic theory suggests that free international movement of labour tends to be beneficial because of allocative reasons, at least for the economy as a whole, as the migrant goes from a place where he is less productive to a place where he is more productive.

Moreover, with immigrants increasing and/or complementing the skills pool in an economy, inflows of foreign workers could well contribute to increasing dynamic efficiency in the host economy. Indeed, most studies find a small overall net gain from immigration for the host country, the "immigration surplus", but the benefits are not distributed evenly across the native population.

Immigration economics in analytical models

The simplest way of thinking about the economic effects of immigration is in terms of an equilibrium labour demand-labour supply model, where immigrants induce an outward shift of perfectly inelastic labour supply.

Figure: The immigration surplus in a model with homogenous labour and fixed capital



For an inflow of M foreign workers, output increases by the area $NBCL$; $NDCL$ is the immigrants' wage bill, and the immigration surplus is given by the area of the triangle BCD . Note that a plausible picture corresponding to more realistic values would rather put the vertical lines N and L much closer together. Indeed, for a 10 percent addition to the initial labour force a typical estimate would suggest an overall immigration surplus of about 0.1 to 0.2 percent of GDP (Borjas, Freeman and Katz, 1997).

While the overall immigration surplus turns out to be fairly small, the distributional effects tend to be more significant. In the above model, the native wage bill falls by the area w_0BDw_1 , which accrues to the owners of capital together with the immigration surplus. However, to put things into perspective, note that assuming an immigration inflow of 10% of the labour force, a typical calculation would suggest an income redistribution of about 2% of GDP from native workers to capital-owners. Clearly, when wages are sticky downwards, no surplus from immigration will arise, but unemployment will emerge.

Refinements of the model include the introduction of heterogeneous labour, usually distinguishing between high-skilled and low-skilled workers, both among natives and immigrants, and lifting the assumption of a fixed capital stock. An assessment of gains and losses for the different factors of production then requires information on the respective factor price elasticities, on the skill-mix of both native workers and immigrants and on how complementary or substitutable are the different groups of workers.

Based on a model of this type, Bauer and Zimmermann (1995) have attempted to gauge the magnitude of the gains and distributional effects of migration on native factors of production, applying calibration techniques using data for Germany. Their results confirm the general observation that, under reasonable assumptions, the overall impact of immigration remains fairly limited, while the distributional effects are significantly more pronounced; see below for the order of magnitudes involved.

The gains and pains from an immigration inflow equalling 5 % of the labour force
(Equilibrium model calibrated with German data 1993; in percent of national income)

	Skill-mix of immigrants		
	all unskilled	50:50	all skilled
Capital	0.71	0.95	1.13
Labour	- 0.51	- 0.91	- 1.07
of which:			
- skilled	1.33	- 0.14	- 1.60
- unskilled	- 1.84	- 0.77	0.53
Natives total	0.20	0.04	0.06
Immigrants	2.18	3.13	3.72
Overall total	2.38	3.17	3.78

Source: Calculated from Bauer and Zimmermann (1995), Table 6. Income shares are kept fix at 14 % for the unskilled, 56 % for the skilled and 30 % for capital. The factor price elasticity for the unskilled is assumed to be -0.85, and -0.45 for the skilled. The elasticity of the wage of skilled workers with respect to a change in the quantity of unskilled is 0.15, and the respective elasticity for the unskilled wage is 0.55. The share of skilled workers in the labour force is 72.9 %.

It should be noted, though, that perceptions of the distributional impact of immigration may alter drastically when different types of economic models are entertained. Indeed, standard trade theory offers the strong presumption that immigration may have no significant effect on income distribution at all, because of the output-composition effect in a multi-sector economy (Rivera Batiz, 1983). Putting model mechanisms in a nutshell, the increase in labour endowments caused by immigration may simply allow for an expansion of the labour-intensive sectors, eliminating any tendency for the wage rate to fall. Clearly, though, when market imperfections are taken into account, such as less than fully mobile factors of production, income distribution effects are reintroduced into these models. But the theoretical effect of immigration on wages is indeterminate in open economy models.

Theoretical models of competitive labour markets predict that increased labour supply due to immigration will, given labour demand, reduce earnings of substitute factors and raise the earnings of complementary factors, where complements include capital. But in presence of economies of scale, such as in research- or technology- intensive activities, average wages could increase. In open economy models, the increase in labour supply is expected to generate other economic mechanisms that increase the demand for labour, through the expansion of labour-intensive industries, so the overall effects on wages and unemployment are ambiguous.

The key issue for evaluating the labour market effects of immigration is whether immigrants are substitutes or complements to native workers. Thus, basically, the consequences for wages depend on the relative skill composition of foreign and native labour. The higher the substitution between immigrants and natives, the more likely that immigration flows will cause a decline in native workers' wages. On the other hand, inflows of immigrant workers that are complementary to native workers would, other things equal, increase the productivity of natives and push their wages upwards. Economic analysis establishes a direct link between the losses to native substitutes and the larger gains to native complements, so little adverse effects of immigration on native workers go hand in hand with little native gain from immigration, except when immigrants do jobs that no native-born would do at any reasonable wage (Freeman, 2006).

Assuming that migrants mainly compete with blue-collar domestic labour for unskilled and low-paid jobs, it is precisely this group of native workers who might see their wage and employment opportunities depressed, while the wage and income of complementary factors will move in the opposite direction. However, as long as the immigrant flows are not too large, negative impacts on native workers are likely to remain rather moderate. Furthermore, as the flows of immigrants

are composed of both skilled and unskilled workers, although biased towards the unskilled, and insofar as skilled and unskilled workers are complementary, the increased supply of skilled workers will raise the demand for unskilled workers and tend to increase their wages somewhat.

According to standard economic models found in the literature, a typical estimate would suggest an overall "immigration surplus" of about 0.1 to 0.2 percent of GDP for a 10 percent addition to the initial labour force.²¹ The distributional effects tend to be more significant: again, a typical calculation for a 10 per cent inflow to the labour force (with a 50:50 skilled/unskilled mix) would suggest an income redistribution of about 2 per cent of GDP from native workers to (native) capital-owners, with unskilled labour having to shoulder a major share of the burden. Note, however, that from an empirical point of view a 10 per cent addition to the labour force represents a fairly large increase; in practice, numbers have been much smaller.

The wage rate effects in standard models are calculated under the assumption that wages adjust and labour markets clear. Obviously, when wages do not adjust, unemployment will emerge. Indeed, immigrants, especially in Europe, tend to have significantly higher unemployment rates than natives, probably reflecting, *inter alia*, lower wage flexibility and slower speed of adjustment in EU economies.

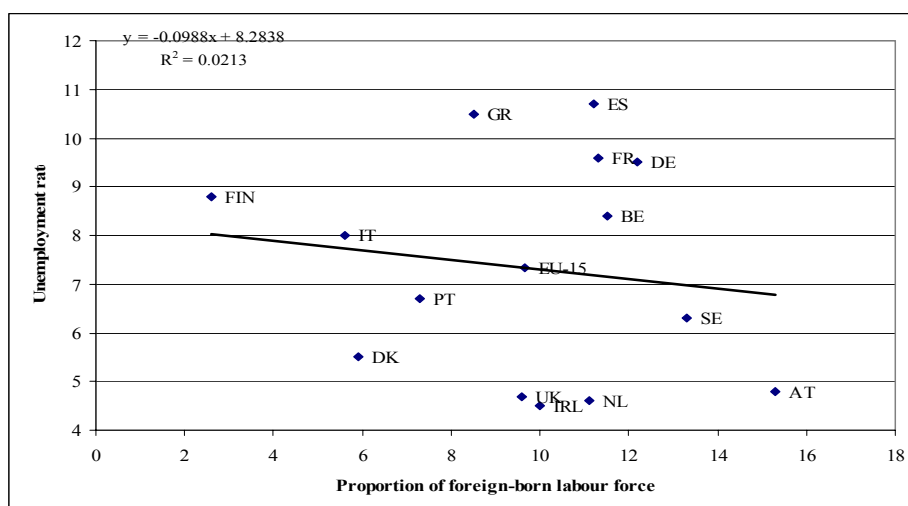
Immigration may have positive effects on the labour market by relieving the labour shortages in certain areas. New jobs can be created, for example in the construction sector, domestic services and hotels and restaurants. These jobs may be difficult, with strong seasonal fluctuations or generally low paid and would not be offered by natives. The highly skilled immigrants are more likely to bring the scientific, technical and innovative skills that expand the production capabilities of the economy (Freeman, 2006). They may contribute to the creation of new industries and the increase in long term growth through human capital accumulation. Labour market efficiency may also increase with immigration, as suggested by Borjas (2001). Indeed, immigrants are very responsive to regional differences in economic opportunities. New immigrants in the US are found more likely to be clustered in the states where wages are the highest for the type of skills they offer, thus "greasing the wheels of the labour market". It is typically argued that labour mobility in the EU is too low to function as an adequate adjustment mechanism to asymmetric shocks between different regions, especially in the context of monetary union. It is certainly much lower than in the US, so immigration could have a potential role in improving the efficiency of labour markets by compensating, at least partially, for the low mobility of natives. Last but not least, immigrants spend in consumption goods and services and related taxes.

2.2.2 Impact on wages and employment

The potential negative effects of immigration on wages and unemployment have received a lot of attention in the academic debate. A large number of empirical studies examine the impact of immigration on the labour market, but the evidence remains inconclusive.

²¹ Borjas, Freeman and Katz (1997), see previous box on "Immigration economics in analytical models".

Graph 3: Unemployment and proportion of foreign-born in the total labour force, 2004



Source: Commission services, OECD/Sopemi (2006)

Rough visual inspection of a cross-plot of the overall unemployment rate and the share of foreign-born labour force shows little, and if any negative, correlation between these two variables. Nine countries out of fifteen record 10 to 12 per cent of foreign-born in the labour force, their unemployment rates vary between less than 5 per cent and over 10 per cent. The available empirical evidence suggests that the effect of immigration on the unemployment of native workers is small. The estimates range from no effect of immigration on unemployment to a small effect over time. Negative effects of immigration are generally found in presence of very high inflows. Empirical studies based on static labour models find different effects on different groups of labour market participants, for example Borjas (1987) work for the US leads to the conclusion that immigrants' main competitors on the labour market are other immigrants (Dustmann et al., 2005). Some empirical studies find a positive relation between migration and wages of complementary workers. It has to be noted that empirical research is plagued with numerous difficulties and that the results depend on many factors, such as the timing of inflows or the fact that immigrants can choose destination countries and regions with relatively low unemployment rates. Furthermore it is difficult to disentangle the labour market effects of immigration from those caused by the different skill levels of immigrants and natives.

Table 7 Selected studies on immigration, unemployment and wages

Reference	Country	Main findings
Card, 1990	US	The arrival of around 125 000 Cubans, largely unskilled, in Florida in May 1985 increased the population of Miami by 7%. Cubans alone (ie neither other unskilled Hispanics, Blacks nor Whites) were significantly affected by the inflow of migrants. But the growth of Miami's population was lower, indicating a fall from other sources of immigration.
Altonji and Card, 1991	US	Very slightly significant positive effect of the migration variable on employment, but negative effect on wages (elasticity 1.2).
Hunt, 1992	F	The repatriation of 900,000 "Pieds Noirs" from Algeria in 1962 increased the total labour force by some 1.6% per cent. A one percentage point rise in the proportion of returnees in the labour force reduced regional wages by 0.8 point and increased the native unemployment rate by 0.2 point.

Simon, Moore and Sullivan, 1993	US	Immigration has no significant effect on the unemployment rate. A very slightly positive effect is obtained when changes in unemployment are considered over 2 years.
Muhleisen and Zimmermann, 1994	D	The proportion of foreigners in local industry does not have an impact on worker mobility or exposure to unemployment.
Carrington and De Lima, 1996	P	The return of 600,000 Angolan nationals to Portugal over three years in the mid-1970s, largely in 3 cities, increased the local population by some 10%. There is no instantaneous effect but a lagged effect equivalent to an additional 1.5% of unemployment.
Diaz-Emparanza and Espinosa, 2000	E	Immigration has a negligible short term effect on unemployment but there is no long-term relation between immigration and unemployment.
Longhi et al., 2004	US, DE, NL, AT, Israel, Australia	A meta-analysis using a sample of 18 papers finds a negative but small effect of immigration on wages of natives with similar skills (a 1 percentage point increase in the proportion of immigrants in the labour force reduces wages by only 0.119 per cent.
Aydemir and Borjas, 2006	US	A 10 per cent labour-supply shift is associated with a 3 to 4 per cent reduction in wages. Immigration reduced wage inequality in Canada and increased it in the US. In Mexico, emigration has increased relative wages of workers in the middle of the skill distribution, but reduced the relative wage of workers at the bottom of the skill distribution.

Borjas versus Card, I

Does immigration harm the labour market opportunities of the less-skilled natives in the US?

Borjas (2004) finds that immigration reduced the earnings of native-born men by roughly 4 per cent, by increasing the labour supply between 1980 and 2000. He estimates the effect to be larger, of 7.4 per cent, for natives without a high school education (who roughly correspond to the poorest tenth of the population). Card (2004), on the other hand, looks across major cities and finds that differential immigrant inflows are strongly correlated with the relative supply of high school dropouts. Nevertheless, using data from the 2000 Census, he finds that relative wages of native dropouts are uncorrelated with the relative supply of less-educated workers, as they were in earlier years. At the aggregate level, he finds the wage gap between dropouts and high school graduates to remain nearly constant since 1980, despite supply pressure from immigration and the rise of other education-related wage gaps.

There are also dynamic effects which complicate the analysis, such as the assimilation effects as immigrants acquire skills and experience in the local labour market, the possible adjustment in decisions on human capital investment by the native population and the potential mobility of native workers to another location after an inflow of competing workers.²²

So far, the literature is overwhelmingly based on static labour models. However, the local labour markets could absorb an inflow of immigrants in many ways and not only through the adjustment of natives' wages and/or unemployment. The literature has only started to tackle the more

²² However, evidence for the US indicates that the native workers who emigrated from regions receiving an influx of unskilled immigrants were predominantly high skilled (Rivera Batiz, 1997).

complex dynamic adjustment processes that may occur and the different effects of immigration on the whole economy. The impact of past immigration on wages depends on the skills structure of the immigrant and native populations, according to Borjas. No obvious impact on native unemployment is found; moreover immigration may even have been beneficial as it acts as a source of flexibility (Coppel et al, 2001).

2.2.3 Fiscal aspects of immigration

An important element in the public debate over immigration is the impact on public finances. Immigrants are often seen as a burden for the welfare state, causing additional costs for unemployment and social assistance systems, as well as for education and health care systems, with these costs, on average, usually not matched by additional tax payments.

Brücker (2001) shows that in Germany, Sweden and Denmark, the share of foreigners among welfare recipients rose from 8.3 per cent to 23.5 per cent over the period 1980 to 1996 whilst the share of foreigners in total population increased from 7.2 per cent to 8.9 per cent. In theory, skilled workers would select less generous countries, which are less egalitarian and in which skills are better rewarded, whilst unskilled workers would select more generous countries.²³ But Brücker finds that the higher dependency among immigrants than natives in these countries can be explained by the characteristics of immigrants – mainly their education level, age and number of children. Temporary immigrants are more likely to leave their family in the source country than permanent immigrants, therefore having a lower demand on a number of social welfare provisions, notably the public education system. Refugees have a significantly higher welfare use than other immigrants.

Unfortunately, it is quite hard to derive a reliable estimate of the net fiscal contribution of immigrants. The impact of immigration on public finances would be positive in the short run, but the effect would tend to reverse in the long-run. Results are typically not very robust with respect to methodological assumptions; it makes a lot of difference, for example, whether the analysis is static or takes life-cycle effects into account, whether the unit of analysis are individuals or households, what is taken into account and what not, and so forth.

Generational-accounting models have been used to estimate the fiscal impact of migration. In Italy, 50,000 immigrants per year would reduce the degree of imbalance of current fiscal policy by 6 percentage points²⁴; in Germany (Bonin, 2001), a net annual inflow of 200,000 immigrants would reduce the tax burden by 1.1 per cent of GDP. Sinn et al. (2001) use a different methodology, calculating the present value for pension benefits and they find that immigrants are on average a net burden to the government budget – the burden is higher during their first ten years than over their total stay. However, the calculations by Sinn are not very robust with respect to small variations in underlying assumptions. A study for the Netherlands by ter Rele (2003) finds a negative fiscal impact of immigrants, due to the lagging labour market performance of immigrants and the basic public pension provision. In the US additional immigration is found to have a positive effect on the government budget only if immigrants are selected by age and skill (Storesletten, 2000). A study by the Danish Ministry of Finance (2004) also demonstrates that the fiscal impact of migration depends largely on the skill composition of the migrant workers.

²³ See box on "Skills, selectivity and the decision to migrate".

²⁴ This means that, at birth, the present value of net taxes of the average person of the first future generation needed to satisfy the inter-temporal budget constraint would be 6 p.p. lower than under the hypothesis of no migration. The longer the immigrant stay, the greater their contribution to sustainability, see Moscarola (2001).

In summary, the evidence on the fiscal effects of immigration is mixed and the results are often not very robust. Having this caveat in mind, it is probably fair to say that overall the net budgetary impact over the long-run appears to be fairly small. However, geographical “clustering” of immigrants could also be associated with a higher burden on “local” budgets.

Older populations in coming decades

The EU will undergo unprecedented demographic change in coming decades, see Eurostat (2004). Over the period 2004 to 2050, fertility rates are expected to remain well below the natural replacement rate of 2.1 children per woman, and life expectancy is projected to continue to increase by about one year and a half per decade.²⁵ Net migration flows are projected to hover around 0.2% of the total population.

The combined effect of these assumptions is that the population in 2050 will be somewhat smaller than today, but much older. Under the baseline scenario²⁶ prepared by Eurostat, the EU25 population is projected to increase by 3 per cent until 2025, when it will peak at 470 million. Thereafter, a steady decline would occur and, according to the projection, the population in 2050 will be smaller than in 2004, at 449 millions.

According to the projection, the population of working-age would start to decline in 2010 and, over the period 2004 to 2050, would drop by more than 15 percentage points, from 307 million in 2004 to 260 million in 2050. It is only projected to increase in Ireland, Luxemburg, Sweden, Malta and Cyprus. Over the same period, the population aged 65 years and above would increase by 58 million people. The old-age dependency ratio for the EU25, which shows the number of people aged 65 and above relative to the working-age population, is projected to roughly double from close to 25 per cent today to over 50 per cent in 2050. While the ageing of populations will differ significantly across EU Member States, what is common for all is the strong increase relative to current levels, with old-age dependency ratios rising to levels well above 50 per cent in some countries. Old-age dependency ratios projected for the EU15 and EU10 in 2050 are very similar, with a faster increase projected in EU10 Member States; thus, enlargement will not modify overall demographic trends.

Concerns about the impact of older populations on long-term economic growth and the sustainability of public finances have prompted a debate over the potential role immigration could play; see European Policy Committee and European Commission (2006). Increased immigration has an immediate impact on the size of the population of working-age, provided, of course, net migration continues to exhibit a relatively younger age structure than the resident population. In addition, fertility rates among immigrant women are often higher than among the resident population which can help boost overall fertility and hence long-term population growth. Note, though, that the fertility rates of immigrant women tend to converge to those of the native. Furthermore, evidence for Denmark indicates that the immigrant descendants tend to have similar fertility rates than native women. Moreover, since immigrants inevitably grow old too, the long-run effect on overall demographic structure is significantly less than in the short and medium term.

Immigration already plays an important role in overall population growth. In fact, for the EU as a whole, net migration has been a more important source of population growth than natural increase, with a number of Member States virtually or entirely reliant on immigration for population growth, see table below.

²⁵ For the EU25, life expectancy at birth for males is projected to increase by 6.9 years between 2004 and 2050. For females, life expectancy at birth is projected to increase by 5.4 years, see Eurostat (2004).

²⁶ EUROPOP2004 Trend scenario, baseline variant.

Net migration as a source of population growth, average

	1960-64	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-02
BE	-41	33	116	31	40	-2	51	47	73
CZ	40	-4	30	4	57	49	-191	-93	-127
DK	2	2	16	11	-84	134	67	66	60
DE	26	19	105	-3	171	72	123	85	185
EE	55	67	53	54	51	30	109	51	-3
GR	-120	-126	-100	40	22	55	93	101	103
ES	-39	-12	-11	6	-6	-22	38	89	92
FR	42	24	26	15	18	17	9	0	33
IE	-72	-122	20	21	-28	232	-15	43	56
IT	-25	-29	-19	2	-401	50	263	1950	145
CY	-229	-47	27	-27	-26	26	65	58	62
LV	58	57	60	69	52	-13	91	35	24
LT	7	10	25	13	26	35	8	86	39
LU	59	23	100	129	118	85	75	70	64
HU	0	5	-3	-6	115	65	576	-81	-43
MT	443	164	880	34	20	5	29	18	77
NL	2	6	21	34	14	31	38	34	42
AT	2	17	82	1638	90	96	71	51	95
PL	-5	-11	461	-16	-7	-27	-15	-49	107
PT	67	291	270	35	0	31	111	84	85
SI	-26	13	-11	46	82	-925	106	94	154
SK	1	-14	-220	-6	-16	-12	53	23	371
FI	-45	-29	78	-60	14	14	35	29	38
SE	21	37	-13	70	64	66	55	137	107
UK	13	-17	-992	136	162	15	14	46	69
<i>EU25</i>	<i>9</i>	<i>14</i>	<i>40</i>	<i>91</i>	<i>22</i>	<i>4</i>	<i>74</i>	<i>119</i>	<i>76</i>
<i>EU15</i>	<i>-7</i>	<i>8</i>	<i>-20</i>	<i>140</i>	<i>13</i>	<i>58</i>	<i>69</i>	<i>189</i>	<i>83</i>
<i>EU10</i>	<i>34</i>	<i>24</i>	<i>130</i>	<i>16</i>	<i>35</i>	<i>-77</i>	<i>83</i>	<i>14</i>	<i>66</i>

Source: Eurostat

Looking ahead, however, maintenance of these trends will not be sufficient to offset the expected decline in the EU population. According to a population scenario prepared by Eurostat, assuming zero net migration, the total population for the EU as a whole would fall by close to 13%, or 58 million people, between 2004 and 2050. Only France and Ireland would experience population growth, and population would fall most dramatically in Germany and Italy, by more than 20%. Population would fall by around 15% in Spain and Austria and the remaining countries would experience drops of between 5 and 10%. The population in EU-10 Member States would also fall sharply, especially in the Czech Republic, Estonia, Hungary, Latvia and Slovenia. The working-age population in the EU25 would fall by about 30% or 87 million people in the absence of net migration flows. In Germany, Greece, Spain, Italy and the Czech Republic the fall would be close to 40%.

The role of migration in achieving specific population objectives between 1995 and 2050 was the subject of a widely noted report by the United Nations (2000). The UN report concluded that keeping old age dependency ratios at current levels through migration seems out of reach because of the extraordinarily large number of immigrants that would be required. Similar calculations have been performed, for example, for Germany arriving at even somewhat higher required migration rates (Bonin, 2001). In a scenario with no net immigration, the German population declines by one-third or around 24 million people between 2000 and 2050. Assuming the annual net migration inflow remains at its historical average of some 200,000 people, the decline in the population is reduced to some 10 million people, or 12 per cent. The annual net inflow has to increase to 300,000 people around 2010, and to 500-600,000 people per annum from 2030 onwards to maintain a constant. Without any naturalisation, the share of the foreign population would increase from 9 to 20 per cent by 2050 if migration remains at historical levels and to 28 per cent if migration increases to a level which holds the total population constant. With migration at historical levels, the old-age dependency ratio is projected to increase from 24 per cent in 2000 to 53 per cent in 2050 (and to 65% in case of zero net migration). If migration increases to a level which holds the total population constant, the corresponding level will be 43 per cent according to these projections.

Pension expenditure and immigration: a rough illustration

The Economic Policy Committee (EPC) and the European Commission have prepared a set of projections for the EU25 Member States covering pensions over the period 2004 to 2050 (see European Policy Committee and European Commission, 2006). A projection of the number of people employed was made, based on the projection of the population of working-age prepared by Eurostat. Migration has not been explicitly modelled, as there are many complex issues involved (such as the assumptions about participation and employment rates of immigrants, their productivity, their demographic behaviour etc). Still, the sensitivity of future pension expenditure projections to changes in assumptions on employment rates was explored, and this sensitivity analysis can be used to roughly illustrate the impact of migration.

The next table summarises the results of the baseline scenario.

Baseline scenario: changes in employment and total pension expenditure

	<i>Employment</i> number of people in thousands			<i>Change</i> in thousands			<i>Total pension expenditure</i> as a % of GDP		
	2004	2015	2050	2004-2015	2015-2050	2004-2050	2004	2050	Change 2004-2050
BE	4105	4456	4115	351	-341	10	10.4	15.5	5.1
DK	2695	2740	2548	45	-192	-147			
DE	36659	40307	33046	3647	-7260	-3613	11.4	13.1	1.7
GR	4475	4877	3823	402	-1054	-652			
ES	17775	20976	16380	3201	-4596	-1395			
FR	24601	26261	25450	1661	-812	849	12.8	14.8	2.0
IE	1827	2181	2360	353	180	533			
IT	22121	23744	19270	1623	-4474	-2852	14.2	14.7	0.4
LU	191	218	258	27	39	67	10.0	17.4	7.4
NL	8135	8524	8234	388	-290	99	12.4	20.0	7.6
AT	3849	4182	3588	334	-595	-261	13.4	12.2	-1.2
PT	4867	5138	4045	271	-1093	-822	11.1	20.8	9.7
FI	2387	2464	2243	77	-221	-144	10.7	13.7	3.1
SE	4283	4540	4694	257	154	410	12.9	13.9	0.9
UK	28149	29960	28218	1811	-1742	69			
CY	344	438	456	94	18	112	6.9	19.8	12.9
CZ	4697	4790	3501	93	-1289	-1196	8.5	14.0	5.6
EE	585	612	475	27	-137	-110	6.7	6.6	-0.1
HU	4010	4143	3276	133	-867	-734	10.4	20.3	9.9
LT	1443	1600	1231	158	-369	-212	6.7	10.4	3.7
LV	1003	1076	791	73	-285	-212	6.8	8.3	1.5
MT	150	177	189	27	12	40	7.4	7.0	-0.4
PL	13894	16075	12814	2182	-3262	-1080	13.9	9.3	-4.6
SK	2240	2545	1884	305	-661	-356	13.9	9.3	-4.6
SI	895	951	738	56	-213	-157	11.0	19.3	8.3
EU25	195380	212975	183625	17595	-29350	-11755	11.9	14.6	2.7
EU15	166120	180567	158270	14447	-22297	-7850	12.0	14.8	2.8
EU10	29260	32408	25355	3148	-7053	-3905	10.9	12.6	1.7

The number of people employed (according to the European Labour force Survey definition) in the EU25 in 2050 is projected to be about 11.8 million below the level recorded in 2004. Note that the baseline scenario incorporates an annual average net migration inflow of some 830 000 people, or some 40 million cumulated over the whole period; moreover, the overall employment rate is projected to rise in the baseline to 70.9% in 2050.

In this scenario, total spending on pensions is projected to rise, on average, by 2.7 p.p. of GDP in the EU25. There is a very wide range of outcomes from a projected increase in spending of 12.9 p.p. of GDP in Cyprus to a decrease of -4.6 p.p. of GDP in Poland.

The next table summarises the results of a sensitivity test with respect to higher employment rates. The scenario assumes an increase in the employment rate by 1 percentage point over the period 2005-2015 relative to the baseline, which translates into 2.6 million additional people that are employed on average over the projection period. Such an increase in the employment rate, however, results in only a relatively small change in pension expenditure increase: the difference in expenditure increase relative to the baseline scenario is of -0.1 p.p. on average in the EU25 (-0.3 on average in the EU10).

Higher employment scenario

Additional number of employees (in thousands) and change in total pension expenditure (in p.p.)

	Average number of additional employees			Change in expenditure	difference relative to baseline
	2005-2015	2015-2050	2005-2050	2004-2050	
BE	38	66	59	4.9	-0.2
DK	19	34	30		
DE	301	496	448	1.7	-0.1
GR	41	68	62		
ES	165	276	249		
FR	217	385	345	1.9	-0.1
IE	16	32	28		
IT	208	339	307	0.4	0.0
LU	2	4	3		
NL	61	108	96	7.5	-0.1
AT	30	52	46	-1.4	-0.2
PT	39	64	58	9.5	-0.2
FI	19	32	29	3.1	0.0
SE	32	59	53	0.9	-0.1
UK	220	392	351		
CY	3	6	5	12.8	-0.1
CZ	38	60	54	5.4	-0.2
EE	5	8	7	0.0	0.0
HU	37	59	54	9.1	-0.8
LT	12	20	18	3.5	-0.2
LV	8	13	12	1.4	0.0
MT	2	3	3	-0.5	-0.1
PL	146	229	209	-4.7	-0.2
SK	21	33	30	-4.7	-0.2
SI	8	12	11	6.9	-1.4
EU 25	1 689	2 849	2 567	2.6	-0.1
EU 15	1 408	2 407	2 164	2.7	-0.1
EU 10	281	442	402	1.5	-0.3

The above scenario of higher employment could be thought of in terms of additional immigration. Assuming 50% more immigration per year than in the baseline scenario, a 70% employment rate of immigrants and an average presence of 30 years in the labour market would entail 5.6 million more employees (immigrants) on average. Thus, according to this simple back-of-the-envelope calculation even a significant increase in net immigration relative to the baseline, from about 40 million to 60 million cumulated over the period until 2050, would probably shave off little more than one quarter of a percentage point of GDP from the increase in total pension expenditures.

2.2.4 Labour market situation of immigrants in the EU

Due to data limitations, the situation of non-EU nationals is often used as a proxy to analyse the employment situation of immigrants. However, immigrants who are naturalised tend to have better labour market outcomes than legal foreign residents and looking at non-EU nationals tends to lead towards more negative conclusions. A complementary approach is to look at the situation of the foreign-born population (see Münz and Fassman, 2005).

The participation rates of immigrants in the labour market are generally lower than those of native, except in the South European countries where labour migration predominates strongly. In Sweden, Denmark and the Netherlands, which traditionally receive high numbers of asylum seekers, the participation rates of foreigners are much lower than those of nationals.²⁷ The gap between female immigrants and native-born is wider than for men, with differences of up to 16 percentage points.

²⁷ It should be noted that asylum seekers are often not allowed to work.

Table 8 **Participation rate, 2004**

	Native-born	Foreign-born	<i>difference</i>
<i>Men</i>			
BE	72,9	70	-3
DK	85,1	74,1	-11
DE	79,1	78,8	0
GR	76,1	89,8	14
ES	79	87,8	9
FR	75,1	77,6	3
IE	78,5	77,7	-1
IT	74,5	89,8	15
NL	85	76,2	-9
AT	76,7	79,1	2
PT	79	85,5	7
SE	80,7	74,6	-6
UK	82	78,5	-4
<i>Women</i>			
BE	57,4	45,5	-12
DK	77,4	61,9	-16
DE	66,9	54,9	-12
GR	50,6	57,3	7
ES	54	64,2	10
FR	64,5	58,2	-6
IE	57,8	57,3	-1
IT	48,6	55	6
NL	71,2	56	-15
AT	64,1	60,1	-4
PT	66	74,8	9
SE	76,9	68,4	-9
UK	69,6	59,3	-10

Note: 2003 data for Belgium, Greece, Spain, Ireland, Italy, Portugal

Source: OECD

The employment rate of immigrants is on average about 6 percentage points lower than that of native born. This difference does not tend to disappear once controlling for skill levels and other socio-economic variables, although the employment rate gap is notably smaller for low-skilled workers. Indeed, education and skill levels of the immigrant population in the EU – including country-specific skills, such as language – are typically much lower than those of the natives. Moreover, the education and professional experience is not easily transferable or recognised into the host country and can result in "brain waste". Indeed, indications that certain immigrants tend to be overqualified for their jobs point to the risk of discrimination in accessing the labour market.

Clearly, the situation differs across countries. While the rate of employment for immigrants is close to 20 percentage points lower than for natives in Denmark, it is similar in Ireland and higher in Spain, Greece, Italy and Portugal. The situation has also improved considerably during the last decade, with increases in the employment rates of immigrants in all countries except Germany and Austria (where employment rates of natives have followed the same trend, although their decrease is much smaller). The increase in the employment rate of immigrants has been much stronger than for natives in Denmark, Greece, Spain and Portugal and similar in the remaining countries.

Table 9 Employment rates of native- and foreign-born populations, 15-64 years old

	1994			2004			<i>change</i>	
	Native-born	Foreign-born	<i>difference</i>	Native-born	Foreign-born	<i>difference</i>	Native-born	Foreign-born
BE	56,8	46,3	-11	62	50,2	-12	5	4
DK	73,1	44,6	-29	77,4	59,4	-18	4	15
DE	67,8	62,7	-5	65,8	55,1	-11	-2	-8
GR	54,1	53,7	0	59,3	64	5	5	10
ES	45	45,3	0	60,3	66,2	6	15	21
FR	60,1	54,2	-6	63,5	57,1	-6	3	3
IE	52,8	49,2	-4	65,7	64	-2	13	15
IT	50,8	57,9	7	57,4	63,5	6	7	6
NL	65,6	47,7	-18	75,1	59,1	-16	10	11
AT	68,5	67,7	-1	67,4	61,5	-6	-1	-6
PT	63,2	56,8	-6	67,8	70,1	2	5	13
SE	75,2	53,6	-22	74,3	61,3	-13	-1	8
UK	68,5	58,4	-10	72,4	63,4	-9	4	5

Note: Data on the column 1994 refer to 1995 for Sweden and Austria and to 1992 for Germany.

Source: OECD

The unemployment rates of immigrants are two to three times higher than those of natives, except in recent immigration countries where they are similar. The unemployment rates of immigrants are lower than that of nationals only in Greece. Immigrant women have similar or lower unemployment rates than men, except in Greece, Spain, France and Italy, where they are much lower, with differences between 4 and 12 percentage points.

Table 10 Unemployment rates of native- and foreign-born populations, 15-64 years old 2004

	N a t i v e - b o r n	F o r e i g n - b o r n	R a t i o
<i>M e n</i>			
B E	5,6	1,5	2,7
D K	4,4	14,4	3,3
D E	10,3	18,3	1,8
G R	6,5	6,7	1
E S	7,8	11,4	1,5
F R	8	13,6	1,7
I E	4,9	6,5	1,3
I T	6,4	6,1	1
N L	3,6	10,3	2,9
A T	4,3	11,2	2,6
P T	5,7	9,9	1,7
S E	6,2	13,9	2,3
U K	4,7	7,3	1,5
<i>W o m e n</i>			
B E	7,5	1,5	2
D K	5,2	10,3	2
D E	9,6	15,2	1,6
G R	15,7	18,9	1,2
E S	15,1	17,1	1,1
F R	9,9	17,2	1,7
I E	3,6	5	1,4
I T	10,1	13,1	1,3
N L	4,3	10,6	2,5
A T	4,3	10,7	2,5
P T	7,4	9,6	1,3
S E	5,2	12,2	2,3
U K	3,9	7,3	1,9

Source: OECD

Several empirical studies find relevant “life-cycle effects” (almost exclusively for the U.S., though), i.e. over time, as immigrants integrate better in the host countries’ society and improve their qualifications, both unemployment rate and wage gaps between immigrants and native workers tend to shrink.²⁸ However, a study for Sweden and Denmark suggests that earlier immigrants do not perform better nor earn higher wages than when they were newly arrived.²⁹ There could be relatively less catching up and convergence of second and third generations in the EU than relative to the US.

According to the results of the OECD’s Programme for International Student Assessment (PISA), immigrant children in some countries lag more than two years behind their native counterparts in school performance, and a sizeable gap often remains, even after accounting for socio-economic factors (OECD, 2006b). Furthermore, in the majority of countries, at least 25% of immigrant students do not demonstrate basic mathematical skills which suggest that the challenges in the labour market integration of migrants could persist among successive generations.

²⁸ See further the overviews in European Commission (2003) and (2004) and COM(2004) 508 final.

²⁹ Rosholm (2001). Moreover, the Swedish delegation reports that, in Sweden, foreign born with academic degrees have lower employment rates than natives with comparable education; and, when employed, high skilled foreign-born have unqualified jobs to a higher extent than native-born. Foreign qualifications in most cases can not immediately be transferred from one country to another and that the proportion of highly educated foreign born people with a qualified job during their first years in Sweden will be lower than for natives. But evidence shows that these differences exist not only for new arrivals, but also for foreign born who have been in Sweden for a very long time, between 16 and 35 years.

Borjas versus Card, II

Have immigrants who arrived to the U.S. after the 1965 Immigration Reform Act successfully assimilated?

Borjas (1987, 1996, 1999) finds that the labour market quality of successive cohorts of immigrants, as reflected in education levels, entry wages and rates of assimilation, has declined between the 1950s and the 1990s. In 1970, for example, the latest cohort arrived had on average 0.4 fewer years of schooling and earned 17 percent less than natives. By 1990, the most recently arrived immigrants had 1.3 fewer years of schooling and earned 32 percent less, as compared to natives. He attributes that trend largely to the 1965 Amendments that abolished quotas and allowed immigration from poorer countries and with lower skill levels.

Card (2004) reviews the success of the U.S.-born *children* of immigrants. By this yardstick, post-1965 immigrants are doing reasonably well: second generation sons and daughters have higher education and wages than the children of natives. Even children of the least educated immigrant origin groups have closed most of the education gap with the children of natives.

The distribution of foreign employment by industry is converging towards that of the native labour force over time (OECD, 2001). Foreign workers, however, still tend to specialise in particular industries and occupations, see Table 11. They are over-represented in certain industrial sectors, in the sense that they account for a larger proportion of employment in those sectors than they do in total labour force. Foreigners are over-represented in the construction sector in most countries and even more markedly in services, in particular hotels and restaurants.³⁰ They are typically under-represented in the public sector as well as in the financial sector. There are also wide cross-country differences in the industrial distribution of foreign employment. Employment in households and other services accounts for 23-33 per cent of total foreign employment in most countries. In Germany, Italy, the Netherlands and Austria, more than 20 per cent of foreign employment is concentrated in mining, manufacturing and energy. Around 12 per cent of foreign employment in Spain is concentrated in hotels and restaurants. In Sweden, over 10 per cent of foreigners employed work in the education sector. In Denmark, Sweden and the UK, 15 to 18 per cent of employed foreigners work in health and other community sectors. The occupational distribution of immigrants shows that they tend to have a greater proportion of blue-collar workers than natives. The proportion of foreigners with blue-collar jobs is generally much higher than that in white collar jobs in most countries, with the exception of the UK, the Netherlands and Belgium. A higher concentration of immigrants in blue-collar jobs is associated with their relatively lower educational levels and the problems of skills transferability.

³⁰ A shift towards labour intensive industries in certain countries may have an impact on productivity.

Table 11 Employment of foreigners by sectors, 2002-2003 average

	Agriculture and Fishing	Mining Manufacturing and Energy	Construction	Wholesale and retail trade	Hotels and restaurant	Education	Health and other community services	Households	Administration	Other services
BE	1.2	17.3	8.8	14.4	12	4.2	8.8	0.4	2.9	25
DK	:	16.2	:	11.9	9.5	5.9	18.5	:	:	30.1
DE	1.3	32	6.4	12.9	7.6	3.9	10.1	0.7	3.3	21.9
GR	6.1	16.3	27.3	11.4	9.2	2.7	2.4	13.4	1.4	9.7
ES	6	13.6	16.3	12.2	12	3.6	3.7	12.2	2	18.5
FR	1.9	14.6	10.3	11.9	5.9	6	9.7	5.8	6.8	27.2
IRL	2.2	16.6	8.4	11.5	13.2	6.4	12.5		2.9	25.4
IT	4.5	28.9	11.1	9.7	7.9	2.8	4.6	10.8	2.4	17.4
LU	1	10.5	16	12.2	6	1.9	6.3	4.2	12.2	29.8
NL	1.5	20.4	4.5	15	8.2	5.4	12.2	:	4.6	28.2
AT	1.2	22.3	8.8	14.4	12	4.2	8.8	0.4	2.9	25
SE	0.6	17.2	2.7	12.1	6.6	10.8	18.6	:	3.9	27.5
UK	0.4	11.8	4.3	13.6	9	8.4	14.5	1	5.2	31.9

Note: DK and IT 2000-2001 average data, NL 2002 data

The numbers in bold indicate the sectors where foreigners are over-represented (i.e. the share of foreign employment in the sector is larger than the share of foreign employment in total employment).

Source: OECD/Sopemi (2005, 2006)

2.2.5 Impact of out migration on source countries

The source country incurs production and tax losses as skilled workers emigrate (brain drain). However, in some developing countries there are "too many" high skilled workers and a number of professionals emigrate because there are no jobs available, so their potential output would not have necessarily materialised. In a number of developing countries where public spending is higher in tertiary education relative to primary education, the education systems appear better suited to the needs of Western economies (Stalker, 1994). Therefore, the impact of the emigration of skilled workers is diverse and depends on the situation of the country's education system and labour market.

In theory, migration of skilled workers increases the return to education in sending countries, which could lead to higher investment in education, with a positive effect on growth and welfare ("brain gain"). However, recent research showed that the brain drain can easily be larger than the "brain gain" (Schiff, 2005). In particular, in the presence of unskilled migration, which reduces the return to education, and "brain waste", when skilled workers only find a low-quality job in the host country, the brain gain is diminished.

In any case, the source country bears the cost of investment in human capital. It is estimated that over one-third of individuals with tertiary education from certain African, the Caribbean and Central American countries have emigrated to OECD countries (Ratha, 2003). Although there may be remittances, technology and know-how transfers to the sending countries by this Diaspora, it appears clear that expatriation on this scale represents a serious loss of human capital. This may not only be of concern to developing countries. Recent anecdotal evidence points to shortages of specialised and low skilled labour in source countries such as Poland and Romania where temporary workers from Ukraine and China are recruited.

The negative impact of international migration in source countries may well be offset by workers' remittances and the possible effects on trade and investment.³¹ Indeed most of the gains of migration accrue to immigrants themselves (their wage bill) and, through remittances, to their families in the source country. They are the second largest source of external finance for developing countries, after FDI and often two to three times as large as the official development assistance flows (World Bank, 2004 and European Commission, 2005). Low-income countries receive larger remittances as a percentage of their GDP than middle-income developing countries.

Remittances raise the income of recipients and contribute to the country's growth through investment or consumption. They can constitute an important part of foreign exchange earnings of poor countries. Furthermore, remittances are less volatile and less pro-cyclical than other private capital flows. They have been rising steadily in the 1990s, even in 1998-2001 when private capital flows declined following the Asian crisis. Remittances are more evenly spread than other private flows, which tend to concentrate into a few countries. In 2001, the top 10 recipients of worker's remittances received 60% of total remittances sent to developing countries, whereas the 10 countries that received the most FDI concentrated 74% of total FDI (World Bank, 2003).

Remittances have played a role in the development of sending countries, such as Italy, Portugal, Greece, Spain and more recently Turkey and Mexico (OECD, 2005). Still, these flows are private

³¹ For example, the net fiscal loss associated with Indian emigration to the US was estimated at 0.24 to 0.58 % of Indian GDP in 2001 but remittances amounted to at least 2.1% of GDP that same year. In the case of emigration of low skilled, unemployed workers, the relative net gain of remittances would be even higher (Ratha, 2003).

transfers and the savings involved belong to the immigrants and their families, who decide on their allocation even though governments may offer incentives to migrants to increase the volume of remittances or influence its use.

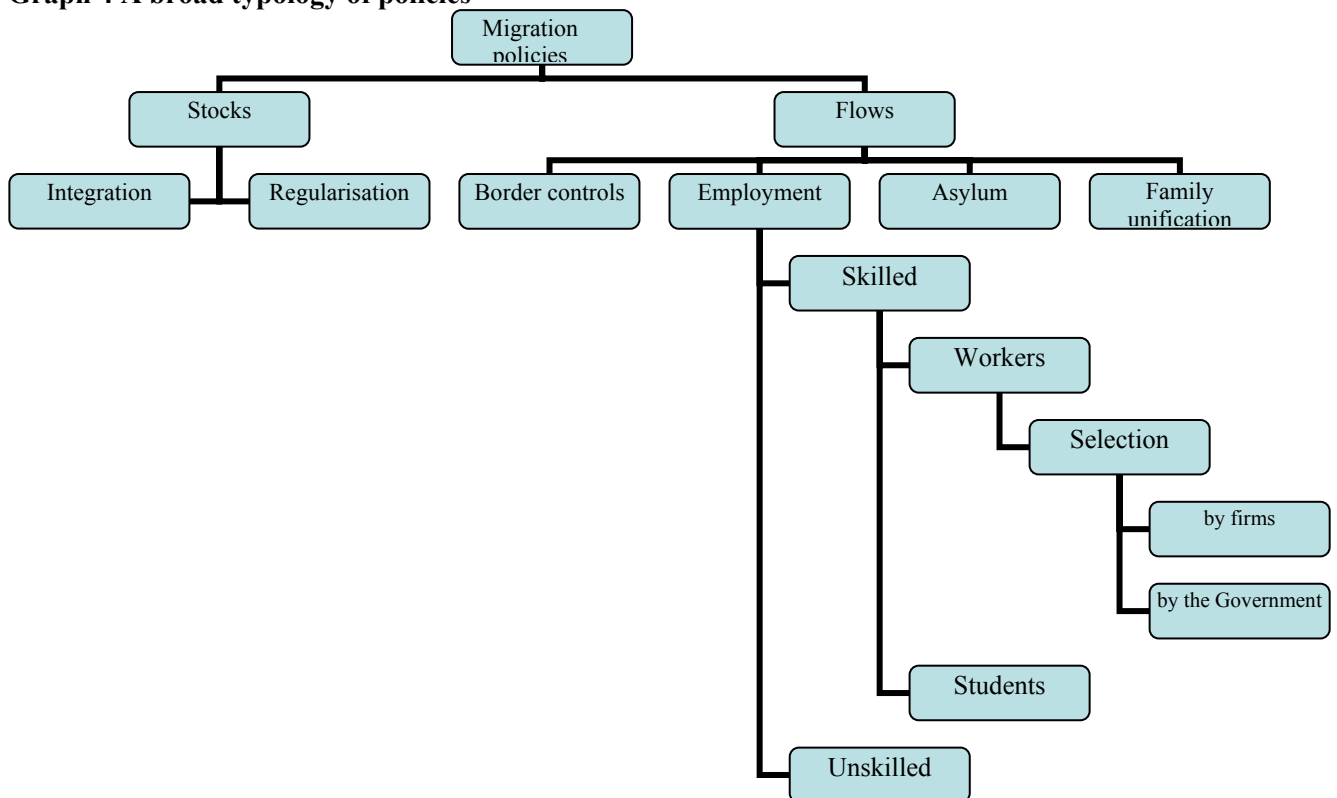
Finally, migrants returning to their source country bring gains in terms of acquired skills and savings and investment.

3. Policy approaches

Two main types of policy approaches can be distinguished, according to whether they deal with the stocks of immigrants who are settled, either in regular or irregular situation, or with the flows, by implementing overall controls over the entry of new immigrants or through their selection, see Graph 4. In essence, almost all countries try to select some immigrants and to keep others away.

The current stance of national migration policies is towards managing and containing immigration flows and addressing the challenges of integration of immigrants present in the country. There is growing interest in the selection of immigrants for employment. While recently several countries have tightened the asylum and family unification channels, these flows remain very important and are admitted on the basis of international agreements or generally recognised human rights. The mechanisms to enter for the purpose of employment are only one strand of migration policy measures and not the main one in terms of entries of international migrants. In 2004, migration inflows for work accounted for less than 30% of total entries in the countries for which data are available and for about 50% of inflows in Portugal and Denmark, see OECD (2006). Family migration, both accompanying family of workers and family reunification, continues to dominate also in countries where work immigration has grown in importance in the past such as Portugal, Denmark or the UK.

Graph 4 A broad typology of policies



The selection of immigrants for employment is mainly geared towards two main areas:

- first the recruitment of highly skilled migrants by selective policies to attract/retain these workers, mostly for permanent migration. Particular attention is given to international students as potential highly skilled workers, who may find it easier to integrate as they develop links with the host country during their stay for studying;
- second, the recourse to temporary, often seasonal, low-skilled immigrants to alleviate labour shortages.

Skills, selectivity and the decision to migrate

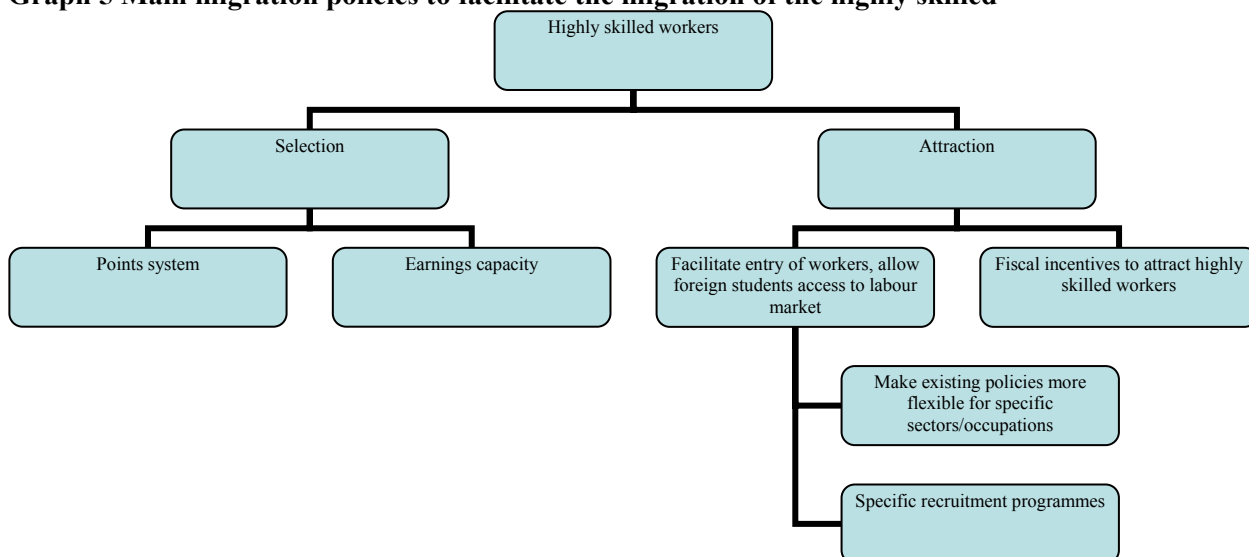
Labour demand in the receiving country has an impact on the skill level of immigrants, which leaves some scope for selective immigration policies. However, the skill levels of immigrants also depend on their country of origin, via positive or negative selection, and on the composition of migratory flows.

In the analysis of Borjas (1989), based on the Roy model, migration will increase with skill-level (*positive selection of migrants*) if the return to skills is greater in the destination than in the source. On the contrary, migration will decrease with skill level (*negative selection of migrants*) if the return to skills is greater in the source. He argues that income disparity can be taken as a proxy for return to skills because return to skills is higher in a less egalitarian society and lower in a more egalitarian society. In migration from a more egalitarian to a less egalitarian society, the highly skilled are more likely to migrate. In migration from a less egalitarian society to a more egalitarian one, the less skilled are more likely to migrate. Empirical evidence shows negative correlation between measures of source country income inequality and earnings of immigrants in the U.S.

The effects of income distribution on the decision to migrate are different in the analysis of Oded and Taylor (1991). They suggest that migration increases with the relative deprivation of potential migrants in the source region and that only the income inequality in the source country matters in the decision to migrate.

The selection of immigrants can be carried out by national administrations through a points system; this is what is done in Australia, Canada, New Zealand and Switzerland. The UK has planned the introduction of a points system (in 2007). Otherwise, the selection tends to be done by employers, even if governments may impose salary, occupational or educational criteria. In that case, immigrants have a job upon arrival.

Graph 5 Main migration policies to facilitate the migration of the highly skilled



In the context of the debate about skills gaps and mismatches there has been a certain revival of interest in economic immigration policies to tackle labour market imbalances.³² Several EU countries have already initiated specific programmes or introduced changes in their regulations to facilitate access to their labour markets for skilled immigrant workers, in particular for high skilled workers such as researchers and software engineers. Some countries are also considering selective employment-related immigration policies to alleviate labour shortages, although the objectives and procedures may differ from one country to another.

Spain, Italy and, more recently, Portugal and Germany, had started to advocate selective policies similar to those in Australia, Canada and New Zealand. As argued, this European-type selectivity takes actually a somewhat different form, in so far that it focuses solely on a system of labour immigration quotas in the case of the first three countries. In other European countries such as the United Kingdom, the Netherlands and France, no quota has been set. The system of recruiting foreign labour is still based on decisions taken principally at national or regional level in the light of labour market needs. The labour market situation remains the basic criterion, as well as the requirement that the salary be comparable to that for nationals with the same qualifications for the job in question. Exceptions do exist however for occupations in the information and technology sector in all three countries, and for specialists in the biotechnology, medicine, health care and teaching fields in the United Kingdom. In these countries, there are no criteria giving preference to one or more nationalities. Depending on the country, the first work permit is usually issued for a year and is renewable.

Table 12 groups more recent measures aimed at highly skilled workers and students or researchers into 3 groups according to their broad objective: to attract foreign students or researchers; to facilitate the entry of highly skilled and students and to select migrants according to their skills. A number of Member States have recently adopted measures to attract foreign students or researchers through financial assistance programmes. The entry of highly skilled migrants is facilitated mainly through facilitation of the right to work for some skilled occupations. Finally, several Member States discuss the introduction of Green card schemes to select migrants. A proposal to launch a Community-wide “Blue card” scheme has recently been put forward by the Brussels-based Bruegel (2006); the possible design of such schemes has also been discussed quite extensively in the context of the EU Policy Plan on Legal Migration.

Table 12 Selected measures aimed at highly skilled workers and students/researchers

Country, <i>source of information</i>	Selected measures	Broad objective
France <i>national authorities</i>	Grants, cooperation with foreign Universities and between public research centres and firms, simplification procedures	Attract foreign students/researchers
Denmark <i>national authorities</i>	Extension of the quota for foreign students obtaining student/research grants in specific areas of study	Attract foreign students
Spain <i>national authorities</i>	Financial assistance to receiving University/research institution; grants to graduates joining international organizations temporarily	Attract foreign and native students/researchers
Belgium <i>national authorities</i>	fellowship scheme for highly qualified researchers (for non-EU	Attract foreign researchers

³² See further HWWA papers commissioned by the European Commission Directorate General for Employment, Social Affairs and Equal Opportunities, in particular Papamedetriou (2004).

	researchers for the moment) and financing of 5-year contracts	
The Netherlands	Simplification of admission procedures for highly qualified workers, earning beyond an annual gross salary threshold, no working permit necessary and 5-year residence permit	Facilitate entry of highly qualified foreigners
UK	Highly Skilled Migrant Programme, facilitating arrival of qualified young people	Facilitate entry of qualified foreigners
Germany	Permanent residence obtained at the outset for highly skilled	Facilitate entry of highly qualified foreigners
France <i>national authorities</i>	Easing entry/labour permit procedures for foreign executives	Facilitate entry of highly qualified foreigners
Finland <i>OECD</i>	Broadens right to work without a work permit for some skilled occupations	Facilitate migration of highly skilled workers
Greece <i>OECD</i>	Eased conditions to obtain student permit	Facilitate entry of foreign students
UK	Math, science or engineering students can work for 12 months after obtaining their diploma	Facilitate entry of foreign students into the labour market
Denmark <i>national authorities</i>	Proposal of introduction of a green card scheme	Select migrants
Austria <i>OECD</i>	Quotas for the settlement of non-EU citizens and their families are open exclusively to the highly skilled	Select the highly skilled for permanent migration
Ireland <i>OECD</i>	Green card established for a list of skill shortage occupations, more restrictive/extensive for occupations in low/high annual salary range	Select migrants
UK <i>OECD</i>	Planned point system for highly skilled immigrants	Select highly skilled workers
UK <i>OECD</i>	Planned point system and requirement of sponsorship by employer for skilled workers with a job offer	Facilitate entry of skilled workers with job offer
Czech Republic <i>OECD</i>	Programme of Active Selection of Qualified Workers, based on a points system (this programme still concerns a very small number of people)	Select young qualified people

A number of Member States have introduced specific fiscal incentives to attract highly skilled migrants, see Table 13.

Table 13 Tax measures for foreign specialists

Country	Fiscal incentives
France	Reduction of double taxation on stock options, easing of fiscal exoneration for immigration bonuses
Denmark	Preferential tax scheme to attract foreign-based researchers, managers and experts
Sweden	Tax deductions of 25%

However, so far the attempts in a few EU countries to put in place selective measures differ from the sophisticated systems that have been in operation for a long time and have been steadily adjusted in Australia, Canada and New Zealand. In the latter countries, the objectives are broader, embracing economic as well as demographic and social aspects. Furthermore, the resources implemented both in foreign consulates and/or via digital connections (in Australia, for example), are considerable, as well as the consultative procedures at regional and local level and between the relevant main partners.

The Canadian points system

Research has shown that age, schooling, technical training and proficiency in the host country's language enhance the earnings of immigrants. The Canadian points system applies to all skilled or self-employed workers wishing to settle in Canada. There are many criteria in the assessment. Points are awarded on the basis of 6 decisive factors:

- training;
- languages known fluently;
- professional experience;
- age;
- whether or not he (she) has signed an employment contract;
- evaluation of the applicant's likelihood of adapting to Canadian life (previous stays in Canada, spouses' qualifications and training)

The need for low skilled immigration, typically of a temporary/seasonal nature, is also an issue of concern in a number of Member States, in particular in Southern European countries. Member States tend to favour temporary immigration for the low-skilled and reserve permanent residence to the highly skilled foreign workers. Some Member States have systems to allow applying for a work permit based on an offer of employment. Most new measures concern the right for seasonal workers to work without work permits for a specific duration, in order to reduce labour shortages during specific periods of harvest without introducing a temporary work permit, see Table 14. These mostly constitute adjustments to seasonal arrangements in place. Indeed, temporary programmes have been growing in the past decade. They concern temporary workers, seasonal workers, working holidaymakers (for Australia), contract workers, inter-company transferees of workers and managers within multinational firms, and paid trainees.

Table 14 Recent measures for lower skilled/temporary labour migration

Country	Selected measure
Italy	Bilateral agreement signed with Sri Lanka covering the movement of up to 1500 caregivers in 2005.
Poland	Planned bilateral agreement with Ukraine
UK <i>OECD</i>	A quota to fill low skilled shortages in sectors such as hospitals and catering
UK <i>OECD</i>	Employment sponsorship to meet specific requirements not met by UK or EEA citizens
Ireland <i>OECD</i>	Revised work permit system for occupations outside the Green Card lists and for which there is a significant labour shortage, based on an offer of employment .
Finland <i>OECD</i>	Right for horticultural workers to work without permit for a period of 3 months
Greece <i>OECD</i>	New seasonal work permit
Hungary <i>OECD</i>	New regulations for seasonal work in agriculture

Table 15 Entries of temporary and permanent workers, 1992, 2000-2004, in thousands

	temporary						permanent					
	1992	2000	2001	2002	2003	2004	1992	2000	2001	2002	2003	2004
DE	332.6	289.7	330.1	348.4	359.2	358.2	408.9	333.8	373.8	374		
FR	18.1	15.4	20.4	23.4	24.7	25.7	42.3	18.4	22.2	20.5		
IT	1.7	30.9	30.3		68	77						
NL				34.6	38	44.1						
SE		19.4	12.7	9.7	9.9	8.3	0.2	0.4	0.4	0.4	0.3	0.2
UK	27.6			62.3		106.4	63.8	113.1	135.8	149.7		

Note: data for Italy refer only to seasonal workers

Source: OECD/Sopemi

From a general perspective, selective employment-related immigration policies cannot be designed in a simple way and clearly have their limits. Although this should not prevent Member States to increase their capacity to forecast skills and labour shortages, it would be illusory to think that the future needs of the labour market by sector and occupations can be accurately determined, not to speak of successful micro-management via immigration. The migrants most likely to help match demand and supply are those adaptable enough to face changing conditions, in view of their qualifications, experience and personal abilities. The selection mechanisms must be geared towards these would-be migrants and offer them sufficiently attractive conditions. Difficulties may arise with respect to identifying “good candidates” for immigration and recognising the validity of qualifications and job experience as well as evaluating their linguistic skills, while avoiding discrimination in the selective procedure. Moreover, public authorities frequently refer to the temporary and even seasonal nature of the immigration they are willing to allow, but this is often not realistic. Past experiences of immigration have also demonstrated that it is extremely difficult to keep track of the length of stay of migrants and of their geographical and occupational mobility and, thus, to sustain temporary immigration schemes

The limits may also be of an external nature: many countries will probably develop similar needs and may thus be competing to attract and retain the same workers. But perhaps more importantly, migration policy will always have to take into account other categories and objectives to which selectivity may not necessarily apply (admission of asylum-seekers and refugees, family reunification and irregular migration). And last but not least, migration policy may be subject to

international agreements governing labour mobility. For all these reasons, immigration has become a matter of common interest for the Member States and the Commission supports the development of a common immigration policy.

The EU Policy Plan on Legal Migration

The European Commission adopted in December 2005 a “Policy Plan on Legal Migration”, jointly presented by Vice-President Franco Frattini, Commissioner responsible for Justice, Freedom and Security, and Commissioner Vladimir Špidla, responsible for Employment, Social Affairs and Equal Opportunities. This plan has been developed in order to comply with a request in the Hague Programme, the EU multi-annual work programme in the field of Justice, Freedom and Security. The Hague programme explicitly asked the Commission to present, before the end of 2005, “a policy plan on legal migration, including admission procedures capable of responding promptly to fluctuating demands for migrant labour in the labour market”.

The Policy Plan is the result of a long bottom-up, rather than top-down, process involving all relevant stakeholders in the field, notably trade unions, employer’s organisations, governments, European Parliament, NGOs and the European Economic and Social Committee. Their input enabled the Commission to present its views on how to respond to the economic and demographic challenges ahead of us – and to the immigration pressures at our borders – by means of a comprehensive set of measures that should allow for a better management of the immigration phenomenon from all its different angles. In order for Europe to truly benefit from immigration legal migration must be managed in a coherent, predictable and efficient way. Immigration must benefit the European economy, the countries of origin and the individual migrants themselves. In this respect, sustained efforts to integrate the immigrants into the labour market and into broader society are equally important as clear but flexible rules for entry, stay or re-entry. Indeed, legal migration and integration are inseparable and should mutually reinforce each other.

The Policy Plan is mainly focused on economic migration and aims at giving a clear and complete overview of whole range of initiatives – legislative and non – that the Commission intends to take in the next years in this field, according to an indicative roadmap covering the period 2006-2009, i.e. the remaining period of The Hague Programme. It addresses four areas for action of equal relevance and importance for the coherent development of the EU common legal migration policy:

- a legislative section to regulate the conditions of entry and residence of third-country nationals in employment; in particular, four category-specific Directives will govern the conditions and admission procedures of third country nationals as highly qualified workers, seasonal workers, inter-company transferees, and paid trainees.
- actions and policies to foster knowledge building and sharing of information in the immigration field;
- policies and founding aimed at supporting and improving the integration of economic migrants and their dependents on the labour market and in the host society;
- measures aimed at a more efficient management of international immigration flows which need the cooperation and the support of the Countries of origin of the immigrants.

While 2006 will be mostly devoted to carrying out studies on specific issues and discussions on the way forward, this preparatory phase will be followed by several concrete initiatives starting from 2007.

In developing selective employment-related migration policies, one should not nurture the idea of micro-planning to match supply and demand across occupations and skills. Certainly, a flexible admission system for allowing in foreign (specialist) labour in specific sectors can significantly contribute to ease labour market bottlenecks. However, the scope for immigration policies trying to pin-point skill shortages appears to be fairly limited and, in any case, unlikely to be applicable on a large scale in an easy and quick manner. Rather, harmful policies restricting internal mobility and other adjustment mechanisms must be avoided. In general, thus, immigration policies should aim to keep the development of foreign workers on an even keel in the medium-term and to avoid harmful stop-and-go policies.

4. Conclusions

The picture of immigration which emerges from this note is one in which net migration to the EU is on the rise, albeit from a comparatively low level, particularly in Member States like Italy, Spain, Portugal, and Ireland. Immigration flows have substantially changed, both in terms of their countries of origin and destination as well as in terms of their motive. Although the flow of asylum-seekers into the EU has increased since 1989, family unification and labour migration remain the predominant reasons for immigration, both legal and clandestine. Moreover, temporary migration – i.e. cross-border labour flows not leading to permanent settlement in the receiving country - has become significantly more prominent. These changes in migration flows are altering the composition of the stock of immigrants over time.

Data restrictions hamper the economic analysis of immigration, partly due to the illegal nature of a significant part of inflows. In contrast, migration flows generally followed legal routes in the 19th century and they are also extremely well documented. Thus it is easier to analyse the economic drivers of migration a hundred years ago than it is today. There is a growing divergence between the prominence of the policy issue of international migration and the lack of adequate migration statistics. A broad approach is needed when measuring stocks: foreign born, foreign born parents and citizenship at birth can also be useful. Development of surveys, in particular longitudinal surveys, is crucial to measure the extent of international migration and its impact for/of successive cohorts of migrants. Statistical input is crucial to develop and monitor immigration and asylum policies, as well as education, employment, social and integration policies.

Overall, the situation of immigrants in the labour market is relatively vulnerable as evidenced by low participation rates and high unemployment rates, particularly in Member States which attract a high number of asylum seekers. In general, non-EU women are less integrated into the EU labour market, with acutely low participation rates and acutely high unemployment rates, even by the standards of male non-EU-nationals. The situation of the foreign-born is somehow more favourable, pointing at the importance of citizenship in the integration process. Overall, the EU appears to be significantly less successful than the US in efficiently absorbing migrants into its labour markets, having to cope with a larger share of low-skilled immigrants. Indeed, the EU lags far behind the US in attracting highly educated immigrants. While this clearly poses a challenge for migration policy, the evidence also suggests that micro planning to match immigration to skill shortages is unlikely to be very successful and could even restrict internal mobility and labour market adjustment.

Economic theory and evidence concur that the net gains from immigration are likely to be positive in sign and modest in size. While it is possible that a disproportionate share of the costs will be borne by certain regions or groups of workers, foreign workers may also relieve labour shortages, act as a catalyst for the creation of new jobs and increase labour market efficiency. Empirical evidence on the impact of immigration on domestic wages and employment is inconclusive, although it appears unlikely that average flows could pose a significant threat to wages and employment in the EU. Similarly, the net budgetary impact of immigration appears to be fairly small, although the results vary according to how the financial burden is estimated, the geographical concentration of immigrants, and whether immigrants are selected on the basis of age and skill.

The enlargement of the EU from fifteen to twenty five Member States has seen a significant increase in the number of EU8 citizens working in the EU15 countries, often on a temporary basis. However, the evidence so far and available projections for the future do not suggest

massive east-west net flows of labour which would put the absorption capacity of receiving countries' labour markets under an unbearable stress test, even if the movement of workers becomes completely unrestricted. In fact, the impact of migration may pose a bigger challenge in some of the source countries in the form of labour shortages in specific areas and a net loss of human capital.

The evidence on the link between immigration and ageing populations suggests that while net inflows of immigrants can partially offset demographic developments, immigration could not on its own solve the problems linked to ageing. Population ageing affects migrants themselves, as they get older and their fertility patterns tend to resemble those in their host country. Thus even somewhat higher net immigration would not dispense policy makers from implementing the EU's internal structural reform agenda to cope with the impact of ageing populations. Clearly, better functioning labour markets will also be conducive to a smooth integration of a growing number of immigrants from non-EU countries in the future.

Obviously, migration scenarios and calculations are somewhat mechanistic and fairly sensitive to assumptions such as age and family structures of newly arriving immigrants. But perhaps more importantly, immigration policy cannot easily be fine-tuned to reach precise demographic objectives due to difficulties in controlling the volume and composition of net migration. The difficulties in managing migratory inflows are all too-well known, limiting in practice the ability to quantitatively target net immigration flows. Moreover, even while policy may have some control over the level of immigrants, it has little or no control over emigration.

Moving from population considerations to labour market scenarios for the future workforce with a view to identify macro labour shortages to be filled by migratory inflows is of course even more complicated, both from a purely methodological and a political point of view. Demographic developments interact with policy reactions and behavioural responses, all of which affect the size and structure of the labour force in a complex way. Thus, any estimate of future "labour force gaps" to be filled by migrant workers crucially depends on the question to what extent the existing labour force potential can be mobilised. And, clearly, labour market participation of migrants has to be considered as well. In consequence, all these factors have to be taken into account simultaneously to obtain a better understanding of the potential contribution of migration to mitigate the labour market impact of demographic change. However, efforts to identify precisely future labour market needs in terms of immigration flows and to fine-tune immigration policies accordingly appear rather limited.

Finally, all Member States have in place a wide variety of policies to manage migration. While this provides ample room to learn from each other and to identify what works and what doesn't work in migration policies, it also creates a need to deal with cross-country spill-over effects and to correct potential co-ordination failures. The latter may arise, for example, from a lack of co-operation/competition for selected/highly skilled migrants or the legal implications of regularisation programmes. Spill-over effects may stem from the single market with free movement of labour within the EU and they underpin the further development of a common approach to immigration into the EU.

5. Annex

LABREF and trends in migration policy

http://ec.europa.eu/economy_finance/indicators/labref_en.htm

Launched in December 2005, LABREF is an on-line database providing information on enacted policy measures which are intended to have an impact on labour market performance in the EU. The database provides information on the design of reforms, their scope and durability. LABREF is organised around nine policy fields, one of which is immigration policies. Under this heading, the database covers the following types of policy measures:

- **Border controls**, encompassing measures related to the entry, stay and access to the labour market;
- **Selective immigration policies**, including quota systems aimed at the recruitment of foreign workers, the easing of recruitment policies for highly skilled or for specific occupations as well as bilateral labour agreements on seasonal or temporary workers;
- **Measures to facilitate the labour market integration of immigrants**, ranging from ALMPs to the recognition of formal education attainments and the entitlement to benefits/social assistance programmes targeted at immigrant workers

The structure of the database enables the user to analyse policy measures by areas of intervention and specific design characteristics. LABREF will be updated annually and there are also plans to backdate the information. So far, the database contains a summary overview of reforms enacted by EU Member States in 2004. The following brief illustrates how LABREF can be used as an instrument for tracking trends in EU Member States' migration policies.

1. Determination to manage migration flows

As a response to increasing migration pressure, many EU Member States have set migration control high on their political agenda, both at national and European level. Combating illegal immigration is seen as a priority.

Spain, a country currently having one of the highest migration rates in Europe, established an extraordinary process of legalisation in 2005. Registered immigrant workers holding a work contract with a minimum duration of 6 months could obtain residence permits. In Greece, immigrants with an expired temporary permit were allowed to submit their renewal request. In both cases, the objective of the intervention was to combat undeclared work, gain better control over the immigrant population and facilitate their social and economic development.

Intra-EU migration has also been the subject of discussion. With the exception of the UK, Ireland and Sweden, all old Member States introduced transition periods for citizens from EU-8 upon the EU enlargement to 25 Member States in 2004. Limitations were imposed to the free movement and access to the labour market for citizens from these countries.

The UK opened its labour market from 1 May 2004 and introduced a Worker Registration Scheme (WRS). Under the scheme, citizens from EU-8 who took up work in the UK needed to register with the authorities. The purpose of the scheme was to allow the Government to monitor the participation of workers from EU-8 in the UK labour market.

2. Growing interest in selective immigration policies

While toughening controls over migration flows, EU Member States also show increasing interest in developing policies to promote selective immigration policies. Several Member States have eased their legislation to facilitate the entry of highly skilled workers. Special programmes, simplified administrative procedures and bilateral agreements are used to further this aim.

Facing a shortage of graduates in the fields of physical science, engineering and mathematics, the UK has introduced a Science and Engineering Graduates Scheme (SEGS) which authorises foreign graduates in the relevant disciplines to remain in the country for 12 months to pursue their careers. A similar measure has been enacted in Germany, where students who complete their studies may remain in Germany for one year after graduation to seek employment. Moreover, Germany welcomes self-employed foreigners provided they are anticipated to have an impact on the economy and employment.

The Netherlands also seek to attract skilled workers. According to a new regulation, workers with a labour contract and an annual gross salary of at least € 45.000 now only need a residence permit and no longer a separate work permit. In Spain, new measures aim at linking legal immigration flows to the dynamics of the labour market. A new system of entry for immigrants should make more room for individual recruitment of high-skilled workers and for programmed recruitment of 'quota' workers required in specific sectors.

3. Measures to encourage the labour market integration of immigrants

As regards measures to facilitate the integration of immigrants, reforms were focused on efforts to curb discrimination and promoting integration of immigrants in the labour market.

With the aim of promoting equality in the workplace, Ireland introduced new employment rights which should prevent indirect discrimination and broaden the scope for positive action. Similarly, Finland has reinforced legal protection against discrimination based, among others, on ethnic origins. The legislation covers in particular access to social services and requires each authority to draw up a plan to foster ethnic equality.

To facilitate the participation of immigrants into the national labour market, some Member States have formulated active labour policies aimed specifically at this group.

Denmark introduced special coaching schemes and entrepreneurial centres in neighbourhoods where the majority of the population is of foreign background. In France, the use of 'reception and integration contracts' has been extended to all of the country. The contracts provide newly arrived immigrants with language classes and social assistance in order to assure a successful integration process.

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