Managing Migration in the European Welfare State

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Executive Summary

Net migration into the EU has been substantial over the past decade: After peaking at over 1 million per year in the early 1990's, net migration to the EU declined over the past decade but is now rising again, and was over 700,000 in 1999. The net legal immigration rate for the EU, 1990-98, was 2.2 per 1000 inhabitants, compared with 3 for the US and almost 0 for Japan. Illegal immigration is estimated to be 60% higher in Europe, at about 500,000 per annum, than in the US. The population of the EU is 34% larger than that of the US. Refugees seeking asylum in the EU between 1989 and 1998 have also exceeded an average of 350,000 per annum, with over 20% being granted entry. As a result of substantial net migration flows, the stock of foreign born in the population of a typical EU country has steadily increased – particularly in Germany – where the stock of foreign population grew by about 3 million to 7.3 million between 1985 and 1999. The percentage of the population with foreign nationality in EU countries is 8.9% in Germany, 9.1% in Austria, 8.7% in Belgium, 6.3% in France, 2.1% in Italy and 3.8% in the UK. The process of naturalisation in some countries causes these figures to substantially understate the proportion of foreign born.

Whereas migration to the EU countries in the 1950s and 60s appears to have been largely demand induced, migration in the 1990s occurred despite EU unemployment, and this has given rise to concerns for the pressures that immigration might bring on the welfare state. This concern is amplified by the costs of supporting high benefit levels in some EU countries. Whereas economic policy in the 1950s and 60s was encouraging of immigration – particularly of a temporary variety - after the rise in unemployment associated with the oil shocks of the early 1970s, policy in the EU broadly changed to a "zero economic migration" stance.

The high levels of refugee and illegal flows, together with the migratory consequences of EU enlargement have provided a focus for popular concern and policy analysis. The total population of the ten accession candidates from Central and East Europe amounts to 104 million while the average GDP of these countries is less than 40% of the average GDP in the EU at purchasing power parities. Thus, granting freedom of labour mobility within the enlarged EU appears likely to prompt substantially greater immigration flows than when the EU was enlarged to include Greece, Spain and Portugal, with a joint population of only 59 million at the time of accession, and a GDP per head about two thirds of that in the EU. Until the present, migration flows from Eastern Europe have primarily affected Germany and Austria.

Analysis of EU immigration occurs in a context of falling population growth and an increasingly elderly population. Between 1975 and 2000, the population of the EU15 grew from 349 to 375 million; however, the working age population (20-64) is forecast to fall from 225 million in 1995 to 223 million in 2025. The share of population aged over 65 was 15.4% in 1995, and is expected to reach 22% of the population in 2025. The

candidate Eastern and Central European countries have even slower population growth. As a result, net migration has become the primary influence on EU population growth, and there is extensive discussion regarding the role increased immigration should play in resolving any problems brought about by ageing EU populations.

Our study addresses these issues in several ways. Given the dearth of unifying statistics concerning the pattern of migration into EU countries, in Section 1 we provide an overview of EU immigration, documenting the changing shares of foreign populations, the pattern of inflows by origin country into major EU countries, distinguishing the flows from Eastern Europe enlargement. We describe the changing levels of asylum seekers in EU and other OECD countries in the past two decades, and give some evidence on the pattern of illegal immigrant flows. Evidence of the age and skill structure of immigrants, sectors of employment and the size of employing firms is also given. Finally, we provide evidence on the concentration of immigrants into certain urban areas.

In section 2 we discuss three aspects of the attitudes of EU natives towards immigration: racism, the influence of the state of the labour market and welfare take-up. Our findings imply that whereas both welfare and labour market concerns contribute to explaining opinion towards further immigration, racially motivated concerns may be the most important factor. Attitudes towards migrants are heavily affected by native education levels.

In section 3, we explore the relationship between immigration and the financial strain on the welfare state. To what extent is there evidence that immigrants take into account the generosity of the welfare system when choosing a destination country? To what extent are migrants more dependent upon the welfare system than natives, holding constant observable characteristics? We find that there are large differences across EU countries with respect to the structure of the migrant population and their welfare dependency. There is some evidence that increased migration may place pressure on the welfare programmes of the more generous countries, but not in the least generous ones, although the effect is typically moderate. A significant part of the higher dependency on unemployment benefits of migrants is left unexplained by differences in observable characteristics. Furthermore, these dependency differences seem to be persistent over time.

Section 4 reviews policy towards immigration. We first describe the policies that govern immigration to and within the EU. We review the extent to which enlarging the EU has altered the scale of immigration and the human capital characteristics of migrants. The linkages between immigration policies, the size and type of migrant flows are explored, together with the resulting implications for welfare dependency. This leads to analysis of asylum seekers, their separate human capital characteristics, and labour market performance. Finally, we discuss the harmonisation of immigration policies across EU countries.

In section 5, we analyse potential gains from a policy of encouraging contracted temporary migrants into EU countries and contrast them with the costs and benefits of permanent migration. We discuss problems of enforcement and the potential efficiency gains to both the sending and host countries.

Section 6 discusses the extension of unrestricted labour mobility to Eastern Europe, and asks whether Eastern enlargement will result in mass immigration to the EU. We find that free movement will probably result in a migration of between 2 and 4% of the population of candidate countries, in the long run. This adjustment process is expected to occur over a long period of time with average net migration into the EU being at most 300,000 persons per annum in the first decade. Over half of these migrants may enter Germany.

In Section 7, we discuss the policy implications raised by European immigration. The political context is that the European Commission considers that channels for legal immigration to the EU should now be enhanced. Given the historically high levels of immigration during the 1990s and the unpopularity of policies that facilitate migration, this is a striking step. Mindful that migration policies go beyond the management of migration flows to include policies toward assimilation, we nevertheless limit our discussion to policy towards the structure of migration and the political context in which these policies might evolve.

<u>Policy Recommendations</u>

Eastern Enlargement: the proposal by the European Commission to largely postpone migration over a long transitional period is likely to merely postpone the migration potential from the East, and maintain a high degree of uncertainty as to the eventual consequences of free movement. This policy may also have an adverse effect on the skill composition of migrants from the East. In contrast to this proposal, quota arrangements can reduce uncertainty regarding the actual size of migration, smooth migration pressures instead of merely postponing it, and allow for a neutral or favourable skill composition of immigrants. EU policies should address compensatory measures in the sending regions such as allocations from the structural and cohesion funds to the education sector in the CEECs.

Family Unification: About half of migration into EU countries arises from the right of those settled in the EU to bring dependants to live with them. Although there is evidence that family unification has contributed to welfare dependency in some EU countries, the case for restricting such migration is weak. Policies supporting family cohesion and the nurturing of children lie at the heart of EU social policy, and a change in this area is not recommended, although EU countries should consider the implications of differing policies towards family criteria for entry.

Asylum and Refugee Policy: At present the national regulation of humanitarian migration is producing a "race to the bottom". The EU should set a common set of rules for admitting asylum seekers and refugees in the EU, co-ordinate the implementation of the rules, and share the costs of humanitarian migration equally, e.g. by a fund for asylum seekers, refugees and other humanitarian migrants. This will internalise costs and prevent that countries with more generous policies are penalised. Against the background of large differences in national standards, the policy problem is to agree on a common set of norms which guide European asylum and refugee policies. A set of minimum standards, which are financed at the European level, while national policies remain free to admit

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further humanitarian migrants, may be a first step in the right direction toward a common European asylum and refugee policy.

Economic and illegal migration: Towards a co-ordinated policy with countries of origin. The increasingly elderly EU population and labour shortages for certain skilled occupations provide the context in which the EU is presently considering an expansion of skilled immigration although the destination of such migrants might be unequally distributed across EU countries. From one viewpoint, such immigration can be viewed as balancing the less skilled migration associated with the illegal flows, and indeed immigration of 250,000 high skilled migrants to the EU is rather modest in proportion to 500-600,000 illegal immigrants and refugees. However, although this may reflect a balancing in terms of EU skill proportions, such a policy will draw disproportionately on the high skill populations of low and middle income countries, and also compound the increasing congestion in Western Europe, particularly it's cities. We advocate a policy of ceasing to pursue unilateral policies towards migration from low/middle income countries of origin, and instead promote co-ordinated policy making towards immigration. The gains from co-ordination for the EU arise from the high illegal immigration flows and the costs of refugee migration. The gains for low/middle income countries arise from mitigating the externality costs that result from long term migration by skilled workers/entrepreneurs. The essence of the co-ordinated policy would be to provide a framework in which the origin country is compensated for the externalities lost by skilled migration, but would be moderated by "fines" arising from illegal flows and violations of human rights standards as partly measured by refugee flows. Within this partnership, the origin countries may prefer that permanent migration of skilled workers should be limited below the laissez-faire level, and we discuss in Section 5 how a rotation of temporary migrants allows potentially more workers to acquire savings and skills to use in the origin country, than with permanent migrants who, evidence suggests, gradually lose contact with their origin country. The implementation of such a policy framework would require careful preparation, but by working in partnership with a group of LDC's, this would be a quite different political contract to the "guest worker" programmes of the 1960's, and instead should be partly viewed as part of the EU international development programme.

1. Immigration and the EU

1.1 Introduction

The UN estimates that 2.5% of the world's population – about 150 million people – live outside their country of nationality. The falling cost of information associated with both the rapid growth of third world urban populations and the expansion of the internet, appear likely to further enhance the world demand for overseas work. The net legal immigration rate for the EU, 1990-98, was 2.2 per 1000, compared with 3 for the US and almost 0 for Japan. After peaking at over 1 million per year in the early 1990's, net migration to the EU declined over the past decade but is now rising again, and was over 700,000 in 1999.

Immigration flows into the EU over the decade 1989-1998, per inhabitant, are similar to those into the US. Whereas legal immigration into the US averaged about 1.0 million persons per annum, legal immigration into EU countries averaged 1.5 million per annum. Surveys suggest that 20% of EU flows originate in other EU countries, so that legal immigration has averaged about 1.2 million per annum from non-EU countries. Illegal migration into the EU is estimated by Europol to be at 500,000 per annum, and since there is no incentive for EU residents to illegally migrate, these are almost entirely non-EU. Illegal immigration into the US is about 300,000 per annum, (Borjas 1999). Thus, total immigration into the US has been about 1.3 million, and that into the EU 31% higher at about 1.7 million[1]. The population of the EU is 34% larger than that of the US. Immigration rates into Germany have, until recently, been particularly high.

These EU migration flows occurred against a background of falling population growth and an increasing average age of the EU population. Between 1975 and 2000, the population of the EU15 grew from 349 to 375 million; however, the working age population (20-64) is beginning to decline, and is forecast to fall from 225 million in 1995 to 223 million in 2025. Whilst this is not a large decline, the number of elderly are expected to rise substantially: the share of population aged over 65 was 13% in 1975, rose to 15.4% in 1995, and is expected to reach 22% of the population in 2025. The population trends of Eastern and Central European countries that stand to be integrated in

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[1] This figure excludes an average flow of about 200,000 ethnic Germans per annum who moved from Communist bloc countries to Germany, but they are excluded from German migrant figures.

the enlargement process have even slower growth. As a result, net migration has become the primary influence on EU population growth, and there is extensive discussion regarding the role increased migration should play in resolving any problems brought about by a larger share of pensioners in EU populations.

Whereas extensive job shortages in the 1950's and 1960's provided a background for the comparatively open-door policies towards international migration into the EU, since that time persistent unemployment has prompted the EU to gradually retreat behind policies which inhibit immigration from non-EU countries. Measures to facilitate mobility between EU countries have failed to increase the share of the EU population that live in other members states above 1.5% so that a majority of the foreign nationals living in EU countries are non-EU citizens. Unemployment in Europe remains about 8% and casts a shadow over the willingness to accept further non-EU immigration and raises concerns about the funding burden that further immigration will place given generous EU welfare benefit levels.

Thus while the overall EU macroeconomic backdrop is favourable, preferences regarding immigration are both cautious and disparate.

At present, the EU is contemplating enlargement to absorb 10 candidate countries from Central and Eastern Europe. On a PPP basis these countries have a GDP per head less than 40% that of the EU countries, and a population of 104 million, so that managing European migration requires a keen awareness of the human capital flows likely to be generated by this possible enlargement, and the implications of the various policy instruments that will influence these flows. Until the present, migration flows from these regions have primarily affected Germany and Austria, and if European migration policy is to be successful it will need to recognise that the various inflows we assess below do not, for several reasons, fall equally on all EU countries.

In the remainder of this section, we provide an overview of the structure and influence upon immigration in to the EU. In chapter 2 we investigate in depth the attitudes of Europeans towards immigration. In chapter 3 we explore welfare take up amongst immigrants and attitudes in three areas: unemployment benefits, health benefits and pensions, discussing how a differentiated take-up for immigrants occurs and whether this arises from their separate observable characteristics such as youthfulness. In chapter

4 we outline the evolution of EU migration policy. In chapter 5 we extend the policy debate by discussing the comparative economic implications for both host and origin country of a policy of accepting permanent immigration to fill a given number of positions, with one which rotates a larger number of temporary migrants through a similar number of positions.

1.2 The Foreign Population

The accumulation of immigration over time, and its importance relative to the native population, is usually measured by the share of either the foreign born population or the stock of foreign nationals. The more appropriate will depend on the problem to hand, but the careful application to Europe is made difficult by the lack of uniformity of country level surveys. Perhaps the primary difference is that German surveys collect information on nationality, but not location of birth, so that the foreign born measure of immigration is not available for unified EU statistics.

The primary consequence is that the EU primarily gives measures of immigration based on nationality, thus the EU statistics normally exclude naturalised immigrants from the "foreign" population. It follows that the more rapidly the EU "naturalises" the immigrant body, the lower is the measured "foreign" population. Since naturalisation is itself a policy instrument, subject to change and country level variation, this measure presents difficulties of interpretation. The upshot of these measurement problems is twofold. First, the time series data for individual EU country's foreign populations are more readily interpreted than cross section comparisons between countries. Secondly, those countries with faster naturalisation rates – which are not carefully documented, but probably include France and the UK – will tend to show lower immigrant populations.

Table 1.1 provides a summary of foreign populations in the EU and some other European countries, based on nationality. The exception is the UK, 1950-70, which is based on "foreign birth". Large increases in the share of foreign population have occurred since 1980 in Germany, Denmark, Austria and Switzerland. The first three of these countries also had low shares of EU nationals in their foreign populations. Typically, the EU shares in the foreign populations have declined sharply since the 1960-70 period. The measured share of the foreign population is low in Southern Europe, but there are strong

grounds for believing that the data are substantially underestimating the scale of immigration, largely because it is both illegal and illegally working in the underground economy. Section a of the table confirms that Germany is the main country of residence for foreigners in the EU – about 37% of all EU resident foreigners live in Germany. For 30 years after the Second World War the stocks of foreigners living in France and the UK would have been greater – largely as a consequence of their colonial past – but these populations have not accelerated in the past 10 years as has occurred in central and southern EU countries[2]. These accelerations in southern Europe would appear all the sharper if unreported immigration could be included.

To provide a historical picture to compare with the US share of foreign born, a direct comparison can be constructed using the UK and US census and the data are summarised in Figure 1.1. Two measures of "foreign born" are given for England and Wales – both only a subgroup of those not born in those countries – so that we understate foreign born on the strict criterion. First, we include the Scots as natives, then both the Scots and Irish are counted as natives – not a characterisation that many Irish or Scots would expect (or relish). First, as is well known, the US have remarkably high shares of foreign born during the mass migration period, but since the Second World War, there is little difference between the scale of foreign born in the US and England & Wales. Perhaps the most striking fact here is the remarkably low base of foreign born that obtained in the US, for such a low population density country, in the 1955-85 period. As we have seen, the UK immigration experience, as best we can compare it, is by no means exceptional within Europe.

1.3 Three Phases of European Migration

Only a few decades ago, Europe experienced mass out migration to the Americas, Africa and Asia. According to Russel King (1993,) about "55-60 million of people moved during 1820-1940 of whom 38 million went to the United States". Post war

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[2] Southern European countries and Germany use the *jus sanguinis* principle for citizenship in which if you have relevant ethnicity you can claim citizenship if you do not already have it. Thus the recent immigration of ethnic Germans, who were German according to the citizenship law as well as being immigrants is not reported in the immigration records. On the contrary in France and in the United Kingdom where citizenship is granted according to the *jus solis* principle, the second generations of immigrants are no

migration flows were mainly into Europe, and as Table 1.2 shows, the net migration patterns differ across countries. Some areas have been mainly receiving areas - for example, Western Europe, while Southern Europe has changed its role during the 70s from a net source of migrants to a net receiver. Eastern Europe after a period of intense migration mainly from East to West Germany, with the construction of the Berlin wall in 1961, ceased to be an area of large emigration, and with few exceptions[3] we could say that only the Yugoslavs continued to emigrate. In the '90s with the end of the Cold War, movements across borders started to increase again.

What were the underlying forces that since the Second World War brought these stocks of foreigners to the EU? Post-war migration in Europe can be divided into three phases: the first begins after WW II and end with the first oil price crisis 1973/74, the second lasts from the mid 1970s until 1989, and the third begins with the collapse of socialism in 1989.

Two main trends characterise European migration in the first phase: the absorption of large migration flows, which have been caused by the massive political disruptions of World War II and decolonisation, and labour migration from the South to the North in Europe beginning in the mid 1950s. The number of people displaced by the World War II was estimated at around 20 million, among them around 12 million Germans who had to leave Eastern Europe. Around 8 million of them migrated into Western Germany, together with another 2.6 million East Germans which moved there before the establishment of the Berlin Wall in 1961 (Zimmermann, 1995). In UK, we observe increasing immigration from the New Commonwealth after WW II, beginning with the Caribbean countries and, later, the Indian subcontinent. Nevertheless, the British government urged many former colonies to control emigration at source, such that total numbers are relatively moderate (Hatton/Wheatley Price, 1999)[4]. In France more than one million Algerians of French origin have been repatriated after the independence of

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longer alien, thus could disappear from immigration records both when classified according to either foreign place of birth or foreign citizenship.

[3] For a detailed description of the trend of immigration into Europe see Bonifazi e Strozza 2001, ONU 1979.

We want only to recall the emigration of Hungarians into Austria in 1956-57 when the URSS invaded the country as well the emigration from Czechoslovakia in 1968-69 for the same reason.

Algeria. Similar processes can be observed after the dissolution of colonies in Belgium, the Netherlands, and, later, in Portugal.

After full-employment had been achieved in the mid of the 1950s, labour shortages induced some countries to open their labour markets or even to recruit foreign labour. The main source countries have been southern European countries (Italy, Greece, Portugal, Spain, Turkey, Yugoslavia) and North Africa (Morocco, Tunisia), the main countries of destination France, Germany, UK, Switzerland, Belgium and the Netherlands. The total number of foreign born increased in Europe from around 4 million to 10 million people from 1950 to 1970 (Table 1.2). Total net migration from the South to the North can be estimated at around 5 million people at the same time (Zimmermann, 1995).

The European receiving countries had very different approaches to immigration. Germany wanted a temporary labour migration. Foreigners were called *guest-workers,* they were asked to come to work and many bilateral agreements with origin countries were signed with governments which also favoured that form of recruitment. In contrast in Belgium, the Netherlands, the United Kingdom and in France, immigration went along with as a decolonisation phase, thus the immigrants or returning emigrants were received as permanent settlers and the new flows from the South were treated in the same way, as permanent settlers. However as soon as domestic unemployment increased, the more open continental countries tried to become more selective, to favour temporary migration, and to slow down family reunification; Germany discovered that the supposed temporary migrants had become permanent.

The *second* phase started after the recession in the mid '70s with an attempt to reduce labour inflows- by some North European countries. South European countries ceased to be emigration countries and little by little they became immigration countries for the neighbouring African countries and also for some countries in Asia and Latin America. The growth in per capita income in the South European countries and the difficulties in reaching the rich countries in North Europe made the South a satisfying second best destination for immigrants looking for better economic opportunities.

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[4] Hatton and Wheatley Price report a total net migration from the Indian subcontinent at 177, from Africa (without South-Africa) at 73, and the Caribbean Commonweaöth at 13 thousand persons in the period 1965-74. Earlier figures are ot available.

While at the beginning of the '80s the percentage share of Africans and Asians in the stock of total immigrants in Southern Europe was 9% in Italy, 7.2% in Spain, and 3% in Greece, at the end of the '80s their respective shares had grown to 32% (16% each group) in Italy, 14% in Spain, 10% in Greece and it remained at more or less the same level as before (43%) in Portugal, but the numbers doubled.

1.4 The End of Communism in Eastern Europe and East-West Migration

While the '80s have been years of stability for the traditional European receiving countries, with a steady growth in the stock of the foreign population, caused by family reunion programs and also addition are labour inflows, the end of the 80s represented a big change. The *third* phase of European migration began at the end of the 80s, when the break-up of the former Centrally Planned East European Economies created a major supply of potential immigrants.

East Europeans have a long tradition of emigration towards Europe, mainly to Germany, Austria, Switzerland, and France. Migration from the Central and Eastern European countries started to increase with the political reforms in the mid 1990s and surged after the collapse of the Berlin wall in 1989. Immigration from CEECs achieved a peak in 1993, and declined then to rather moderate numbers. The total number of nationals from the Central and Eastern European countries residing in the EU is, at around 0.8% of the population in the countries of origin, at present well below those of the traditional source countries of European immigration. Notice that the inflows from the former Yugoslavia, which increased dramatically during the Civil Wars and other political unrest there, account for the largest share of immigration from Central and Eastern Europe.

Geography plays an important role in the distribution of migrants from the East across Europe: Austria and Germany receive the highest share of migrants. Austria is, with around 14% of the migrants from the CEECs, the most affected country in per capita terms. The share of foreigners has increased there from around 5% on 1989 to 9% in 1998. Germany took 53% of the inflows - amounting to nearly 500,000 immigrants from east European countries at the peak in 1993 (Table 1.3a). Former Yugoslavia accounts for 270,000 of the flows to Germany. Immigration figures from the East have declined

substantially after 1993, but they still accounted for 29% of total immigration to Germany in 1997. Moreover, Germany received large inflows of ethnic Germans (so-called "Aussiedler") from the former USSR, Poland, and Romania, which are not covered by the immigration data presented here. The inflow of ethnic Germans totalled some 2 million persons in the 1990s, around 70% of them arrived between 1989 and 1993 (OECD 2000, p. 63).[5]

Other countries close to the CEECs received notable inflows from there as well: Legal immigration from the CEECs into Italy numbered 41,000 persons in 1993, a sum which amounts to around 70% of total legal migration into Italy. The main source countries are the former Yugoslavia and Albania. In Greece the legal inflows from the East accounted for 22.1% of total legal inflows, comprising mainly migrants from Albania and Bulgaria. The flows have affected countries in northern Europe too: Norway accepted 6,200 immigrants from Bosnia-Herzegovina, 1,700 from the former-Yugoslavia, and 300 from Poland in 1997, which together accounted for 34% of their total immigration. Sweden accepted 20,700 immigrants from Bosnia–Herzegovina, 3,300 from the former-Yugoslavia and 400 Poles, which in total make up 45% of the total inflows. Even the more distant United Kingdom accepted 3,500 immigrants from Poland, and 3,500 from the Russian Federation, who in total represented 4% of the 1994 inflows. Although France has a tradition of accepting immigrants from east European countries, it was not a favoured destination, only 6% of total immigrants came from east Europe in 1993; 1,100 Poles, 1,000 Romanians and 4,000 from the former-Yugoslavia.

As outflows from east Europe fell, the destinations became more varied; for example, the Romanian communities which were earlier concentrated in Germany are now spread around Europe, but what is more important many have returned home. The effect in Germany has been so great that the net migration rate (inflows minus outflows) in the last two years has become negative. The other two large immigration countries France and UK were less affected by the immigration surge from the East (see Tables 1.3a, 1.3b). Although the total foreign population grew at a much lower rate in absolute terms, the increases were substantial, see Table 1.5. The total foreign population in Germany increased by about 2,000,000 in the 90s, compared to 500,000 in the UK.

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[5] The cumulated inflows of Ethnic Germans from the 1950 to 1998 are 3.924.000.

There was no change or even a slight decline in France, while in Italy there was an increase of 500,000, which was a relative new-comer as a receiving country[6]. Illegal immigration, as we shall see below, amends this picture.

Immigration in the 1990s is however not only characterised by inflows from Central and Eastern Europe. Immigration from the traditional source countries have increased in France and the UK (Table 1.4). The colonial past and economic growth in each country explains the different patterns of the foreign population (see Table 1.6). The high percentage of immigrants from the EU in the stock of foreign population in France and Germany is mainly due to immigrants from South Europe, who are mainly unskilled, while in the UK the increase of EU citizens is mainly made up of skilled immigrants. Another difference to be noted is that the Asians in the UK are mainly from India and Pakistan, while in France immigration from the south east Asia is more important as immigrants come from Cambodia, Vietnam, Laos, and China together with Lebanon and above all Turkey.

Italy shares the Mediterranean model with France, in that Africans represent 20% of total immigrants, but also the East European model with Germany because about 20% of the immigrants come from CEEC. The low number of UE citizens is however unique and cannot be traced to its new found role as an immigrant country because it is not a characteristic of other the south European countries.

France attracts a high share of foreigners from the Iberian countries, but this figure has stagnated since the early 1980s, while the share of foreigners from former colonies has been growing. In the northern EU members the share of non-EU migrants from both the CEECs and developing countries has increased at the expense of immigration from the Nordic countries. In Austria the share of EU foreigners has declined relative to the share of foreigners from Turkey and Yugoslavia and, since the demise of socialism, the share of foreigners from the CEECs. In the UK the number of foreigners from Ireland and other EU countries has stagnated, while the number of foreigners from developing countries, namely from the New Commonwealth, is increasing. However, the UK also attracts a large number of immigrants from non-European OECD countries, especially from the USA. Finally, in the southern EU states

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[6] Greece unfortunately does not provide data on the stock of its foreign population.

we observe increasing immigration from African and Asian developing countries since the beginning of the 1980s.

1.5 The channels of entry

European migration of the 1960s and early 1970s was mainly driven by the demand for manual workers, which ceased after the first oil-price crisis. The main receiving countries erected barriers to labour immigration after 1973, such that three other channels of entry became more important: family reunification, asylum applications and illegal migration.

Even if European countries report immigration split by channels of entry at all, they do not apply uniform standards. Nevertheless, the available evidence indicates that the importance of family reunification has grown over time and is now the most important legal channel for immigration. According to the SOPEMI (2000), family reunification accounted for 50% of the inflow in 1992 and 70% in 1998. In the United Kingdom, 80% of the foreign nationals who possess permanent residence status were accepted on the basis of their family ties. Inflows due to family reunion are not important only for old immigration countries but also for the new ones. In Italy, inflows of family members are already 40% of total annual inflows, which shows that migration is reaching a mature stage (Table 1.6).

The number of asylum applications and other forms of humanitarian immigration has grown steadily since the early 1970s, and experienced a surge after the collapse of the Berlin wall in 1989. Table 1.7 displays the asylum applications for most European countries and, as a point of reference, the USA and Canada. Asylum applications in Europe tripled after the fall of the Berlin wall in 1989. Germany alone received twice the number of asylum seekers of the USA. After a peak at the beginning of the 1990s the number of asylum applications diminished, but it remained at a higher level than it had been during the previous decade. The main cause for the surge in asylum applications and other forms of humanitarian immigration were the Civil Wars in the countries of the former Yugoslavia, but EU countries also received notable numbers from the transition countries in Central and Eastern Europe (Albania, Romania, former USSR). Moreover, the number of asylum seekers from Turkey (Kurds) and the trouble spots in developing

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countries (Afghanistan, Iraq, Zaire, Mali, Pakistan, Somalia, Sri Lanka, China) have increased in France, the UK and Germany.

The fall in the number of applications for political asylum after 1993 can be explained with various reasons. The conditions for the entry and acceptance of asylum seekers have been tightened substantially in a number of other countries including Germany France and the UK (see Chapter 4), social benefits for asylum seekers and other humanitarian migrants have been reduced, and the economies of the transition countries started to recover.

Only a small share of asylum seekers are accepted - between 5% and 20% of total applications. However, a much higher number of asylum seekers and refugees is tolerated in the receiving countries since they cannot be repatriated without risks for their personal safety. Nevertheless, the number of asylum seekers and refugees in the EU has been reduced by an active policy of encouraging refugees to return home voluntarily, which led to an increased number of departures, particularly to Bosnia-Herzegovina and other countries of the former Yugoslavia.

Although reliable figures are not available, there is mounting evidence that the number of illegal migrants residing in the EU has increased substantially in the 1990s. The total number of illegal entrants is estimated by Europol at 500,000 persons p.a. Countries with long sea borders which are difficult to patrol, especially in the south of Europe, experienced a surge in illegal immigration. Large shares of the informal sectors have increased incentives to illegal migration.[7] In traditional immigration countries, such as Germany, France and the UK, the number of illegal migrants has increased in the wake of the fall of the Berlin wall. In Germany different indicators, such as people stopped at the border and illegal migrants detected at their working places suggest that illegal migration has increased by between 150% and 300% in the 1990s (Lederer, 1998). Although border controls have been tightened in recent years, the number of illegal entrants detected in the UK doubled from 7,500 in 1994 to 14,300 in 1997.

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[7] The importance of the irregular economy in the Mediterranean countries is highlighted by recent estimates of Friedrich Schneider: while the share of the informal sector is estimated in Italy at 16-28%, in Spain at 23.4%, in Portugal at 22.9%, and in Greece at 29% of GNP, the respective figures are 15% in France and Germany, 18.3% in Denmark and 9.6% in Austria (Caritas, 2000).

Several European countries have legalised substantial numbers of illegal immmigrants in repeated amnesties in the post-war period (Italy has passed 5 amnesties, France 2, Spain 4, Portugal 3, Greece 1). Moreover, considerable numbers of illegal immigrants have been legalised on an occasional basis. In France, some 80,000 of the 143,000 applications for legalisation were accepted, while the number of people deported and taken to the border reached 34,000 in the 1990s. Notice that the illegal presence of foreigners was always much higher then the number of the foreigners who applied for a legal status. As an example, in Italy it is estimated that the share of illegal migrants who do not participate in a legalisation varies between 20% and 61% (Strozza, Venturini, 2001).

Illegal immigrants from outside the EU are not coming from areas different from those of legal immigrants. The EU, of course, grants free movement to workers and persons with few restrictions, so there is no incentive to move about illegally. Table 1.8 highlights the importance of North African and Latin American countries for illegal migration in Italy, Spain, and Portugal. Moreover, illegal immigration has become more and more important in Greece and Italy. Notice that colonial ties and networks play a role in the different patterns of illegal migration in the individual receiving countries.

During this initial phase of immigration into the Southern European countries, legalisation was the most important channel of legal entrance. Little by little the institutions in charge of the management of immigration become more efficient, border controls more effective and the front door more open, such that we can expect that the number of illegal entrants will fall there in the future.

1.6 The Characteristics of Migrants

The socio-economic characteristics of migrants living in the EU can be summarised by the following stylised facts: migrants are younger than natives, the proportion of males is higher in the migrant population than in the native population, migrants are concentrated in large cities, the skill levels of migrants are below those of the native population, and their occupational status is below those of natives with comparable skill levels. Finally, migrants are more than proportionally affected by unemployment. Averages, as is well known, can hide differences between nationalities.

The socio-economic characteristics of migrants and their performance in labour markets differ largely between countries of origin. In general, we observe rather high skill levels and a better labour market performance of EU foreigners.

The average age of foreigners is well below that of nationals in the main receiving countries of the EU: while the share of the working-age population among EU nationals amount to three-thirds of the native population, the respective shares amount to between 75% and 80% of the foreign population. Notice that the share of the 0-15 age groups is among the EU foreigners below that of the native population, while for the non-EU foreigners the converse holds true. Not surprisingly, the age of the more recent immigrant cohorts is lower than that of the total foreign population. More than 65% of the arrivals in Italy belong to the 19-40 age cohort, and more than 85% of the arrivals in Germany and the UK are younger than 40 years. Even though the most recent immigrants are asylum seekers who move with their whole family, their average age is still about 30.

Although the majority of migrants in Europe are males, their shares differ widely between the receiving and source countries: the share of males among the foreign population is at around 65% in Germany, 55% in France and Italy, but only at 50% in the UK. Among the source countries extraordinarily high shares of males can be observed among foreigners from African continent and Albania, while the share of females among the foreigners from Central and Eastern Europe are substantially higher than among other foreigners. In some receiving countries the shares of females from Romania and the Filipinos among the foreign population are above 50%.

Migrants in Europe are concentrated in the urban areas, and in particular in the large cities, while the rural areas remain largely unaffected. This is important to recognise partly because additional immigrants are also likely to be drawn to the existing immigrant areas, which may take the shares of immigrants to levels which become a focus for opposition groups, shape preferences towards immigration, and increase the costs of assimilation. In the UK, ethnic minorities have always been concentrated in certain areas. 45% are located in Greater London, as compared to only 10% of the white population. Other major areas of settlement are the Midlands and industrial areas in Lancashire and Yorkshire. The ethnic communities in many of these areas are often dominated by one particular group. For example Bangladeshis make up 23% of the

population of Tower Hamlets, Black Caribbeans make up 15% of the population of Lambeth, while Indians predominate elsewhere in London and in Midlands (Hatton, 2001). There is a similar pattern in France where 53.6% of the foreigners are located in the Ile de France, 24.4 in Paris, 10% in Hauts de Seine, 9.6% in Rhone-Alpes and 10.3% in PACA (Le Bon, Table f). In Italy 33% of resident foreigners live in north west Italy, 22% in the north east, 28% in the centre and 16% in the south. The situation is changing and the importance of migrants in the north east is growing, while it is declining in the centre the north west. Again, migrants concentrates in the large cities and in regions where the employment prospects are highest In Germany, migration is concentrated on the large industrial and service centres. The number of foreign residents is highest in Frankfurt and Stuttgart with a foreigner share at around 30% in the population. Note that shares of foreigners in employment are, at around 15-16%, substantially lower there, since large parts of the native employees live in the sub-urban areas of these cities. High shares of foreign employees can be observed also in medium-sized cities in the south (Baden-Wurtemberg, Baviaria) and the north-west of Germany (Ruhrgebiet), where manufacturing industries is concentrated (Table 1.10).

The sector of employment follows the same pattern: employment shares of migrants are well below those of natives in agriculture, while we observe extraordinarily high shares of foreign employees in manufacturing industries. As an example, in Germany 51% of the non-EU nationals and 45% of the EU nationals are employed in manufacturing industries, while the share of nationals amount to 35%. Similar patterns can be observed in the traditional receiving countries such as France, too. However, more and more migrants are employed in the service sectors, although their shares lag here well behind those of natives (Table 11).

Information about an immigrant's level of education should be taken with a lot of care: if they come from personal statements the level is generally overstated, while if it refers to the official recognition of foreign qualifications, the level is understated because many qualifications are not recognised. Nevertheless, we can derive from the available evidence a reasonable picture: in the main receiving countries of European immigration the skill levels of migrants are well below those of natives. European immigrants are in general more educated than third country nationals. In some immigration countries such

as France and Luxembourg, which attracted large shares of manual workers from southern European EU members, the share of low-skilled migrants from EU were nevertheless high. The UK forms a notable exception: although it attracted large shares of foreigners from developing countries, the average skill levels of non-EU foreigners exceed those of natives. In many EU countries we can observe a polarisation of educational levels of migrants, i.e. their shares in the upper and the lower ends of the spectrum are higher than those of natives. A detailed discussion of the skill structure of migrants is provided in Chapter 4.

The occupation status of migrants lags behind their skill levels. In the main receiving countries such as Germany and France more than 70% of the foreign employees, and only between 40% and 45% of nationals are employed as manual workers either in manufacturing and agriculture or the service sectors. Interestingly enough, in the UK and some countries which experienced in the recent years a migration surge such as Austria, the share of foreigners in manual occupations are only slightly above those of natives. In the upper segment of occupations, the picture varies between countries: in several countries the shares of managers and professionals in total employment is among EU foreigners higher (Austria, UK) or equal (Belgium, Germany, Netherlands) with those of natives, while they are substantially lower in France. However, non-EU foreigners are underrepresented in these occupations in most EU countries. However, the UK with it high shares of foreign professionals in finance and other service sectors forms with Denmark a notable exception (Table 1.12).

Finally, the high share of migrants in manual low skill occupations is reflected in higher unemployment risks. While unemployment rates of EU-foreigners are roughly in line with those of natives, the unemployment rates of non-EU foreigners are, according to the European Labour Force Survey, dramatically above those of nationals (Table 1.13). Although these figures have to be taken with a grain of salt due to low response rates of the foreign population, they show nevertheless that unemployment risks of non-EU foreigners exceed those of natives in some countries dramatically. Figure 1.3 displays the ratio of the shares of foreigners in unemployment to their shares in the labour force: with the exception of the southern EU members, which attract rather small numbers of foreigners with relatively high skill levels, the unemployment rates of foreigners have

been between 1.5 and 3 times higher than those of natives in 1998. There is a tendency for foreigners to be disproportionately unemployed in the high unemployment benefit countries.

The labour market performance of migrants has - relative to that of natives - deteriorated over time: in all EU countries we observe that the gap in unemployment rates between the native and the foreign population has increased between 1983 and 1995. As an example, in Belgium declined the unemployment rate of natives from 11% to 8% between 1983 and 1995, while that of foreigners has increased from 22% to 23% at the same time. Although in some countries unemployment rates of foreigners have fallen slightly along with the general recovery of the labour market, they decline in these countries less than those of natives. Thus, foreigners are among the groups most affected by unemployment and their risks tend to increase relative to that of natives over time (Table 1.14).

Table 1.1a: Foreign population (in thousands)

	1950	1960	1970	1980	1985	1990	1998
North Europe							
Denmark (a)	na	na	91	100.1	117	160.6	256.3
Sweden	108	186.7	404.2	421.7	388.6	483.7	552
Norway	16	25	76	82.6	101.5	143.3	165.1
Finland	na	na	na	na	17	37.6	85.1
Ireland	Na	na	na	82	79	80	111
United Kingdom (b)	1576.3	2219.9	2904.3	1637	1731	1723	2208
West Europe							
Austria	849	na	605	Na	304.4	456.1	737.3
Belgium	353	444	681	885.7	846.5	904.5	892
Netherlands	104	118	252	520.9	552.5	692.4	662.4
Switzerland (c)	278	570	1054	892.8	956	1163.2	1347.9
Luxemburg	36.7	46.9	59.3	Na	97	113.1	152.9
France(d)	1737	2170	2621	3714	3680	3596.6	3231.9
Germany	na	583	2509	4453.3	4378.9	5342.5	7319.6
South Europe							
Italy	47	63	121	298	450	863	1250.2
Portugal	21	30	32	58.1	95	107.8	177.8
Spain	93	68	148	182.4	242	278.8	719.6
Total Europeans	5219	6524.5	11557.8	13328.6	14036.4	16146.2	19869.1

Notes: Data for 1950, 1960 and 1970 are derived from Census, some of them refer either to foreign-born population or to aliens, we always chose to present the aliens value, with the exception of the United Kingdom where only the foreign population value is available. Data for 1980-98 are derived from different national sources and refers to foreign population, not to foreign born population. They are derived from population registers for Austria, Belgium, Germany, Netherlands, Luxembourg, Denmark, Sweden, Norway, Finland; from residency permits for Italy, Spain and Portugal, for Labour Force Surveys for Ireland and United Kingdom and Census for France. If foreign born population is considered the share for Netherlands goes up to 9.5, Sweden to 10.8, Norway 6.1, Denmark 5.4. a. 1975, b. 1950-70 refers to foreign-born population and Commonwealth and West Indies are included; c. Seasonal workers excluded, d. Data includes Algerians (20.000 in 1948 and 470.000 in 1968), 1985 estimated. Values and percentages only refer to legal immigrants.

Source: For 1950, 1960 and 1970 United Nations (1979) and Bonifazi and Strozza (2001), for 1980-98 SOPEMI (2000).
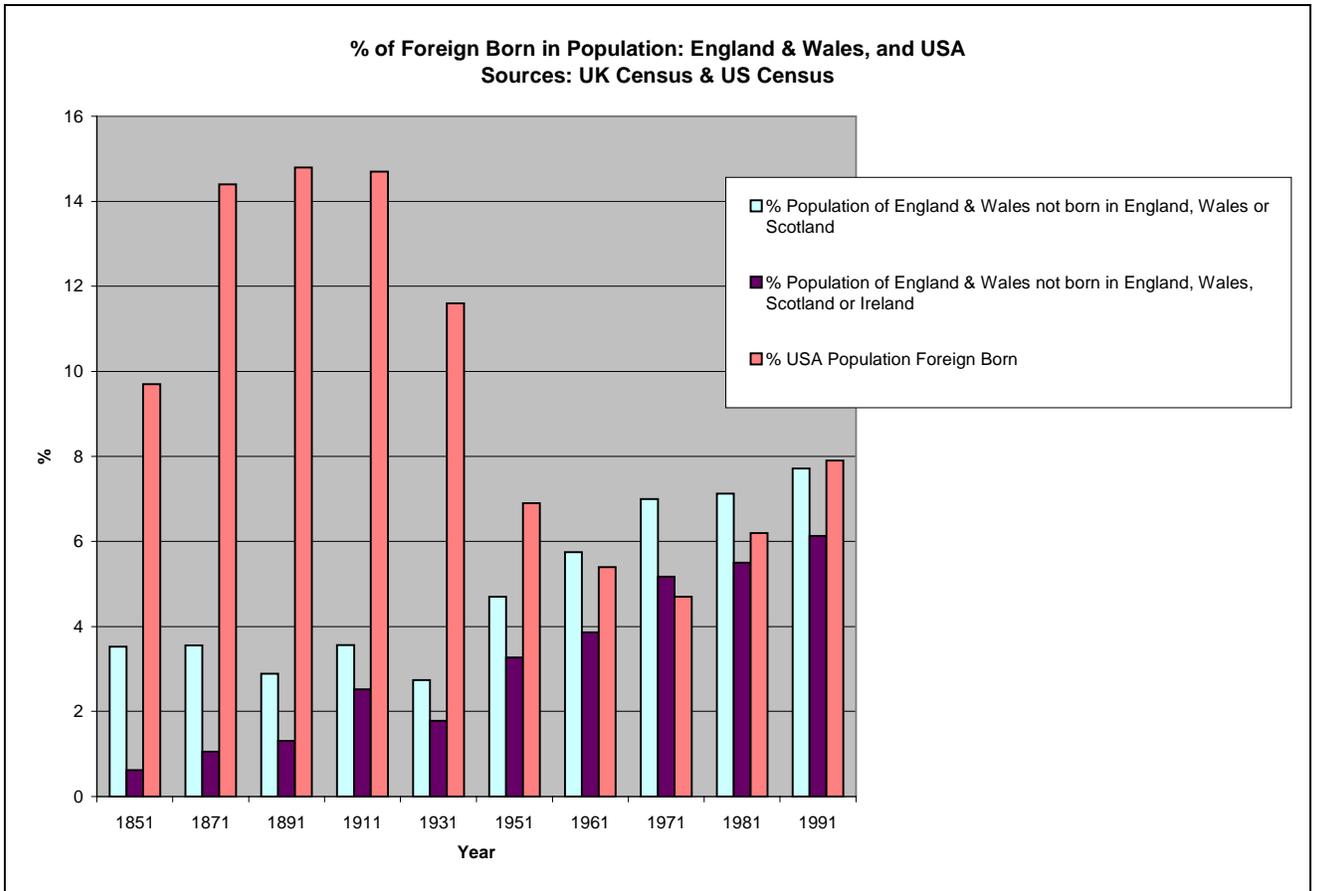
Table 1.1b: Foreign population in % of the population in the country of destination

	1950	1960	1970	share of EU-foreigners 1950-1970	1980	1985	1990	1998	Share of EU-foreigners 1998
North Europe									
Denmark (a)	na	na	1.8	Na	1.9	2.2	2.5	4.8	20.7
Sweden	1.8	2.5	5	95	5	4.6	4.7	5.6	40
Norway	0.5	0.7	2	Na	2	2.4	2.6	3.7	45.7
Finland	na	na	na	Na	na	0	0.4	1.6	18.4
Ireland	Na	na	na	Na	2.4	1.9	2.2	3	76.7
United Kingdom (b)	3.4	4.5	5.7	60	3	3.1	3.2	3.8	40
West Europe									
Austria	11	na	7	88	Na	4	4.1	9.1	13
Belgium	4.3	4.6	7.2	85	8.9	8.5	8.6	8.7	63.1
Netherlands	1.1	1	1.9	66	3.6	3.8	3.9	4.2	29
Switzerland (c)	6.1	10.8	17.2	96	14.1	14.6	14.7	19	62
Luxemburg	9.9	13.2	18.4	53	na	26.5	26.3	35.6	87
France(d)	4.2	4.6	5.3	61	6.8	na	6.8	6.3	36.5
Germany	Na	1.2	4.5	77	5.6	5.6	7.4	8.9	25.3
South Europe									
Italy	0.1	0.1	0.2	39	0.1	0.1	1.2	2.1	13.7
Portugal	0.2	0.3	0.4	26	0.6	0.9	1	1.8	27.1
Spain	0.3	0.2	0.4	60	0.5	0.6	1.1	1.8	41
total Europe	2.4	2.3	3.6	Na	3.7	3.9	4.4	5.3	Na

See for notes and sources Table 1a.

Table 1.2: Migratory Balance in Europe, 1950-95

	1950-60	1960-70	1970-80	1980-90	1990-95
Migratory balance in million persons					
East Europe (a)	-3.2	-1,1	-0,4	-0,9	-1,9
North Europe (b)	-1,0	-0,1	0,0	0,3	0,3
West Europe (c)	2,9	4,2	2,8	3,0	4,2
South Europe (d)	-2,5	-2,7	0,4	0,3	0,6
Total Europe	-2,2	0,3	2,8	2,8	3,2
Net migration per 1000 habitants (annual average)					
East Europe	-2,9	-1,1	-0,4	-0,7	-3,2
North Europe	-1,3	-0,2	0,0	0,4	0,7
West Europe	2,1	2,6	1,7	1,7	4,7
South Europe	-2,7	-2,6	0,4	0,2	1,0
Total Europe	-0,5	0,1	0,6	0,7	1,3

Notes: (a) Albania, Bulgaria, Republic Chic, Slovakia, Ungheria, Poland, Romania, East Germany and ex Yugoslavia (Bosnia-Herzegovina, Croatia, Macedonia, Slovenia and Yugoslavian Federation). (b) Denmark, Finland, Island, Ireland, Norway, Sweden and United Kingdom. (c) Austria, Belgium France, Germany, Luxembourg, Netherlands and Switzerland. (d) Greece, Italy, Malta, Portugal and Spain.
Sources: United Nations Unite [1979,1999] from Bonifazi e Strozza (2001) and from United Nations (1979).

Figure 1.1

% of Foreign Born in Population: England & Wales, and USA
Sources: UK Census & US Census

Legend:
- □ % Population of England & Wales not born in England, Wales or Scotland
- ■ % Population of England & Wales not born in England, Wales, Scotland or Ireland
- ■ % USA Population Foreign Born

X-axis: Year (1851, 1871, 1891, 1911, 1931, 1951, 1961, 1971, 1981, 1991)

Y-axis: %

Table 1.3a: Inflows into Germany, France, Italy , Greece and the United Kingdom from CEEC, 1993

To	From	Yugoslavia/ Montenegro	Bosnia-Her-zegovina	Albania	Romania	Croatia	Bulgaria	Poland	Hungary	Russian Federation	total East Europe	total immigration
		Immigration in thousand persons (in % of total immigration)										
Germany	Thsd. persons	141	107	na	81.2	26	27.2	75.2	24.2	42.7	525	986.9
	in %	14.3	10.8	na	8.2	2.6	2.8	7.6	2.5	4.3	53.1	100
France	Thsd. persons	4	na	na	1	Na	Na	1.1	Na	na	6	99.2
	in %	4.0	na	na	1.0	Na	Na	1.1	Na	na	6.0	100
Italy	Thsd. persons	23.2	4.2	2.2	3	8	Na	na	Na	na	41	60
	in %	38.7	7	3.7	5	13.3	Na	na	Na	na	67.7	100
UK	thsd. persons	Na	na	na	Na	Na	Na	3.5	Na	na	8	190.3
	in %	Na	na	na	Na	Na	Na	1.8	Na	na	4.2	100.0
Greece	Thsd. persons	3	na	4.4	3.3	Na	6.1	na	Na	na	16.5	69.2
	in %	4.3	na	6.3	4.7	Na	8.8	na	Na	na	23.8	100
Source: Eurostat.												

Table 1.3b :Inflows into Germany, France, Italy, Greece and the United Kingdom from CEEC, 1997

| To	From	Yugoslavia/ Montenegro	Bosnia Her-zegovina	Albania	Romania	Croatia	Bulgaria	Poland	Hungary	Russian Federation	total East Europe	total immigration
		Immigration in thousand persons (in % of total immigration)										
Germany	Thsd. persons	31	6.9	na	14.2	10	6.3	71.2	11.2	29.2	180	615.3
	in %	5.1	1.1	na	2.3	1.6	1.0	11.6	1.8	4.7	29.3	100
France	Thsd. persons	1.5	na	na	0.6	Na	na	0.8	Na	0.7	4	80.9
	in %	1.9	na	na	0.7	Na	na	1.0	Na	0.9	4.9	100
Italy	Thsd. persons	5.7	na	11.2	5.9	1.5	na	3.8	Na	3.1	35	110.9
	in %	5.1	na	10.1	5.3	1.4	na	3.4	Na	2.8	31.6	100
UK	thsd. persons	na	na	4	Na	Na	na	5.4	Na	na	10	236.9
	in %	na	na	na	Na	Na	na	na	Na	na	4.2	100
Greece	Thsd. persons	2.9	na	4.3	3	Na	5.6	2.1	Na	11.8	29.46	77.2
	in %	3.7	na	5.6	3.8	Na	7.2	2.7	Na	15.3	38.2	1000
Source: Eurostat.												

Table 1.3c: Migration stocks and net migration from the accession candidates (CEEC-10)

	cumulative net migration from the CEEC-10 [1]		stock of residents from the CEEC-10 [1]		stock of employees from the CEEC-6 [2]	
	Σ 1990-1998		1999		1995	
	in persons	in % of population	in persons	in % of population	in persons	in % of employees
	country figures in italics are estimated					
Austria	n.a.	n.a.	*103 000* [5]	*1.27*	37 989	1.14
Belgium	5 491	0.05	11 233	*0.11*	1 584	0.04
Denmark	6 728	0.13	9 167	*0.17*	1 571	0.06
Finland	11 705	0.23	12 804	*0.25*	487	0.02
France	n.a.	n.a.	*22 000* [5]	*0.04*	7 965	0.04
Germany	606 718	0.74	547 837 [6]	*0.67*	160 852	0.49
Greece	n.a.	n.a.	20 131 [7]	*0.19*	8 324	0.22
Ireland	n.a.	n.a.	*200* [5]	*0.01*	n.a.	n.a.
Italy	n.a.	n.a.	55 791 [7]	*0.10*	1 595	0.01
Luxembourg	1 272	0.29	*700* [5]	*0.16*	212	0.21
Netherlands	16 914	0.11	11 268	*0.07*	2 579	0.04
Portugal	n.a.	n.a.	819	*0.01*	*200*	0.00
Spain	n.a.	n.a.	13 819	*0.04*	2 256	0.02
Sweden	19 923	0.22	26 394	*0.30*	*7 116*	*0.17*
United Kingdom	1 582 [4]	0.00	39 000 [8]	*0.07*	15 146	0.06
total [3]	**670 333**	0.18	**748 263**	*0.20*	**240 558**	**0.18**
EU-15 (estimate)	..	..	**874 163**	*0.23*	**247 874**	**0.18**

1) Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia. - 2) Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovak Republic. - 3) Non-estimated countries only. - 4) 1990-1997. - 5) 1997. - 6) 1. January 1999. - 7) 1998. - 8) 1997. Estimated on basis of national records of labour participation of foreigners.

Source: Boeri/Brücker et al. (2001), based on Eurostat and national sources.

Figure 1.2   Migration rates of the EU-15 and selected EU countries, 1988-1998
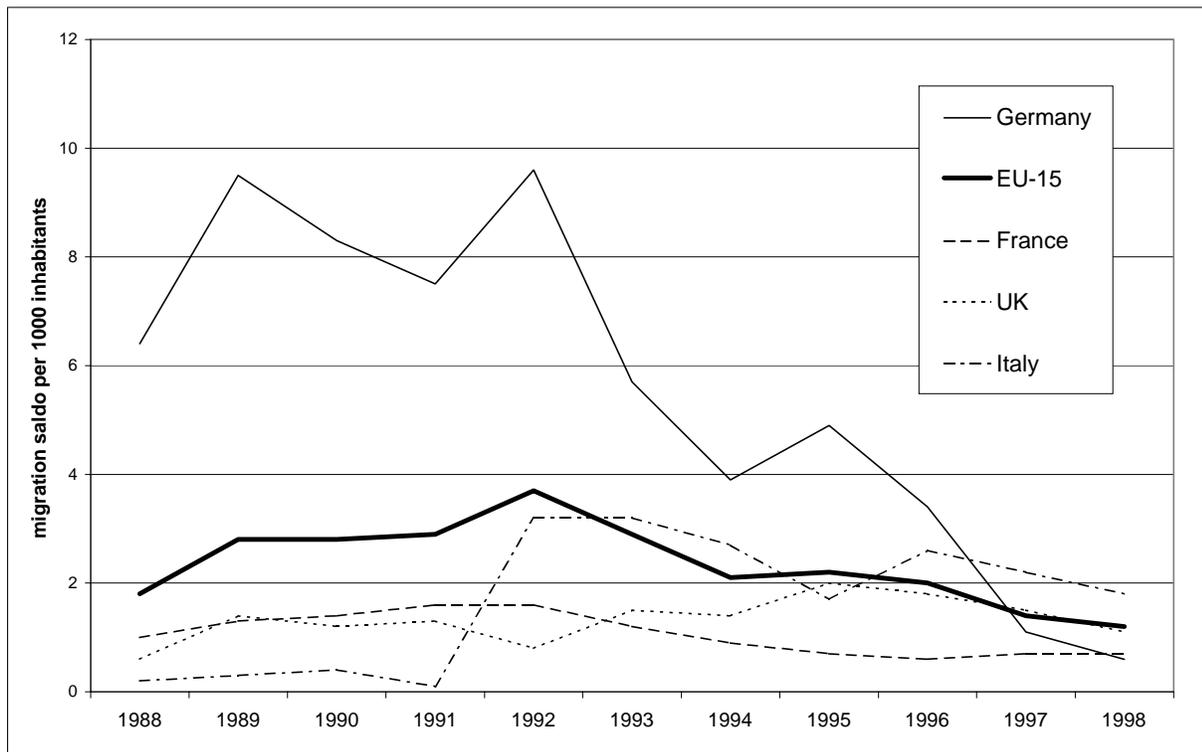
Sources: SOPEMI (2000), Eurostat (2000), own calculations.

Table 1.4:Inflows of Immigrants by continents of origin, 1997

	Germany		France		Italy		United Kingdom	
	in thousand persons	in %	in thousand persons	in %	in thousand persons	in %	in thousand persons	in %
total immigration	615.3	100.0	65.7	100.0	143.2	100.0	186	100.0
EU	150.6	24.5	6.4	9.7	9.2	6.4	61	32.8
non-EU	462	75.1	59.4	90.4	133.9	93.5	125	67.2
Europe	437.9	71.2	15	22.8	55.6	38.8	72	38.7
Other EEA[a]	4.7	0.8	0.6	0.9	0.7	0.5	1	0.5
CEECs	225.5	36.6	3.2	4.9	45.6	31.8	4	2.2
Africa	33.5	5.4	35.8	54.5	49.7	34.7	17	9.1
America	29.5	4.8	5.4	8.2	16.1	11.2	19	10.2
USA, Canada	17	2.8	2.4	3.7	1.4	1.0	16	8.6
Other Americas	12.5	2.0	3	4.6	14.7	10.3	2	1.1
Asia	105.9	17.2	9.3	14.2	21.4	14.9	56	30.1
Australia and Oceania	2.3	0.4	0.1	0.2	0.3	0.2	22	11.8

Notes: Other European Economic Area (EEA): Norway, Iceland, Lichtenstein.
Source: Eurostat Demographic Statistics.

Table 1.5   Stock of foreign population

	Germany			France			Italy			United Kingdom		
	1991	1999		1991	1997	%	1991	1999	%	1991	1998	%
	in thousand persons		% of total									
Total immigration	5882.2	7365	100	3597	3231	100	537	1250	100	2012	2207	100
EU	1487	1850	25.1	1312.0	1261	39.0	111.0	168.1	13.4	780.0	857	38.8
non-EU	4395.2	5515	74.9	2285	1970	61.0	426	1081.9	86.6	1232	1350	61.2
Europe	4856.2	5939	80.6	1662.0	1264	39.1	1987.0	486.5	38.9	950.3		
EEA	252.1			33.9	23	0.7	19.3			35.3		
CEEC	550	1907	25.9	63.0	63	1.9	20.8	292.6	20.1	49.3		
Africa	236.4	303	4	1633.0	1381	42.7	170.0	350.9	28.1	195.4		
Maghreb	75.1	125	1.7	572.0	1160	35.9	61.7	220.1	15.4	9.5	14	
America	160	199	2.7	72.8	75	2.3	64.2	172.8	13.8	278.0		
USA/Canada	99.7	122	1.7	24.2	33	1.0	19.6	63.1	5.0	117.3		
Other Americas		77	1.0		42	1.3		109.7	8.8			
Asia	553.4	798	10.8	227.0	354	11.0	85.8	225.5	18.0	500.1	490	23.7
Australia /Oceania	8	10	0.1	2.3	3	0.1	3.3	4.1	0.3	68.2		

1991 only Marocco

27

Table 1.6: Immigration inflows by main categories into selected countries, 1998

	Workers	Family reunification	Asylum seekers and refugees	Others[1]
	in % of total immigration			
Switzerland(a)	50	45	5	0
Sweden(b)	2	55	21	22
France(c)	21	55	10	16
Italy(d)	50	39	3	8
United Kingdom(e)	45	50	5	0
United States(f)	12	72	8	8
Canada(f)	55	29	13	3
Australia(f)	34	26	11	29

Notes: 1) Wit the exception of the UK and Switzerland,the total inflows includes also, students, visitors etc, thus the total does not sum up to 100.
(a) OCECD, 2000, reports in the text p.258 a different split for 1998 inflows 75.000, 31% family reunion, 36% employment. We suppose the difference between the split presented in p.20 and used in the table is due to the exclusion of seasonal workers. (b) 1997, (c) for France 1996, because in 1998 a legalisation took place; (d) 1999;. (e)from OCDE 2000, Passengers excluding European Economic Area nationals, admitted to the UK, The data only include certain categories of migrants: work permit holders, spouses and refugees. The category "Workers" include Commonwealth citizens with UK ancestry. (f) Inflows of permanent settlers 1998.
Source: OECD (2000); National Statistics for Italy (average 1998-1999).

Table 1.7: Inflows of Asylum seekers into selected OECD countries, 1980-1998

	1980	1985	1987	1989	1991	1993	1995	1996	1999	Average 1990-99	% asylum on Inflows 1998-99 *
GREECE	1.800	1.400	6.950	6.474	2.800	800	1.400	1.560	1.500	2.24	5.9
PORTUGAL	1.600	100	250	116	200	2.090	450	269	300	0.55	9*
ITALY	2.450	5.400	11.050	2.240	27.000	1.300	1.700	675	33.400	9.09	8.3
SPAIN		2.350	3.700	3.989	8.000	12.600	5.700	4.730	6.400	8.36	9.3*
FRANCE	18.790	28.809	27.568	61.372	50.000	27.600	20.400	17.405	30.900	29.72	21.5
GERMANY	107.800	73.850	57.400	121.318	256.100	322.600	127.900	116.193	95.100	187.96	31.5
THE NETHERLANDS	3.200	5.650	13.450	13.898	21.600	35.400	29.300	22.170	39.300	32.20	39.5
UNITED KINGDOM	9.950	6.200	5.900	16.830	73.400	28.000	55.000	34.800	91.200	49.68	21
AUSTRIA	9.300	5.300	6.000	8.200	15.400	26.500	11.700	6.991	20.100	12.96	–
SWUITZERLAND	3.020	9.700	10.900	24.425	41.600	24.700	17.000	18.001	46.100	28.25	37.7
NORWEY a	200	800	8.600	4.400	4.600	12.900	1.500	1.800	10.200	5.36	20
SWEDEN a	3.000	14.500	18.100	30.000	27.400	37.600	9.000	5.800	11.200	24.50	68.7
U.S.A. a	26.000	16.600	26.100	101.700	56.300	144.200	154.500	128.217	42.500	99.07	15
CANADA	1.600	8.400	35.000	19.900	32.300	21.100	25.600	26.120	29.400	27.92	16

• Percentage ratio between average (1990-99) demand of asylum seekers to 1998 or 1999 total inflows.
• For Portugal and Spain the estimated inflows. Inflows for Austria not available
a For Norway, Sweden and USA data of the first column refer to 1983

Source: SOPEMI (2000).

Table 1.8: Recent Regularisation in Europe by main country of origin

ITALY

I 1987-1988		II 1990		III 1996		IV 1998		%
Morocco	21.7	Morocco	49.9	Morocco	42.3	Albania	39.4	18.1%
Philippines	10.7	Tunisia	25.5	Albania	34.9	Romania	23.4	10.7%
Sri Lanka	10.7	Senegal	17.0	Philippines	29.9	Morocco	22.4	10.3%
Tunisia	10.0	ex-Yugoslavia	11.3	China	14.9	China	19.1	8.8%
Senegal	8.4	Philippines	8.7	Peru	14.9	Nigeria	11.6%	5.3%
Ex-Yugoslavia	7.1	China	68.3	Romania	10.0	Senegal	10.0	5.0%
Other	50.1	Other	97.1	Other	102.1	Other	91.7	42.4%
Total	118.1	Total	217.7	Total	249.0	Total	218.747	100

SPAIN

I 1985-1986		II 1991		III 1996		IV 2000	
Morocco	7.9	Morocco	49.2	Morocco	7		
Portugal	3.8	Argentina	7.5	Peru	1.9		
Senegal	3.6	Peru	5.7	China	1.4		
Argentina	2.9	Dominican Rep.	5.5	Argentina	1.3		
United Kingdom	2.6	China	4.2	Poland	1.1		
Philippines	1.9	Poland	3.3	Dominican Rep.	0.8		
Other	21.1	Other	34.7	Other	7.8		
Total	43.8	Total	110.1	Total	21.3	Total	126.9

PORTUGAL

I 1992-1993		II 1995	
Angola	12.5	Angola	9.3
Guinea-Bissau	6.9	Cape-Verde	6.9
Cape-Verde	6.8	Guinea-Bissau	5.3
Brazil	5.3	Brazil	2.3
San Tome'	1.4	Pakistan	1.7
Senegal	1.4	China	1.6
China	1.4	San Tome'	1.5
Other	3.5	Other	6.5
Total	39.2	Total	35.1

GREECE

I1997-98	
Albania	239.9
Bulgaria	24.9
Romania	16.7
Pakistan	10.8
Ucraina	9.8
Polond	8.6
Other	58.9
Total	369.6*

FRANCE

1997-98	
Algeria	12.5
Morocco	9.2
China	7.6
Demc.Rep.Congo	6.3
Tunisia	4.1
Other	11.3
Total	77.8

*Persone a cui e' stata concessa una "carta bianca" che rappresenta il primo stadio della regolarizzazione

Source: OECD, Trends in International Migration, various editions.

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Table 1.9: Population by main nationality and age groups, 1999

Country	EU15	Austria	Belgium	Netherland	Germany	France	United Kingdom	Denmark	Sweden
Age (males and females)				in % of total population					
Nationals									
0-14 years	17	16.7	17.9	18.7	14.8	19.5	20.2	17.4	18.3
15-24 years	12.3	11.4	12.2	11.9	10.4	12.7	11.7	11.5	11.6
25-49 years	36.2	37.8	36	39	36.6	36.3	35.7	36.5	33.7
50-64 years	17.9	17.9	16.7	17.2	20.5	15.6	17	18.7	18.4
65&+ years	16.6	16.3	17.3	13.2	17.7	15.8	15.3	15.8	18
15-64 years	66.4	67.1	64.8	68.1	67.5	64.6	64.5	66.8	63.8
Non-nationals: EU									
0-14 years	11	11.8	9.7	12.9	15.3	8.6	6.3	13.2	
15-24 years	10.3	8	9.8	8.8	12	6.4	11.9		9.1
25-49 years	46.1	54.7	48.3	52.6	46.7	43.7	42.9	53.6	52
50-64 years	21.5	13.6	18.7	19.5	20.8	25.4	22.3	22.7	29
65&+ years	11	12	13.5	6.2	5.3	15.8	16.5	7.4	9.8
15-64 years	77.9	76.3	76.8	80.9	79.4	75.8	77.1	79.4	90.2
Non-nationals:non-EU									
0-14 years	21.4	27.3	24	23.3	23.8	17.7	14.2	35.1	32.3
15-24 years	15.2	13.7	17.4	17.5	16.7	13	13.2	13.1	10.6
25-49 years	47.2	48.7	44.9	46.8	43.8	46.8	56.5	38	41.1
50-64 years	12.5	8.3	10.9	10.6	13.3	17.3	9.4	8	9.9
65&+ years	3.7	2.1	2.8	*1.9*	2.4	5.2	6.8	5.7	6.2
15-64 years	74.9	70.7	73.2	74.9	73.7	77.1	79	59.2	61.6
Italy, Spain, Greece and Portugal are omitted.									

Data Source: Eurostat, Labour Force Survey 1999.

Table 1.10: Share of foreigners in total employment in selected German Cities, 1997

City	foreign employees in % of total
Stuttgart	16.3
Munich	15.7
Frankfurt	15.5
Cologne	12.5
Berlin	10.0

Notes: All data refer to employment districts.
Source: Federal Employment Services (Bundesanstalt für Arbeit), special provision.

Table 1.11: Employment by Sectors in selected EU countries, 1995

	Austria	Belgium	Netherland	Germany	France	United Kingdom	Denmark	Sweden
			in % of total employment					
Nationals								
Agriculture	8.0	2.8	3.9	3.3	5.0	2.1	4.4	3.3
Industry	30.8	27.6	23.2	34.8	26.2	27.6	26.9	25.6
Services	68.6	69.6	72.9	61.8	68.8	70.2	68.7	71.1
Non-Nationals: EU								
Agriculture	1.5	0.9	0.1	1.1	3	0.6	7.8	0.7
Industry	23.2	39.6	22	43.8	43.4	23.8	33.6	30.7
Services	75.3	59.6	77.9	55.2	53.6	70.3	58.5	68.6
Non-Nationals: non-EU								
Agriculture	0.9	1.5	1.4	1.3	3.2	0.6	4.2	1.5
Industry	47.4	32.5	35.0	51.1	36.4	23.8	35.3	17.6
Services	51.7	66	63.6	47.6	60.3	75.6	60.6	80.9

Source: Kiehl/Werner (1999); based on Eurostat Labour Force Survey 1995.

Table 1.12: Employment by Occupations in some EU countries 1995 (%)

Country	Austria	Belgium	Netherlands	Germany	France	UK	Denmark
Nationals				in % of total employment			
Armed forces	0.3	1.1	0.6	0.6	1.4	0.5	0.6
Managers	7.7	10.4	12.6	6.1	7.9	14.9	6.5
Professional	9	18.5	14.5	12	10.6	14.7	12.2
Technician	13.8	10.2	18.2	19.7	17.4	8.3	16.8
Clerk	15.2	17	13.3	13.8	14.9	16.6	12.7
Service Worker	11.9	10	13.6	10.7	12	14.1	15.6
Framer/agric.worker	6.3	2.6	1.8	2.4	5.1	1.2	3.4
Craft Worker	18.9	13.4	10.8	18.3	13.3	12.7	12.6
Assembler	8.7	8	7.3	7.1	10.5	8.5	8.2
Basic occupation	8.1	8.8	7.3	9.5	6.8	8.5	11.5
Non-Nationals:EU							
Armed forces	0	0.1	0.7	0	0.2	0.2	0
Managers	15.8	15	11.3	9.2	5.4	18.8	11.9
Professional	23.8	11.4	16.5	8.8	6.4	21.4	20.1
Technician	21.4	10	16.1	11.4	6.3	6.8	20.6
Clerk	9.1	11.2	12.8	8.1	5.5	11.9	11.6
Service Worker	11.5	9.8	15	13.4	9.3	17.6	8.7
Framer/agric.worker	1.5	1	0.9	0.8	3.1	0.1	7.5
Craft Worker	8.3	20.2	12.6	19.6	29.4	8.3	6.6
Assembler	6.1	10.7	9.2	12.3	15.1	5.8	10.3
Basic occupation	2.5	10.7	5	16.6	19.1	8.9	2.7
Non-Nationals:non-EU							
Armed forces	0	0.7	0.3	0	0.1	2.5	0
Managers	2.4	12.4	7.1	3.3	7.4	16.8	9.4
Professional	3.2	7.6	7.6	5.1	5.7	19.6	17.4
Technician	5.5	3.5	7.9	8.1	5	6.9	11.2
Clerk	3	6.8	7.3	5.4	5.8	10.2	5.4
Service Worker	8.4	12.7	14.8	12.2	13.3	17.9	7.2
Framer/agric.worker	0.1	1.7	1.3	0.8	3.9	0.1	1.7
Craft Worker	28.8	16.2	14.7	26.5	20.8	8.5	11.1
Assembler	18.1	14.1	18.3	15.7	19.4	7.8	11
Basic occupation	30.6	24.3	20.8	22.8	18.6	9.8	25.6
Source: Kiehl/Werner (1999); based on Eurostat Labour Force Survey 1995.							

Table 1.13: Unemployment rate by main groups 1999, %

	Nationals	Non-Nationals	
		EU	Non-EU
		Unemployment rate in %	
Austria	4.3	Na	9.5
Belgium	7.6	13.3	35.7
Netherlands	3.4	3.3	18.5
France	11.4	10.5	30.5
Germany	8.2	8.8	18.9
United Kingdom	6	7.3	11.5
Denmark	5	Na	16.4
Sweden	7.2	Na	28.4

Source: Eurostat Labour Force Survey, 2000.

Figure 1.3

Share of foreigners or the foreign-born in total unemployment relative to their share in the labour force 1995-1998 average

Source: OECD 2000, Trends in International Migration - Chart I.12, page 52.
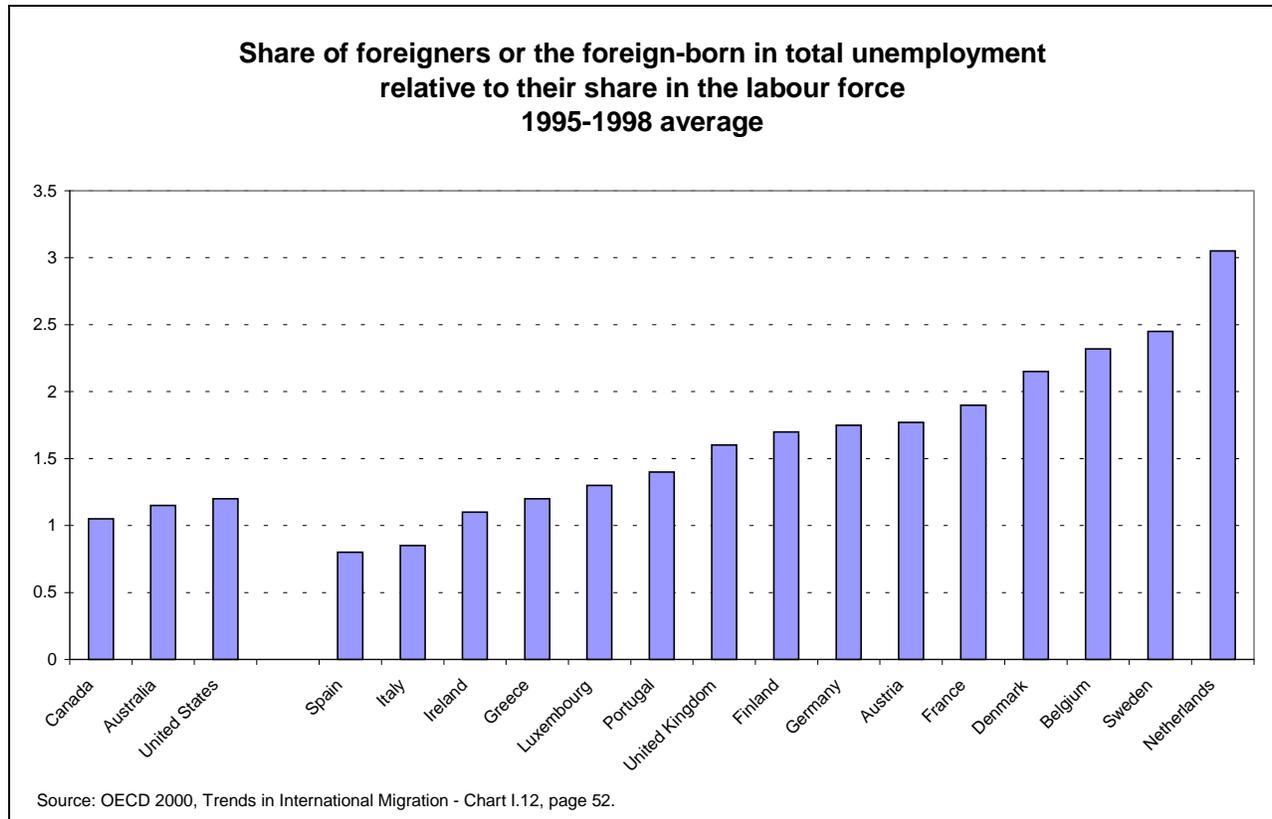
Table 1.14: Unemployment rate in selected EU countries 1983-95 (%)

	Belgium			All Non Nationals on Nationals	Netherlands			All Non Nationals. on Nationals	Denmark			All Non Nationals. on Nationals
	Nationals	All Nationals	Non-Eu		Nationals	All Nationals	Non-Eu		Nationals	All Nationals	Non-Eu	
1983	10.8	21.9	19.2	2.0	11.3	24.5	16	2.2	9.6	19	8.1	2.0
1985	10.5	22.6	19.8	2.2	9.8	27.1	15.4	2.8	7.7	14.8	8.2	1.9
1987	10.2	24.7	21.7	2.4	9.4	24.9	14.4	2.6	5.9	15.2	11.3	2.6
1989	7.2	22	17.4	3.1	8	26.6	11.8	3.3	8	17.5	7.7	2.2
1991	6.1	18	15.1	3.0	6.6	25.2	12	3.8	8.9	19.1	15.8	2.1
1993	7.1	19.4	14.6	2.7	5.7	19.6	8.1	3.4	10.4	28.1	19.7	2.7
1995	8.1	23.4	17.4	2.9	6.5	23.5	11	3.6	6.8	18.1	7.2	2.7
	France			All Non Nationals. on Nationals	Germany			All Non Nationals on Nationals	United Kingdom			All Non Nationals on Nationals
	Nationals	All Nationals	Non-Eu		Nationals	All Nationals	Non-Eu		Nationals	All Nationals	Non-Eu	
1983	7.4	14.5	11.2	2.0	6	11.3	9.7	1.9	11	13.9	11.2	1.3
1985	9.6	18.5	12.2	1.9	6.4	12	9.7	1.9	11.3	15.1	14	1.3
1987	10.2	19	11.7	1.9	6.3	12.5	9.6	2.0	10.9	13.2	12.3	1.2
1989	9	17.8	10.2	2.0	5.4	9.3	6.7	1.7	7.3	9.8	9	1.3
1991	8.7	16.7	9.5	1.9	5.1	8.4	4.8	1.6	8.4	12.2	10.5	1.5
1993	10.8	20.6	11.5	1.9	7.1	13.3	7.9	1.9	10.1	16	11.9	1.6
1995	11.2	21.7	10.5	1.9	7.5	15	9.4	2.0	8.5	14.3	11	1.7

Data source Eurostat Labour force Survey 1983-95

From: Kiel M., Werner H., 1999.

2. European Attitudes Towards Immigrants

2.1. Attitudes towards migrants in the context of economic conduct and performance

This chapter is concerned with the important three components in the attitude of the native population towards immigration: racism, labor market effects and welfare take-up. Attitudes and sentiments towards migrants and foreigners vary quite widely across countries. They may arise from racial antipathy or may be associated with economic fears about conditions in the labor market, the generosity of the welfare state, and in particular an individual's own economic perspective. They may be also related to the success and degree of assimilation of foreigners in labor market and society. Since success is affected by personal characteristics, it is also important how migrants are selected into the host country.

Racial prejudice is one important element of behavior against migrants and can be fueled from various sources. It typically arises from personal insecurity and fear for the future of natives, for instance caused by a fear of loss of national characteristics. Racial attitudes can also derive from a taste for cultural homogeneity. Ethnic origin is mostly the basis for racial prejudice and discrimination, and the degree to which these happen depends on how dissimilar immigrants are culturally and ethnically from the native population.

Racism and xenophobia can be related to economic concerns about the development of society, the labor market and the welfare state. Migrants can be considered to be a threat to the native population in that their presence could increase unemployment and depress wages. It is also conjectured that migrants rely more heavily on welfare payments and hence are often seen as exploiting the welfare system. Consequently, those natives that are directly affected by competition from migrant workers are more likely to exhibit racial behavior. However, it is also possible that natives are jealous of migrants good performance in the labor market and society and it is this that causes the negative feeling.

Since immigration is controlled by particular policies, this policy is partly responsible for the characteristics of the immigrants a country receives, their economic performance and that of the economy as a whole, and as well as how immigrants are perceived by the native born population. If the migration policy takes into account labor market needs, it is more likely that migrants perform relatively well in the labor market, assimilate quickly and contribute to the development of the economy. If non-economic motives dominate the selection of migrants, it is less likely that they perform well in the economy. Their skills may be less transferable to the host country, and consequently labor market assimilation is more

difficult. This all implies that the choice of a migration policy should be expected to have an impact on the sentiments of natives towards foreigners.

Native workers can be affected by immigrants either through payments needed for the welfare system or through their effects on the labor market. If immigrants are substitutes for a group of natives, the natives may suffer from depressed wages or a rise in unemployment. If they are complements, natives will benefit, however. For example, it may be argued that low-skilled immigration is likely to benefit native high-skilled workers, while high-skilled migration may benefit native low-skilled workers. If some labor markets are in excess demand, immigration of those workers does not harm natives, but cause benefits. As long as migrants bring no capital with them, native capital owners will gain from migration. As a consequence, it is not unlikely that sentiments towards immigration are likely to depend on labor market status, education and type of skills.

There are only few contributions in the economic literature. An early paper is by Gang and Rivera-Batiz (1994), who investigate the effect of foreign workers on the employment status of German citizens and whether attitudes toward immigrants are related to the labor status of natives or to prejudice and ethnic bias. Dustmann and Preston (2000a, 2000b) deal with similar issues in the British context and also investigate the local context and the role racial attitudes have and how they are generated. Fertig and Schmidt (2001) study the welfare dependence of migrants in Germany and contrast the actual figures with the German natives perception of migrants welfare dependency. Bauer, Lofstrom and Zimmermann (2000) compare native sentiments of migrants across various OECD countries and contrast the perceived variance to different migration policies.

It is clear from this discussion that social and economic concerns may be interrelated. To suggest some basic structure for the analysis, this chapter will further investigate the attitudes using survey data similar to previous contributions in the literature. To begin with an instructive example, we consider country-aggregates of survey responses on concerns about migration and unemployment. Unemployment is often seen as a major problem associated with immigration, and hence one would expect to see a high positive association between the worries over unemployment and the worries over immigration in population surveys.

The 1997 Eurobarometer survey contained various questions on the attitudes of Europeans toward immigrant populations. The question asked was: "I am going to read out a list of some of the big political and social issues of our time. Could you please tell me which three are you most worried about?" Among the potential answers were "unemployment in Europe" and "immigration". Excluding Luxembourg and Greece, Figure 2.1 contains the

aggregate responses in the remaining 13 member states of the European Union concerning the worries expressed over unemployment and immigration.

The message provided by Figure 2.1 is compelling: By no means is there a clear-cut relationship between both concerns. To the contrary, the variables seem to exhibit no interaction at all. There appear to be four distinct groups of countries. The group with least worries about migrants and unemployment contains the United Kingdom, Ireland and the Netherlands. Danish respondents have been the only ones expressing serious concerns about migrants and little concern about unemployment, and hence form their own group. Finland, Portugal and Spain do not have serious concerns with migration, but worry over unemployment, and form the third group. The fourth group contains the remaining countries: Austria, France, Italy, Belgium, Sweden and Germany. Here worries are relatively high about both migrants and unemployment. Germans find unemployment most worrying, although the German unemployment rate ranks in the middle of all European countries. Danes are most afraid about migration, while the Danish foreign population share ranks only middle amongst the European Union member states. This is another observation that suggests that fears and facts are not necessarily related.

In the next section, we first investigate the occurrence of racism. The following section studies attitudes towards migrants and their determinants in more detail. The final section deals with the interaction of migration policies and sentiments.

Figure 2.1: Main political and social worries of our time: percentage of respondents mentioning immigration or unemployment in Europe
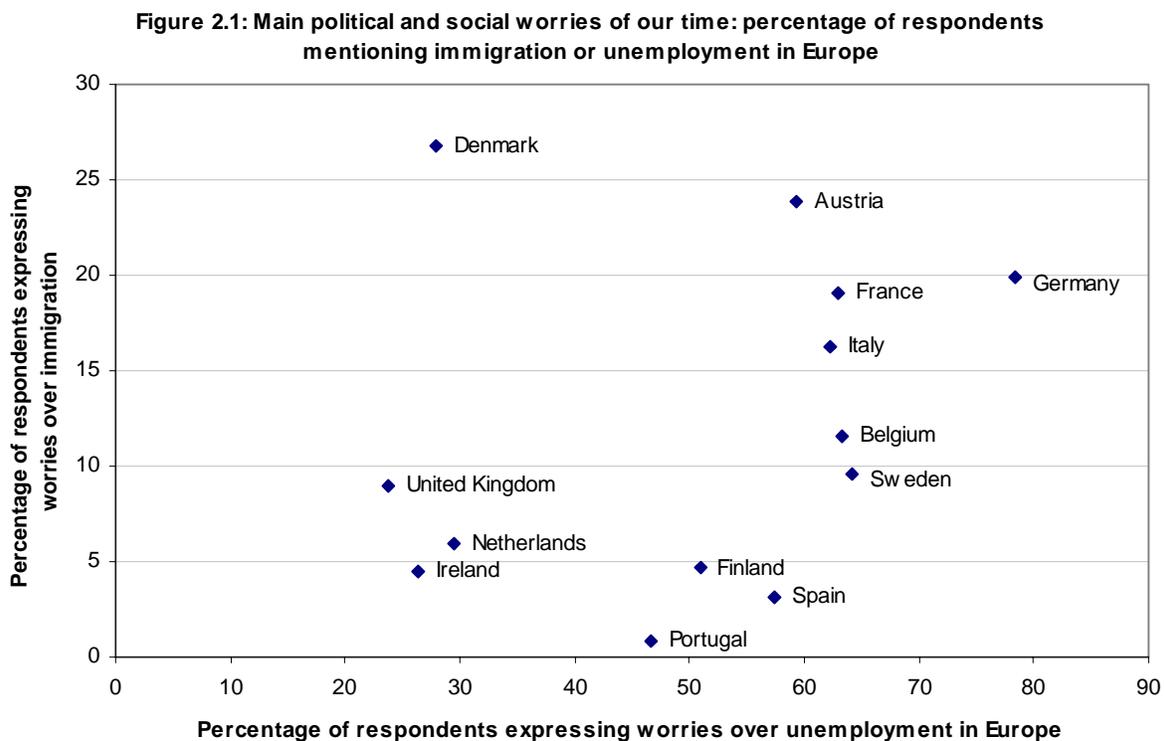
2.2. Racism and concerns about unemployment and migration

The 1997 Eurobarometer survey contained a question on racism: "Some people feel they are not at all racist. Others feel they are very racist. Would you look at this card and give me the number that shows your own feelings about this? If you feel you are not at all racist, you give a score of 1. If you feel you are very racist, you give a score of 10. The scores between 1 and 10 allow you to say how close to either side you are." Although only few people said that they are "very racist", the overall level of racism and xenophobia was worrying. Nearly 33 percent of those interviewed openly described themselves as "quite racist" or "very racist" (4 –10 scores).

The percentage of those reporting some racist feelings (who scored 2 -10 in the survey) in 1997 are graphed against the 1996 OECD standardized unemployment rates (see Figure 2.2), and against the 1996 foreign population share (see Figure 2.3). Judging from Figure 2.2, there is no indication of a positive relationship between the actual experience of unemployment and the share of reported racist feelings in the various countries. To the contrary, the line in Figure 2.2 is negatively sloped, although the decline is not statistically significant.

Figure 2.2: Percentage of respondents reporting racist feelings by 1996 unemployment rate
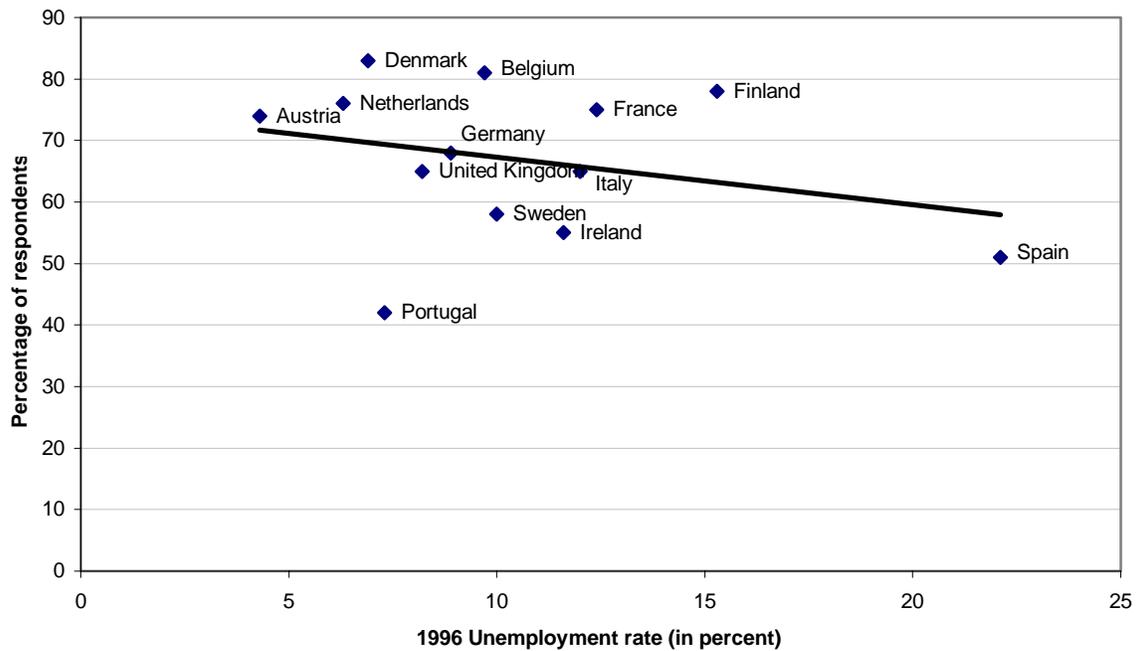
Figure 2.3: Percentage of respondents reporting racist feelings by 1996 foreign population share
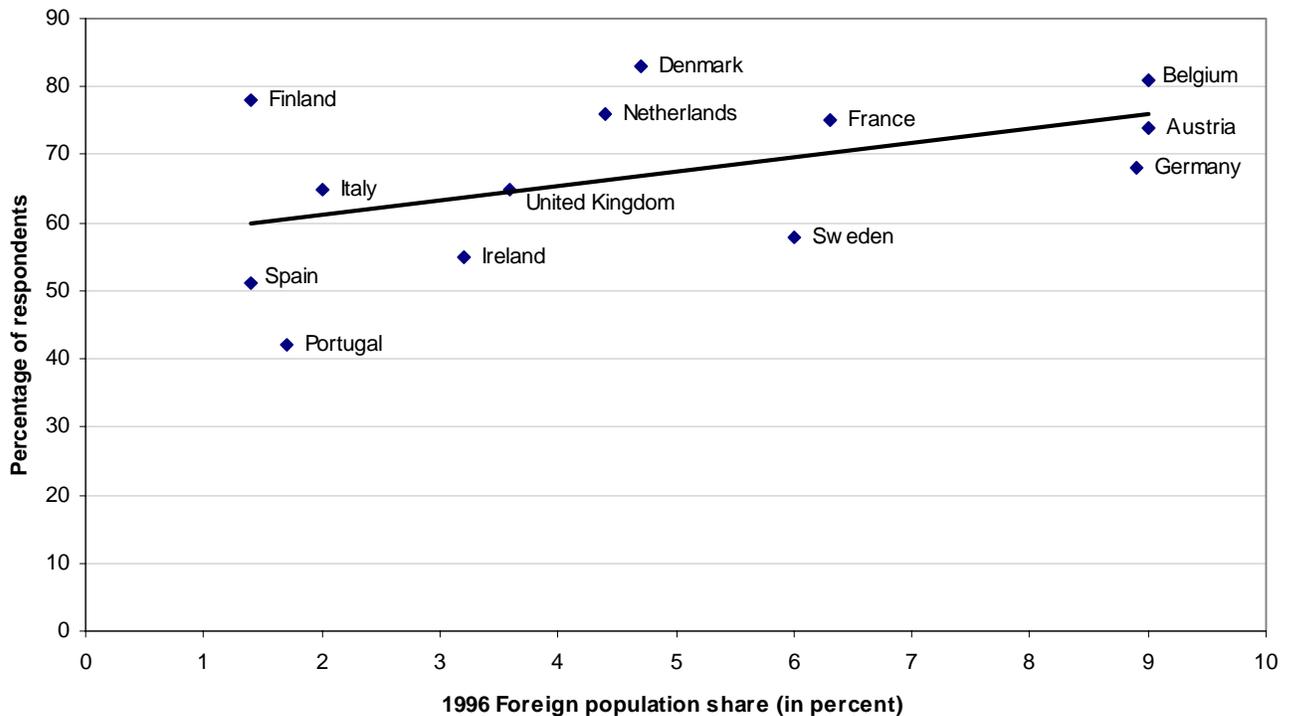
Portugal and Spain seem to be outliers, with the lowest level of racist feelings, probably because there are few foreigners in the country. Figure 2.3, however, shows the expected positive relationship between the foreign population share and the reported racist feelings.

To examine this more formally, an illustrative regression across the European Union countries was run. Self-reported racism in 1997 was explained by the 1996 unemployment rate, the 1996 foreign population share, and the mean real GDP growth rate over the 1991-1996 period. The result of the regression analysis is contained in column 1 of Table 2.1. It shows that this approach has hardly any explanatory power and the regression coefficients are never close to significance. This implies that racism is unrelated to the central economic variables of the debate, at least at this level of analysis.

The study by Dustmann and Preston (2000a) provides a deeper analysis of racial attitudes at the micro level. Based on data for white respondents from England contained in the British Attitude Survey using various years between 1983 and 1991, they estimate a multi-stage factor model, where they compose attitudes towards further immigration through the three channels welfare, labor market and racial issues. In this analysis, various racial indicators and their determinants are examined. We will report their findings in some detail.

Dustmann and Preston (2000a) use three different questions in the survey as measures of racial prejudices: (i) Self-rated prejudice against minorities: 64% of respondents are "not prejudiced at all". (ii) Acceptability to inter ethnic marriage of a relative with a person of Asian or West Indian origin: 48% would "not mind", and (iii) Acceptability of a suitable ethnic minority superior at work of Asian or West Indian origin: 64% would "not mind". Racial attitude probit regressions using these indicator variables show that racial hostility is positively associated with ethnic concentration at the county level; at the individual level, hostility seems to be lower for low income groups, females, Catholics, young people and for the highly educated. Neither the unemployment rate at the county level nor individual unemployment experience have a significant impact on hostility measures.

As we have seen in Figure 2.1, worries over unemployment and immigration measured in the 1997 Eurobarometer survey are uncorrelated. Are there any general observations we can make concerning the potential economic forces that are driving theses worries? Are they related to the size of ethnic groups in the country or to the degree of measured racism? It is instructive to first consider some figures. There is some positive relationship between the foreign population share in 1996 and the worries expressed in 1997 concerning immigration and unemployment (see Figures 2.4 and 2.5).

Table 2.1: Racism and concerns about unemployment and immigration

	I	II	III
	Self reported racism	Concerned about unemployment	Concerned about immigration
1996 Unemployment rate	-0.24 (0.94)	2.02 (0.84)	-0.19 (0.57)
1991-1996 Mean GDP growth	-2.56 (2.69)	-6.75 (2.54)	-0.07 (1.70)
1996 Foreign population share	1.84 (1.41)	5.41 (1.38)	1.06 (0.92)
Self reported racism	-	-.63 (.30)	.26 (.20)
Constant	65.57 (16.77)	58.44 (24.79)	-8.49 (16.57)
Adjusted R^2	0.09	0.64	0.28

Source: Eurobarometer 1997, own calculations. Standard deviations in parentheses.

Notes: I : if respondent declares some degree of racist feeling, = 0 otherwise.
    II: if respondent considers unemployment in Europe to be one of the three most important political and social issues of our time, = 0 otherwise.
    III: if respondent considers immigration to be one of the most important three political and social issues of our time, = 0 otherwise.

Figure 2.4: Percentage of respondents considering immigration to be an important issue by 1996 foreign population share
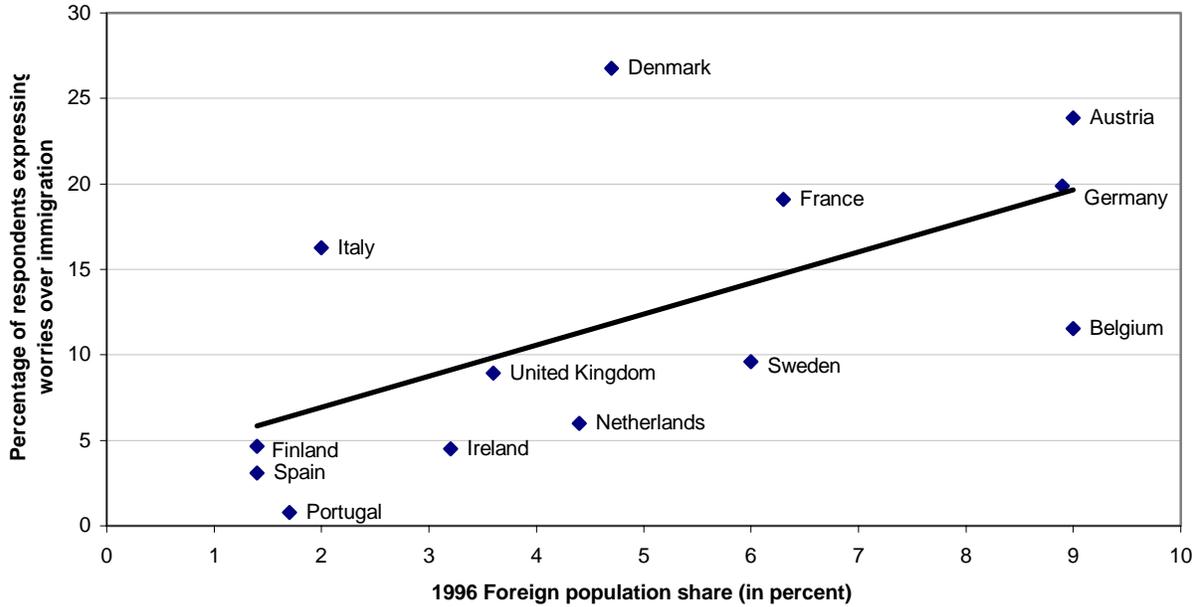
We find a linear upward trend between the foreign population share and expressed worries over immigration (see Figure 2.4). Countries where worries over immigration are particularly high given the observed foreign population share (measured by the line in the figure) include Italy, Denmark, France, Austria and Germany. Figure 2.5 exhibits a U-shaped relationship between the foreign population share and the expressed worries over unemployment in Europe. Four distinct groups show up. First, a group with low foreign share but large worries over unemployment including Italy, Spain, Finland and Portugal. Second, a group with low unemployment concerns and a medium foreign share including Ireland, the United Kingdom, the Netherlands and Denmark. Then, a group with very large worries over unemployment but medium foreign population share consisting of Sweden and France; and finally there is a country group (Germany, Belgium and Austria) with very high worries over unemployment and high levels of the foreign population share.

The expressed worries concerning unemployment in Europe are largely unrelated with the foreign population share, and hence not shown here. Figure 2.6 exhibits these worries against the actual OECD standarized unemployment rates in 1996. A positively sloped line fits well along the responses measured in Portugal, Finland and Spain, who can be considered responding "average" given the size of the actual unemployment problem. Low concerns about unemployment are found for the Netherlands, Denmark, the United Kingdom and Ireland. Large worries over unemployment are found in Austria, Belgium, Sweden, Italy, France, and especially in Germany.

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Table 2.1 contains two regressions explaining the concerns towards unemployment and immigration by the actual unemployment rate in 1996, the mean real GDP growth in 1991-1996, the 1996 foreign population share and the degree of self reported racism in the particular country. We find that the worries about unemployment can be quite explained by these variables. The larger the previous unemployment rate and the foreign population share, and the lower past growth was, the higher are these worries. More racist countries are less worried about unemployment. In contrast, not even racism seems to have an effect.

To conclude, there is some evidence that the presence of foreigners or ethnic minorities may cause racial tensions. While this is less visible in the cross-country comparisons among the European Union member states, it is quite clear at the local level. General economic conditions like economic growth and country level unemployment play no role, as is true for the local unemployment rate and the individual unemployment experiences. Education plays a positive role in moderating ethnic hostility, perhaps because it may make economic arguments more accessible to those educated, or education attracts those more inclined to think in such terms. It is also important to note that concerns over unemployment are affected by economic factors, the size of the foreign population and the degree of racism, but concerns over immigration are not. Hence, a deeper analysis of attitudes towards foreigners is needed, which will be carried out in the next section

Figure 2.5: Percentage of respondents considering unemployment in Europe to be an important issue by 1996 foreign population share
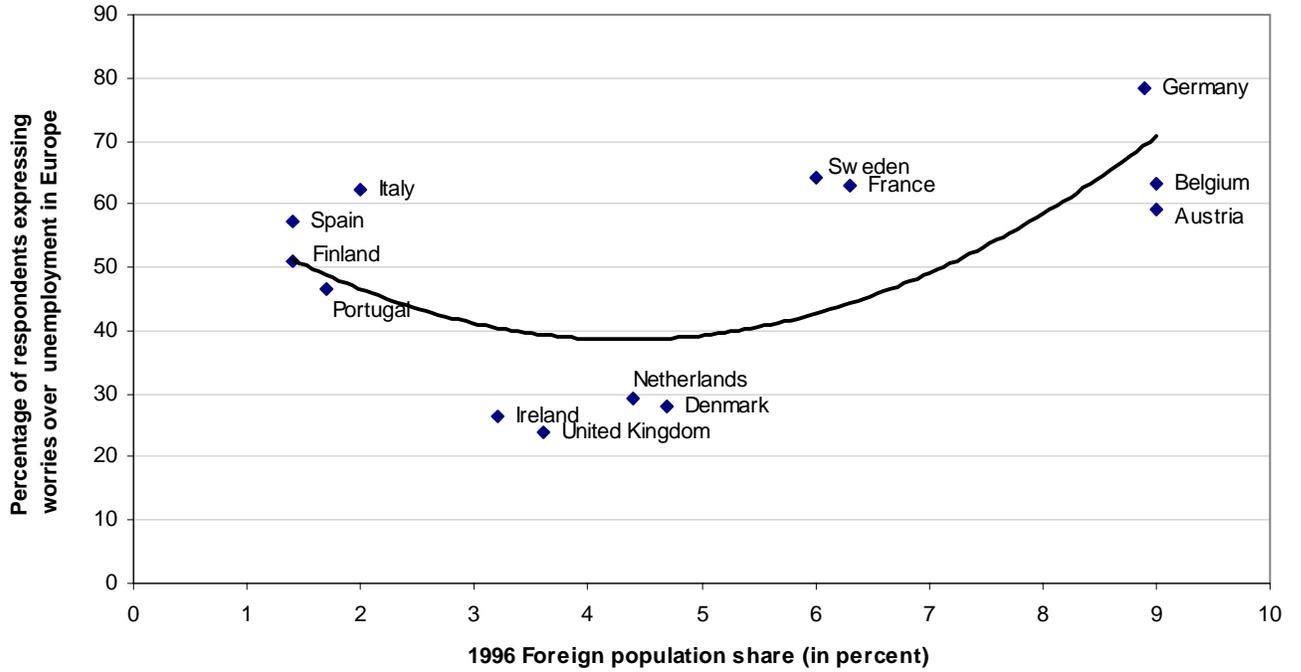
Figure 2.6: Percentage of respondents considering unemployment in Europe to be an important issue by 1996 unemployment rate
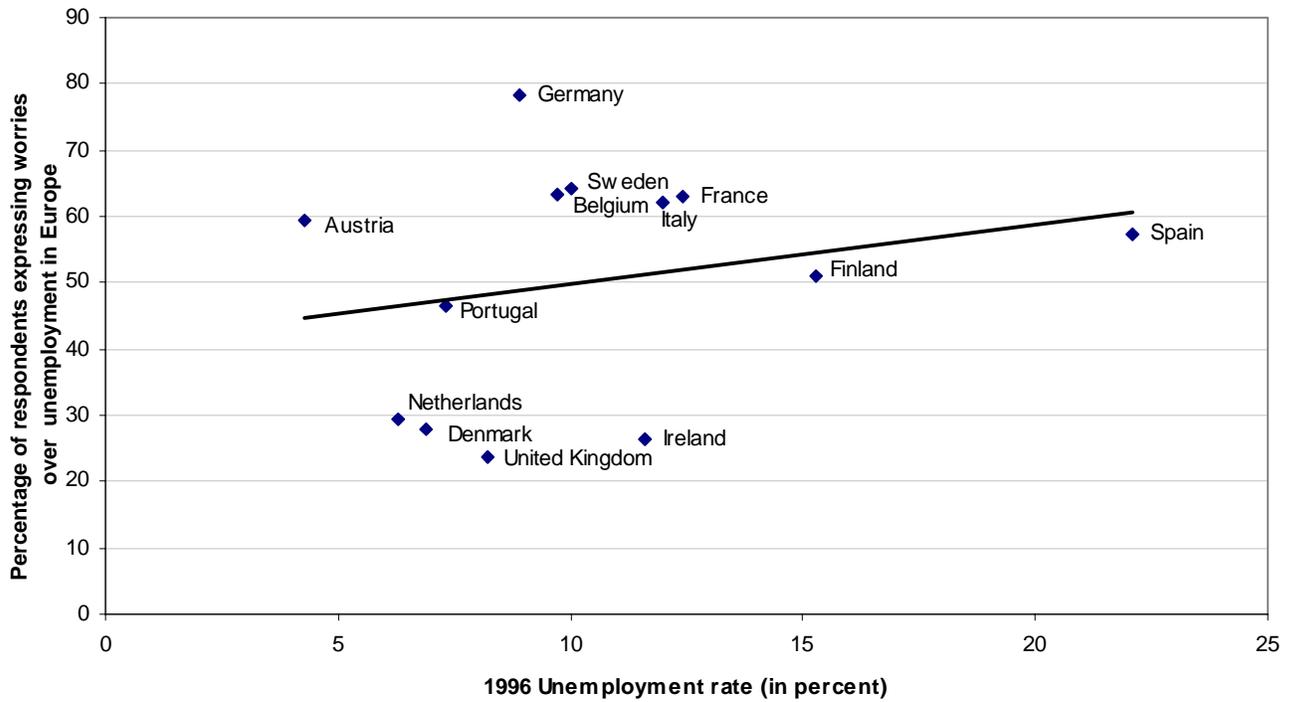
2.3. Determinants of attitudes

Various studies have examined the determinants of sentiments towards migrants. Before we go deeper into the microeconomics of these exercises, we examine again the cross-country evidence using data from the 1997 Eurobarometer survey. Responses on the following questions have been utilized:

- "Our country has reached its limits; if there were to be more people belonging to these minority groups we would have problems." (The boat is full!)

- "People from these minority groups abuse the system of social benefits." (Abuse welfare system.)

- "The presence of people from these minority groups increases unemployment in our country." (Cause unemployment.)

The feeling that the boat is full can be reached through different channels, e. g. this can result from racism, through the view that ethnic minorities abuse the welfare system or that they cause labor market problems, where the most prominent labor issue is unemployment. Figure 2.9 exhibits the cross-country relationship between the 1996 foreign population share and the percentage of respondents agreeing that people from minority groups abuse the system of social benefits. The attitude that migrants constitute a problem given a particular size of the foreign population is above normal in Finland, the United Kingdom, Denmark, France and Belgium. Figure 2.10 contains the same investigation for the attitude that minority groups increase domestic unemployment. Again, there is a positive correlation, but the countries above the regression line are now different ones to before (Portugal, Italy, Spain, the Netherlands, and Germany are new), only Denmark and Belgium also belong to the group of states with relatively strong fears of job losses.

Figures 2.7 and 2.8 exhibit the 1997 responses that the boat is full against the 1996 foreign population share and the 1996 unemployment rate. The fear that minorities create unemployment is positively related to the relative size of the foreign population, but negatively related to actual unemployment. The first relationship looks quite stable, while the latter and more surprising finding stems from three "outliers", namely Ireland, Finland and Spain. However, even without them, it would be impossible to derive a positive relationship between a perceived unemployment threat of minorities and actual unemployment.

Figure 2.7: Percentage of respondents agreeing that further immigration would cause problems domestically by 1996 foreign population share
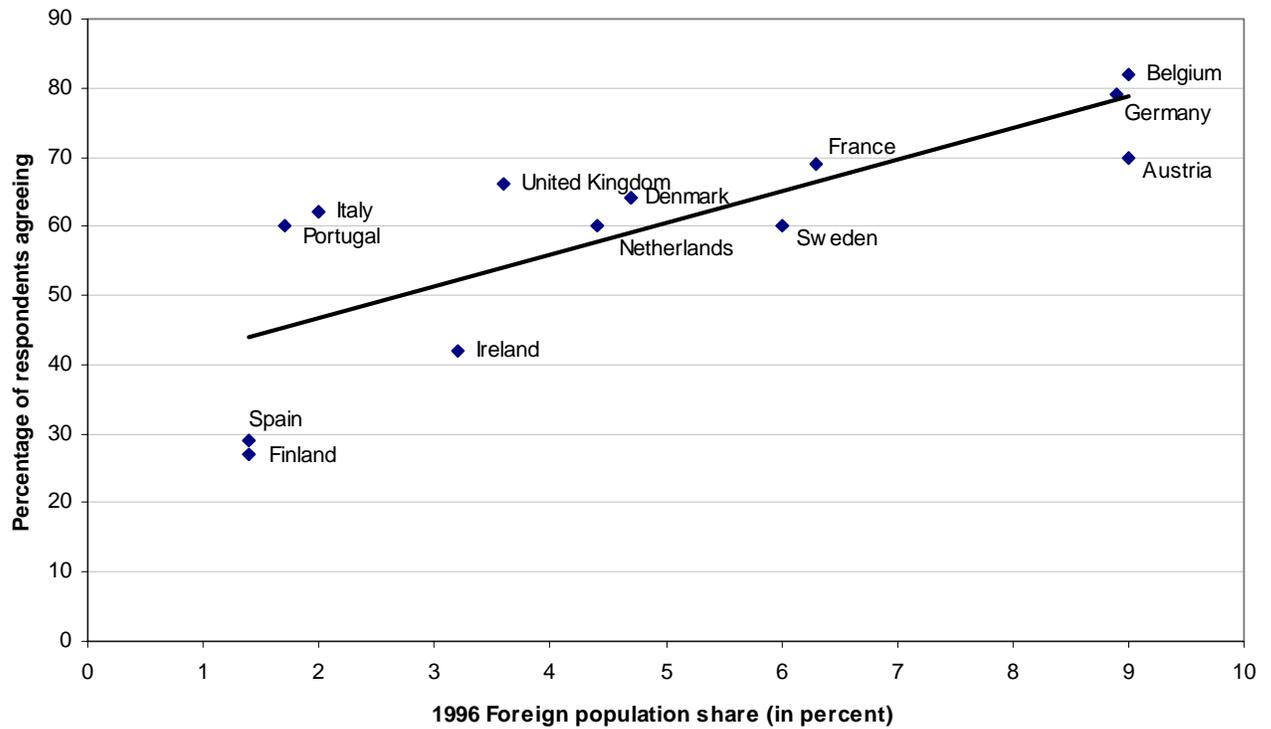
Figure 2.8: Percentage of respondents agreeing that further immigration would cause problems domestically by 1996 unemployment rate

45
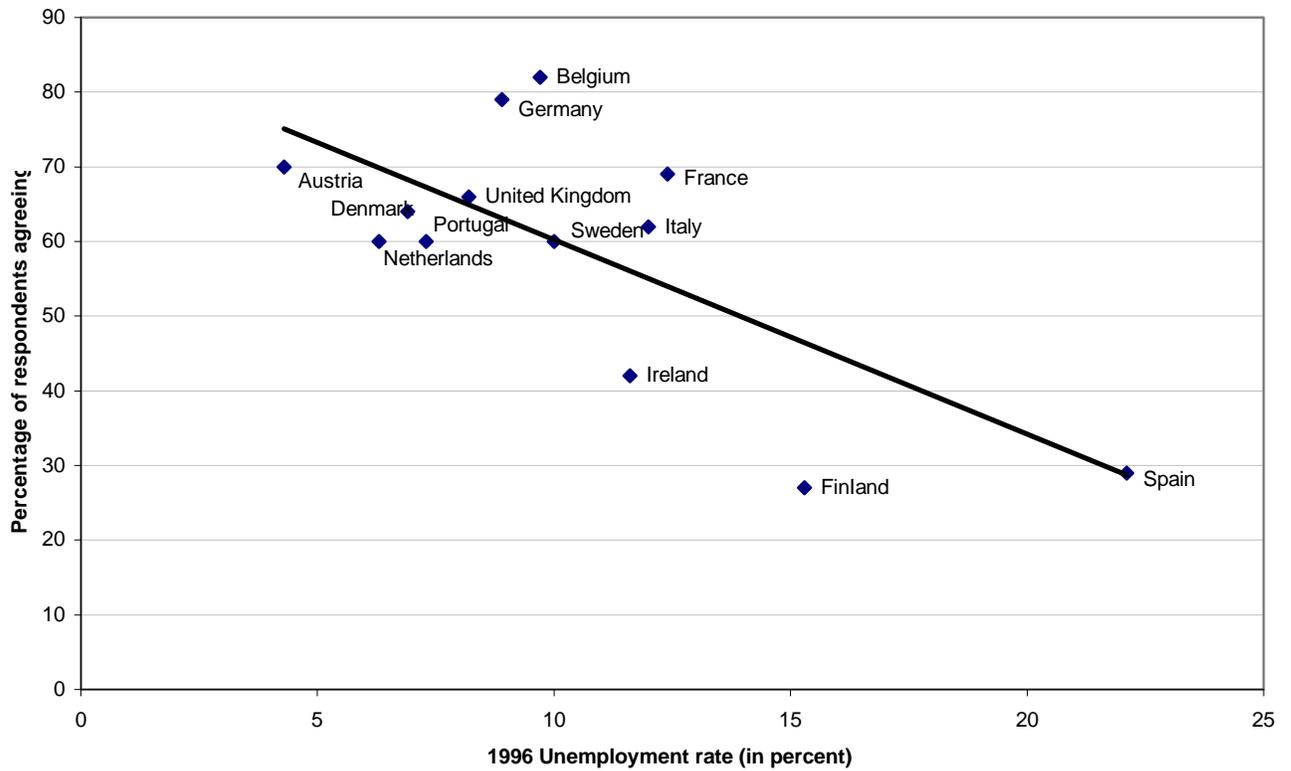
Figure 2.9: Percentage of respondents agreeing that people from minority groups abuse the system of social benefits by 1996 foreign population share
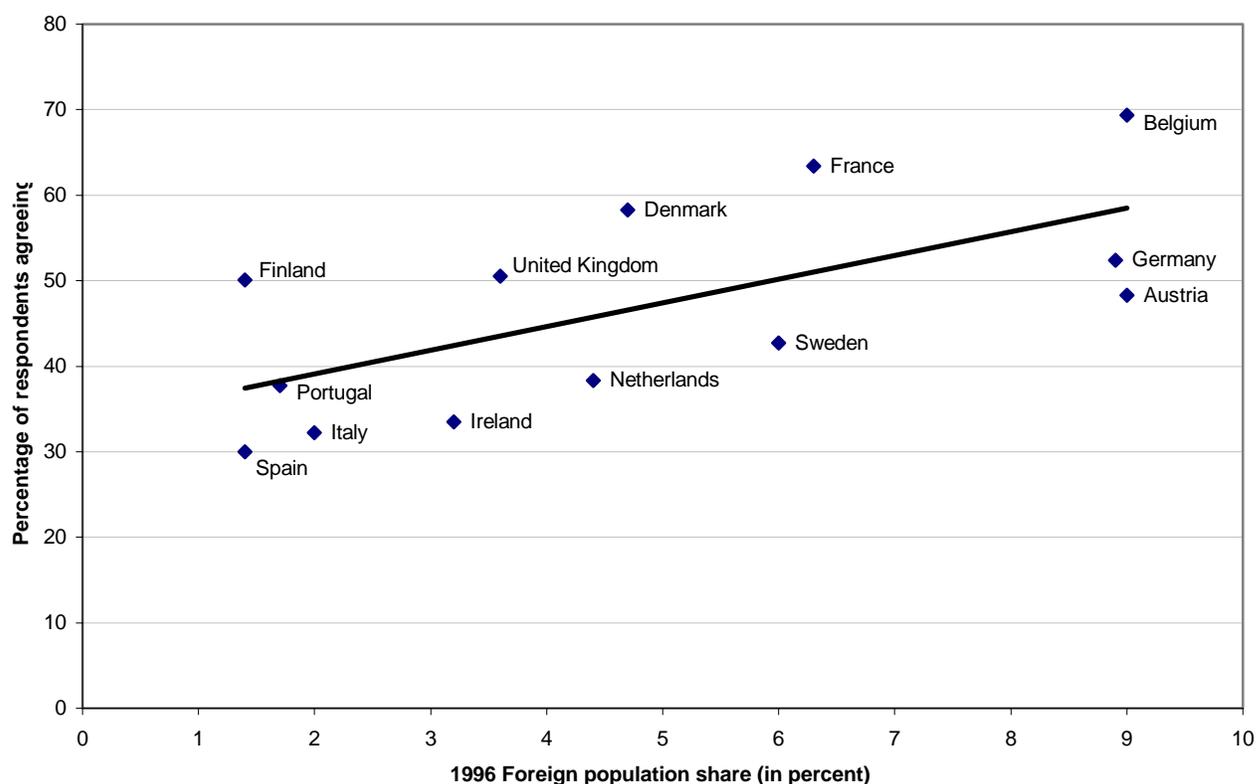
Figure 2.10 plots the feelings that "further immigration would cause problems domestically" against the frequency of responses that "minority groups increase domestic unemployment". The graph suggests that these variables are well contrasted indicating that the "boat is full" mentality comes from a strong feeling that future migrants would cause native unemployment. This interaction is more fantasy than fact, in that it is unrelated to past unemployment (see also Figure 2.8).

Some regression exercises shed more light on these findings. Table 2.7 contains two regressions explaining the responses concerning the abuse of the social security system and the perception that minorities create unemployment by previous unemployment, past real average growth, the previous foreign population share and self reported racism. It turns out that these variables hardly explain the "unemployment threat" concerns. In the case of the perceived abuse of the social security system, the estimated coefficients have the expected signs, but only for the foreign population share and self reported racism variables the received standard errors are more reliable. We conclude that it is difficult to explain the measured attitudes across countries simply by the using this proxy for racism, the relative foreigner share and the macro economic differences.

Table 2.3 investigates the "boat is full" mentality. To what extent can we explain the sentiments that further immigration would cause problems domestically? Column 1 employs the same regressors as the previous regressions, namely past unemployment and real growth, foreign population and self reported racism. Coefficient estimates for racism and growth are clearly non-significant. The relative foreign population size has a positive impact, while the unemployment rate seems to have a negative effect. The latter somewhat surprising finding is consistent with the graphical analysis outlined above. Whether this is an artifact or the result of the belief that immigrants might help to fight unemployment cannot be solved at this stage.

Column 2 of Table 2.3 concentrates on the hypothesis that the antipathy to immigration is based on the three pillars: racism, the threat of unemployment and welfare concerns. The explanatory power of the regression is lower, and only the estimated parameter for unemployment concerns provides a decent size and significance. It supposes that a combination of the significant variables of the two first regressions as shown in column 3 works best. The explanatory power is large, and the foreign population share and unemployment concerns show a positive and significant effect, while the previous unemployment rate remains negative and significant.

There have been a few studies which investigate these issues using micro survey data and the appropriate micro-econometric techniques. The relevant literature includes Bauer, Lofstrom and Zimmermann (2000), Dustmann and Preston (2000a), Fertig and Schmidt (2001) and Gang and Rivera-Batiz (1994). We deal with these studies in three steps. First, we deal with the unemployment concerns migrants often face, which also play a decisive role in the public debate about immigration policies. Second, there is the conjecture that migrants exploit the welfare system of the host country, an issue that is finding rising interest in the public debate. Third, there is the attitude towards further immigration. In Germany and other European countries there are attempts to change the immigration policies to allow more qualified immigrants in. Hence, (is of interest) the extent that perceptions of natives depend on economic motives or on racist feelings. Racism is much more difficult to fight but it might be possible to convince a wider public of the potential positive effects of immigration.

Figure 2.10: Views on immigration: domestic problems and unemployment

Percentage of respondents would cause problems would agreeing that further immigration

(y-axis label, rotated): Percentage of respondents would agreeing that further immigration would cause problems

Percentage of respondents agreeing that minority groups increase domestic unemployment
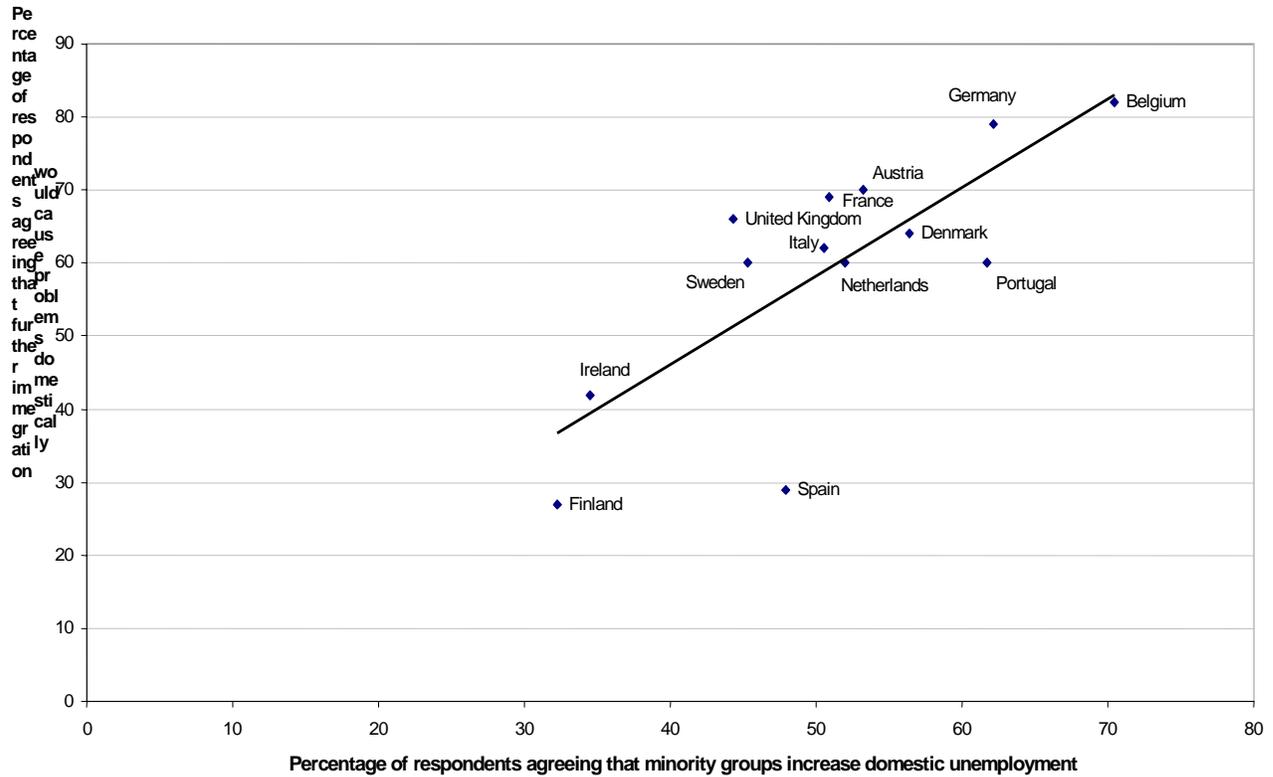
Table 2.2: Abuse of welfare and cause of unemployment

	IV	V
	Immigrants abuse social security system	Immigrants push up unemployment
1996 Unemployment rate	0.16 (0.69)	-0.47 (0.81)
1991-1996 Mean GDP growth	-1.42 (2.07)	-1.84 (2.44)
1996 Foreign population share	1.90 (1.12)	1.93 (1.33)
Self reported racism	.45 (0.24)	-.21 (0.29)
Constant	8.50 (20.17)	64.25 (23.87)
Adjusted R^2	0.50	0.06

Source: Eurobarometer 1997, own calculations. Standard deviations in parentheses.

Notes   IV: if respondent agrees that people from minority groups abuse the system of social benefits, = 0 otherwise.

      V: if respondent agrees that the presence of people from these minority groups increases domestic unemployment, = 0 otherwise.

Table 2.3: Further immigration would cause problems domestically, the boat is full!

	VI	VII	VIII
	The boat is full!	The boat is full!	The boat is full!
1996 Unemployment rate	-1.58 (0.79)	-	-1.17 (.56)
1991-1996 Mean GDP growth	-2.26 (2.37)	-	-
1996 Foreign population share	3.54 (1.29)	-	2.22 (.94)
Self reported racism	-.19 (-.28)	.07 (.39)	-
Immigrants push up unemployment	-	1.02 (.35)	.67 (.24)
Immigrants abuse social security	-	.37 (.43)	-
Constant	76.27 (23.10)	-14.71 (23.38)	26.76 (14.15)
Adjusted R^2	0.65	0.55	0.81

Source: Eurobarometer 1997, own calculations. Standard deviations in parentheses.

Notes: VI, VII and VIII: if respondent agrees that further immigration would cause problems domestically, = 0 otherwise.

A popular presumption is that migrants are substitutes for the native-born workers and are depressing wages, displacing natives, and causing unemployment. This presumption is behind most public worries and has generated demand for tighter regulation of immigration. However, there are many reasons to believe that migration can be beneficial even in the face of unemployment in the host country (Zimmermann, 1995). For example: in the cases where they are complements to local workers in production, if there is excess demand for workers or if migrants bring capital with them.

Gang and Rivera-Batiz (1994) were the first to study both the effect of immigration on natives and the attitudes towards foreigners shown by individuals in various labor market situations using individual data for Germany from the 1988 Eurobarometer survey. They first examine whether there is an effect on the probability of native employment for those who are in the labor market, from foreign presence in the labor market after controlling for differences in schooling, labor market experience and demographic characteristics. Foreign presence is measured in two ways: first, by an objective measure which is the actual percentage of population in the region; and secondly by a subjective measure using the respondents self-report of foreign presence using the survey question "are there many, a few or no people of another nationality who live in your neighborhood?" They find that foreign presence (measured by the objective variable) has a positive (although not significant) effect on native

employment, while the subjective measures show a negative and significant result. Naturally, it is difficult to judge whether this difference in findings results from the better quality of the individual evaluations or that they are biased by misperceptions.

When asked whether "foreigners increase our unemployment", the proportion of German respondents answering "no" was 71% while the overall response rate in the European Economic Community in 1988 has been 67.7%, while the Netherlands had a response of 73.4%, France 64.2% and the United Kingdom 67.4%. When analyzing this data for Germans at the individual level studying the question whether "foreigners increase our unemployment", Gang and Rivera-Batiz (1994) find no significant impact of employment status, gender on the presence of foreigners (measured in both ways). However, for education they estimate a very significant negative effect parameter.

Among many questions on natives' sentiments towards migrants, Bauer, Lofstrom and Zimmermann (2000) also study whether "immigrants take jobs away" using the micro responses in 12 OECD countries provided in the 1995 International Social Survey Programme. This data provides some information about the different perceptions people had about migrants across OECD countries in 1995. In the United Kingdom, about half of the native population has felt that immigrants take jobs away, closely followed by the United States. Spain, New Zealand, Ireland, Italy, Austria, and Germany rank in the middle at around 40%. At the other end of the spectrum were Sweden, where only about 16% report that they feel threatened by migrants in the labor market. Similarly low findings to Sweden were received for the Netherlands, Norway and Canada. Cross-country regressions using the micro data and employing country-specific fixed effects suggest that negative attitudes rise with age, are higher for females, and lower if married or better educated. Being unemployed also seems to increase significantly the probability that a person thinks that immigrants take jobs away.

Dustmann and Preston (2000), while having no comparable question available whether "immigrants take jobs away", construct their own variable measuring job insecurity from various survey responses on perceived labor market conditions. The data is again from the British Attitude Survey using various years between 1983 and 1991.They find that perceptions of job insecurity are strongest among poorer, older, female, manual workers with low or medium education, and experience of unemployment. However, only the effects of age, income rank and gender are strongly statistically significant. While not directly comparable to the results provided by Gang and Rivera-Batiz (1994) and Bauer, Lofstrom and

Zimmermann (2000), they are nevertheless largely consistent in interpretation. This is not surprising, if one accepts that migrants may contribute to job insecurity.

A recent study by Fertig and Schmidt (2001) investigates the claim that migrants are a burden to the welfare state, or are at least perceived to be so. Using German Microcensus data from 1995 to evaluate the actual welfare take-up and the 1996 ALLBUS survey to examine the individual sentiments, they also distinguish between first and second generation migrants. According to the ALLBUS data, 36% of the natives disagree, 21% are indifferent, and 43% agree when asked whether "foreigners are a burden for the social security system".

The issue of welfare dependence of foreigners was already studied by Riphahn (1998). Using micro data from the German Socio-Economic Panel for the 1984-1996 period, she reports a detailed pattern of welfare dependence for foreigners and natives. The paper asks whether the welfare dependence of foreigners is due to their exogenous characteristics or due to behavior such as benefit take-up. The estimation finds that foreign households are no more likely to depend on welfare, once exogenous characteristics are accounted for. The most sizable effects on the risk of welfare dependence show up when the unit is a single parent household, the household head is female and has a larger number of children. The estimates show that between natives and foreigners there are significant differences in the effects of the number of children, the household's residence in a large town, and whether the household head is of retirement age on the welfare dependence. The general result of Riphahn (1998) that the estimated differences in the dependence on social assistance payments between foreigners and natives suggest a statistically significant and substantially lower risk of foreigners to depend on these benefits, is clearly at odds with the reported perception in the ALLBUS opinion survey reported in Fertig and Schmidt (2001).

The study by Fertig and Schmidt (2001) uses a much larger sample from the German Microcensus data and largely confirms the findings of Riphahn (1998). To explain welfare dependence, they use a number of different regressors on the household level (e.g. married, children), the individual level (e.g., age, gender, education, training, employment status), city size and various sets of variables to charcterize first and second generation migrants in the sample. Married respondents are substantially less likely to be on welfare than single adults, and single adults with children are somewhat more likely to receive welfare benefits. Number of children also has a separate positive impact on the probability of welfare dependence. East Germans are less likely to be on welfare than west Germans, probably the result of other public support programs. Age plays a significant role, with welfare dependence more likely for younger people. Females and inhabitants of big cities are more likely to be on welfare; a

higher education and more training, however, has a strong negative impact on benefit take-up. First generation migrants have a clearly lower welfare dependence than natives, while second generation migrants are closer to native Germans although still significantly higher for some foreigner groups such as for Turks and citizens from other European Union countries.

Since the attitude towards migrants and native ideas about the welfare take-up of foreigners is in contrast to what we see in the evidence from the Riphahn (1998) and Fertig and Schmidt (2001) studies, it is worth studying the determinants of the individual responses on the attitude question. Fertig and Schmidt (2001) do this using the ALLBUS 1996 survey and the responses to the statement "foreigners are a burden on the social security system". Again, various individual characteristics have been employed as explanatory variables for the political opinion and the share of foreigners in the region. Older people, east Germans, females, the less educated and right wing respondents living in an environment with a low share of migrants all agree more   with this statement. However, being unemployed and currently fearing of a job loss show no significant estimated coefficients.

This section has provided a review of various results that contradict popular beliefs about welfare take-up by migrants and job-losses caused by foreigners. It is interesting to examine whether it is possible to separate racist feelings from concerns about unemployment (or job insecurity) and welfare dependence. Dustmann and Preston (2000) have tried to do so using a multi-stage factor model and a sample of English white respondents from the British Attitude Survey. In the first stage, they determine the factors racist behavior (race), job insecurity (jobs) and welfare concerns (welfare) using various indicators and a larger number of regressors. In the second stage, they study the impact of those factors on the expressed opinions towards further immigration. Then, they are able to separate the findings for different educational levels and different ethnic origins of the migrants. Results for manual and non-manual workers are also presented.

These findings confirm that both welfare and labor market concerns matter for the expressed opinion towards further immigration, but racially motivated concerns are the most important factor. Since the data allows us to distinguish between attitudes towards different origin groups, the nature of the bias can be explored more deeply. All three factors (race, jobs and welfare) play a larger (and negative) role for Asians and West Indians, while it is less strong for Europeans. The fourth region (Australia and New Zealand) is hardly explained by any of these factors. The dominant racial factor is especially strong for West Indian and Asian populations. A further important finding of the study is that there are no relevant effects of labor market and welfare concerns of low skilled or manual workers on the attitude against

further immigration. To the contrary, Dustmann and Preston (2000) find that welfare and labor market concerns are more closely related to an attitude against further immigration for non-manual workers and for the more educated.

2.4. Attitudes, migration policy and policy conclusions

A recent contribution by Bauer, Lofstrom and Zimmermann (2000) has examined various measures of natives's sentiments and their relationship to migration policies across 12 OECD countries. They found some evidence that the design of an immigration policy may be important for the prospect of immigrant assimilation, or labor market success, and hence for the development of sentiments of natives towards immigrants. They start with the observation that current immigration policies give priority to particular groups of people, and these preferences vary greatly across the major receiving countries. Whereas Canada and New Zealand focus on the selection of immigrants following the needs of their labor markets, other countries either favour the immigration of family members of former migrants, such as the U.S., or on ethnic groups, such as ethnic Germans from the former USSR in Germany, or citizens of the Commonwealth in the UK. In Sweden, Norway, and the Netherlands the majority of new immigrants typically consist of refugees and asylum seekers.

Economic theory suggests that immigrants from countries that are similar to the host country, with respect to economic development, the schooling system, language and culture, assimilate well into the labor market. This is probablydue to a rapid transferability of the human capital they accumulated in their home country. In addition, the migration motive is important for the labor market success of immigrants. Empirical studies on the assimilation of migrants in different countries (see also Bauer, Lofstrom and Zimmermann, 2000) have shown that the country-of-origin and the migration motive are among the most important determinants of the labor market success of migrants. In particular, it has been shown that the success of immigration policies selecting migrants on the basis of their skills, such as in Canada and New Zealand, seem to be successful, not primarily because they attract the most skilled migrants from a given country, but because they alter the mix of countries which immigrants come from. It has also been shown that nearly all significant receiving countries recently experienced a decline in the quality of immigrants, as measured by the wage differential on arrival between immigrants and natives. In all cases, the decrease in the quality of migrants comes together with a significant change in the country-of-origin mix of the immigrants.

Finally, even though all countries face a decline in the quality of migrants, an assimilation of immigrants to natives can be observed only in those countries that select immigrants on the basis of their labor market characteristics.

It is difficult to separate the extent to which the sentiments of the population are in line with policy or policy is in line with sentiments. There are at least indications that immigration policies affect natives' sentiments of immigrants. Analyzing individual data from 12 OECD countries, Bauer, Lofstrom and Zimmermann (2000) find evidence suggesting that natives in countries selecting immigrants on their skills are more likely to think that immigrants are generally good for the economy than in countries which receive mainly asylum seekers and refugees. Natives in Canada and New Zealand, however, are more concerned that immigration negatively affects their own labor market situation, whereas in countries that receive mainly non-economic migrants, natives are mostly concerned about increasing crime rates. Socio-economic characteristics of the respondents such as education, gender and employment status do not seem to explain the major differences in the perception of immigrants across countries. The results indicate, however, that the relatively more educated have a more positive view of immigrants.

Previous parts of this chapter have found that ethnic hostility or racism is visible in various European countries. However, its strength is hardly related to economic determinants like unemployment. Education is helpful to fight ethnic hostility. Pressure against further immigration is fueled by racism, not so much through concerns about the misuse of welfare measures and the threat of unemployment. Hence, it is not surprising that worries about unemployment and worries about immigration are unrelated. A clear-cut result is that the claims that migrants are a burden for the welfare-state and a threat to the labor market shows up in the measured opinions, but they are nevertheless unfounded if one relies on applied research. Foreigners hardly affect the employment status of natives, at least not negatively. Welfare dependence of immigrants is lower than for natives as soon as one controls for the individual characteristics. Attitudes towards migrants are affected most effectively by education.

This all has interesting policy implications. Policy-makers are typically concerned about re-election, and hence must be interested in the emotions of voters caused by immigration. There are two important channels by which re-election might be affected: First, there are social tensions caused by ethnic rivalry and other negative social externalities such as crime. It will be hard to fight racist feelings, although better education may be useful as a long-run measure. However, there is hope that the other driving forces behind the pressure

against migration can be better addressed: The observed fears, that migrants would take away jobs and would exploit the welfare system are unfounded. The more information that is provided to the public about this, the more likely it is that this will be understood by a larger part of the population. It is also useful to select economic immigrants better in order to avoid negative signals in the labor market and the social security system.

Second, immigration can improve the economic conditions in a country. They take jobs which natives refuse to do, they are often complements to natives or they enter in market segments which have an excess demand for labor. Hence, they increase production and create further employment among natives. Since the popularity of a government depends largely on its economic success, a well-chosen migration policy will be effective also in a political sense. For example, European governments might be able to increase their popularity by means of a migration policy that relies more on the respective country's labor market needs. Popularity might increase further by such a policy since social tensions may decline with a relatively higher proportion of labor migrants.

It is also important to realize that any humanitarian policy can be costly in an economic sense. However, by reducing negative attitudes towards immigrants in the native population through a migration policy that stresses the economic needs of the receiving country, the government may also be able to increase the number of admitted humanitarian immigrants without a higher risk of not being re-elected.

3. The impact of immigration on the welfare state

Do migrants take into account the generosity of the welfare system when choosing a host country? Does this put a strain on the financing of the welfare state? Does it adversely affect the distribution of skills in the host country's economy? These are politically sensitive issues. In this chapter we explore the sort of insights can be obtained from economic analysis. We then use data for the EU countries to examine the empirical evidence regarding welfare dependence amongst immigrant workers.

Only a few studies have yet analysed the causes of welfare dependency of migrants in Europe. A number of studies focus on Germany (Bird et al. 1999; Fertig/Schmidt, 2001; Frick et al. 1996; Riphahn, 1998; Sinn et al., 2001), some recent evidence is available on Sweden (Hansen/Lofstrom, 1999) and Denmark[8]. In all three countries welfare dependency ratios have increased in absolute terms and relative to the native population. As an example, in Germany the share of foreigners among the welfare recipients[9] numbered 8.3% in 1980 and 23.5 % in 1996, while the share of foreigners in the population has increased from 7.2 % to 8.9 % at the same time (Riphahn, 1998). A part of this increase can be traced back to higher numbers of asylum seekers and refugees, which are not or only under restrictive conditions permitted to work. In Sweden we observe similar trends (Hansen/Lofstrom, 1999; Pederson, 2000).

The main findings of the literature on welfare dependency of foreigners can be summarised as follows. Firstly, the higher probability of migrant households relative to native households to depend on social assistance and related welfare programs is basically a result of their human capital and other socio-economic characteristics: all German studies find that foreigners are equally or even less likely to depend on welfare than natives once it is controlled for observable characteristics. Lower education and a lower age of the household head and a higher number of children of migrant relative to native households are the prime factors that contributed to the higher welfare dependency of foreign relative to native households (Riphahn, 1998; Bird et al., 1998; Frick et al., 1996; Fertig and Schmidt, 2001). The higher welfare dependency of foreign households relative to their native counterparts is, not surprisingly, closely related to the weaker labour market performance of adults in the foreign households relative to the native households. Moreover, foreigner households are not more likely to claim benefits for which they are eligible than native households (Bird et al., 1999).

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[8] The major part of the German literature relies on household panel survey (German Socio Economic Panel, GSOEP), one study on the microcensus data (Fertig/Schmidt, 2001). The Danish study relies on administrative data which records the full population, the Swedish data on a longitudinal data set which comprises one percent of the population.

Bird et al. (1999, p. 17) conclude that "immigrants are more likely to be in the circumstances that would lead any household – German or native – to claim benefits more frequently." The same differences in socio-economic characteristics explain the higher welfare dependency ratios of foreign relative to native households in the Swedish and the Danish studies (Hansen/Lofstrom, 1999; Riphahn et al., 2001). In contrast to the German studies, it has been found in Sweden that the high welfare participation of migrant households is, beyond socio-economic factors, affected by unobservable characteristics of migrant households (Hansen/Lofstrom, 1999).

Secondly, in contrast to evidence from the US (e.g. Borjas/Hilton, 1996), the European studies find evidence that foreigners tend to assimilate out of welfare assistance. In Germany, welfare dependency declines with the duration of stay of migrant households all other factors being equal (Fertig/Schmidt, 2001; some weak evidence is also provided in Riphahn, 1998). Strong evidence for the hypothesis that migrants tend to assimilate out of welfare has been found also in the Swedish case. Nevertheless, it is not predicted that welfare dependency ratios of migrants and natives will tend to converge (Hanson/Lofstrom, 1999).

Thirdly, welfare usage of non-humanitarian migrants is well below that of humanitarian migrants in Sweden. Non-humanitarian migrants tend, however, to assimilate more rapidly out of welfare than other migrants (Hanson/Lofstrom, 1999).

3.1. Basic Theory

Standard economic analysis holds that migration choices depend on the distribution of income.[10] This is illustrated on Figure 3.1. On the horizontal axis is the skill level of a given individual. On the vertical axis is his income net of migration costs. The AA line represents the individual's income in his or her home country. The BB line is income in the host country, net of the cost of migrating.

As Figure 3.1 is drawn, the slope of AA is greater than that of BB. This means that the source country is assumed to be more unequal than the recipient country. This would be typical when dealing with migration from a « poor » to a « rich » country (for example, the steeper slope of the poor country may simply come from the scarcity of skilled labor there). As Figure 3.1 makes clear, those who will migrate to the skilled country are workers with a skill level below a critical threshold. Alternatively, Figure 3.1 may represent the choice by a

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[9] We use the term welfare synonymously to social assistance. In Germany the social assistance consists of two parts, general income support and support under special circumstances (handicapped, elderly care).
[10] See Borjas (1987).

pool of migrants between two host countries, one more egalitarian than the other. It then says that the least skilled migrants will elect the most egalitarian country, while the most skilled go to the inegalitarian one.

Figure 3.1 – Country choice as determined by relative distribution of income.
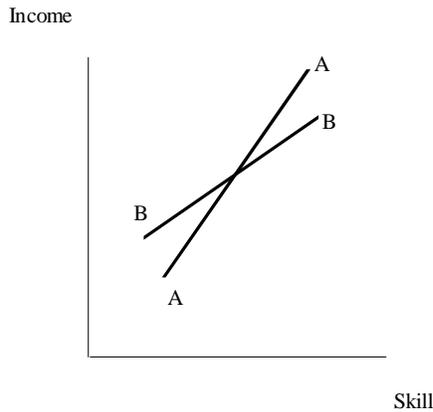
How is this analysis changed when one deals with the welfare state? Figure 3.2 represents the choice between two countries that only differ by their welfare system. Country 1 does not have any assistance system, while country 2 has a minimum guaranteed income which is financed by a tax on labor income. Accordingly, the schedule corresponding to country 2 has a horizontal portion corresponding to this guaranteed income, and above that level it is below the schedule for country 1 because of the taxes needed to finance the welfare system.

Figure 3.2 – Locational decisions under welfare minima
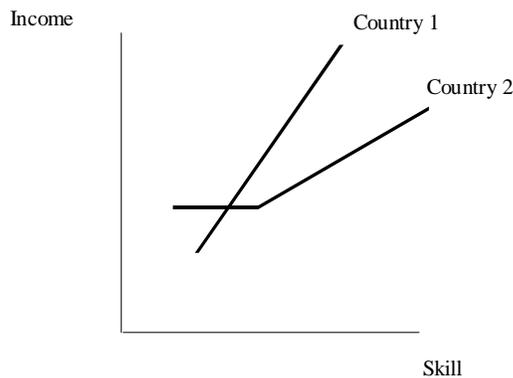
As drawn on Figure 3.2, workers with a skill level below a certain threshold will select country 2 and they will indeed be on welfare ; those above that threshold will select country 1. Therefore, the welfare state contributes to bias the composition of migrants towards low-skill types who are more likely to get benefits.

An increase in the generosity of benefits is represented on Figure 3.3. It lifts the income floor upward while reducing net income at high skill levels because of the extra taxes required to finance the increase in the welfare minimum. This increases the skill level below which one selects country 2, thus increasing the number of migrants in country 2 and reducing it in country 1 (Figure 3.3).

Figure 3.3 – Impact of more generous benefits in the most generous country.
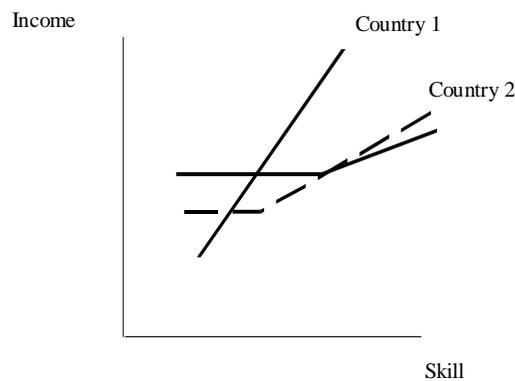
In contrast, if country 1 introduces a guaranteed income then this will not attract any migrants as long as it is below that of country 2 (Figure 3.4). Therefore, in the most generous countries, immigration acts as a multiplier which boosts the response of the number of claimants to an increase in the generosity of benefits. This effect is not present in the less generous countries.

Figure 3.4 – Impact of an increase in benefits in the least generous country.
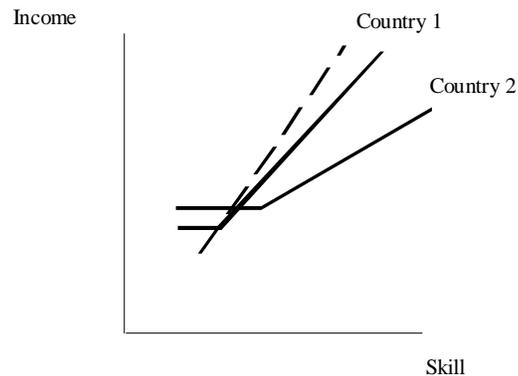
The above analysis predicts that in the most generous countries migrants will have characteristics that make them more likely to be on welfare. However, after controlling for these characteristics, immigrants are not more nor less likely to be on welfare than natives. The literature on migration has however, noted the importance of networks in determining migration decisions. If belonging to a given network affects the migration decision, then migrants can be less or more likely to be on welfare than natives even controlling for their characteristics. For example, if migration is mediated by networks of employers and family members who are already in the host country and have a job, then the cost of migration is likely to be lower if one comes to work than if one comes to be on welfare. This makes migrants more likely to work relative to natives with the same characteristics. If, on the other hand, there exist networks of people who have good information about how to get benefits, the converse will occur. This will also occur if there are specific adaptation costs (language, etc.) associated with migration, which make it more likely that a migrant will end up on welfare.

Another complication is the effect of age. The cost of migrating increases with age, while its benefits fall with age. Therefore we expect migrants to be younger, on average, than the source population, and presumably also the host population. This makes them less likely to be on pensions and therefore migration tends to ease the problem of financing pensions, at least temporarily. We return to that important point below.

Also, the above analysis assumes that the labor market clears. If there is involuntary unemployment, and if it is unevenly distributed across skill levels, then the migration decision

will not be based on the distribution of wages, but rather on the distribution of permanent income, which has to be adjusted in order to reflect expected unemployment spells. This is illustrated on Figure 3.5, where the distribution of permanent income is more unequal than that of wages because it is assumed that the incidence of unemployment is higher at the low end of the distribution of income. The difference between the two slopes is larger:

i.   The more unemployment is concentrated at the bottom of the distribution of income;

ii.   The lower the unemployment benefit ratio;

iii. The more the migrant population is likely to enter the host country labor market as unemployed job seekers. This may not however be the typical case as much migration is the result of employers' overseas recruiting activities;

iv.   The more the migrant population is likely to be ineligible, as new entrants, for unemployment benefits. This is typically the case for unemployment insurance but not for assistance.

Figure 3.5 – Adjusting the income profile for unemployment.
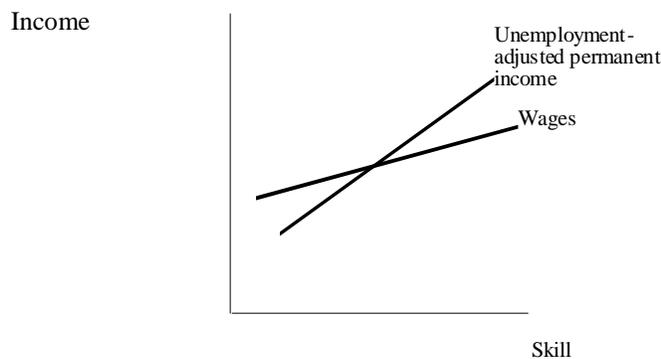
To summarize, the existence of involuntary unemployment at the bottom of the distribution of income is likely to reduce the attractivity of countries with generous welfare systems, although we do not typically expect it to entirely offset the basic economic mechanisms described at the beginning of this chapter.

3.2. An Empirical Analysis: comparing migrants with natives

The central prediction of the theory outlined above is that countries with more generous welfare systems will attract migrants disproportionately likely (relative to natives) to be dependent on welfare. In other words, migrants' characteristics (such as human capital) are more elastic to taxes and benefit than natives' characteristics, because migrants are self-selected to be more mobile. Typically, we should expect migrants' differential dependency on welfare to be entirely explained by differences between their characteristics and those of natives. This is what is implied by the above theoretical analysis and the previous empirical findings for Germany that are reported in the introduction. However, to the extent that some of the characteristics are unobservable and that there are specific effects associated with migration, it is also possible that *controlling for their characteristics,* migrants have a different exposure to welfare than natives. Thus, our empirical analysis will proceed in two parts. First, we shall compare the characteristics of migrants with those of natives and impute their predicted welfare dependency. Second, we shall analyse the specific consequences of migrant status as such for welfare dependency, defined as *residual welfare dependency.*

We now empirically investigate the phenomena analyzed in the previous section using the European Community Household Panel (ECHP). This survey is a standardised annual longitudinal survey carried out in the European Union since 1994 (see the Annex for details about the survey). All current EU member states, with the exception of Sweden, are represented. Austria and Finland only joined in wave 2 (1995) and 3 (1996) respectively.

3.2.1. Measuring migrant status

The first step consists of defining immigrant status. There is no ideal way of doing it, so we have considered two possibilities.

The first one is to define an immigrant as a non citizen of the country one is considering. As we are more concerned about migration from poorer countries, we may define a migrant as a non EU citizen. The problem with this variable is that it does not identify the country of origin and may be subject to bias due to cross-country differences in naturalization laws. Furthermore, this criterion reduces the number of people classified as immigrants, thus reducing the number of observations in relevant cells. This problem is aggravated by the fact that sampling seems biased in favor of EU citizens. For example, in Italy, there are only 6 observations out of more than 17000 where the respondent is not EU citizen.

Alternatively, one can use information on the country of birth as a proxy for immigrant status. Here, the source of bias is misclassification of 'true nationals' born abroad for whatever reason as immigrants. Such misclassification may be a serious source of bias for countries which have former colonies such as France, the U.K., Belgium and Portugal. However, as Table 3.1 makes clear, this increases the number of observations classified as immigrants.

In the following, we only report results associated with the first criterion.

Table 3.1: Comparison between the two measures of immigrant status (1st Wave of the panel).

Country	%EU	%EUBorn
Germany	97.8	NA
Denmark	98.0	97.1
Netherlands	99.3	NA
Belgium	97.0	93.9
France	97.2	92.3
UK	98.1	94.6
Greece	99.1	NA
Spain	99.6	98.9
Portugal	98.9	98.0
Luxembourg	NA	95.8
Ireland	NA	98.7

In reading the results below, one should be cautious that our criterion implies that there are not many observations of non EU citizens in the panel, as exemplified by Table 3.1 and the example of Italy.[11]

3.2.2. Migrants' average welfare dependency

The first thing we do is to look at the raw figures of migrants vs. natives welfare dependency. The first two columns of Table 3.2 report the proportion of people who are on unemployment benefits in 11 countries. Roughly speaking, one can decompose these countries in two groups: those where migrants' dependency is not significantly higher,

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[11] While Italy has been dropped, in Spain there are 41 observations of non EU citizens. While using wave 3 allows to include Finland and Austria which is valuable for the purpose of cross-country comparisons, the panel , where non citizens are undersampled to begin with, seems to suffer from excess attrition of non EU citizens

sometimes even lower, than natives : Germany, the U.K., Greece, Spain, and Portugal; and those where it is significantly higher than among natives: Denmark, the Netherlands, Belgium, France, Austria and Finland.

Table 3.2: Welfare dependency of migrants

Country	% receiving UB		% receiving old age pension		% receiving family benefits	
	EU	NON-EU	EU	NON-EU	EU	NON-EU
Germany	6.96	8.57	NA	NA	NA	NA
Denmark	13.0	37.5	21.0	3.1	19.7	25.0
Netherlands	6.7	13.7	18.8	3.9	19.6	27.5
Belgium	10.7	17.4	21.1	15.0	24.5	25.6
France	7.7	12.6	22.8	10.0	15.3	32.0
UK	2.8	3.4	26.8	3.45	20.1	20.7
Greece	2.2	1.4	23.6	21.4	3.8	5.7
Spain	6.5	4.9	15.8	4.9	1.7	4.9
Portugal	2.2	0.0	24.6	18.2	18.8	9.09
Austria	5.3	14.2	21.0	3.0	23.9	32.0
Finland	15.4	47.1	18.4	5.7	22.4	22.6

Turning to pensions:(next two columns of Table 3.2), far fewer immigrants are on pensions than natives, which is probably mostly due to their younger age and their propensity to retire in their native country. In fact, in many countries the absolute number of respondents who are both non EU citizens and on old-age pensions is quite small: 3 in Finland, 4 in Portugal, and 2 in Spain, the UK, the Netherlands, and Denmark. In other words, for these countries the panel is quite unappropriate to deal with this issue.

Finally, dependency on family benefits is reported in the last two columns of Table 3.2. It is typically comparable to that of natives except in the Netherlands, France and Austria where it is much higher. In Greece, Spain and Portugal, the results have to be interpreted with caution because of the small number of observations.

These differences come from the complex interactions of many factors. The first thing to look at, in light of the discussion of section 3.1, is migrant's characteristics as compared to natives.

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relative to native. Thus, more observations would have been obtained by using wave 1, although in fewer countries.

3.2.3. Migrants' characteristics

What are the characteristics of immigrants? Table 3.3 compares them to the non-immigrant population by education, age, sex and marital status. As will become clear, migrants characteristics differ substantially from those of natives, in a way which itself varies across countries.

The first two colums of Table 3.3 look at the gender ratio. In many cultures, males migrate first, and the rest of the family joins thereafter if it is decided to settle for a long time in the host country. Thus, we expect the gender ratio to be biased toward males for migrants relative to natives. This is true in France, the UK, Portugal, the Netherlands, and Denmark, but not in Germany, while immigrants are mostly females in Greece, Spain, and Belgium (with an abnormally low gender ratio in Belgium). Here a note of caution is necessary: given the low proportion of non-EU citizens in the sample, for smaller countries the results are not very stable across waves of the survey.

The next two columns of Table 3.3 look at marital status, and show that migrants are typically more likely to be married than natives, except in Portugal and Spain, while in Belgium the likelihood is the same. Being single presumably reduces the cost of migration, which would account for a lower marital status ratio for non citizens, but on the other hand it makes it less likely to encounter economic hardship, which reduces the need to migrate.

The following two columns of Table 3.3 consider the low end of the skill distribution. It shows that there are striking disparities across countries regarding the educational attainment of migrants vis-à-vis the natives. Typically, European countries can be classified in two groups. In the first group, migrants are substantially less educated than natives. This group includes Germany, Denmark, the Netherlands, Belgium, and France. In the other group, which comprises the U.K., Greece, Spain and Portugal, migrants are more skilled than the average citizen.

Note the order of magnitude of the effect: in Germany, the proportion of migrants who have not completed secondary education is almost twice as large as for natives, and in France 50 percent higher.

Table 3.3: Characteristics of migrants

	% of males		% of married people		% of peple not having completed secondary education		% of people with college degree		average age		average number of children	
Country	EU	NON-EU	EU	NON-EU	EU	NON-EU	EU	NON-EU	EU	NON-EU	EU	NON-EU
Germany	8.5	7.1	0.4	2.1	8.8	0.0	0.5	5.0	8.1	9.5	.51	.05
Denmark	8.8	1.6	5.8	1.9	0.0	4.7	0.7	1.3	7.7	9.9	.53	.00
Netherlands	6.8	9.0	8.6	2.6	7.4	0.0	7.6	2.9	6.8	9.1	.62	.27
Belgium	6.6	0.8	5.4	6.2	6.2	6.8	8.3	4.2	7.9	5.4	.62	.74
France	7.7	1.4	1.9	1.5	2.4	4.9	8.2	1.0	7.3	3.7	.57	.67
UK	7.1	1.7	5.3	1.0	5.2	9.8	2.7	3.9	9.0	0.3	.61	.46
Greece	7.5	8.6	1.2	8.6	1.2	1.4	5.3	1.4	6.9	7.5	.50	.57
Spain	7.7	1.5	6.0	8.5	8.9	1.5	5.1	9.3	9.7	2.4	.53	.87
Portugal	7.2	4.6	9.7	0.9	7.3	2.4	.7	3.8	9.9	3.6	.56	.91
Austria	7.3	8.7	5.6	7.7	1.8	9.6	.11	8.27	8.3	7.7	.69	.04
Finland	9.4	8.5	7.5	5.4	3.1	0.8	9.7	7.2	6.9	9.5	.66	.7

Is this pattern confirmed when one looks at the top of the skilled distribution? As shown in next two columns of Table 3.3, educational comparisons between natives and migrants are more favorable to the latter when one looks at the top than the bottom. Denmark and the Netherlands now join the group which benefits from better educated migrants (with the above mentioned caveat that the results are less robust for smaller countries because of sample size), while France, Germany, and Belgium remain in group 1.

One may argue that differences in the educational levels of migrants vs. natives across European countries reflect differences in the quality of the workforce in source countries, which for historical reasons are allocated differently across recipient countries. In order to investigate this possibility, we have computed the average characteristics of African-born

migrants to various destination countries[12]. This is a way of controlling for the geographical origins of migrants, although admittedly there is large heterogeneity among African countries—but finer disaggregations are not possible because they would reduce the number of relevant observations by too much. If one compares the two main recipients of African migrants, namely France and the U.K., we still get a pattern similar to that of the previous two columns of Table 3.3: In France, 33% of Africans have not completed secondary education, vs. 18% in the U.K.

Turning now to age, Table 3.3 shows that migrants are substantially younger than natives. The age difference ranges from minus 0.6 years in Greece to 10.6 years in Austria. This result is not surprising and is explained by the existence of return migration, the greater demographic dynamism of source countries, and the fact that the investment cost of migration can be repaid out of a lomger stream of benefits. . It suggests that, at least in the medium run, migrants may contribute to significantly alleviate the financing problems of the pension system.

The last two columns of Table 3.3 look at an important determinant of welfare entitlements, namely the number of children. The variable used is the number of children living in the same household and is much higher for migrants than for natives. This is explained by the migrants cultural background and some of their characteristics such as age and education, but it is possible, in the line of the logic exposed in the theoretical section, that there is a systematic self-sorting of migrants according to the generosity of family benefits; i.e., migrants with more children may systematically choose more generous countries. Because of this sorting effects, migrants' fertility may be more responsive to family benefits than natives'.

3.3. Implications for the welfare state

The above evidence suggests that migrants have personal characteristics that make them substantially different from natives. This in turn affects their expected relationship with the welfare state in the following ways:

1. In all EU countries, immigrants should be less likely to be on old-age and health benefits because they are younger.
2. In Germany, Denmark, the Netherlands, and France, immigrants are more likely to be on unemployment benefits and welfare assistance because of their reduced earnings capacity. In the UK, Greece, Spain and Portugal, it should be the opposite.

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[12] This was done using wave 1 of the survey.

3. In all countries, migrants are more likely to be on family benefits because they have more children; their greater likelihood of being married yield more ambiguous predictions as to access to the welfare state, since it may reduce their access to benefits associated with single parenthood.

In this section, we analyze the differential welfare dependency of migrants compared to natives. We distinguish between two concepts. First, we consider the dependency that a probability model estimated over the whole population would predict on the basis of their characteristics. Second, we estimate « residual » dependency, i.e. the difference between their actual dependency and their predicted one. This is a measure of the extent to which migrant status increases (or reduces) dependency on a given programme, everything else equal.

This section is organized as follows: in section 3.3.1, we report econometric estimates of the determinants of welfare dependency for three programmes: unemployment benefits, family benefits, and pensions. This allows us to estimate the impact of migrant's chracteristics on their predicted welfare dependency, and to compare it with natives. In section 3.3.2, we empirically estimate residual dependency for each of the three programmes, and discuss various economic interpretations of the residual dependency.

3.3.1. The determinants of welfare dependency

In order to assess which individual characteristics make it more likely for migrants to be on welfare, we estimate a probit model explaining the likelihood of being on one of three types of cash transfers: pensions, unemployment benefits, and family allowances[13].

We report our results for each type of benefit.

3.3.1.1. Unemployment Benefits

Probit results predicting the effect of individual characteristics on the probability of being on unemployment benefits are available upon request. These regressions have been run for each wave of the panel and the coefficient values are fairly robust across waves, while their significance varies. Table 3.4 summarizes the results, with two stars indicating significance at the 5 % level and one star at the 10 % level.

These coefficients capture the cumulated effect of individual characteristics on both incidence and eligibility. These two aspects vary greatly across countries. Hence, variables such as sex and marital status may come up with a positive significant coefficient in some

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[13] The ECHP also provides info on recipients of sickness benefits, but there are not enough observations to allow proper study.

cases, and a negative one in other instances. On the other hand, variables like education which are strongly negatively correlated with incidence and have little impact on eligibility systematically, come out with a negative and statistically significant coefficient.

Table 3.4: Econometric determinants of UB dependency

Variable/Country	Germany	Denmark	Netherlands	Belgium	France
Sex = male	-0.05	-0.22**	0.07*	-0.24**	-0.02
Married	-0.2**	-0.2**	-0.26**	-0.136**	-0.14**
Age	-0.014**	-0.045**	-0.006*	-0.015**	-0.00
Experience	0.00	0.018**	-0.006*	-0.01**	-0.03**
Tertiary education	-0.076	-0.406**	-0.187**	-0.583**	-0.23**
Secondary Education	0.03	-0.24**	-0.144**	-0.134**	0.05
Number of Children	-0.00	0.048*	-0.00	0.06**	-0.01

Variable/Country	UK	Greece	Spain	Portugal	Austria	Finland
Sex = male	0.28**	0.11*	0.36**	0.05	0.25**	-0.06
Married	-0.06	0.11	0.18**	0.167**	-0.18**	-0.07
Age	-0.007	-0.006	-0.00	-0.009**	-0.021**	-0.027**
Experience	-0.01	-0.017**	-0.017**	-0.003	0.00	-0.00
Tertiary education	-0.14	-0.5**	-0.48**	-0.94**	-0.53**	-0.45**
Secondary Education	-0.06	-0.3*	-0.323**	-0.267**	-0.287**	-0.21**
Number of Children	- 0.04	0.01	0.034*	-0.03	-0.005	-0.03*

Against this background it is possible to find out whether migrants' characteristics make them more likely, on average, to be on unemployment benefits. The results are summarized in Table 3.5, which compares the probability of being dependent on Unemployment Benefits between an « average » EU citizen , i.e. a putative individual with each explanatory variable set to the average of this group, with that of an « average » EU citizen. Note that because of the nonlinearity of the Probit model, the predicted probability of welfare dependency of such an « average » individual is not equal to the average proportion of respondents on UB.

Table 3.5: Predicted dependency on welfare of migrants versus natives

Country	EU	NONEU	Difference
Germany	0,05	0,06	0,02
Denmark	0,11	0,18	0,07
Netherlands	0,06	0,08	0,02
Belgium	0,09	0,11	0,02
France	0,06	0,07	0,00
UK	0,02	0,03	0,01
Greece	0,02	0,02	0,00
Spain	0,05	0,05	0,00
Portugal	0,01	0,01	0,00
Austria	0,05	0,07	0,02
Finland	0,14	0,17	0,03

Overall, the excess predicted dependency of migrants is typically positive but small, with the exception of Denmark. For countries of group 2 as defined above, it is substantially smaller than the actual difference, suggesting that migration-specific effects play an important role in explaining this difference.

These small predicted differences come from different factors. In France for example, the educational level of non EU-citizens is lower than that of EU citizens, mostly because there are fewer people with secondary education, but secondary education has little impact on UB dependency. In the UK, migrants are better educated than natives, but education has a lower impact on UB dependency. In Spain, the higher educational level of migrants tends to reduce their UB dependency, but their lower experience tends to increase it,so that the net effect is zero.

3.3.1.2. Old-age pensions

We now turn to old-age pensions. This programme is different from Unemployment benefits in that it is only likely to fall upon individuals older than a certain age. For this reason we run our regression explaining the likelihood of being on old-age pensions by confining the sample to respondents older than 50. Furthermore, we enrich the specification in

order to capture a complex dependence of eligibility on age. In particular, we introduce age dummies to the regression that are defined as follows:

D50 = 1 iff 50 <= age < 55, 0 if not
D55 = 1 iff 55 <= age < 60, 0 if not
D60 = 1 if 60 <= age <65, 0 if not
D65 = 1 if 65 <= age <70, 0 if not

Observations for which all these dummies are equal to zero therefore correspond to respondents older than 70. Our probit results are available upon request, and the main econometric coefficients of interest are summarized in Table 3.6.

Not surprisingly, the age dummies have a monotonic profile and are very significant in all countries. But other variables often show up significant, somewhat with a surprising sign.

Our results have to be interpreted with more caution than for other welfare benefits, because the determinants essentially reflect past labor market history of natives and this makes it difficult to extrapolate the results to migrants and to the future. For example the male dummy often comes out significant and with a positive sign, which probably reflects the greater workforce attachment – and therefore greater pension rights -- of males *in the past.* But increased female participation over time should ideally lead us to pick up a lower value for this coefficient.

Similarly, the younger age of migrants in a cross section would typically lead us to predict a lower welfare dependency; but migrants will eventually reach retirement age, and, on top of that, a substantial fraction will be naturalized and therefore counted as EU citizens. Thus the cross-sectional determinants of pension dependency tend to overstate the differences between migrants and natives in predicted pension dependency, relative to a true dynamic perspective.

Another issue is that there are not many non Eu citizens in this subsample, so that our results are not very stable.

With the above caveats in mind, let us proceed and look at what this econometric model predicts for migrants vs. natives pension dependency.

Table 3.6: Econometric determinants of old-age pension dependency

Variable/Country	Denmark	Netherlands	Belgium	France	UK
Sex = male	-0.108	0.7**	0.657**	0.699**	0.016
Married	-0.065	-0.425**	-0.356**	0.083	-0.017
Tertiary education	0.047	0.369**	0.146	-0.1	0.474**
Secondary Education	0.163	0.116	0.245**	-0.06	0.133*
Experience	0.015	0.009**	-0.026**	-0.033**	0.014**
Number of Children	-0.523	-0.11*	-0.116	-0.09*	-0.1
D50	-3.92**	-5.37**	-3.42**	-4.22**	-2.94**
D55	-3.76**	-4.42**	-2.17**	-3.15**	-2.45**
D60	-2.71**	-3.38**	-0.92**	-1.45**	-1.48**
D65	-1.77**	-1.59**	-0.3**	-0.4**	-0.5**

Variable/Country	Greece	Spain	Portugal	Austria	Finland
Sex = male	0.709**	1.66**	0.29**	0.52**	-0.07
Married	-0.029	-0.036	-0.111**	-0.054	0.056
Tertiary education	0.163*	-0.089	-0.095	-0.007	0.19*
Secondary Education	0.0676	0.043	-0.039	0.12*	0.0658
Experience	-0.017**	-0.022**	-0.003	-0.003	0.033**
Number of Children	0.0114	0.02	-0.144**	-0.094**	-0.025
D50	-3.31**	-4.23**	-2.91**	-2.92**	-3.96**
D55	-2.58**	-3.36**	-2.40**	-1.68**	-3.24**
D60	-1.81**	-2.09**	-1.86**	-0.742**	-2.33**
D65	-0.719**	-0.724**	-0.604**	0.037	-1.04**

As Table 3.7 makes clear, the migrants' predicted pension dependency is virtually nil relative to natives. This is because they are overwhelmingly below 60, which is far from being the case for natives. The predicted values are thus simply capturing the wide differences between the two populations in terms of the cross-sectional age distribution at a point in time.

This suggests that in the mid-nineties, in most European countries, migrants generate transitory, but large contributions to the financing of the pension system. This is partially offset by their greater dependency on unemployment and family benefits, especially given that the unemployed don't contribute, but this offsetting effect is unlikely to be of the same

order of magnitude as the direct positive effect, except perhaps in Denmark and the Netherlands.

Table 3.7: Predicted dependency of migrants vs. natives

Country	EU	NONEU	Difference
Denmark	0,60	0,04	-0,56
Netherlands	0,51	0,00	-0,51
Belgium	0,47	0,01	-0,46
France	0,55	0,00	-0,55
UK	0,65	0,14	-0,50
Greece	0,45	0,06	-0,39
Spain	0,21	0,06	-0,15
Portugal	0,48	0,08	-0,40
Austria	0,49	0,08	-0,41
Finland	0,50	0,33	-0,17

3.3.1.3. Family benefits

We now turn to the determinants of family benefits. Here we expect the number of children to play an important role, and eligibility to be strongly and nonlinearly related to that variable. Consequently, as we did for age in the case of pensions , we enrich our specification by adding dummies representing different intervals for the value of this variable. These dummies are defined as follows:

$D1 = 1$ iff nchildren $= 1$

$D2 = 1$ iff nchildren $= 2$

$D3 = 1$ iff nchildren $= 3$ or 4

$D5 = 1$ iff nchildren $= 5$ or 6

$D7 = 1$ iff nchildren $>= 7$

The reference case for which they are all equal to zero therefore corresponds to zero children in the household. The complete estimation results are again reported in the Appendix and the coefficients summarized in Table 3.8. Whenever a cell is empty, the corresponding variable was dropped because of multicollinearity.

Table 3.8: Econometric determinants of family benefits

Variable/Country	Denmark	Netherlands	Belgium	France	UK
Sex = male	-2.91**	2.33**	-1.30**	-0.487**	-2.53**
Married	-0.078	-0.328**	0.423**	0.096**	0.114*
Age	-0.0046	0.026**	-0.003	-0.00	-0.013
Tertiary education	0.276**	0.08	0.115*	0.023	-0.039
Secondary Education	0.175*	0.187**	0.139*	0.083*	-0.05
Experience	-0.01	-0.0183**	-0.01**	-0.0088*	-0.0077
D1	2.95**	2.54**	1.31**	1.38**	2.13**
D2	2.81**	2.55**	1.25**	1.88**	2.29**
D3	2.96**	2.62**	1.22**	1.96**	2.49**
D5	2.66**	2.25**	1.27**	1.92**	2.87**
D7	--	0.783	0.68	1.39**	3.22**

Variable/Country	Greece	Spain	Portugal	Austria	Finland
Sex = male	-0.938**	-0.146**	0.947**	-0.013	-2.78**
Married	0.0149	-0.005	0.546**	0.124**	0.237**
Age	0.012**	-0.001	-0.007**	0.001	-0.004
Tertiary education	-0.543**	-0.409**	0.213**	0.192**	0.096
Secondary Education	-0.424**	-0.342**	0.119**	0.02	0.045
Experience	0.001	-0.004	-0.009**	-0.002	-0.012
D1	0.542**	0.7**	1.19**	1.18**	2.49**
D2	0.472**	0.791**	1.27**	1.23**	2.52**
D3	1.39**	1.20**	1.3**	1.24**	2.56**
D5	2.56**	--	1.44**	1.32**	2.77**
D7	--	1.66**	2.59**	0.77	3.43**

With respect to the number of children, the predicted positive dependence is observed, although one may distinguish between countries where the probability is not increasing in the number of children (Denmark, Netherlands, Belgium), and those where it is. In some cases the coefficient is lower when the number of children increases (e.g. D2 vs. D1 in Greece), perhaps reflecting a lower time to devote to claiming the benefit.

With respect to education, in many countries (Denmark, Netherlands, Belgium, Portugal, Austria, and to a lower extent France and Finland), the dependence is « regressive »

in that a better education increases the probability of earning family benefits. This may be due to better information about these benefits or a more flexible allocation of time which may make it easier to claim the benefit. This effect of education on benefit receipt is likely to lower migrants' expected dependency, at least partially offsetting the effect of the number of children.

Finally, whenever marital status comes out significant, it is positive, while in most cases female respondents are more likely to declare being on such benefits than males, with the noticeable exceptions of the Netherlands and Portugal.

The predicted dependency is summarized in Table 3.9. Migrants' excess dependence on benefits ranges from 0 to 15 percentage points. Note that the discrepancy with actual data is large in some cases, reflecting the greater vulnerability of this prediction to nonlinearities. For example, in Denmark, sex has a strong effect on family benefit dependency, and the « average sex » person for which this indicator is about 0.5 is predicted to be much less dependent than the population as a whole, where it is equal to 0 for 50 % of the people and 1 for the remaining 50 %.

Table 3.9: Predicted dependence on family benefits

Country	Pred. EU	Pred. NEU	Diff
Denmark	0,028	0,057	0,029
Netherlands	0,056	0,210	0,154
Belgium	0,157	0,170	0,014
France	0,074	0,191	0,118
UK	0,041	0,189	0,148
Greece	0,016	0,018	0,002
Spain	0,007	0,010	0,003
Portugal	0,122	0,165	0,043
Austria	0,198	0,301	0,102
Finland	0,050	0,070	0,020

3.3.2. Residual dependency

The preceding tables give us the predicted welfare dependency of migrants' *characteristics*. That is, they tell us the effect on the welfare state of fictitious perfectly « integrated » migrants, having overcome any specific shock associated with migration,

evolving in the same networks as similar natives, having the same preferences regarding work, leisure, and job search, and not suffering any discrimination in labor markets.

In this section, instead, we ask the following question: is migrant status associated with any *excess* dependency? That is, would an immigrant with a given set of characteristics be more or less likely to be dependent on unemployment benefits than a native with identical characteristics?

In order to answer that question and to see whether any difference is statistically significant, we have run the probit regressions explaining welfare dependency while adding a dummy equal to one for non EU citizens and to zero for EU citizens. We have again done so for the three main cash transfer programmes, namely unemployment benefits, family benefits, and pensions.

Before reporting these results, however, it is worth discussing what mechanisms may lie behind the existence of residual dependency.

3.3.2.1. Sources of residual dependency

Residual dependency is defined as the difference between actual migrants' dependency as predicted on the basis of their individual characteristics and the actual proportion of migrants under a given welfare scheme. Such residual dependency may result from various sources:

(i) *Self-selection.*

As argued above, countries with generous welfare systems will attract migrants with relatively low earnings. If earnings depend not only on individual characteristics but also on some unobservable individual ability component, then this component's average value will typically be lower for migrants than for natives, because it is conditional on the migrant having elected the generous country as a destination, i.e. on the migrant having an earnings capacity lower than a certain threshold.[14] Self-selection would then lead to positive residual welfare dependency of migrants. It may also lead to negative welfare dependency in some cases. For example, if being in good health makes it easier to bear migration costs, then migrants will be less likely to be paid sickness benefits than natives with similar characteristics.

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[14] Formally, earnings capacity is $y = Xb + e$, where X is a vector of individual characteristics and is unobservable ability. If y^* denotes the migration threshold, then the expected value of e for migrants is $E[e / Xb + e < y^*]$, which is lower than the unconditional expectation of e.

(ii) *Migration-specific effects*

Immigrants may suffer from specific shocks such as psychological trauma, language problems, etc, which make them more likely to be on welfare controlling for their individual characteristics. One may also think of specific effects going in the other direction : welfare entitlement may be more sensitive to literacy in the destination country's language than getting a low-skill job, in which case there will be negative welfare dependency.

(iii) *Discrimination*

If employers discriminate on the basic of ethnicity, then some migrants may have trouble finding jobs and may end up on welfare. Note, though, that this supposes that the administrations allocating welfare payments do not discriminate, or at least that they discriminate less than employers. If the opposite occurs, then one will observe negative residual dependency.

The discrimination hypothesis is plausible in light of anecdotal evidence and legal cases of racial bias, although at the statistical level it is not straightforward to distinguish it from network effects[15].

(iv) *Network effects*

The importance of co-ethnic ties in locational and occupational choice has been documented.[16] Specific networks of immigrants may develop in order to get jobs, which will generate negative residual dependency.[17] On the other hand, some ethnic groups may have access to networks that are less well connected than natives, and this phenomenon may be compounded by urban ghettoes; this will again generate positive residual welfare dependency. It is also conceivable that networks may develop for access to welfare benefits, which will yield positive dependency.

(v) *Non-portability of entitlements*

If entitlements are not transferable across countries then migrants will have lower entitlements than natives of similar characteristics , which will generate negative residual dependency of migrants. We expect this phenomenon to be particularly salient for **pensions.** But migrants may also have reduced eligibility for other programmes because of their past labor market history and/or reduced legal access to benefits.

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[15] See Richard (2001) for an analysis of differential unemployment incidence across ethnic groups in the French case.
[16] See Borjas and Bronars (1991) and Casella and Rauch (1997).

(vi) *Reduced wages*

Phenomena which reduce the wages of immigrants may also reduce their employment rate and increase their welfare dependency. This is because they have lower incentives to look for a job, for example. Beyond discrimination, an important contributing factor may be reduced access to public jobs.

3.3.2.2. Unemployment benefits

We now turn to the empirical results, starting again with unemployment benefits. Table 3.10 reports the probit regression on the migrant status dummy when it is added to the set of explanatory variables. The complete regression results are in the Annex. In Denmark, the Netherlands, France, Austria and Finland being an immigrant clearly has a positive and significant impact on Unemployment benefit dependency, while this is not true in Germany, the U.K., Greece and Spain.[18]

The last column expresses this residual dependency in terms of the increment of an « average » person's probability of being on UB if he or she is a migrant, in percentage points.

Table 3.10: Econometric determinants of residual migrant welfare dependency

Country	Residual migrant UB dependency			Residual migrant family benefit depenency	
	Coefficient	z-statistic	Excess Prob. (%)	Coefficient	z-statistic
Germany	0.07	(0.48)	0.97	NA	
Denmark	0.613**	(3.55)	15.6	-0.256	(-0.8)
Netherlands	0.412*	(1.8)	6.6	-0.188	(-0.7)
Belgium	0.204**	(2.1)	3.6	-0.06	(-0.5)
France	0.359**	(3.3)	5.6	0.187*	(1.9)
UK	0.08	(0.24)	0.4	-0.75**	(-2.5)
Greece	-0.19	(-0.47)	-0.6	0.199	(0.7)
Spain	-0.09	(-0.28)	-0.8	0.63*	(1.9)
Portugal	NA			-0.54	(-1.4)
Austria	0.481**	(3.79)	7.1	0.03	(0.3)
Finland	0.876**	(4.97)	27.4	-0.065	(-0.23)

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[17] For example Richard (2001), in the case of France, finds that migrants of Portuguese origins have a lower probability of being long-term unemployed than native French, while the contrary is true for migrants of North African origins, which may be interpreted as evidence of discrimination but also as a network effect.

[18] Results for Portugal are unavailable because of multicollinearity problems.

3.3.2.3. Old-age pensions

We have also looked at old-age pensions, adding the migrant status dummy to the probit regressions. We have only kept those coutries for which the number of observations of migrants on old-age pension is not trivial, i.e. Austria, Greece, France, and Belgium. The econometric results are available upon request. For all these countries, the dummy coefficient is not significantly different from zero, indicating that there is no residual effect on pensions[19]. This is somewhat not surprising, as eligibility only depends on age and not on economic outcomes, although one might have expected a negative coefficient because of portability and eligibility problems.

3.3.2.4. Family benefits

Finally, turning to family benefits, we find positive residual effects in France and Spain, although they are only significant at the 10 % level, while there is a negative significant residual effect in the U.K. (See Table 3.10)

3.3.3. How persistent is welfare dependency?

The above analysis suggests that there is residual dependency of migrants on unemployment benefits in Belgium, Denmark, the Netherlands, Finland, Austria, and France. There is no such residual dependency in other countries and for the other welfare programmes the evidence is mixed.

How persistent is migrants' residual UB dependency? If it is associated with the specific shocks of the migration itself, one may expect it to vanish over time. On the other hand, Western European countries are well known for long unemployment duration and duration dependence of exit rates, so that there may be some irreversibility associated with such excess UB dependency.

To know more about that, we run probits explaining UB dependency on individual characteristics and migrant status, while distinguishing between migrants who arrived less than 5 years before the survey date and those who arrived before. The results (not reported) imply that there is no significant difference between the two types of migrants. Consequently, the residual UB dependency of migrants seems to be quite persistent and not to vanish with the length of stay in the host country. It should be stressed, however, that typically eligibility to UB schemes requires a minimum contribution record. Thus long-term migrants are tipically entitled to UB, while short-term are not.

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[19] In Denmark and the UK, there is a significant negative residual effect, and in Portugal, a significant positive one. Note however that there are very few relevant observations in these cases.

3.4 Are cross-country differences in migrant selection related to differences in the welfare system?

If some of the differences between migrants and natives have to do with the generosity of welfare benefits, then we expect these two variables to be correlated in a cross-section of country.

Let us start from unemployment benefits where our results are most clear-cut, since they indicate a positive predicted and residual dependency in a well-identified group of countries. Figure 3.6 represents the relationship between the residual UB dependency of migrants as measured from the corresponding probit coefficient (RESEF) and a summary measure of benefit entitlement (BENEFIT)[20]. The residual effect is observed to grow where UB generosity is higher.

Figure 3.6: UB dependency of migrants and the generosity of benefit entitlement
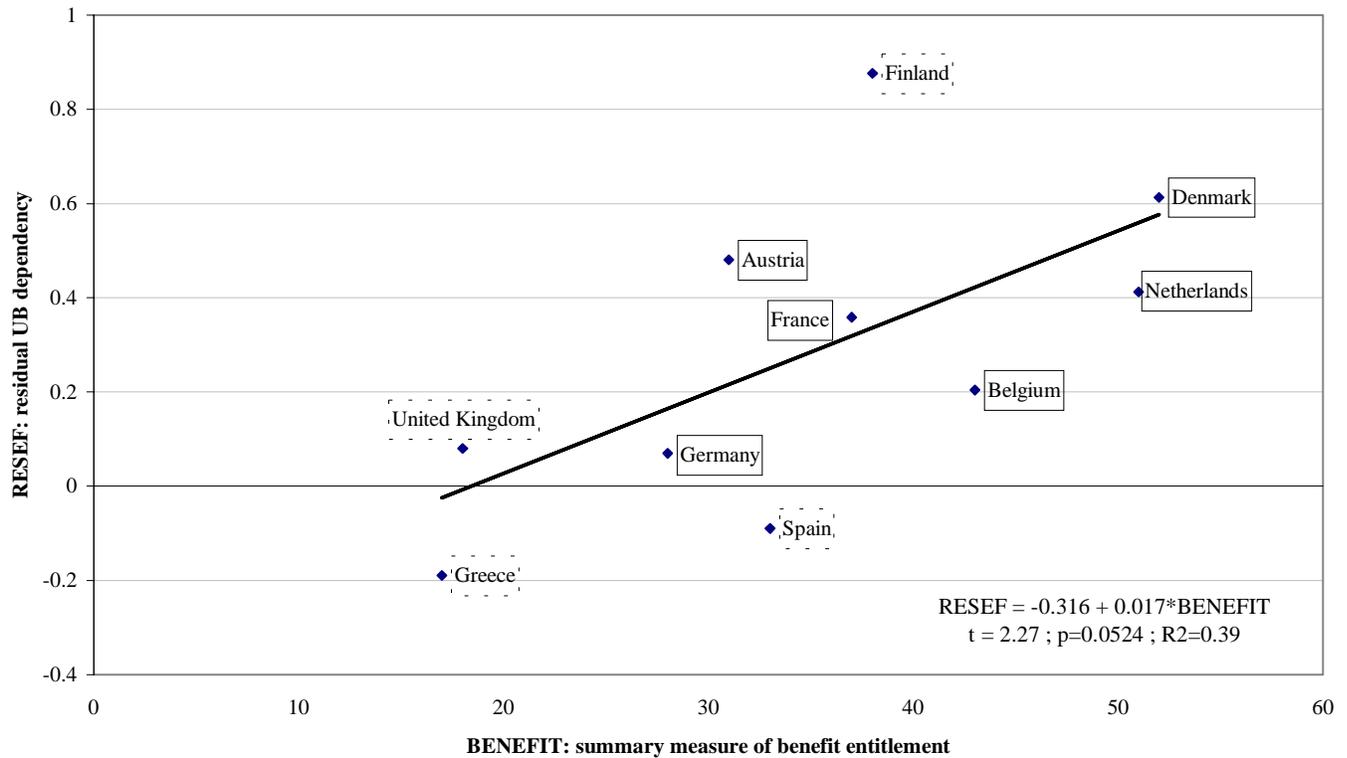
Note: group 1 in continous lines and group 2 in dotted lines

Then if we split our sample of countries in two groups, those where the proportion of migrants with less than secondary education is higher than that of natives (group 1), and those in the opposite case (group 2), it turns out that the average measure of UB generosity is 40 for

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[20] This measure refers to 1991 and is taken from OECD Jobs Study, 1995, table 8.1.

group 1 and 28 for group 2. This is only mild evidence, however, as a regression of the relative proportion of migrants with less than secondary education on the generosity measure yields a positive coefficient, but only significant at the 15 % level[21].

3.5 Conclusion

There are large differences across European countries with respect to the composition of the migrant population and welfare dependency. To some extent, these differences seem to be correlated with the generosity of the welfare state in a way consistent with the economic mechanisms described at the start of the chapter, although the evidence is not very strong. One consequence is that as far as unemployment benefits are concerned, increased migration may increase pressure on this programme in the most generous countries, but not in the least generous ones. The effect is typically moderate, since its order of magnitude is the product of the proportion of immigrants – a few percentage points -- times the excess UB dependency of migrants – a few percentage points too. But in some countries like Denmark and the Netherlands, this latter component is quite large, suggesting the most generous countries may indeed act as a welfare magnet.

Despite significant differences in characteristics, in many cases a significant component of the excess dependency of migrants is residual. One might have expected this component to go away with time, but we did not find any evidence on that: residual welfare dependency seems fairly persistent.

Our evidence on residual dependency is at odds with the literature mentioned in the introduction, which attributes most of the differential welfare dependency of migrants to their characteristics. Here despite the fact that their characteristics are quite different from those of natives, in many countries they do not explain a large share of their welfare dependency, either because of conflicting effects of various characteristic or because the link between observable characteristics and welfare is not very strong. In contrast, residual effects are strong in countries with generous welfare systems. These differential effects are consistent with the possibility of discrimination but their correlation with welfare generosity suggests that sorting and/or network effects may also be at work.

The differential fertility rate of migrants is also likely to put pressure on family benefits, although there is much less evidence of systematic sorting of migrants with many children into the most generous countries.

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[21] The t-statistic is 1.64.

On the other hand, the much lower age of migrants tends to ease the financing of the pension system for a long transitory period. In wave 3 of the European Household Panel Survey virtually no non-citizen had characteristics such that he or she would claim pensions. This is not surprising since eligibility is due to past labor market history which is unchanged when one migrates.

Overall, our findings are broadly consistent with the view that welfare benefits distort the composition of migrants, both in terms of their observable and unobservable characteristics; while the effects are quantitatively moderate, some of the most generous countries seem to act as welfare magnets.

What are the consequences of the above findings for the design of EC migration policies ? One may split this question in two parts. First, what are the implications for policy vis-à-vis non EU migrants ? Second, what are the implications for policies regarding intra-EU migration.

As for the first question, one may be concerned that the fact that the country where immigrants enter may differ from the destination country may generate excess migration. If the cost of controlling migration entirely falls upon the entry country, while the benefits accrue to the destination countries, then countries which have less generous benefits, and therefore are less likely to end up as a destination country, have a reduced incentive to control migration. In fact, one way for them to reduce their stock of migrants may, paradoxically, be to give citizenship totheml, since it will facilitate their move to another EU countries. That is, a logical implication of free movement within the EU is, in order to reduce these externalities, that immigration and naturalization policies be in the hand of the EU as a whole rather than individual member states.

As for the second question, the prospect of EU enlargement to poor countries may increase migration pressures to the countries with the most generous welfare state. In order to mitigate such pressure, it may be desirable to condition the entry of accession candidates upon the introduction of minimal social insurance of those countries. EU transfers to these countries could be used to finance the set-up cost of their social safety net.

Annex

European Community Household Panel (ECHP)

This survey is a standardised annual longitudinal survey carried out in the European Union since 1994. All current EU member states, with the exception of Sweden, are represented. Austria and Finland only joined in wave 2 (1995) and 3 (1996) respectively.

The data are collected separately at the national level by "National Data Collection Units" – "NDUs", either National Statistical Institutes (NSIs) or research centres depending on the country. The questionnaire and procedures are fairly standard across countries, but there are differences, mainly in sample selection and anonymisation (whereby some countries have stricter requirements by law, as for example Germany). Comparability is ensured by Eurostat guidelines which are followed by NDUs.

The interviews took place mostly in the calendar year following the survey year (1994 for the first survey, relating to 1993, etc...). Only the first three waves (1994, 1995 and 1996) are currently available. In the first wave a sample of some 60,500 households - i.e. approximately 130,000 adults aged 16 years and over were interviewed in the then 12 member countries. In wave 2, EU-13 samples totalled some 60,000 households and 129,000 adults. In wave 3, 14 samples included some 61,000 households and 131,000 adults.

For a detailed description of the ECHP methodology and questionnaires, see "The European Community Household Panel (ECHP): Volume 1 - Survey methodology and Implementation" and "The European Community Household Panel (ECHP): Volume 1 - Survey questionnaires: Waves 1-3" - Theme 3, Series E, Eurostat, OPOCE, Luxembourg, 1996.

4. The Impact of European Immigration Policies on Welfare and the Welfare State

In contrast to other forms of regional integration, the free movement of EU citizens is a fundamental freedom of the "Single Market" in the European Union (EU). It was granted to the citizens of the six founding Members of the then European Economic Community (EEC) with a joint population of 185 million in 1968, and has meanwhile been extended to the 15 members of the EU and another three members of the European Economic Area (EEA) with a joint population of 380 million people. This free movement forms the core of European immigration policies. A comprehensive set of regulations has evolved at EU levels, which aim to protect EU households against discrimination in other member states. These regulations cover, inter alia, the eligibility to welfare benefits. Nevertheless, the mobility of the population among the present EU Members is low: no more than 1.5 % of the EU's population reside in other member countries. Most foreigners living in the EU countries - at around 3.2 % of the community's population - stem from non-EU countries.

The removal of barriers to labour mobility in the EU has gone hand in hand with the establishment of increasing restrictions to the immigration from non-EU countries after the first oil price crisis in 1973, family reunification, humanitarian migration and illegal migration have become the main channels for migration in many member states since then. As a consequence of the "Single Market" principles, the protection of labour markets against an influx of workers from non-EU countries has meanwhile been instituted at EU levels. However, European immigration policies are far from being consistent: the two main legal channels for the immigration of non-EU nationals -- family reunification and rules designed for humanitarian migration -- are still under authority of the individual member states.

In a nutshell, the principles of European immigration policies can be sketched by two imperatives: (i) remove the barriers to mobility of labour for the club of rather rich countries with relatively homogenous factor endowments, and (ii) protect labour markets of the club members against an additional labour supply from non-club members. These policies had not only an impact on the quantity of migration flows, but also on the human capital characteristics of migrants. While the first imperative intends to select migrants from countries with relatively high average income and skill levels, the second imperative aims to prevent the immigration from countries with relatively low average income and skill levels. However, these policies have unintended side effects: the greater share of third country

nationals using the channels of family reunification, humanitarian and illegal immigration affects the skill composition and the propensity of migrants to depend on welfare.

The political and economic environment for European immigration policies has changed during the last decade: firstly, the EU ceases to be a club of rather rich countries with homogenous factor endowments after Eastern Enlargement. Note that income differentials between the present EU Members and the accession candidates from Central and Eastern Europe are similar to those between Canada and the USA on the one side, and Mexico on the other side, when the NAFTA was signed. Secondly, declining birth rates and a rapidly ageing population in all EU countries create an additional demand for foreign labour, if a deterioration of the ratio of the working age to the elderly population should be mitigated. Thirdly, increasing numbers of illegal migrants and increasing pressures on countries with generous rules for humanitarian immigration undermine the protection of labour markets. As a consequence of these changes, the traditional principles of European immigration policies come increasingly under pressure.

In this chapter we discuss the implications of the central principles of European immigration policies on welfare and the welfare state in the EU against the background of the three challenges mentioned above. As a basis for further discussion, we start with an overview of the polices that govern immigration within and into the EU. We then analyse how European immigration policies have affected the selection and self-selection of migrants with regard to the mix of countries of origin and the human capital endowments of migrants. On this basis we discuss how the different rules to admit immigrants have affected wages and employment of natives as well as the labour market performance of migrants. We then summarise our findings and discuss finally the impact of enlarging the EU, opening EU labour markets to non-EU immigrants and harmonising the rules for admitting humanitarian migrants.

4.2 The rules of European immigration policies: an overview

Before proceeding to the empirical analysis, an overview on the cornerstones of European immigration policies will be instructive in order to establish the institutional background. Post-war immigration to the countries which now form the European Union (EU) has been regulated both at the level of the community and at the level of the national states. Before the predecessor of the EU, the European Economic Community (EEC), was founded in 1957, immigration processes in Europe have been characterised by two main trends: the absorption of the large immigration waves, which have been caused by 1) the

massive disruptions of World War II and decolonisation, and 2) South-North labour migration after full-employment have been achieved in the mid 1950s. The first produced immigrant waves that were governed by national definitions of citizenship, the second one by a set of rules which supported actively or passively the immigration of foreign workers (e.g. the "guest worker" system in Germany). These two large migration processes left their imprint in the composition of European migrants and their descendants. After the foundation of the EEC, barriers to the mobility of workers and other persons have been removed step by step in a continuously growing union of countries. The removal of barriers to labour mobility within the union has gone hand in hand with the establishment of barriers against labour immigration for non-EU nationals in most member states after the first oil price crisis in 1973. These policies have also been instituted at EU levels. In the EU of today, we can distinguish basically four policy areas, which regulate migration within and into the EU: i) rules which govern the free movement of workers in the Common Market, ii) the regulation of the access of migrants to welfare benefits, iii) rules which govern labour immigration and family reunification from non-EU countries, iv) the regulation of humanitarian migration (asylum seekers, refugees), and v) the co-ordination of external border control after internal borders have been removed in the "Schengen" area.

Integrating Labour Markets in the European Community

The foundation of a Common Market in Europe was based on the idea that integration of all four markets, i.e. the markets for goods, services, capital and labour, would enhance welfare of all members of the community. The Treaty of Rome, which established the then European Economic Community (EEC) in 1957, defines the free movement of workers consequently as one of the four fundamental freedoms of the "Single Market."[22] It took, however, another eleven years until full free movement of workers was granted to the citizens of the community[23].

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[22] Art. 48-51, EEC-Treaty.

[23] The free movement in the then EEC was introduced in three steps: firstly, the members were still allowed to assign priority to their own nationals, but if no national could be found, nationals from other member states were entitled to take-up the job in 1961 (Regulation 15/61). Secondly, the priority to nationals was abolished in 1964, but the right to seek jobs remained restricted. Moreover, safeguard clauses allowed to suspend the free movement (Regulation 38/64). Thirdly, the full free movement was introduced in 1968, but a safeguard clause still allowed to suspend free movement in certain regions on request (Regulation 1612/68). The safeguard clause was formally repealed in 1992.

	Box 4.1 Immigration policy of the EU: a chronic

1957	"Treaty of Rome" (EEC-Treaty): Art. 48 defines the free movement of workers as a fundamental freedom of the "Single Market."
1968	Full free movement of workers for the six founding members of the EEC (Belgium, France, Germany, Italy, Luxembourg, and the Netherlands).
1968	Completion of the "Customs Union."
1971	Accession of Denmark, Ireland, UK; no transitional period for free movement.
1981	Accession of Greece; transitional period for the free movement of workers.
1985	"Schengen"-Agreement on border control (Schengen I).
1986	Accession of Portugal and Spain; transitional period for the free movement of workers.
1986	"Single European Act:" Establishment of the legal framework for the "Single Market."
1988	Greece: transitional period for free movement expires.
1990	"Social Charta." The free movement of workers is granted in Art. 1.
1990	"Schengen"-Application Convention on border control (Schengen II).
1992	Portugal and Spain: transitional period for free movement expires.
1992	Completion of the "Single Market:" unrestricted right for provision of services, self-employment, establishment of firms. Mutual recognition of education degrees.
1992-1997	"Europe Agreements" with ten countries from Central and Eastern Europe.
1995	Accession of Austria, Finland and Sweden; no transitional periods for free movement.
1998	"Treaty of Amsterdam" (EU-Treaty): Art. 38-48 defines again the free movement of workers and persons as a fundamental freedom of the Single Market.
1999	Tampere European Council.
2000	Inclusion of Bulgaria, Latvia, Lithuania, Romania, Slovakia into accession negotiations, candidate status for Turkey.
2001	The European Commission proposes transitional periods of 5 + 2 years for the free movement of labour for the CEEC-10, no transitional periods for Cyprus and Malta.

The free movement of workers started in a community of six countries with a joint population of 185 million persons and relatively homogenous per capita GDP levels[24], and has been extended step by step to the 15 members of the present EU with a joint population of some 375 million persons. Moreover, in 1990 the free movement was extended to the

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[24] Measured in purchasing power parities, the GDP per capita of Italy, the poorest country among the six founding Members, was at 90 % of the community average in 1968 (author's calculations based on Maddison, 1995). However, large regional disparities in income levels induced notable migration flows from Italy to other founding Members of the community in the 1960s.

members of the European Economic Association (EEA), which today comprises Iceland, Liechtenstein and Norway with a joint population of almost 5 million persons.

As a rule of the thumb, the citizens of the relative rich countries have been entitled to free movement immediately after accession, while transitional periods have been agreed in the cases of countries with relatively low income levels:[25] transitional periods of seven years have been agreed in the accession of Greece in 1981, as well as in the accession of Portugal and Spain in 1986.[26] The European council decided later to shorten the transitional periods for Portugal and Spain to six years. During the transitional period, work permits of the host countries were still required for labour immigration. Family members enjoyed the right to join the worker, but got only limited access to the labour market.

The free movement of workers entitles citizens of the community to work in other member countries and to reside there. More specifically, the free movement of workers comprises the following rights: (i) to seek employment in other EU countries, (ii) to move there for the purpose of employment seeking, (iii) to reside in other EU-countries for the purpose of employment, (iv) to remain in other EU-countries after the completion of employment if the household is able to finance its living out of its own means.[27]

The right to seek employment implies in practice that EU citizens can stay in other member states for at least three months. A recent statement of the European Supreme Court states that a time span of six months and, in reasonable cases, even more is appropriate. Employed persons are automatically entitled to a residence permit. France, Germany, Italy and Spain decided to demand no residence permit for employed EU citizens in July 2000.

The *acquis communautaire*, i.e. the common set of legal rules in the community, requires the equal treatment of all EU citizens with regard to employment, occupation, remuneration, dismissal and other conditions to work.[28] Moreover, the legal framework of the EU attempts to reduce barriers to labour mobility through the mutual recognition of education degrees and the harmonisation of education systems. Finally, several obstacles to the establishment of businesses, self-employment and the supply of services in other member countries were removed during the declaration of the 'Single Market' on January 1, 1993.

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[25] In the case of Ireland the free movement was granted immediately after accession. Free movement between Ireland and UK was however already in place before accession.

[26] In cased of Luxembourg, a transitional period of ten years was agreed in the accession negotiations with Portugal and Spain, which was cut down to 8 years.

[27] Art. 39 (1), EC-Treaty. The general principles have been translated into practice by the Regulation 1612/68 (EEC) on the free movement of labour and the Directive 68/360 (EEC) on the abolition of barriers to travel and residence of EU citizens in other member states.

[28] Art. 39 (2), EC-Treaty.

Although the EU grants, in principle, the free movement to all EU citizens irrespective of their employment status, the free movement of non-employed persons is still more restricted than the free movement of workers. The immigration of non-employed persons can be rejected if they are not able to prove that they are able to finance their living out of their own means. Moreover, a health insurance is needed in most member states. Family reunification can be rejected if the living of the household cannot be financed out of its own means and if housing is not guaranteed. A residence permit of unemployed EU citizens can be withdrawn after the period for which unemployment benefits are granted has expired and if the household is not able to finance the living out of its own means[29]. Thus, the free movement of persons is actually limited to those who have sufficient means to finance their living without social assistance of host countries.

Eligibility to welfare benefits[30]

The principle of equal treatment requires that EU foreigners should enjoy the same protection by the social security systems as natives.[31] The *acquis communautaire* does not aim to harmonise social security schemes, but to avoid that migrant workers are penalised in the field of social security[32]. As a consequence, a number of regulations demand that claims against social insurance are portable and that they can be set off against each other. This holds true for pension schemes, disability benefits, health care, unemployment benefits, family benefits, etc. In principle, it does not matter whether social benefits are financed by social insurance contributions or by taxes. However, benefits that are not financed by social insurance contributions are paid at the place of residence and cannot be exported.

The application of these principles is, however, problematic, and uneven social benefits still create considerable labour mobility costs. According to the rules of the *acquis communautaire*, the payment of social benefits should follow the principle of equivalence, i.e. that claims against social insurance should be granted if similar contributions have been made or similar claims exist in home countries. However, many obstacles to the mobility of labour remain since social security systems are not harmonised in the EU. As an example, different rules for taxing pension schemes are applied in the EU, i.e. some countries exempt

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[29] EU Directive from 1990.

[30] For an in-depth description of the legal framework see Beirat beim Bundesminister der Finanzen (2001) and Sinn et al., 2000.

[31] Art. 51 EC-Treaty; Art. 42 EU-Treaty. The Decrees 3 and 4 (EEC) are the basic rules which demand the protection of workers against losses involved by cross-border changes of social security systems.

contributions and capital gains but not tax benefits, while others exempt benefits but not tax contributions and/or capital gains. As a consequence, in some cases the change of a social security system involves double taxation, while in other cases double tax-exemptions (EC, 2001). Thus, differences in social security and tax systems still distort the benefits and costs of international migration across the member states.

Uneven welfare benefits across EU countries create incentives for "welfare shopping," i.e. to migrate between EU countries in order to earn higher benefits. Several provisions in the legislation of the EU and its member states are designed to protect national social security systems against welfare shopping: as has been outlined above, nationals from other EU countries are only admitted if they can prove that they are able to finance their living out of their work or other financial means. This also holds true for family reunification. Unemployment benefits can be exported to other EU countries for a period of three months. However, job seekers are not entitled to any welfare benefits in the host country. Claims against social insurance such as unemployment benefits are only accepted after certain periods of payment. Although EU-foreigners are, in principle, entitled to social assistance, the member states can both reject the immigration of family members if the household is not able to finance its living out of its means and withdraw residence permits if a foreign household relies on social assistance[33].

Although the EU and the members states attempt to protect social security systems against the immigration of welfare seekers, workers from other EU countries and their families are in practice entitled to the same set of social welfare benefits as natives once they have been employed in another EU country for a certain period of time. Residence permits are only withdrawn in exceptional cases. As a consequence, the entitlements to welfare benefits affect both the return migration of those whose earnings fall under the level of social assistance and the self-selection of migrants with regard to their prospective social risks.

Restricting immigration from non-EU countries and preferential treatment of EU citizens

Most member states of the EU have established legal and administrative barriers against labour immigration immediately after the first oil price shock in 1973, although labour immigration from non-EU countries still play a role (see Chapter 1). Among the larger

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[32] Art. 42 EU Treaty demands the co-ordination of social insurances and other social security systems. The basic rules for the portability of claims against social security systems for employed persons, self-employed persons and their families are defined in the Regulation 1408/71 (EEC) and Regulation 574/72 (EC).

immigration countries, Germany stopped the recruitment of guest workers in 1973, and restrained labour immigration since then. Family reunification and humanitarian immigration remain the main legal channels for immigration from non-EU countries in Germany after 1973 (Bauer/Zimmermann, 2000). In France, the number of accepted immigrant workers dropped sharply in the wake of the 1973/74 recession. Illegal migration have become one, if not the main channel for labour immigration after 1974 (Gross, 1999; see also Garson et al. 1997; Weil, 1994). Note that considerable numbers of illegal migrants have been legalised in several large amnesties in France.[34] In Sweden, the active recruitment of labour basically from other Nordic countries ceased after 1973, and humanitarian immigration and family reunification became increasingly important (Hansen, 2000). In the UK, more and more restrictions against the immigration from the former Commonwealth countries have been imposed during the post-war period. The number of work permits granted to foreign immigrants have declined substantially after 1973, but recovered in the late 1980s (Hatton/Wheatley Price, 1999). Family reunification and asylum laws have become increasingly important in the UK, too, but they do not play the same role as in the large immigration countries on the continent.

The legal framework of the EU reflects the protective policies of its member states: the *acquis communautaire* explicitly demands a preferential treatment of EU citizens vis-à-vis non-EU citizens in the labour markets. Labour from outside the community can only be hired if it is proved that the position cannot be occupied with EU-nationals or with non-EU nationals who already possess a residence permit in the respective country.[35] Temporary work permits can be granted to non-EU citizens if a position is offered to a specific person with specific skills and the position cannot be filled with employees from domestic and EU labour markets. Seasonal workers, border commuters and key personnel from non-EU countries can be admitted under restrictive conditions. Thus, the legislation of the EU demands the discrimination between EU and non-EU nationals regarding the entry to the labour market of the community. However, these regulations hardly form a binding constraint to the member states, since it confirms only common practice in the member states.

According to the legislation of the EU, individual member states can admit families of non-EU nationals if it is proved that they possess sufficient means to finance the living out of

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[33] Moreover, in some member states the national legislation explicitly rules out that social assistance is paid to those who emigrated for the purpose of seeking welfare benefits. See e.g. the German social legislation, namely §120 of the Federal Social Assistance Law (BSHG).
[34] 60% of all active new immigrants received amnesty in France between 1948 and 1981 (Gross, 1999, relying on the French Ministry of Social Affairs and National Solidarity).

their work and wealth and if housing is guaranteed. Although the criteria for admitting family reunification differ among the individual countries, all member states allow family reunification in one way or another (see SOPEMI, 2000, for a review). Family reunification has been one of the key channels for immigration of non-EU nationals into the EU after the barriers to labour immigration were raised in the wake of the oil price shock in 1973. Note that the combination between high barriers to labour immigration and relatively low barriers to family reunification had a long-lasting impact on the composition of migration from non-EU countries (see below).

The legislation of the EU does not explicitly regulate the access of third-country nationals to welfare benefits, but it demands a "fair treatment" for workers and other persons from non-EU countries. This implies that basic rules for integrating workers from EU countries into social security schemes apply also to nationals from non-EU countries. However, the individual member states are free to withdraw residence permits if non-EU foreigners rely on social assistance.

Although the EU imposes several restrictions on its members with regard to the admission of foreigner workers from non-member countries to labour markets, the immigration from outside the EU remains basically under authority of the individual members. It is explicitly stated in a General Declaration to the 'Single European Act', which establishes the Single Market, that "nothing in these provisions shall affect the right of member states to take such measures as they consider necessary for the purpose of controlling immigration from third world countries." Thus, immigration policies vis-à-vis third countries remains under domain of national policies. Non-EU foreigners are, consequently, excluded from the free movement: residence and work permits cannot be transferred to other EU countries.[36].

Admitting humanitarian migrants

Although all member states of the EU signed the 1951 Geneva Convention on refugees, asylum and refugee policies differ largely across the individual EU countries. Both, the rules of admitting asylum seekers and refugees, as well as the practices of how to proceed with non-accepted asylum seekers and refugees are not yet harmonised in the EU. Nevertheless, one common feature in all EU countries is that only few applications for

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[35] Regulation 1612/68 (EEC) and 569/90 (EC).
[36] However, non-EU foreigners with a residence permit in a member state can move freely to other EU countries for a period of up to three months.

political asylum and a refugee status are accepted (see Chapter 1). Many humanitarian migrants are however tolerated in EU countries, even though their applications for asylum or a refugee status have been rejected (see Box 4.2).

Although the share of forced migrants among asylum seekers and other applicants for humanitarian migration is higher than the official statistics suggest, legal rules defined for humanitarian migration have been nevertheless used as a channel for large scale economic migration. As we have seen in Chapter 1, the number of asylum seekers and other humanitarian migrants have increased along with tightened conditions for labour immigration. The number of asylum applications experienced a surge in the early 1990s and concentrated on few immigration countries. Germany was particularly affected, a historical peak of 440 000 asylum was reached there in 1992.

As a consequence, Germany and many other EU countries have tightened the legal and administrative rule for admitting asylum seekers and other humanitarian migrants significantly. The measures applied are similar: accelerating the processing of applications, rejecting work permits, reducing social assistance for applicants, paying social assistance in form of vouchers, and preventing the entry of humanitarian migrants. All these measures are aimed at, and have resulted in, limiting entries to the respective countries and shorten the duration of stay. In particular, policies to reject the entry of humanitarian migrants have proved to be efficient in the German case: after the amendment of Art. 16 of the German basic law, asylum seekers can be rejected if they arrive from a "safe country." Moreover, asylum seekers arriving at an international airport are kept in the transit area and their immigration is rejected if their application is proved as "manifestly unfounded" (see Boswick, 1997, for an analysis). These restrictive measures have reduced asylum applications in Germany to one quarter of the 1992 figure, while the number of applications has increased in other member states such as the UK and the Netherlands. Nevertheless, similar measures as in Germany have already been applied by the other EU members or are discussed there (see the SOPEMI, 2000, report on the developments in the individual member states and other OECD countries).

Box 4.2   What is a humanitarian migrant?

For an understanding of the phenomenon of humanitarian migration it is helpful to distinguish three types of forced migrants: the activist, the target and the potential victim. The first is a political agent who is primarily persecuted because of her or his political activities. The target has not contributed or caused her or his persecution, other than by belonging to an ethnic, religious or other type of group. The last category, the potential victim, comprises those who are not especially targeted for persecution, but are nevertheless fleeing from threats against their safety which are induced by

Civil Wars and other social catastrophes (Boswick, 1997; Zolberg, et al., 1989). The first type of forced migration is usually covered by political asylum laws, e.g. Article 16 of the German basic law. The second type is protected under the Geneva Convention and may stay in a host country even if their asylum applications are rejected. The third type is neither captured by national asylum laws nor by the Geneva Convention, but comprises nevertheless the largest share of forced migration. As an example, most of the refugees from the Civil Wars in former Yugoslavia are not entitled to asylum or to the Geneva Convention refugee status. However, as in the cases of the civil wars in the former Yugoslavia or Uganda, many of these humanitarian migrants have been tolerated in EU member states. This helps to explain why many humanitarian migrants were not repatriated in the EU, although they are not accepted as asylum seekers or refugees.

Thus, although large numbers of refugees have been tolerated in Germany and some other EU countries during the Civil Wars in the former Yugoslavia, it can be hardly denied that asylum and refugee laws have been tightened significantly throughout the last decade. This is hardly surprising, since national asylum and refugee policies tend to penalise the generous countries in the community, such that a 'race to the bottom' is unavoidable if migrants take advantage of different national rules. A common European asylum and refugee policy is on the agenda of the EU, but has not yet brought many results. The competence of the European Community for a common asylum and immigration policy has been established for the first time in the Treaty of Amsterdam, but it does not go much beyond an information mechanism on national policies. In the Dublin Convention from 1990, twelve EU members agreed on a common procedure for asylum seekers, which addresses, inter alia, the question of how to deal with multiple asylum claims. The content of asylum claims remain, however, unaffected from this agreement. Finally, the European council declared at the Tampere summit in 1999 that "the separate but closely related issues of asylum and migration call for the development of a common EU policy." In a recent Communication of the European Commission to the European Council and the European Parliament it is proposed that rules on the recognition and content of asylum and refugee status should by harmonised at EU levels. Moreover, a refugee fund, which should compensate individual member states for the burden of humanitarian immigration, is under discussion (EC, 2000).

The Schengen Accords: Controlling external borders and combating illegal migration

As a consequence of the Single Market, a subset of the EU members decided to establish a region without internal border controls, known as the 'Schengen' area. The first Schengen Accord was signed in 1985, a second one in 1990. The objective of the Schengen

initiative is to abolish internal of the signatory states, to create a single external border where immigration checks are carried out in accordance to a unique set of rules, and to harmonise rules regarding visas and asylum applications. As a consequence, a set of measures such as the co-ordination of policies, customs, judiciary and the development of a common information system have been adopted. The Schengen Accord has been meanwhile signed by all EU members, except the UK and Ireland. The later countries participate, however, in many aspects of the Schengen Accord, except the abolition of border controls.

Although the Schengen Accord is a milestone in reducing barriers to the mobility of persons within the EU, it has a more limited impact on the integration of labour markets. Non-EU foreigners permitted to reside in a member country are allowed to travel within the Schengen area, but they are not allowed to reside or to work in other EU countries. Moreover, asylum seekers and refugees are usually not allowed to leave the country (or even the region) of residence. Thus, Schengen is basically about organising efficiently the external control of borders in a community which has abolished its internal borders for the transport of goods and movement of people. It certainly has an impact on combating illegal migration, but it does not affect the national authority to regulate the immigration of workers and persons.

The two cornerstones of post-war European immigration policies are the removal of barriers to mobility for the members of the EU and its predecessors, and the establishment of barriers to labour immigration from non-EU countries after the first oil price shock in 1973. However, in contrast to the integration of goods markets, the EU's policy toward the integration of labour markets remains partial: while the barriers to intra-EU mobility of labour have been removed, the entry of non-EU migrants to EU's labour markets is still regulated by the individual member states. The free movement is consequently denied to non-EU citizens residing in the EU. Thus, although we can observe several attempts in harmonising rules of admitting third world country nationals, it is premature to speak about a common immigration policy of the EU, except in that policies attempt to protect host labour markets against immigration from non-EU countries in one way or another.

4.3 How did European immigration policies select migrants?

Immigration policy has a long-lasting impact on the size of migration and the human capital characteristics of migrants. In this section we address the question what consequences the free movement within the EU and national immigration policies vis-à-vis third countries had on the scale and skill composition of migrants. Starting with a brief discussion on how immigration policies can affect the selection and self-selection of migrants, we examine the

change in the country mix of origin in the wake of introducing the free movement and establishing of barriers to migration from third country nationals. Then we analyse, on the basis of the European Household Survey Panel, the skill composition of migrants in the EU.

How do migrants select themselves?

Immigration policy is basically about the selection of migrants. It affects, whether intended or not, the costs and benefits from international migration and, hence, the quantity, and human capital characteristics of migrants. At first glance, mean income and education levels of source countries relative to the countries of destination give an idea on the quantity and human capital characteristics of (potential) migrants. However, migrants are a non-random sample of the population in the country of origin. A simple, but powerful way to tackle the question of the composition of migrants has been proposed by Borjas (1987), relying on the Roy (1951) model: under the assumption, that the costs of migration are a constant share of wages, the self-selection of migrants is determined by the distribution of incomes in the country of origin relative to the country of destination. For a given structure of incomes in the host country, the net benefits for migration are higher for individuals with high abilities and skills if the income distribution is more equal in the country of origin than in the country of destination, and vice versa. Thus, removing the barriers to immigration vis-à-vis a country with a lower inequality of incomes relative to the country of destination yields a more "favourable" skill composition of migrants, while the removal of barriers to immigration vis-à-vis a country of a higher inequality of earnings results in a less "favourable" self-selection of migrants (Borjas, 1987).

However, two qualifications are needed. Firstly, the terms 'favourably' and 'unfavourably' self-selection suggest a normative judgement, which might be misplaced. In the models of trade theory, factor movements which are motivated by differences in factor prices increase welfare in the receiving country or region. Thus, the movement of unskilled labour into a country which is relatively abundant with high-skilled labour may increase aggregate welfare there. Secondly, the self-selection model, as is sketched here, is only a special case of a more general human capital model of migration (Chiswick, 2000). If we relax the assumption that the costs of migration are a constant proportion of wages for all types of migrants, then the composition of migrants is not only determined by the inequality of incomes in the country of origin relative to the country of destination, but also by the structure of migration costs. As a consequence, the picture becomes more complex.

Consider the following cases: firstly, if all or a part of the migration costs are equal for all types of migrants (e.g. out-of-pocket costs for transport and communication), then migration yields, ceteris paribus, higher net returns for the high-skilled relative to the low-skilled. Secondly, if abilities to minimise migration costs are related to the labour productivity of individuals, then net returns for the high-skilled are again higher than those of the low-skilled, all other factors equal. Thirdly, if employers in the home countries know the true productivity of migrants, while employers in the host countries do not, then relative wages of high-skilled workers are, ceteris paribus, in host countries below wages in the country of destination. This may result in adverse selection, i.e. that the negative self-selection of migrants induce employers in host countries to reduce wages for immigrant workers, which reduces the skill levels of migrant cohorts further, and so on (Kwok and Leland, 1982; Katz and Stark, 1986; Stark, 1991). Finally, if liquidity constraints of migrants and their families are (negatively) correlated with education and labour productivity, then migrants tend to be, ceteris paribus, favourably self-selected[37].

Against this background, we expect that the immigration policies of the EU and its members has affected the composition of migrants in different directions:

1. <u>Selective migration barriers</u>: The rationale to remove barriers to migration within the EU while establishing barriers to immigration vis-à-vis third countries is to affect the mix in the countries of origin. If implemented efficiently, this policy should have increased migration from countries with a relatively low inequality of earnings and reduced it from countries with a relatively high inequality of earnings, and, hence, raised the skill composition of migrants.

2. <u>Channelling migration from third countries</u>: Establishing barriers to labour immigration vis-à-vis non-EU countries has increased the importance of the channels of family reunification, humanitarian migration and, presumably, illegal migration for migrants from there. All three channels tend to increase incentives for migration of relatively low-skilled workers (e.g. Chiswick, 2000). Thus, the impact of protecting EU labour markets is ambiguous: one the one hand, it may have increased the skill composition of migrants by reducing migration from countries with relatively high earnings inequality, while it has, on the other hand, affected the skill mix of migrants from these countries unfavourably.

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[37] It is, however, also possible to construct the reverse case: individuals may emigrate in order to escape from liquidity constraints in rural areas or poor countries. Even small chances for success may motivate the emigration of risk-averse individuals if liquidity constraints are present (Stark, 1991). Thus, if a positive correlation between liquidity constraints and skills exist, then liquidity constraints favour the emigration of low skilled. It is however

3.   Labour market integration in the EU: Reducing the costs of migration can work in both directions, i.e. increasing the net benefits of migration for either the high-skilled or low-skilled workers. In general, all measures which reduce the costs of transferring human capital (e.g. harmonisation and acceptance of education degrees, language training, etc.) increase net benefits of migration for the high skilled relative to the low skilled, while reducing out-of-pocket costs such as transport increase the net benefits of migration for the low-skilled relative to the high skilled. At the balance, the large set of measures implemented by the EU to reduce information costs and the mutual recognition of education degrees etc. should have favoured the migration of high-skilled workers relative to the low-skilled within the EU.

4.   Eligibility to welfare benefits: Redistributing incomes and improving the eligibility of foreigners to welfare benefits tend to increase migration incentives of the low-skilled relative to the high-skilled. However, the impact of welfare benefits on the selection of migrants is ambiguous: if the risks of migration increase with the accumulation of human capital, insuring migrants against social risks such as unemployment may increase incentives to migrate for high-skilled workers relative to the low-skilled. Thus, the impact of improving the access of EU citizens to welfare benefits in host countries may have, at the balance, improved incentives for high skilled workers of EU countries to migrate.

5.   Temporary migration: immigration policies in many, but not all, EU countries favours temporary migration. If a complementarity between country specific and internationally transferable human capital exists, temporary migrants (guest workers, sojourners) tend to be less skilled than permanent migrants. Thus, temporary migration restrictions reduce both, the incentives for the high-skilled to migrate, and incentives for those who emigrated to invest in country specific human capital (Chiswick, 2000). Moreover, if temporary migration arrangements are not properly enforced such as the guest worker arrangements in Germany, they may have a long-lasting impact on the skill composition. However, restricting the duration in the country of destination may not reduce incentives to migrate for high-skilled professionals whose human capital can be transferred internationally with low costs. Moreover, low-skill temporary immigration may increase welfare in host countries -- at least if they manage to enforce return migration (see Chapter 5).

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reasonable that ability of migrants increases with liquidity constraints, since their prospective returns of migration are higher.

The shift in national origin of EU migrants

At first glance, European immigration policies have been unsuccessful in affecting the mix in the national origin of migrants. Since the early 1970s, when the free movement of workers was introduced for the founding members and barriers to the immigration from non-EU countries were established, the share of EU citizens residing in other member countries stagnated at around 1.5 % of the EU's population.[38] At the same time, it can be estimated that the share of foreigners from non-EU countries residing in the EU has increased from around 1.5 % to 3.3 % of the EU's population.[39] As a consequence, more than two-thirds of the foreign population residing in the EU stem from non-EU countries in 1998 (Figure 4.1).

Figure 4.1 Share of EU- and non-EU foreigners in the population of the EU members, 1998[40]
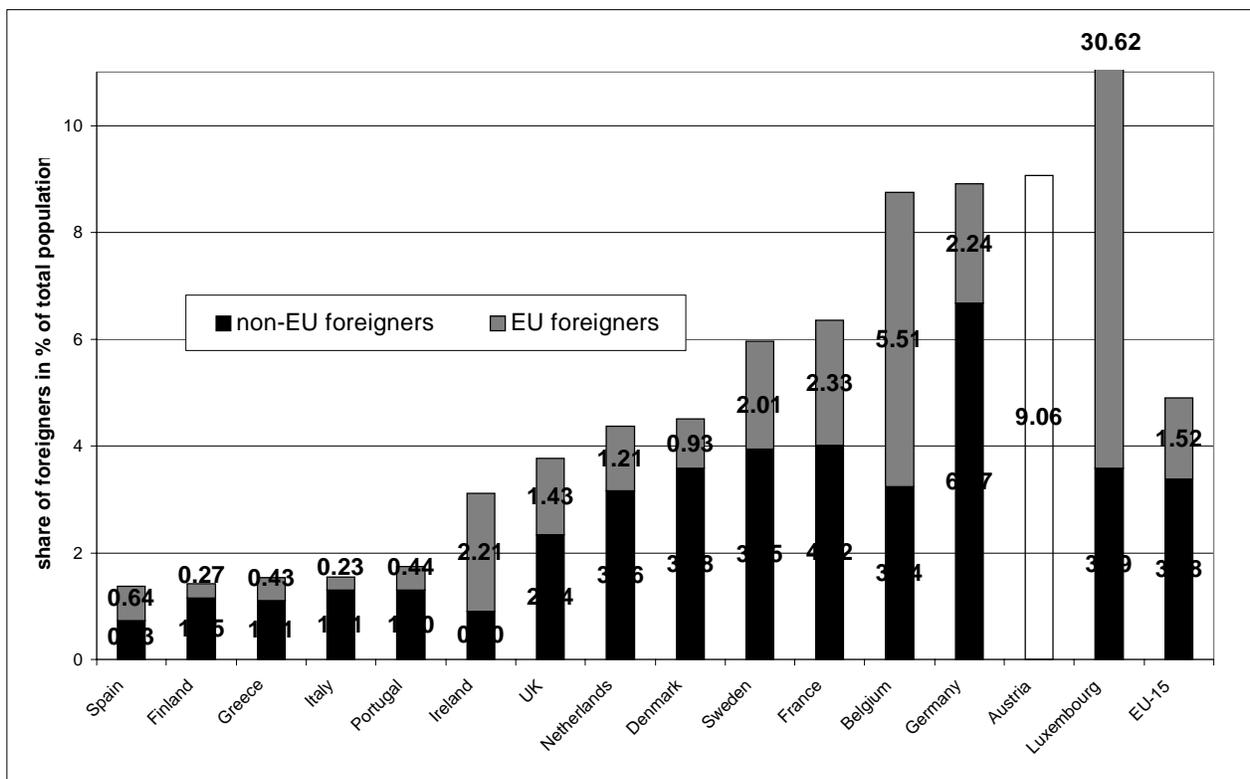
Source: Eurostat (2000), own calculations.

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[38] These figures refer to the population of the present EU-15 members.

[39] Own estimates, based on Eurostat (2000) and national sources.

[40] Note that cross-country comparisons are distorted by different national concepts of citizenship and different naturalisation rates, see Chapter 1.

This development can be illustrated with the German example: the number of citizens residing in Germany from the present EU members increased slightly from 1.6 million in 1970 to 1.84 million in 1998, while the number of non-EU foreigners increased from 1.4 million to 5.5 million persons at the same time. The change in the mix of the country of origin involved that average PPP-GDP per capita of the source countries of German immigration declined from around two-third to around one-third of the German level between 1961 and 1998 (Table 4.1). This is basically a result of increasing shares of the traditional countries of origin for guest worker recruitment at the European periphery (Turkey, Yugoslavia) at the expense of EU-members.

Similar trends can observed in many other EU countries (see Chapter 1). As a consequence, developing countries and low-income countries at the European periphery are the countries of origin for between 40 % and 70% of the migrants in the main immigration countries of the EU now (Table 4.2).

Table 4.1   Germany: Change in country of origin mix, 1961-1998

	1961		1967		1970		1980		1990		1998	
	foreign population by country of											
	in thousand	in % of total	in thousand	in % of total	in thousand	in % of total	in thousand	in % of total	in thousand	in % of total	in thousand	in % of total
EU-15	451,7	65,8	946,6	52,4	1586,7	53,3	1836,6	41,2	1661,772	31,1	1844,243	25,0
southern [1]	283,8	41,4	814,8	45,1	1216,4	40,9	1207,6	27,1	1093,63	20,5	1235,02	16,8
European [2]	32,1	4,7	508,7	28,2	997,0	33,5	1749,4	39,3	2384,471	44,6	3289,176	44,7
other OECD	33,4	4,9	83,2	4,6	99,9	3,4	131,5	3,0	36,912	0,7	202,571	2,8
Central and Eastern Europe[3]	34,9	5,1	97,0	5,4	113,4	3,8	124,9	2,8	371,927	7,0	826,82	11,2
Developing	134,1	19,5	171,2	9,5	179,5	6,0	610,9	13,7	887,45	16,6	1203,023	16,3
total	**686,2**	**100,0**	**1806,7**	**100,0**	**2976,5**	**100,0**	**4453,3**	**100,0**	**5342,532**	**100,0**	**7365,833**	**100,0**
	average PPP-GDP per capita of countries of [4]											
in USD	na		6 505		7 860		5 313		5 897		7 391	
in % of	na		63,51		65,87		0,35		31,26		33,56	
1) Greece, Italy, Portugal, Spain. - 2) Cyprus, Iceland, Malta, Turkey, (former) Yugoslavia. - 3) Albania, (former) Comecon members. - 4) 1990 Geary-Khamis Dollars based on Maddison (1995); 1998: World Development Indicators												
Source: Federal Statistical Office, Maddison (1995), World Bank (2000), author's												

Table 4.2   Country of origin mix for selected EU-countries, 1998

	Belgium		France		Germany		Italy		Luxembourg		Sweden		UK	
	in thousand	*in % of total*	*in thousand*	*in % of total*	*in thousand*	*in % of total*	*in thousand*	*in % of total*	*in thousand*	*in % of total*	*in thousand*	*in % of total*	*in thousand*	*in % of total*
EU-15	560,6	63,0	1321,5	36,7	1844,2	25,0	211,7	23,9	127,9	89,6	178,2	48,3	805,5	38,0
southern Europe[1]	300,5	33,7	1124,6	31,3	1235,0	16,8	27,9	3,2	76,9	53,9	13	3,5	163,3	7,7
other OECD	18,2	2,0	56,9	1,6	202,6	2,8	23,6	2,7	na	na	51,5	14,0	237,2	11,2
Central and Eastern Europe[3]	11,6	1,3	63,0	1,8	826,8	11,2	11,6	1,3	na	na	131,1	35,6	84,4	4,0
European periphery[2]	92,3	10,4	250,2	7,0	3289,2	44,7	7,8	0,9	na	na	19,1	5,2	81,6	3,8
Developing countries	210,7	23,7	1905,0	53,0	1203,0	16,3	629,9	71,2	na	na	146,7	39,8	911,9	43,0
total	**890,4**	**100,0**	**3596,6**	**100,0**	**7365,8**	**100,0**	**884,6**	**100,0**	**142,8**	**100,0**	**526,6**	**368,8**	**2120,6**	**100,0**

1) Greece, Italy, Portugal, Spain. - 2) Cyprus, Malta, Turkey, (former) Yugoslavia. - 3) Albania, (former) Comecon members. -

Source: Eurostat (2000).

The most important countries of origin, which cover around two-thirds of the migrants from non-EU countruies, are portrayed in some further detail in Tables 4.3 and 4.4: GDP per capita levels measured in purchasing power parities vary in these countries usually between one-tenth and one-third of those in the EU-15, while industrial wages at current exchange rates vary between 5 and 25 per cent of those in the EU-15. Moreover, the Gini-coefficient for the distribution of per capita incomes is significantly higher than that in most EU countries.

Table 4.3   Key income indicators in main countries of origin and the EU-15

	population	foreign citizens in the EU-15	PPP-GDP per capita, 1998[1]		Labour cost per worker in manufacturing, 1995-1999[2]		Gini-coefficient[3]
	in thousands		in USD	in % of EU-15	in USD	in % of EU-15	
main countries of origin							
Turkey	63 500	2 635 [6]	6 594	31.1	7 958	29.6	41,5
former Yugoslavia	22 600	2 019 [6]	4 005	18.9	na	na	na
Morocco	29 100	1 141 [5]	3 188	15.0	3 391	12.6	39,5
Algeria	29 900	658 [5]	4 595	21.7	6 242	23.2	35,3
Poland	38 654	414 [5]	7 543	35.6	1 714	6.4	32,9
USA	268 033	353 [4]	29 240	137.9	28 907	107.6	40,8
former USSR	291 667	321 [5]	6 180	29.2	1 528	5.7	48,7
Tunisia	9 300	285 [5]	5 169	24.4	3 599	13.4	40,2
India	979 700	193 [5]	2 060	9.7	1 192	4.4	37,8
Pakistan	131 600	146 [5]	1 652	7.8	3 099	11.5	31,2
Romania	22 526	142 [5]	1 360	6.4	119	0.4	28,2
present EU members							
Austria	8 068	215 [4]	23 145	109.2	28 342	105.5	23,1
Belgium	10 170	139 [5]	23 622	111.4	24 132	89.8	25,0
Denmark	5 275	81 [5]	23 855	112.5	29 235	108.8	24,7
Finland	5 132	133 [5]	20 641	97.4	26 615	99.0	25,6
France	56 652	365 [5]	21 214	100.1	na	na	32,7
Germany	82 012	280 [5]	22 026	103.9	33 226	123.6	30,0
Greece	10 487	434 [5]	13 994	66.0	15 899	59.2	32,7
Ireland	3 661	479 [6]	17 991	84.9	25 414	94.6	35,9
Italy	57 461	1 216 [5]	20 365	96.1	35 138	130.7	27,3
Luxembourg	418	11 [5]	38 840	183.2	na	na	26,9
Netherlands	15 567	281 [5]	22 325	105.3	39 865	148.3	32,6
Portugal	9 934	289 [5]	14 569	68.7	7 577	28.2	35,6
Spain	39 299	477 [5]	15 960	75.3	8 475	31.5	32,5
Sweden	8 845	76 [5]	19 848	93.6	29 043	108.1	25,0
United Kingdom	58 185	444 [6]	20 314	95.8	23 843	88.7	36,1
EU-15	**371 166**	**4918 [7]**	**21 200**	**100.0**	**26 876**	**100.0**	
memo items:							
CEEC-10	104 690		8 007	37.8	na	na	

1) GDP per capita in purchasing power parity. - 2) Gross monthly wages in maufacturing industries. - 3) Years 1994-

- 5) Without Austria and Ireland. - 6) Without Austria. - 7) Reporting countries only.

Sources: Worldbank (2000); Eurostat (2000a), Eurostat (2000b), authors' calculations.

The rather low levels of per capita incomes of the main countries of origin are closely related to relatively low education levels, in particular in secondary and tertiary education (Table 4.4).

However, the properties of the transition countries in Central and Eastern Europe differ somewhat from this picture: although their PPP-GDP per capita and wage levels are only slightly above those of the other main immigration countries, the inequality of earnings is, in most cases, well below, and education levels are well above those of the traditional source countries of EU immigration. However, all measures of earnings inequality in transition countries have to be taken with a pinch of salt, since the distribution of incomes underlies rapid changes in the course of transition and measurement problems may distort

results. Moreover, qualitative studies indicate that actual education levels in Central and Eastern fall short of those indicated by formal indicators such as school enrolment rates (Boeri/Keese, 1992; Boeri et al., 1998). Nevertheless, relative to their income levels the CEECs possess a well educated population and a low inequality of earnings.

Table 4.4   **Key education indicators for main countries of origin and the EU-15**

	gross school enrolment rates figures refer to 1997 unless otherwise indicated		
	primary	**secondary**	**tertiary**
main countries of origin			
Turkey	107	58	21
former Yugoslavia	69	62	22
Morocco	86	39	11
Algeria	108	63	13
Poland	96 [2]	98 [2]	24 [2]
Russian Federation	107	96	46
Ukraine	102	94	42
Tunisia	118	64	14
India	100	49	7
Pakistan	40	14	4
Romania	104 [2]	78 [2]	23 [2]
present EU members			
Austria	106 [2]	77 [2]	18 [2]
Belgium	103 [2]	146 [1,2]	57 [2]
Denmark	102 [2]	121 [2]	46 [2]
Finland	99 [2]	116 [2]	71 [2]
France	106 [2]	111 [2]	52 [2]
Germany	102 [2]	104 [2]	45 [2]
Greece	94 [2]	95 [2]	43 [2]
Ireland	104 [2]	116 [2]	40 [2]
Italy	101 [2]	94 [2]	43 [2]
Netherlands	107 [2]	137 [1,2]	50 [2]
Portugal	128 [2]	106 [1,2]	38 [2]
Spain	107	122 [2]	53
Sweden	106 [2]	137 [1,2]	49 [2]
United Kingdom	115 [2]	133 [1,2]	50 [2]
memo items [2]			
high income countries	103	106	58
middle income countries	114	70	15
low income countries	93	42	5

1) Incl. training for unemployed. - 2) 1996.

Source: World Bank (2000), authors' calculations.

Many econometric studies provide evidence that differences in per capita GDP levels or wages are the main factor which affect migration within and into the EU and its member states, although labour market conditions, institutional variables, language, distance and

unobservable country characteristics also play a role (Boeri/Brücker, 2001a; Brücker, 2001; Fertig, 1999; Rotte/Vogler, 1998). It is however important to note that the number of migrants from countries with relatively low income levels in the EU (and other OECD countries) tend to grow, while absolute incomes in these source countries tend to increase, too. This phenomenon can be traced back to a number of causes, inter alia to the relaxation of liquidity constraints[41]. As a consequence, the trend of increasing differences in per capita income levels between the host countries in the EU and the countries of origin may continue.

Did the free movement of workers in the EU not increase migration?

A first look at the statistics does not support the view that integration into the EU and the introduction of the free movement had an impact on migration: in case of the introduction of the free movement for the southern EU members we do not observe any increase in migration with the exception of a small migration 'hump' in the case of the accession of Greece (Figure 4.2).

Figure 4.2   Net emigration flows from Greece, Portugal and Spain, 1960-1996

(in % of home population)
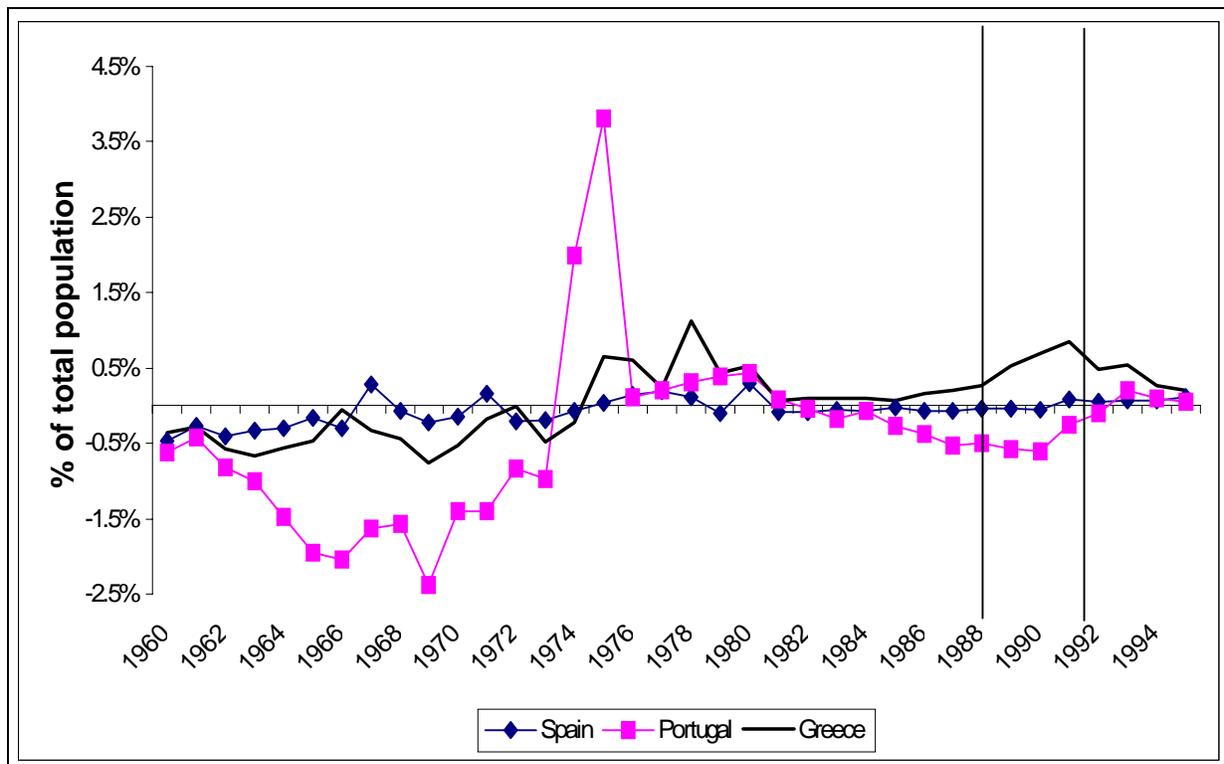
Source: Boeri/Brücker et al. (2001a), based on Eurostat (1987).

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[41] For a discussion see Faini/Venturini (1995).

However, it is premature to draw from this descriptive evidence the conclusion that the free movement of workers in the EU and the establishment of external restrictions had no quantitative impact on the migration of workers and other persons in the EU. The counterfactual question, what would have been the quantity and country structure of immigration if the EU hat not introduced free movement, cannot be answered by simply looking at actual migration figures. Recent research indicates that the introduction of free movement had indeed increased migration within the EU: based on a time-series analysis of migration to Germany for a panel of 18 EU and non-EU countries of origin it turned out that dynamic equilibria between the share of migrants in the population and economic variables, i.e. differences in per capita income levels and employment rates, are reached after a certain period of time. When the share of migrants has achieved its steady state level, net migration ceases and the growth of the stock of migrants declines to the rate of natural population growth minus the rate of naturalisations (Brücker, 2001; Boeri/Brücker, 2001a; similar results are presented by Flaig, 2001). The existence of dynamic equilibria can be explained by individual heterogeneity, i.e. that either individual preferences to migrate or individual human capital characteristics, which affect the costs and benefits from migration, differ (see e.g. Faini/Venturini, 1995). As a consequence, the individual propensity to migrate declines with the number of those who already live abroad.

Thus, the fact that removing barriers to migration for the Southern EU Members has not yield large migration flows is hardly a surprise, if the share of migrants from the Southern European countries in the home population has already been close to its equilibrium level and per capita incomes tend to converge. Note that guest worker recruitment and the following family reunification have channelled considerable migration flows from the South into the community before accession and free movement.

The studies mentioned above find that the free movement of labour had an impact on the scale of migration. The free movement of labour increases both the absolute level of migrants as well as the elasticity of migration with regard to income differences relative to the immigration regime, which channels migration basically by family reunification (Brücker, 2001). As an example, the long-run share of migrants from Turkey residing in Germany would be between 0.5 and 0.8 percentage points higher in case of free movement for the given difference in per capita income levels. Thus, although these figures should be treated with caution, the free movement of workers seems to contribute at least somewhat to labour mobility in the EU.

How does national origin affect the skill composition of migrants?

The selection and self-selection models discussed above predict that the skill composition of migrants is affected by the mix in the countries of origin, or, more precisely, by differences in distribution of incomes between the country of destination and origin. An indication for the skill composition of migrants can be provided on the basis of the European Household Panel (see Chapter 3), which applies an international comparable classification of education levels in its questionnaire. Unfortunately, the response rates are too low for an analysis of the skill composition of migrants by detailed country samples. However, the sample allows classification of migrants in EU-foreigners and non-EU foreigners, which provides some interesting insights on the consequences of national origin on the skill mix of migrants (Figures 4.3 and 4.4). Note that all figures should be interpreted with caution, since all information depend on self-classification, which tend to bias skill-levels of foreigners upwards.

Figure 4.3   The skill composition of EU foreigners and natives in the EU, 1996
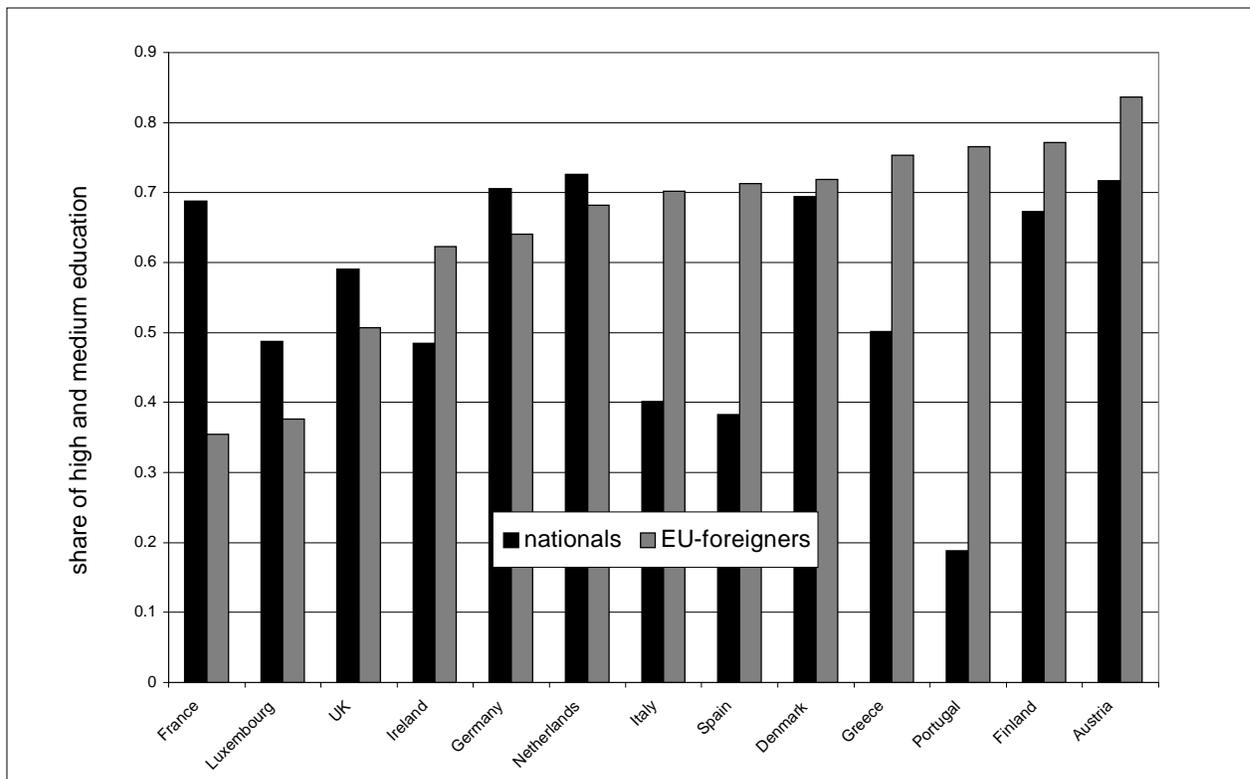
Source: European Household Survey Panel.

Within the EU, countries with relatively low education levels of natives – i.e. Portugal, Spain, Greece, Ireland, Italy -- receive migrants with high skills from other EU countries. However, the share of EU-foreigners in these countries is, with the exception of Ireland, at between 0.2 % and 0.6 % of the population almost negligible (see Figure 4.1,

again). Interestingly enough, in many – but not all - EU countries with high education and income levels, education levels of EU foreigners are almost at the same levels of natives or even slightly above (Austria, Germany, Netherlands, Denmark and Finland). Note that in some of these countries (Germany, Austria) the main countries of origin of EU foreigners are in the south of the EU. Finally, we observe a distinct gap in education levels between natives and EU foreigners in France and Luxembourg, which recruited notable shares of their workforce in Iberian countries and Italy. The skill composition of EU foreigners in these countries is roughly in line with that of the countries of origin.

Although these data should be interpreted with caution, there seems to be little evidence for an unfavourable selection of skills in intra-EU migration. At least in the German case, factors which induce a favourable selection of EU-migrants with regard to their skill composition seem to affect the composition of migrants. While we can observe in some cases a Heckscher-Ohlin pattern of migration, i.e. that low-skilled EU foreigners move to countries with a high share of high and medium skilled labour, and EU-countries with relatively low education endowments receive high-skilled migrants, the rather high skill levels of EU migrants in Germany and some other receiving countries does not exactly fit well into that pattern.

Figure 4.4   **The skill composition of non-EU foreigners and natives in the EU, 1996[42]**
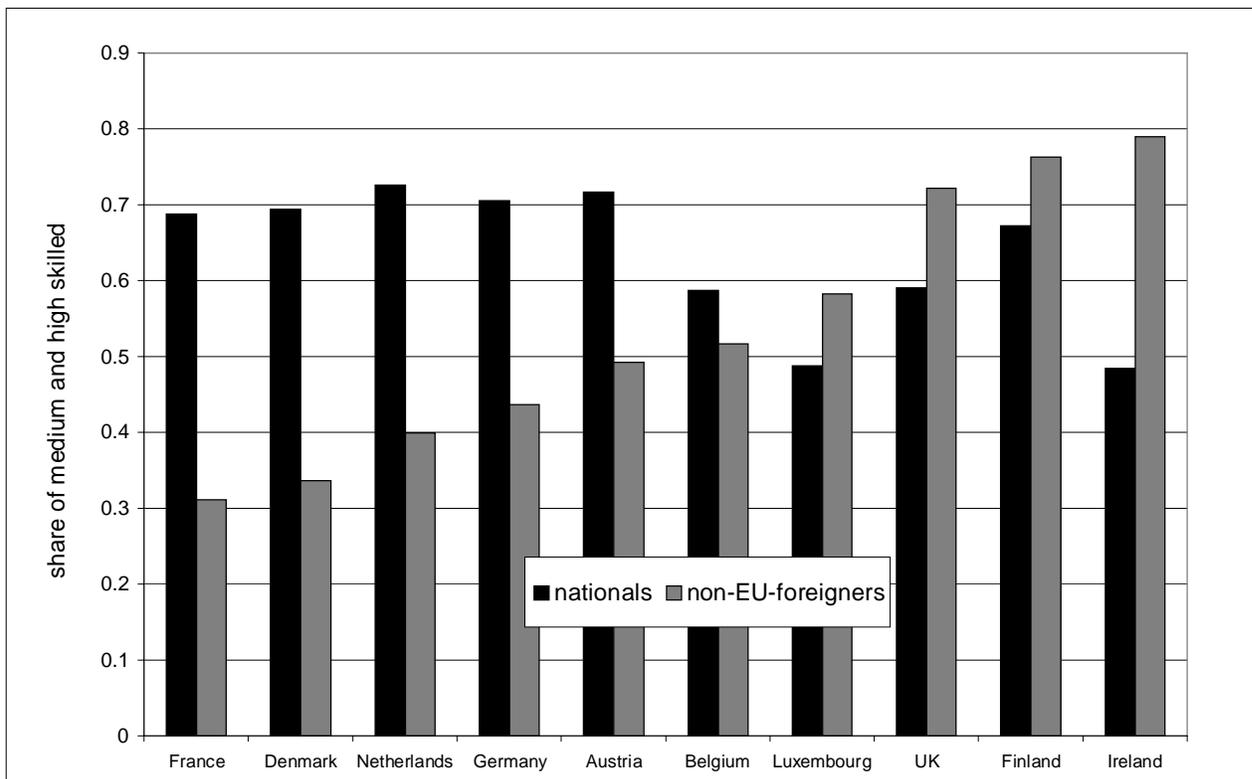
Source: European Household Survey Panel.

The average skill composition of non-EU foreigners is well below that of EU-foreigners, but we observe a polarisation at the upper and the lower ends of the skill distribution, which are basically determined by differences in the source country mix: on the one hand, in France, Denmark, the Netherlands, Germany and Austria the overwhelming share of the migrants from non-EU countries belongs to the low-skilled category. This reflects low human capital endowments in the countries of origin. On the other hand, in Ireland and Finland the high skill-levels of non-EU migrants reflect relatively high skill levels in the countries of origin - the USA in the Irish case, and the CEECs in the Finish case. The main outlier is the UK: it managed to attract non-EU foreigners with skill-levels above those of natives, although three-quarters of this group stem from developing countries[43].

Has the skill composition of foreigners deteriorated over time?

There is neither evidence that the skill composition of foreigners in the EU has significantly improved nor that it has declined during the last few decades. Unfortunately, there is no historical data for the EU such as the Censuses in the USA, every ten years, which allows a comparison of the skill composition of migrant cohorts over time. Instead we have to rely on the information of recent surveys, which differentiate between immigrants by their date of arrival. Since immigrants may increase education levels after arrival and return migration may affect the skill composition of the remaining immigrants, this gives only a crude picture. In many countries the share of low-skilled among the recent immigrant cohorts, i.e. those which immigrated during the last 10 years, relative to those who immigrated more than twenty years ago, has declined (Belgium, France, UK, and less significantly in Austria, Luxembourg, Netherlands). However, with a few exceptions, the skill composition of the newly arrived immigrants is only slightly above that of the older ones. In Spain, Italy, and Portugal, i.e. those countries which receive notable migration flows from Africa and other developing countries, the shares of low-skilled among the newly arrived cohorts has been above those of the older ones or the same. However, these groups are insufficiently covered by the European Household Survey Panel there, such that we have no reliable information on the skill composition of non-EU foreigners in these countries (Table 4.5).

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[42] Foreigners are defined by citizenship and not by immigrant status.

[43] Notice that foreigners are defined by citizenship and not by immigrant status, such that these figures reflect the more recent immigration.

Table 4.5 Share of individuals with low education levels

	total population	by citizenship			by immigration status				
		nationals	EU foreigners	non-EU foreigners	native born	foreign born			
							years since immigration		
						all	0 - 9	10 - 20	20 +
	ratio of low education relative to group total								
Netherlands	0.2773	0.2742	0.3181	0.6007	na	na	na	na	na
Austria	0.2931	0.2830	0.1635	0.5075	0.2916	0.1830	(0. 13)	(0. 08)	0.2807
Germany	0.3013	0.2945	0.3596	0.5633	na	na	na	na	na
Denmark	0.3123	0.3056	0.2816	0.6640	0.3013	0.4371	0.5500	0.3726	0.3745
Finland	0.3258	0.3273	0.2285	0.2373	0.3260	0.3049	0.4427	(0. 5766)	(0. 235)
France	0.4077	0.3119	0.6453	0.6892	0.3911	0.5217	0.4435	0.5204	0.5398
UK	0.4094	0.4097	0.4933	0.2781	0.4859	0.3162	0.1790	0.3291	0.3510
Belgium	0.4126	0.4126	na	0.4831	0.3918	0.3912	0.2240	0.4505	0.4261
Greece	0.4975	0.4988	0.2473	(0.3727)	0.5075	(0.2586)	(0.1704)	(0.2599)	(0.3257)
Ireland	0.5117	0.5154	0.3768	0.2100	0.5173	0.3669	0.3279	0.4262	0.3516
Luxembourg	0.5469	0.5123	0.6233	0.4177	0.5225	0.5888	0.4894	0.4559	0.7165
Italy	0.5983	0.5991	0.2978	(0.3592)	0.5933	(0.4366)	(0.3458)	(0.4081)	(0.4638)
Spain	0.6163	0.6177	0.2875	(0.3687)	0.6227	(0.537)	(0.4236)	(0.2429)	(0.3187)
Portugal	0.8106	0.8120	(0. 2347)	(0.4995)	0.8198	(0.442)	(0.4742)	(0.4988)	(0.4855)

Figures in brackets are affected by low response rates or non-representative sampling

Source: European Household Survey Panel.

A number of studies has analysed educational attainments of immigrants in host countries, in particular of second generation immigrants and ethnic minorities. We can observe mixed trends across individual EU countries: based on microcensus surveys, Riphan (2000) found evidence that educational attainments of second generation migrant cohorts born between 1956 and 1974 tend to *diverge* from those of natives: the gap in educational degrees between second generation migrants and natives increases with the later born cohorts. Interestingly enough, these trends reflect a change in the country of origin mix of second generation cohorts. After controlling for country of origin, the significant difference in cohort effects disappears (Riphahn, 2000, p. 9). In contrast to Germany, educational attainments of foreigners in the UK have improved: early migrant cohorts tend to be less qualified than later migrant cohorts, and first generation migrants tend to be less qualified than second and third generation migrants (Hatton/Wheatley-Price, 1999). Moreover, there is evidence that the younger members of ethnic minorities have attained higher educational attainments than whites (Berthoud/Modood, 1997).

Conclusions

Altogether, the size and structure of immigration within and into the EU is largely, but not exclusively, driven by differences in factor endowments. As a general rule, EU members with higher per capita incomes and higher endowments of physical and human capital

received a higher share of migrants, and among the migrants in many cases a higher share of manual workers. The converse holds true for the EU members with lower per capita income and a higher share of less-skilled workers in their labour force. However, the skill composition of migrants does not always follow a Heckscher-Ohlin pattern: on one hand, we observe that in most countries with highly skilled natives, the skill composition of foreigners is relatively low (Austria, Denmark, France, Germany, Netherlands). But on the other hand, the UK attracted a high share of skilled labour inflows although their main sources of foreign labour from outside the EU are developing countries. Moreover, in some countries such as Germany and Austria we observe that skill levels of foreigners originating in the EU and the CEECs[44] are high – even relative to natives in the host countries. Finally, immigration from Africa and other developing countries is increasing in the Southern EU members, which will tend to reduce the average skill composition of immigrants over time.

The skill composition of migrants in the EU seem to reflect differences in factor endowments between the countries of destination and origin, but migrants tend in general not be unfavourably self-selected with regard to their skill composition: within the EU, migrants are at least as highly qualified as the average native in the countries of origin. In particular, in Germany and some other countries we observe a skill composition of EU foreigners which is high relative to that of natives in their home countries, while France and Luxembourg receive EU-migrants with a skill composition which is roughly in line with that of natives in their home countries. We do not have enough information to evaluate the skill composition of the population in the countries of origin in the case of non-EU foreigners properly, but the information we have tend to indicate that migrants are again favourably self-selected.

Although the patterns of European migration largely follow economic incentives, i.e. differences in factor income, they have nevertheless been affected by European immigration policies. In particular, the polices of active labour recruitment in many continental European countries in the 1960s and early 1970s left its imprint in the composition of immigrants. In particular, the link between active labour recruitment and the later channelling of migrants via family reunification in Germany have brought large numbers of tied movers, which still affect the skill composition of recent immigrants (see e.g. Fertig/Schmidt, 2000). Similarly, the link between relatively restrictive policies toward labour immigration along with the legalisation of large numbers of illegal migrants in France has presumably contributed to the relatively

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[44] Note that in case of the CEECs education is high and earnings inequality is in most countries still low, such that this observation fits pretty well in the self-selection framework. However, earnings inequality tend to increase rapidly in the CEECs such that the skill composition of migrants from there may deteriorate over time.

low-skilled composition of foreigners there. In contrast, the balanced policy mix between labour immigration and other channels of immigration is associated with a relatively favourable skill composition of recent migration to the UK.

4.4 Was the emphasis of European immigration policies on protecting the labour markets of the community misplaced?

The main concern of European immigration policies has been that migrant workers have replaced natives after the first oil price shock in 1973. In particular, it was feared that foreigners replace less-skilled natives, since these groups have been affected more than proportional by unemployment. As a consequence, European immigration policies aimed to protect labour markets against an influx of foreign workers from non-EU countries, particularly against an influx of manual workers.

In this section we review the available evidence as to whether labour immigration has actually increased unemployment and reduced wages of natives in Europe. As has been shown in the previous section, immigration has indeed increased the supply of manual workers and less-skilled labour, such that factor endowments have changed at least in the main receiving countries of the EU. There are different ways of how economies can adjust to changes in labour endowments. In the case of an isolated one-good economy, the labour markets bear the whole burden of adjustment. Most studies on the wage and employment impact of migration rely on this framework. We start therefore with an elaboration of this framework and discuss the findings of empirical studies on the labour market impact of migration. Then we proceed with a discussion on the implications of labour migration in a wider framework, which allows the adjustment through trade flows, in order to assess the implications of labour migration on native welfare.

The impact of labour immigration in the one-good framework

Public concerns about the wage and employment impact of migration refer usually to the most simple case of an isolated economy, where only one good is produced, and the labour supply of natives remains fixed. In this case the labour market bears the whole burden of adjustment. Assume that a one-good economy produces with capital, high skilled labour and manual workers, and that the production function is characterised by a constant returns to scale technology. Capital and both types of labour are complements, while high skilled labour and manual workers are imperfect substitutes. An additional supply of low-skilled labour will then raise the income of capital and reduce wages of low skilled labour, while production

expands. The impact of migration on high-skilled labour is ambiguous: the fall in wages for low-skilled workers may lead to the substitution of high-skilled workers by less-skilled, while the scale effect increases the demand for high-skilled labour. The total effects on income are positive in the receiving region, while aggregate income of those left behind in the sending region falls – at least if they are not compensated by remittances.

The result that immigration increases aggregate incomes of natives relies, however, on the assumption that labour markets clear. Assume that wages for manual workers are fixed by a monopolistic trade union above equilibrium levels, while wages for high-skilled labour are flexible. As a consequence, a part of the unskilled-labour force is unemployed and wages of skilled labour are below equilibrium levels. Individual employment is decided by a Harris-Todaro process (Harris/Todaro, 1970), i.e. everyday a random draw is made to decide who is employed. If wages for unskilled labour remain constant, the immigration of unskilled labour simply increases aggregate unemployment, and, hence, average earnings of manual workers. Aggregate welfare is reduced. If the trade union adjust wages partially to the additional labour supply, the effects are ambiguous: production expands and the wage for skilled labour increases, while it depends on the scale of the wage response and the parameters of the model whether unemployment increases or not.

The different consequences of labour migration with full-employment and unemployment in an one-good economy have been illustrated by Bauer and Zimmermann (1997): under full employment, a calibration of a one-good model of the European economy gives welfare gain of 0.6 % of the EU's GDP if the workforce increases through immigration by 10 %, and all migrants are manual workers.[45] If the economy suffers however from unemployment and wages remain fixed, the losses amount to 6.5 % of the EU's GDP (Box 4.3). Thus, if we follow the one-good model, European immigration policies were well-advised to reject the immigration of manual workers after the first oil-price shock in 1973 – at least if those policies were to have been enforced properly.

Box 4.3: **A calibration of the impact of labour migration on welfare of natives**

The possible implications of labour migration on welfare in the EU-15 have been calibrated for a one-good economy with a constant return to scale technology by Bauer and Zimmermann (1997). Production technologies are approximated by a Cobb-Douglas function, where the shares of manual workers have been estimated at 26.7 per cent, of non-manual workers at 45.3 per cent, and of capital at 29 per cent. Immigrants differ with regard to their skill composition, but bring no capital. Potential

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[45] Note that these gains are below those calibrated for the USA by Borjas (1995b): the maximum net gain is calculated at 2.4 per cent of the US GNP there.

gains from immigration depend, hence, on the skill composition of migrants. In order to calibrate the quantitative impact of migration on native welfare, two cases are conceived: in the first case labour markets are in equilibrium, while in the second case the economy suffers from unemployment of unskilled labour.

In the first case an immigration of 10 % of the EU's labour force (13.6 million workers) affect a minimum gain of 0.1 per cent of the EU's GNP at a share of 40 per cent of manual workers among the migrants, while these gains increase to 0.34 per cent of the EU's GNP if all migrants are skilled, and to 0.6 per cent if all migrants are unskilled. The actual share of manual workers among the migrant workforce in the EU is around 60 per cent. This would imply a gain of around 0.15 per cent of the EU's GNP. Note that these are rather small numbers. However, migration has a considerable impact on the distribution of incomes: if 100 per cent of the migrants are manual workers, their native counterparts lose 3.1 per cent of the EU's GNP, while they will gain 3.7 per cent of the EU's GNP if all migrants are non-manual workers.

In the second case, under consideration of unemployment, the picture changes: assume first that only non-manual workers immigrate and wages of unskilled workers remain constant. Unemployment is, hence, reduced and the gains from immigration could increase up to 8.6 per cent of the EU's GNP. In the converse case, if only manual workers immigrate and wages are hold constant, losses from migration can increase up to 6.5 per cent of the EU's GNP. Thus, although the immigration of manual workers enhances welfare of natives in labour market equilibrium with full employment, it may reduce welfare if less skilled labour is plagued by unemployment (ibid., p. 96).

Empirical findings

A large amount of literature has meanwhile evolved which assesses the impact of migration on native employment and wages in a number of European countries. Most of these studies rest explicitly or implicitly on the one-good framework. They rely either on a cross-section of regions or branches and use variations in the immigrant density in order to identify the impact of migration on wages or other variables of interest such as employment opportunities. All these studies suffer from an endogeneity problem, since migrants usually select themselves into prosperous regions or branches, such that simple regressions between migrant density and wages yield spurious results (Friedberg/Hunt, 1995; Borjas 1995a). Moreover, if migration decisions of natives respond to labour immigration, the estimated results are also distorted. Estimating in first differences circumvents these problems only partially, since expectations on wage growth may affect migration decisions too. Many estimates rely therefore on the instrumental variable technique, in order to control for the endogeneity of migration decisions. However, the choice of suitable instruments is controversial, such that a good deal of uncertainty surrounds the results.

Following the seminal paper of Grossman (1982), one branch of the literature estimated the elasticity of complementarity of different types of labour in a production function framework. In general, these studies find rather low elasticities: as an example, Gang and Rivera-Batiz (1994) estimate for the skill composition of workers from Turkey, Portugal, Spain, Italy and Ireland that in Germany an increase of foreign workers from the respective nations by 10 % will cause in the worst case a loss of 0.5% of native wages, and in the best case a gain of 0.1% of native wages in Germany. Similar results have been obtained by Bauer (1997): an increase of foreign workers by 10 % will induce in the worst case a wage loss of 0.2 % for low-qualified native workers.

Another branch of the literature estimated wage equations based on panel and household survey data sets, which allow the controlling for individual characteristics. The findings of these studies depend heavily on the choice of instrumental variables. The upper limit is marked by a study of DeNew and Zimmermann (1994) based on data from the German Socio-Economic Panel (GSOEP), which estimates that an increase in the share of foreigners by 10 % will induce a loss of almost 4 % of native wages. This implies, that an increase in share of foreigners by one percentage point in the 1990s, i.e. from 8.5 to 9.5 %, would have caused a loss of 4.1 % in native wages in Germany. Against the background of considerable differences between the OLS and the instrumental variable estimates, the authors warn the reader that their results may be affected by the choice of unsuitable instruments. Indeed, a series of follow-up studies find much lower wage effects in the range from the studies reported above (Haisken-DeNew/Zimmermann, 1995; Haisken-DeNew 1996; Bauer, 1998). In a study on Austria, Winter-Ebmer and Zweimüller estimated wage effects of a 10 % increase of the foreigner share in an interval of –0.5 % and 0.5 % (Winter-Ebmer/Zweimüller, 1996). In the recent literature increasing doubts about the use of instrumental variables have evolved. Since no instruments could be identified which pass the statistical tests on validity, wage equations have been estimated in first-differences without instrumental variables (Gavasto/Venturini/Villosio, 1999; Trabold/Trübswetter, 2001). Interestingly enough, these studies find small, but positive effects of migration on native wages.

Does one migrant replace one native worker?

The finding that immigration does not have notable effects on native wages is not *per se* surprising. If the European system of wage determination involves wage compression, one could expect on the basis of the one-good framework sketched above that labour markets adjust by increasing unemployment to the influx of foreign labour. However, there is little

evidence that immigration involved higher unemployment. In one of the very few macro-econometric studies, Dominique Gross (1999) found on basis of a Keynesian-disequilibrium model no evidence that migration has increased unemployment rates in France. A number of studies which refer to regional differences in unemployment rates come to similar results: doubling immigration into a German region affects an increase in the unemployment rate of natives of 0.2 percentage points (Pischke/Velling, 1997). Similar results have been obtained by Hatizius (1994) for Germany, and Winter-Ebmer and Zweimüller (1996) for Austria. Trabold and Trübswetter (2001) find even declining unemployment probabilities with an increasing density of foreigners in Germany. However, these findings are affected by the same endogeneity problems as the estimations of the wage effects of immigration. Moreover, there is some evidence that the increase of foreigners is partially absorbed by an out-migration of natives (Trabold/Trübswetter, 2001).

Altogether, the findings can be summarised by the conclusion of the studies quoted above: "(…) there is little evidence for displacement effects due to immigration. This is true in particular for unemployment rates" (Pischke/Velling, 1997, p. 604).

Considering other adjustment mechanisms

Thus, there is not much empirical evidence that supports the prediction of the one-good models that the immigration will reduce either wages or employment of natives. Although a considerable amount of uncertainty surrounds the empirical findings, other channels for adjustment should be considered. Immigration need not affect wages and employment if the assumption of a closed economy is relaxed: in the standard case of trade theory, the Heckscher-Ohlin-Samuelson (HOS)-model, factor prices depend on the prices of traded goods but not on factor endowments. Factor prices equalise by trade alone if factor endowments are sufficiently similar, and an influx of manual workers is completely accommodated by a shift in the output-mix. Migration affects welfare and income distribution neither in the host nor in the home country.

Factor price equalisation however implies that economic incentives for migration cease. As a matter of fact, wage differences between the main countries of destination for labour migration in the EU and the main countries of origin are large, and it is questionable whether they tend to diminish over time. We can consider a number of factors, may result in persisting differences in wages and other incomes between countries: differences in technologies, the specialisation of countries on the production of different commodities, factors which are immobile between sectors. In these cases incentives to migration remain,

but migration need not necessarily affect factor prices (for a detailed discussion Venables, 1999; Trefler, 1997). It remains therefore an empirical question as to how economies adjust to an increasing supply of labour.

Although there is some recent evidence from the US that the influx of migrants has been largely accommodated by a shift in the output-mix (Hanson/Slaughter, 1999), empirical evidence from Europe on the role of trade in absorbing migrant workers is missing. The large shares of migrants employed in manufacturing industries in countries like France and Germany[46] (see Chapter 1) is, however, an indication that trade plays a key role for accommodating immigration. Altogether, empirical research on the labour market effects of migration in Europe does not provide evidence that labour immigration has replaced native workers or reduced their wages by significant numbers. Although we do not know enough about the ways by which European economies adjust to labour migration, the high emphasis, which European immigration policies has addressed to the protection of the community's labour markets, looks against the background of the empirical findings misplaced.

4.5 Does European immigration policies affect the labour market performance of migrants?

As we have seen in the previous section, the change in factor endowments induced by labour immigration had only a negligible impact on wages and employment of natives in host labour markets if at all. However, migration may affect welfare in host countries by other channels. In this section we review the empirical literature on the labour market performance of migrants in order to address the question: what have been the consequences of the (self-) selection of migrants on their labour market performance, and, hence, their risks do depend on welfare?

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[46] In Germany the highest shares of migrants in the labour force are reported in the industrial centres of Baden-Wuerttemberg, where automobile and engineering industries are concentrated.

Table 4.6   Unemployment of natives and foreigners

	by citizenship			by immigration status				
				native born	foreign born			
	nationals	EU foreigners	non-EU foreigners			years since immigration		
					all	0 - 9	10 - 20	20 +
	share of unemployed in % of 20-60 age group							
Austria	3,54	1,34	13,54	4,05	4,68	na	na	na
Belgium	9,74	na	15,83	9,73	17,15	3,1	21,24	20,17
Denmark	6,25	8,19	24,1	6,08	16,17	25,87	15,67	10,94
France	8,03	6,18	19,58	7,89	11,62	12,41	21,14	9,22
Finland	12,14	18,97	41,25	12,46	21,15	na	na	na
Germany	5,11	7,82	11,28	na	na	na	na	na
Greece	7,63	na	11,49	7,21	13,41	14,29	19,47	7,28
Ireland	9,24	9,47	na	8,84	14,1	18,83	19,69	9,98
Italy	8,51	na	2,31	8,44	8,7	4,96	18,14	5,47
Luxembourg	1,81	2,36	5,86	1,86	2,25	2,37	1,27	2,53
Netherlands	8,45	8,77	7,5	na	na	na	na	na
Portugal	5,65	na	3,64	5,74	3,33	2,94	10,1	0,2
Spain	13,84	20,16	18,73	13,81	20,95	35,29	16,3	20,98
UK	4,31	2,33	21,36	4,96	8,37	10,55	11,19	6,89

All figures refer to 1996.

Source: European Household Survey Panel (2001).

The impact on labour market performance of migrants

The labour market performance of migrants lags well behind that of natives and has deteriorated in most EU countries over the last decades. The following facts characterise the situation: firstly, the share of unemployed in the migrant population is higher than that of the native population (Table 4.6; Chapter 1)[47]. Secondly, studies in Denmark, Sweden and Germany provide evidence that migrants remain longer than natives in unemployment spells (Hansen, 2000; Pederson, 2000; Schmidt, 1997). Thirdly, EU-foreigners are less affected by unemployment than non-EU foreigners, in some cases even less than natives (Table 4.6, Chapter 1). The some holds true for unemployment risks of OECD-foreigners relative to non-OECD foreigners.[48] Fourthly, the gap between the unemployment rates of migrants and those of natives has increased (OECD, 1998; Pederson, 2000, Table 4.7).

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[47] The figures in Table 4.6 refer to the share of unemployed persons in the 20-60 age group, they should be not confused with unemployment rates which usually refer to the share of registered unemployed in the labour force. Since the sample basis differs and the status of unemployed refer to the self-perception of individuals, they cannot be compared with national unemployment statistics.

[48] The unemployment data for OECD-foreigners resemble largely the data for EU-foreigners in the European Household Survey Panel and is therefore not reported here.

Table 4.7: Unemployment rates of natives and foreigners in selected countries, 1983-1994

	France		Germany		Netherlands		Sweden	
	natives	foreigners	natives	foreigners	natives	foreigners	natives	foreigners
	unemployment rate in %							
1983	7.4	14.5	6	11.3	11.3	23.7	-	-
1984	9	16.6	6.3	11.3	-	-	-	-
1985	9.6	18.5	6.4	12	9.9	25.6	-	-
1986	9.7	18.6	6.1	12	-	-	-	-
1987	10.2	19	6.3	12.5	9.4	23.5	1.8	4.4
1988	9.6	18.5	5.9	10.9	8.8	24.9	1.5	3.8
1989	9	17.8	5.4	9.3	8.1	25.8	1.2	3.4
1990	8.8	17	4.5	8.6	7.1	23.9	1.4	4
1991	8.7	16.7	3.7	8	6.6	24	2.4	6.6
1992	9.7	18.8	3.6	8.9	5.1	16.4	4.3	12.8
1993	10.8	20.6	4.9	12.7	5.7	19.6	7.8	20.8
1994	na	na	na	na	na	na	7.6	21

A large literature on the labour market performance of migrants in Europe has meanwhile evolved which sheds some light on the causes of the deteriorating labour market performance of migrants. In a nutshell, the findings can be summarised as follows: Firstly, earnings and unemployment experience of migrants are closely related to their human capital characteristics: migrants with higher education, better language proficiency[49] earn more and are less likely to be unemployed.[50] In the German case, there exist moreover some evidence that the high concentration of guest workers on employment sectors which are subject to severe structural changes, contributed to their relatively high labour market risks (Dustman, 1993). Some studies conclude that differences between native and migrant labour market performance can be exclusively attributed to differences in observable human capital characteristics (e.g. Schmidt, 1997), while others provide some weak evidence that unobservable characteristics such as 'ability' may have affected labour market performance (Hansen, 2000). Moreover, studies on the labour market performance of first- and second-generation ethnic minorities in the UK reveal that their unemployment risks are higher than those of whites of equal human capital characteristics (Blackarby, Leslie and Murphy, 1997; Wheatley-Price, 1998). Secondly, earnings and employment probabilities of refugees and other humanitarian migrants lag behind those of other foreigner groups. Note this holds true

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[49] Language abilities, and especially writing proficiency, improve the earnings position of migrants considerable Dustmann (1993).

[50] See for UK: Blackarby, Leslie and Murphy (1997), Blackarby, Drinkwater et al. (1997); Blackarby, Clark et al. (1994), Hatton/Wheatley-Price (1999); for Sweden: Carling et al. (1996); Hansen (1999); for Denmark: Pederson (2000); for Germany: Schmidt (1997); Dustmann (1993); Dustmann/Schmidt (1999); Fertig/Schmidt (2001), for Switzerland: Golder (1998), Golder/Straubhaar (1999).

also for countries that open their labour markets for humanitarian migrants immediately after arrival, e.g. Denmark (Pederson, 2000) and Sweden (Hansen, 2000).

Thirdly, mixed patterns of labour market assimilation of migrants have been observed across Europe: the prediction from human capital theory, that the age-earnings profile of first-generation migrants is steeper than that of natives is backed by a number of studies in UK, Denmark and Sweden. Moreover, the unemployment risk of migrants declines with the time after arrival. However, the German evidence on labour market assimilation is more fragile: a number of studies found that earnings of migrants from the guest worker generation lag persistently behind those of demographic equivalent native workers (Dustmann, 1993; Schmidt, 1997). Moreover, employment risks of migrants from the guest worker generation do not decline with the duration of stay. In contrast, the labour market performance of ethnic Germans, which immigrated immediately after WW II, has converged to those of native born.

As a consequence of all this, the poor labour market performance of migrants in continental Europe is traced back in the literature basically to a change in the skill composition of recent migrant cohorts, which is in turn a result of an increasing number of migrants from non-EU countries which utilise the channels of family reunification and asylum and refugee laws for immigration: in Sweden, Hansen (2000) observes that unemployment varies between migrant cohorts after controlling for arrival time and that increasing employment risks correspond to declining skills of recent cohorts involved by increasing numbers of tied movers and refugees. In Denmark, large differences in labour market performance have been found between migrants from the Nordic countries, other EU members, and the Americas at the one end, and migrants from Turkey and Pakistan at the other end of the spectrum. Refugees and tied movers are particularly affected. However, the poor labour market performance of recent migrant cohorts is not only a result of their skill composition, but also of unfavourable labour market conditions at their time of arrival (Pederson, 2000). In Germany, distinct differences in the labour market performance of the cohorts of ethnic Germans, which immigrated after WWII, and the guest worker generations, have been found after controlling for the duration of stay (Schmidt, 1997). Moreover, the cohorts of ethnic Germans immigrated after the fall of the Berlin wall perform poor relative to the post-WW II cohorts. However, no large differences between different cohorts of migrants from the traditional source countries of guest worker migration have been found. Golder/Straubhaar (1999) report for Switzerland that the shift in the country of origin mix toward Portugal, Turkey, the former Yugoslavia and other non-European countries in Switzerland was associated with a less favourable skill profile and a higher age of

immigrants, which corresponds again to lower earnings and higher unemployment risks of these cohorts. In contrast to the experience in continental Europe, we can observe a better labour market performance of the more recent migrant cohorts in UK relative to the older ones, which reflects again a change in the human capital composition (Hatton/Wheatley-Price, 1999).

Altogether, the distinct gap in the labour market performance between natives and migrants is mainly caused by observable human capital characteristics. Unobservable factors such as migrant 'ability' seem to play no or only a minor role. Moreover, it is important to note that not country of origin *per se*, but differences in the skill composition of migrants affects their labour market performance.

4.6 What can we learn from the post-war immigration episode?

Post-war immigration policies of the EU and its member states have brought paradoxical results: on the one hand, removing barriers to labour mobility within the EU were not associated with increasing. So that the share of EU citizens residing in other EU countries is similar to that before introducing free movement. On the other hand, the share of foreigners from non-EU countries has doubled since the early 1970s, despite immigration policies at national and EU levels designed to protect labour markets against non-EU immigration.

The increasing immigration from non-EU countries involved a substantial shift in the mix of the countries of origin toward low-income countries at the 'European periphery' and developing countries. The gap in per capita GDP levels between the main immigration countries in the EU and the countries of origin has, with some exemptions, increased substantially during the post-war period. The relatively low per capita incomes of the source countries are associated with relatively low human capital endowments, and, as a consequence, low education levels of non-EU foreigners. There is, however, no evidence that they are unfavourably self-selected relative to the average skill composition in the countries of origin, and indeed the converse appears to hold true.

The shift in the country of origin mix reflects large and persisting differences in per capita income levels between the EU and the source countries of migration. Increasing levels of absolute incomes in the source countries have presumably relaxed liquidity constraints, while falling transport and communication costs and network effects have reduced the costs to migrate. These factors cannot be affected much by immigration policies. Nevertheless, immigration policies have contributed to the skill composition of migrants. In many continental European countries -- namely Germany, France, Denmark, Sweden – labour

immigration was reduced to small numbers after the first oil price crisis in 1973. The three main channels for migration there - family reunification, humanitarian immigration and illegal immigration – have systematically selected migrants with relatively low human capital, and poor labour markets prospects: family dependants of manual workers, refugees from regions with political unrest such as Yugoslavia, eastern Turkey and a number of developing countries, and migrants working in grey sectors of the economy that provide low returns to human capital. The relatively low education levels have translated into high unemployment rates of non-EU foreigners, which are above those of natives and EU foreigners. Moreover, at least in the continental European countries, the gap in unemployment rates between non-EU foreigners and natives has increased. Conversely, we observe in the UK, where the mix between labour immigration and the other channels is relatively balanced, a favourable selection of migrants from non EU-countries.

Although the share of EU-citizens in the foreign population of the EU member states stagnates, introducing the free movement had nevertheless an impact on intra-EU labour mobility: econometric studies have demonstrated, that the share of EU foreigners would have been lower without removing the barriers to migration in the Common Market (Brücker, 2001; Flaig 2001). Stagnating shares of EU foreigners are basically a consequence of the relatively small and declining differences in per capita incomes among the EU member states.

In many – but not all – receiving countries EU foreigners are favourably self-selected, i.e. that their skill levels are above average skill levels of natives in home countries. The relatively favourable self-selection of intra-EU migrants with regard to their skill composition translates into a relatively favourable labour market performance of EU foreigners: they are less affected from unemployment and welfare dependency as other foreigners, and perform in many EU countries similar or better than natives. However in some receiving countries which recruited high shares of manual workers from Southern EU-members, the labour market performance of EU-foreigners lags persistently behind natives.

Introducing free movement, and establishing the principle of 'equal treatment' in the labour markets of the EU has created no visible tensions in the social security systems of the individual member states. Although we have no hard evidence, it appears that the removal of barriers for the transfer of human capital, the protection of EU workers against discrimination, and the insurance of accumulated human capital by the welfare systems, has enforced the favourable self-selection of EU migrants at the balance. However, the low mobility of labour and persons between the Member States indicates that the EU citizens either do not yet regard

EU labour markets as integrated, or have high non-percunary valuations of their own communities.

Altogether, policies that aimed to protect host labour markets against labour immigration have contributed to an unfavourable selection of migrants regarding their skill composition. Ironically, against the background of the empirical knowledge about the labour market implications of migration, it looks as if the high emphasis on protecting labour markets was misplaced: empirical studies find at best minor effects of labour migration on wages and employment opportunities of natives, although not enough is known about the adjustment mechanisms which have brought these moderate results. Nevertheless, policies that would have promoted 'economic' migration at the expense of the other channels would have improved the skill composition of migrant cohorts and their labour market performance without involving large effects on wages and unemployment risks of natives.

5. Contracted Temporary Migration

5.1 Introduction

In this chapter we consider the possibility of host countries in the EU developing policies to facilitate contracted temporary immigration. This immigration differs from temporary migration as it currently occurs in the EU in that the contracted wages and other conditions may differ from those of host country workers. This increases the demand for temporary migrants, and enables employers to both offset the higher non-wage costs of employing temporary migrants, and assist the government with ensuring the migrant's return to the origin country. It may also decrease illegal immigration. This would enable affluent EU countries to ensure the rotation of migrant employees in temporary migrant positions, which has been argued to be key to the success of such policies[51], and to expand temporary employment without exposure to permanent immigration. Such a policy brings costs and benefits that may be compared to those arising from permanent immigration.

The flow of permanent legal immigrants brings both benefits and costs to the host country. At certain times, the host country may consider that the costs outweigh the benefits: the integration of immigrants may be slow and social tensions may exist; the economy may be depressed and unemployment high amongst the existing labour force; the level of illegal immigration may be considered to be excessive; and, the level of anticipated family unification immigration may be high. In these situations the host country may wish to create additional flexibility in both the numbers and skills of migrants by substituting temporary for permanent immigration. This alters the pattern of costs and benefits for both the origin and host countries. The distribution of benefits and costs between potential migrants will also be changed if a large number of migrants experience short spells of temporary overseas employment, rather than a smaller number living overseas permanently.

Contracted temporary migration benefits the local firms in the host country because the firms gain access to skilled and/or unskilled workers who are needed for production. How are firms affected by employing temporary rather than permanent migrants? First, temporary workers will have to leave the host country after a certain time period and thus, the employer may have to incur costs to train new workers. However, this may not be a major additional cost if permanent migrant workers change jobs and are replaced by others in the different life cycles of a job. It will also be a minor cost if migrants supply general human skills not firm-specific ones. Second, workers incentives to invest in firm-specific human capital will be

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[51] See Zimmerman (1995).

lower if they anticipate a shorter spell at the contracted firm than other workers do. However, if contracted temporary workers are unable to invest in general human capital in the origin country due to training opportunities being unavailable, this may encourage such investment at higher rates than permanent migrants in the host country. Depending on the work context, this may increase or reduce the effort of the temporary migrant provided to the employer. In many situations – where workers are providing well-defined professional services such as computer programmers, or unskilled work, rotating temporary labour would be similar to having permanent migrants.

As well as the degrees of freedom it gives the authorities, and the consequences for employers, there are other aspects to this policy. Consider the position with regard to the origin country. The migrants who immigrate to the EU are frequently highly skilled workers who may provide skill-spillover and other externalities in their origin countries. Their migration may therefore reduce the welfare of the local population. Temporary workers will return to their family[52] at their home country after a certain period of time, most probably, with a higher human capital that was obtained in the host country. This incremental human capital may itself possess positive economic externalities for the home country and affect the quality of future migrants to the EU, and the terms of trade between the home country and the EU.

Corporate partnerships between EU and Third World firms might emerge on a substantial scale, allowing worker exchanges. This could enrich a large number of temporary migrants and their countries of origin, rather than allowing benefits to a smaller number of permanent migrants to settle in the EU. There is a small literature[53] which documents how returnees from international migration contribute through various channels to development in the origin country - remitted savings, entrepreneurship and increased business investment, enhanced skills, and the accumulation of information. A policy of rotating workers through temporary jobs will increase dramatically the impact of overseas work experience on the typical LDC economy.

If the migrants are skilled, their migration may impose a further cost on the origin country workers. Instead of the home country becoming economically "close" to the EU, the home country may drift away as a result of this "brain drain" of the skilled works (see for example Beine, Docquier and Rapoport, 2001). This has macro and micro economic effects

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[52] With permanent migration the issue of family reunion is likely to arise. However, with temporary migration this problem does not exist.
[53] For example Ilahi (1999), McCormick and Wahba (2000) (2001), Swamy (1981), Russell (986), Cornelius (1990).

on the host country and on the terms of trade with the EU. There is the mixed possibility of the origin country becoming a talent-poor and persistently low GDP per head region, rather than one with the potential to fully participate in world development. A policy which facilitates temporary contracted migration rather than permanent migration to enter the EU may therefore *also* benefit the sectoral balance and long term potential growth in the home country[54].

However, temporary worker policies also raise a variety of economic problems. In the first place one has to consider what will happen if the policy cannot be enforced and the temporary workers stay in the host country illegally. It is not clear what mechanism should be used in order to force the temporary workers to return home at the end of the period. We will now consider the different options the authorities have and the consequences of having contracted temporary workers in the host country. Moreover, a policy must be supported by the local population and not only by the local employers.

5.2 Implementing contracted temporary migration policy

Economic studies of illegal immigration have considered how border controls and apprehending migrants internally can be used to control illegal presence (see for example, Ethier 1986, Hillman and Weiss, 1999a, Jahn and Straubhaar 1995, Zimmermann 1995). Here we consider compliance with immigration laws when people enter a country legally for purposes of temporary employment, and where there is, at the same time, no credible and effective internal detention mechanism should a foreign worker decide to switch to illegal unemployment and overstay the permissible contractually specified time period. Since entry into the country takes place legally, border controls are of no relevance to our study, nor is there a role for internal detention under the circumstances we are considering.

The circumstances, which we are investigating, arise when a legal employer has been granted a permit to bring in a foreign worker for a designated period of time, after which the foreign worker is obliged to depart. The intention of the government policy is for guest workers to be temporary guests, to be replaced in a revolving pool of temporary foreign workers. The foreign workers, however, receive job offers on a secondary market, and can accept an offer of illegal employment if they so wish. In legal employment, workers are obliged to return home at the end of the specified contractual period, whereas in illegal employment there is no such effective restriction on the length of stay. By making the

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[54] To our knowledge there does not exist any empirical study on this subject.

transition to illegal employment, the foreign intended temporary workers would be transformed to illegal permanent immigrants (see Hillman and Weiss, 1999b). [55]

The question which we wish to consider is whether governments can expect to be successful in enforcing a temporary stay, when the source of illegal immigration is those who have entered the country legally under the terms of contracted temporary migration employment.

In Israel in the 1990s', for example, the purpose of contracted temporary migration guest-worker programs were a result of sector-specific labor shortages: temporary migrant workers have been nurses and providers of old-age care from the Philippines, building construction workers from Romania, agricultural workers from Thailand, and other specialized services from Russia and the Ukraine (catering principally to other foreign workers). The purpose of such workers could also be for reasons of worker exchange between the EU and the third world firms. The latter would present a policy of enriching a large number of temporary migrants and their origin countries, rather than settle a smaller number of permanent migrants in the EU.

Foreign workers arrive in a country under short-term employment contracts. The intention of temporary stay is reflected in families left behind, and in the local employer often taking responsibility for housing, health care, and other services during the temporary stay. Yet some foreign workers may well prefer not to return home as the alternative income and life standard in the home country are well below that of the host country (moreover, they may not have ties such as families and different assets that tie them to the home country).

One way of trying to ensure that the migrants return to their home country is a bond that is forfeited if a worker does not leave as determined by the employment contract. Ideally the migrant worker would post the bond. A credible bond may, however, be beyond the migrant worker's means, and also there are jurisdictional and convertible-currency impediments to having immigrant workers make payments conditional on the issuance of temporary work visas. It is therefore usual for the bond to be paid by the employer who has requested the foreign worker (we will return to ways and means of imposing some sort of a bond on the worker himself at a later time). The procedure in Israel and Greece is to set a bond on the employer rather the on the worker himself. This type of a bond shifts the departure enforcement from the government to the employer (see Epstein, Hillman and Weiss, 1999 for a detailed description).

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[55] The transition to becoming an illegal migrant is more likely as the migrant is younger with no family obligations in the home country.

How the legal employer acts depends on the opportunities facing the foreign worker. If foreign workers can leave legal employment for illegal employment more or less freely, the legal employer confronts the problem of devising incentives that preempt or inhibit the transition to illegal employment. When governments choose not to deport illegal immigrants, legal employers indeed confront a compromise of contractual rights. They have paid the bond to bring in a foreign worker. They cannot, however, prevent the foreign worker, once present in the country, from making the switch to illegal employment, and if the foreign worker makes the switch, the legal employer loses the value of the bond.

This problem for a legal employer arises in a society where all residents, including intended temporary workers, are free to exercise choice of employment. The problem does not arise in those countries where the relation between employer and temporary immigrant worker can verge on indentured service or near slavery, and where foreign workers can be confined to the housing complex of the family to whom they are bonded, or to the domain of physical control of the business enterprise to which they are legally subject. In these countries the penalty for absconding from the legal employer can be harsh, and a policy, which assigns responsibility to employers for departure of migrant workers, can be affective. We are concerned, however, with circumstances where all employment, including that of foreign workers, is *de facto* voluntary, in the sense that, should a foreign worker choose to leave a legal employer, the costs of seeking out and deporting the absconded worker are too high to warrant the enforcement activity, by either the legal employer or the government. The legal employer then forgoes the bond, and incurs the cost of replacing the lost worker with a new legal migrant worker (which entails a new bond). The new worker may, however, likewise decide to become illegal. In this process, a pool of illegal immigrants is created, contrary to the intentions of the contracted temporary migration program.

It is important to note that under such circumstances it is not clear why an employer would employ a legal migrant and not just employ an illegal one. Some employers have no choice but to employ legal workers. This may be a result of tax constraints, the visibility of the employment relationship, the cost of being caught or simply for moral reasons as it is not moral to employ an illegal worker.

The contracted temporary migration program allows the import of legal workers and thus the legal workers provide the pool for a population of illegal immigrants. However, the illegal market is, in practice, not organized to provide continuous market job offers. Advertising for illegal workers cannot take place because of the illegal nature of the job offer. Legal workers accordingly tend to receive random job offers from prospective illegal employers which they

can accept or decline. Legal employers are, however, aware of the incentives that confront the foreign worker, and can therefore be expected to make allowance in their wage payments for the likelihood than their legal workers will receive illegal job offers. Employers who have chosen to employ illegal workers could alternatively have chosen to bring in legal workers. If illegal employers are indifferent to importing legal workers themselves and employ other legal workers, the wage for illegal employment is ceteris paribus greater than for legal employment, since the legal employer incurs the cost of the bond while the illegal employer does not. The wage premium for illegal employment makes illegal offers attractive for migrant workers. A move to illegal employment before the end of the legal contractual period has another advantage for the foreign worker, who can thereby avoid having to return home. Should the worker still be with his legal employer when the permissible stay expires, the legal employer will redeem his bond by ensuring exit of the worker from the country. There are, on the other hand, offsetting benefits when a worker chooses to remain legal. Life is easier, and also the freedom of legal residence facilitates accumulation of human capital, which is rewarded in the legal wage contract. All aspects considered, the position of the legal employer is, however, not advantageous, for job offers can be expected to arise when the worker, for whom the bond has been posted, leaves to accept illegal employment

Legal workers and illegal jobs

Legal immigrants can enter the country under the contracted temporary migration policy. However, illegal immigrants also enter the host country in order to increases their income in relation to their earnings in their home country. Both the legal and illegal migrants are related to each other. The legal temporary workers are granted entry to host countries in order to work in specific assigned jobs. These jobs are limited by law. Since such workers aim to maximize earnings during the period spent in the host country, there is an incentive for them also to take on jobs which are not allocated to them legally (working overtime, weekend, holidays, etc.).

Illegal workers entering host countries (Borjas, 1994; Ethier, 1986) cannot find jobs as easily as legal workers and tend to use the existing networks generated by the local migrants (legal and illegal) to find jobs. In this process, both legal and illegal migrants gain specific human capital, thereby increasing their incomes over time. These can include on-the-job training as well as learning the language. Legal immigrants may work in both legal and illegal jobs; therefore their designated wage is higher than that of illegal migrants, who are restricted to illegal jobs. The increase in specific human capital, and, hence income, for both legal and

illegal immigrants enables both groups to employ newly arrived illegal immigrants with low specific human capital. Naturally, illegal immigrants turn to the local network for help.

By specializing in certain fields or professions, such as home health care, cleaning and educating children, illegal immigrants may substitute for the legal immigrants at home. Such assistance enables the legal immigrants to devote more time to increasing their earnings. Immigrants generally prefer to employ migrants from their own country as they come from a similar environment, culture, and language, enhancing network externalities (Marks, 1989; Church and King, 1993 Carrington, Detragiache, Vishwanath, 1996; and Chiswick and Miller, 1996). Therefore, a sub-economy is emerging whose sole purpose is to provide services for migrants. Much of this economy is illegal. In Malaysia and Israel for example temporary migrant workers, both legal and illegal, employ illegal migrants (see Epstein, 2000).

5.2.1 Contracted temporary migrants and illegal migration

A major concern of EU countries is the presence of illegal migrants. The question we address here is whether contracted temporary legal migrants will increase or decrease illegal migration. There are two conflicting effects. Those migrants who seek temporary employment in the host country will prefer to be temporary legal migrants rather than illegal migrants. This will lead to a lowering of the stock of illegal migrants. Conversely, the migrants who wish to stay permanently in the host country may use the contracted temporary migration policy in order to enter the host country and then overstay their permits and become illegal migrants. In other words, when the contract expires, the contracted legal temporary migrants have to decide whether to return home or stay illegally in the host country. Becoming illegal may be better financially for the migrant than returning to the home country where the income is relatively low. The policies set by the authorities should take this into consideration and should be set such that they decrease the incentives of the contracted temporary migrants to stay in the host country and not return home. Policy instruments (such as forced saving) that accomplish this goal will be presented in the next section.

To conclude this section of the chapter we could say that any contracted temporary migration policy must insure that: 1) temporary workers leave at the end of their legal time period; 2) the interaction between legal and illegal migrants is minimized, and 3) legal migrants are given strong incentives to avoid illegal activities.

5.3 Policy Instruments

We now consider four different public policies that may have an effect on the three main issues stated above. The policies we will consider are: 1) imposing a bond on the legal employer, 2) taxing legal migrants' earnings, 3) imposing a penalty on local employers caught employing illegal migrants, and 4) forced savings, whereby migrants are compelled to save part of their legal earnings, which they would lose if deported as a result of being caught working illegally.

We now consider briefly the implication of each of these different polices. The analysis presented here is based on the papers by Epstein, Hillman and Weiss (1999) and Epstein (2000).

5.3.1. Imposing a bond on the legal employer

The bond, we consider, is one the employer pays at the time of the entry of the temporary worker. When the immigrant leaves the host country legally at the end of the time permit, the employer will receive his bond back from the authorities. If the immigrant does not leave the country legally at the end of this time period, the employer will forfeit the bond.

Epstein, Hillman and Weiss (1999) show how the bond affects the wage differential between legal and illegal employment of migrant workers, and thereby the incentives for transfer from legal to illegal employment. An increased bond is an additional cost imposed on legal employers. This additional cost of employing legal immigrants increases the legal wage, since there is an increased incentives for legal employers to attempt to forestall the departure of legal workers to illegal employment. The value of a bond is complementary to the legal wage; and a higher legal wage is *ceteris paribus* a greater attraction to remain legal.

Still, if migrant workers desire to remain longer than the permissible period, they will wish to avoid being with their legal employer at the end of their period of legal contractual employment. Both the government and the legal employer have an interest in ensuring that the worker returns home. The intention of the government is expressed in the policy of temporary admission to the country, while the legal employer does not wish to forfeit his bond. Despite the government's intentions, the legal employer can find his position quite *precarious*. If his legal workers are still with him at the end of the legal period of employment, *it is only* because they will have rejected an illegal offer which, in retrospect, they should have accepted (as earnings in the host country on the legal and illegal market are higher than that of the home country). Also, if the worker leaves the legal employer just before he is to be deported, the employer has paid twice - once via the higher second period

wage, and again via the forfeited bond. A policy of intended temporary foreign workers appears inevitably therefore to the creation of a population of illegal immigrants. The question is only the size of the illegal population.

It has been shown therefore that even with a completely inelastic legal demand, a bond is affective in decreasing illegal employment (by increasing the wage offered in legal employment and thereby reducing the probability that a legal worker will make the transition to illegality by accepting an illegal job offer).

5.3.2. Taxing legal migrants' earnings,

Given that the demand for legal migrants is not inelastic, the net income of the migrants working on the legal market will decrease as a result of imposing an income tax on the legal migrant's earnings. This, of course, will also affect the income on the illegal market. However its impact will be stronger on the legal market than on the illegal market. Thus taxing the legal immigrants earnings increases the probability that the immigrants will accept an offer of work on the illegal market. This will affect the timing when the legal migrant will be willing to accept an offer on the illegal market. As the tax rate increases, the benefit from staying on the legal market decreases and thus the migrant will tend to move to the illegal market leaving his legal employer. This will occur earlier than in the case where the tax rate is low. Thus increasing the probability of the legal immigrant staying on the illegal market working for local employers, when his legal permit expires. The number of illegal magnets will increase therefore and the time spent on the legal market will decrease. Taxing legal immigrants' earnings also affects the number of illegal migrants the legal migrants can employ. As the tax rate increases, both the legal and illegal net earnings will decrease. As the effect of the taxes on the legal earnings are stronger, the difference between the legal and illegal earnings will decrease. This will the decrease the incentive of the legal migrant to employ an illegal migrant and will increase the time spent on the illegal market by the legal migrant.

5.3.3. Imposing a penalty on local employers caught illegally employing migrants

Imposing a penalty on the local employers employing an illegal worker will decrease the earnings of the immigrants on the illegal market. It will, however, also have the same type of an effect on the earnings of the legal workers as both markets are tied together. However, the effect of such a penalty will be stronger on the illegal market than on the legal markets. Thus, such a policy will increase the time the legal employee works legally for the

local employer before he decides to move to the illegal market. As stated above, it is not always easy to find jobs on the illegal market and it is not clear if the illegal worker will receive an offer quickly enough to ensure that it would be worth his staying illegally in the host country. Therefore, such a penalty, on average, will decrease the number of migrant workers staying illegally in the host country.

Imposing a penalty on local employers caught employing illegal migrants also has an effect on the time the legal worker spends working on illegal jobs parallel to the time spent on the legal market. Such a penalty would increase the proportion of time spent by the legal migrant on the legal market and decrease the number of illegal migrants they employ.

5.3.4. Forced saving

Forced savings is the case where the migrants are compelled to save part of their legal earnings, which they would lose, if deported. This could be seen as a lump sum of money paid by the employer to the local worker when he departs legally from the host country. It could be implemented by the employer paying part of the employees earnings to the government (such as social security payments[56]) and when the worker leaves the host country legally he/she will receive this lump sum of money. The recourse of the legal employer for offering his legal workers a lump-sum payment at the end of the legal period of employment transfers the bond to the migrant worker. The deferred payment to the migrant worker makes switching to illegality less attractive and increases the likelihood that the worker will still be legal when the period of permissible stay expires. Moral hazard nonetheless intrudes on interests of the legal employer and the government when they coincide. The legal employer can gain, when the opportunity arises, by compelling his workers to move to illegal employment after the accumulated value of deferred wage payments exceeds the value of the bond. The intent of the bond is then nullified, via a reversal of the employer's incentives. If workers anticipate such opportune behavior, the bond will remain with the legal employer. Then, the vulnerability of the legal employer, because of defection to illegal employment, is also the source of the government's vulnerable policy.

Therefore the cost, of not leaving the country legally, is transferred from the employer to the employee. This will increase the probability that the legal worker will leave the host country legally and will decrease the illegal population of migrants.

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[56] In order to decrease the costs to the local employer, the deferred payments of the low skilled workers should be relatively lower than those of the high skilled workers.

Imposing a policy whereby the legal migrant "saves" also affects the time the legal migrant will work on the illegal market parallel to his work on the illegal market. Such savings increases the cost if caught and thus reduces the time spent on the illegal market. If in addition to the penalty of employing an illegal migrant, he losses his savings, if caught employing an illegal migrant, we would then see a reduction in the number of legal migrants employing illegal migrants. Note that at a lower wage the employer may have an incentive to continue employing the worker illegally after the legal duration of the contract. This incentive can be decreased by a joint policy package of forced savings with a bond and/or a fine set on the employer caught employing an illegal migrant.

5.4 The EU and the case of Israel

In this section we describe the situation in a few EU countries. We then describe the case of Israel where the employment of foreign temporary workers has been implemented successfully in the past few years. Finally we compare the case of Israel and the EU countries.

5.4.1 The EU

The EU countries employ temporary foreign (non-EU) workers. Different countries in the EU design different policies with regard to the employment of the foreign temporary workers. The temporary workers in the EU can be divided into two main groups: highly skilled workers and seasonal workers (or as defined in the UK "working holiday makers"). The majority of the temporary workers in the EU countries are seasonal workers rather than the highly skilled workers. 82 percent of the workers in France and Germany are seasonal workers while approximately 45 percent in the UK are (if we consider the short term permit holders also as seasonal workers then the percent increases to 70 present). In most countries temporary workers are limited to work for the employer from whom they have received the permit. Moreover, in most cases they usually have no possibility of changing their status from temporary to permanent workers (the UK is an exception where highly skilled workers can change their status to permanent workers after four years working as temporary workers).

Comparing 1992 to 1996 and 1997 (see Table 5.1) we see that there has been a rather large change in the number of foreign temporary workers in different countries in the EU. The amount of temporary workers in 1996 and 1997 are more or less the same. Moreover, in Germany and France the number of entry permits for temporary workers is more or less equal

to the stock of migrants (and in some cases even higher). Thus the temporary workers seem to be leaving the country legally rather than staying illegally in the host country.

In order to understand the different policies in different countries we now present a more detail description of three countries: France, Germany, and the United Kingdom. The statistics described below with more detailed data is summarized in Table 5.1.

In France there were 10,000 temporary workers in 1997. 1,000 of these were highly skilled workers (employees on secondment and researchers) while 9,000 of the were seasonal workers. Most of the temporary workers are students holding a passport from America, Canada, Brazil, Algeria, Poland and Russia. If domestic workers are available for the jobs which the temporary workers are applying for, then there may be grounds for refusal of a permit to work in France. All workers are restricted to work in the jobs for which they have obtained the permit. The responsibility of obtaining the work permit is imposed on the employer rather than the worker. In the case of seasonal workers, the requirement to obtain a permit falls on the employer while the workers themselves must hold a temporary residence permit valid for the period of employment. In France, there are no quotas set for highly skilled workers while in the case of seasonal workers, under certain bilateral agreements such as with Morocco and Tunisia, quotas do exist. Seasonal workers are limited by age and must be between the ages of 17 and 50. Highly skilled workers are limited for nine months of work with a possibility of renewal, for a further nine months. On the other hand, the maximum duration of seasonal workers is 6 months while there is also, in some cases, a minimum duration period (for example: 4 months for workers from countries like Morocco and Tunisia).

In Germany there were 271,200 temporary workers in 1997 divided into two main groups: workers employed under contract for services (42,100) and seasonal workers (226,000). The employment of a temporary worker can be arranged only under bilateral agreements made by Germany with the home country of the workers. In some cases, the employer of the worker in the home country must also approve such employment (especially in the case of workers employed under contract). The workers must be at least 18 years old and hold a working permit. The availability of domestic workers can affect the employment of seasonal workers. However it will not affect the employment of workers employed under contract. On the other hand, there are quotas for service workers while there are no quotas for seasonal workers. Germany also limits the duration of the workers: workers employed under a contract for services are employed for a maximum of 2 years (3 in some exceptional cases) and seasonal workers are limited to 3 months per year.

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United Kingdom also permits the employment of temporary workers and sets similar restrictions to those described above. In 1997 there where 75,700 temporary workers in the UK divided into three main groups: Highly skilled workers (long terms permits) (18,700), short-term permit holders (19,000) and working holidaymakers (33,300). Highly skilled workers need work permits while seasonal workers are not required to have such permits. The highly skilled workers can change employers under specific conditions. The availability of domestic workers can affect the possibility of employing seasonal workers while it has no affect on the highly skilled workers. Seasonal workers must be unmarried, ages between 17 and 27 and have sufficient finances to return home after the holiday. There are no quotas set for temporary workers in the UK. Highly skilled workers are authorized to stay in the UK for up to 4 years while renewals are possible, subject to the same conditions as when first accepted. Renewal permits normally do not exceed 36 months. Holiday workers, on the other hand, are limited to 2 years without the possibility of renewal.

5.4.2 The Case of Israel

Until the 1990s' the Israeli economy relied on foreign workers who came to work in the morning and went home at the end of the day. This situation was very convenient, as the country didn't need to import foreign workers permanently or for temporary stays in Israel. These foreign workers were Arabs who came to work in the Israeli cities from the Gaza Strip and the West Bank. During the late 80s' and the early 90s' the workers became a threat to the Israeli population, as it was difficult to distinguish between Arab terrorists and workers whose only objective was to work. As the number of Israeli casualties increased and the various methods of protection didn't succeed in stemming the number of terrorist attacks, the Israeli authorities decided to decrease the number of Arab workers working in the different Israeli cities (for example, in order to decrease the probability that a worker could be a terrorist, at different periods of time, the Israeli authorities allowed only married workers above the age of 35 to work in Israeli cities). The decrease in the number of Arab workers working in the Israeli cities, and lack of workers for other reasons, caused a shortage in specific sectors. The authorities thus decided to permit the import of temporary workers for a certain period of time.

To minimize the number of temporary workers deciding to stay illegally following the termination of the legal permit, the Israeli authorities decided to implement a policy under which an employer who received approval to import temporary workers could do so for a period of five years but had to renew the permit after 2 years. After the five years the worker

must leave the host country for at least one year before he can return to the host country. The reason for insisting that the worker must leave Israel for one year is the high probability that the employer will not hold the job for the foreign worker for that period of time and thus may employ a local or different worker. If the foreign worker returns to Israel after a year it is as a result of the economical situation of the country. The employer would place a bond of around Euro 1,250 for each worker imported, returnable when the legal temporary worker leaves the host country. If the worker left the legal employer and became an illegal migrant then the legal employer would forfeit the bond. The legal foreign workers receive high-level modern health care paid by the employer. In many cases if a foreign worker becomes illegal and needs health care then either the worker pays it him/herself or, in the case where the worker cannot afford it, the government pays (however then the authority will know that the worker is illegal and he/she will be deported).

This policy, which was carried out in the in Israel in the 1990s, enabled different types of temporary workers to enter Israel under temporary migration guest-worker programs: temporary migrant workers have been nurses and care of the old, from the Philippines, building construction workers from Romania, agricultural workers from Thailand, and other specialized services from Russia and the Ukraine (catering principally to other foreign workers).

The bond that was imposed on the employer shifted the responsibility, of the workers leaving the country legally, from the government to the employer. As described above, the incentive of the legal immigrant to stay illegally in Israel decreased as a result of this policy. However, many temporary workers still stayed in Israel illegally after their legal employment terminated. As we can see from Table 5.2 the estimated proportion of legal and illegal workers were more or less identical in 1995 and 1996 (56,100 legal temporary workers in 1995 and 47,000 illegal workers. In 1996 the number of workers increased, the legal to 85,200 and the illegal to 74,000). Over time, as a result of this market failure, when employers lost their bond as a result of legal migrants staying illegally in Israel, the employers started contracting an agreement whereby legal temporary workers would receive part of their income when they left the host country. A different agreement used was that of workers posting a bond, in his/her host country, in favor of the new employer, before entering Israel. This ensured that he/she would leave Israel at the end of time agreed. As we can see from the Table 5.2 this new policy rapidly decreased the growth of temporary workers staying illegal in Israel on the termination of their legal agreement.

This brings about the question regarding the duration of legal and illegal workers in Israel. Table 5.3 presents the duration distribution of legal and illegal workers in Israel in 1999. It is clear from the table that most of the legal and illegal workers depart from the country within 2 years. For the legal workers this is a direct result of the contract between the workers and the employers (which is dictated, in many cases, by law). The percentage of illegal workers staying in Israel over 2 years is around 10%. In general we could say that most legal and illegal leave inside 2 years while a small proportion of illegal workers stay in Israel over this period of time. We should note that many of the illegal workers were legal before becoming illegal. Thus the duration of an illegal worker, which includes the time spent as a legal worker, is thus longer and is around 4 to 5 years. With high probably we could say that workers that have spent over 4 years in the country without leaving to visit their home country (illegal workers cannot reenter after departing) would prefer to stay permanently in Israel. However as we can see, the number of such workers is less than 10% out of the stock of illegal workers.

5.4.3 The EU and Israel

The main outstanding difference between the EU and Israel is that most temporary workers in the EU are seasonal workers coming to work for short periods of time (a few months) while in Israel the temporary workers come for a longer period of time (five years). Moreover, the temporary workers in Israel are mostly low skilled while in EU countries only 80 percent of all temporary workers are low skilled. The low skilled foreign workers in Israel receive health care financed by the employer. This is not always the case in the EU.

The low skilled workers' income in Israel increases the welfare of the families left in the home country through the transfers sent back by the worker. Thus the long period of employment of foreign temporary workers in Israel (five years) enables both the local employer and the workers to take full advantage of the temporary worker policy. This long period of time decreases the costs for both sides and increases their welfare.

Even though there is pressure by employers, Israel does not have any policies to permit temporary highly skilled workers in the country. Highly skilled temporary workers are conceived by the Israeli authorities as a threat to the local highly skilled workers, threatening the income and employment of the local population.

Comparing the temporary foreign worker policy in the EU and Israel seems to reveal three main pillars that enable the implementation of a successful policy: *a)* a relatively long period of time that the worker can stay in the host country; *b)* the ability to make sure that the

workers leave at the end of the period; and *c)* the low threat to the local population. The first pillar decreases the cost for both sides and increases efficiency. The second pillar is aimed at decreasing the possibility of creating an illegal migration. The third pillar determines what type of workers are allowed under such a policy. Should these workers be high or low skilled workers? Should the policy be preempted only for certain professions? The answer to these questions must be determined individually by each country. Choosing the right type of workers will decrease the threat to the local population and will thereby receive political support both from the employers and the local population.

These three pillars seem to be the basic framework for a successful temporary foreign worker policy. Such a policy will enable an increase in the local population's welfare and increase the welfare of the temporary workers and their family in the home country.

5.5. Concluding Remarks

While many workers migrate only temporarily, and the benefits to both origin and host economy may depend on the duration of stay in the host economy, little policy analysis has been given to the choice between temporary and permanent migrants. We have presented the basis of a framework for accepting temporary contracted workers under which the workers will enter the host country for a given period of time and at the end of that period return home to the host country. Under quite weak assumptions this policy could benefit both the host and the home country of the migrant. The fact, that the workers are temporary, decreases the political resistance in the destination country to a high level of immigration – as for example, has occurred in Switzerland. The main question is how to implement such a policy.

Drawing upon evidence from the policy carried out in Israel and in the different EU countries it would seem that the successful implementation of a temporary foreign worker policy has three requirements: *a)* a relatively long period of time for the worker to stay in the host country; *b)* the ability to make sure that the workers leave at the end of the period; and *c)* the low threat to the local population. The third requirement determines the types of workers to be allowed to enter the host country. The latter will depend on the economic needs of each of the countries in question. This will increase the political support for such a policy both from the employers and from the local population (see Epstein and Hillman, 2000 and Tapinos, 1999).

The second requirement seems to be the most difficult to implement. As presented above, and given the experience in Israel, a bond could be undertaken to make sure that the temporary legal worker will return to the host country. There are two types of bonds: 1) a

bond imposed on the employer, and 2) a bond imposed on the worker.   The bond imposed on the employer transfers the responsibility for the worker leaving the host country at the end of the period, from the authorities to the employer. This policy does not always work and as we can see from the case of Israel, the total number of illegal immigrants, staying after completing their legally permitted time, increased over time.   The second possibility is imposing a bond on the legal migrant. The legal migrant may not have many assets thus it would be difficult to impose such a bond on him. However the possibility of "forced savings", under which the worker is required to save part of his income and receive it only if he leaves legally (such as social security and medical care), seems to be a more efficient policy to decrease the number of migrants that remain after their legally permitted period.

A temporary contracted workers' policy could be considered, at first, in the form of seasonal workers which already exists in many countries and thus the countries would only have to increase the number of permits for such workers.

Table 5.1

Temporary Workers

(Thousands)

	1992	1996	1997
France			
Highly skilled workers			
Employees on secondment (provisional work permit)	0.9	0.8	1.0
Researchers	0.9	1.2	1.1
Seasonal workers	13.6	8.8	8.2
Total (as a percentage of foreign born population)	0.4	0.3	0.3
Inflows (as a percentage of total inflows)	36.3	20.7	13.6
Germany			
Workers employed under a service contract	115.1	47.3	42.1
Seasonal workers	212.4	220.9	226.0
Trainees	5.1	4.3	3.2
Total (as a percentage of foreign born population)	5.1	3.7	3.7
Inflows (as a percentage of total inflows)	33.9	37.1	46.4
United Kingdom			
Highly skilled workers (long-term permits-over one year)	12.7	16.9	18.7
Short term permit holders	14.0	16.8	19.0
Working holiday makers	24.0	33.0	33.3
Trainees	3.4	4.0	4.7
Total (as a percentage of foreign born population)	2.7	3.7	3.7
Inflows (as a percentage of total inflows)	NA	NA	NA

Source: OECD, Trends in international migration, 1999

Table 5.2

Estimated number of illegal foreign temporary workers in Israel 1995-1999

(Thousands)

Year	Source	Total Legal Foreign Temporary Workers	Estimated Total IllegalForeign Workers
1995	CBS	56.1	47
1996	CBS	85.2	74
1997	Rasuth	64	76
1998	Rasuth	80.5	88.6
1999	Rasuth	67.2	79.3

Source: CBS – The Israeli Central Bureau of Statistics.

Rasuth –The Israeli Ministry of Labor and Welfare.

Table 5.3

Duration of legal and illegal workers in Israel in 1999

(Percentage)

Period in Months	Legal	Illegal
1-6	7.6	1
7-12	45.8	52.1
13-24	44.2	37.1
25+	2.4	9.8
Total	100.00	100.00

Source: Bar Tzuri (2001).

6. Extending the free movement to Eastern Europe

In past enlargement rounds, the EU has extended the free movement of labour to countries with similar per capita incomes and factor endowments. Even in the case of the Southern Enlargement, differences in income levels were moderate compared with the gap in per capita income levels that the EU will face in the context of the eastern rounds. Figure 6.1 displays the population and PPP-GDP figures of the EU-15, the ten accession candidates from Central and Eastern Europe[57] (CEEC-10), and a set of other countries, which may apply for accession in the future. Note that Turkey already possesses a candidate status. The total population of all ten accession candidates from Central and Eastern Europe amounted to 104 million persons in 2000 and that of the southern EU countries (Greece, Spain, Portugal) 59 million at the time of their accession. While per capita PPP-GDP levels of Greece, Spain and Portugal have been at between 60 % and 70 % of average levels in the EU at the time of their accession, the average GDP of the ten candidate countries from Central and Eastern Europe was in 1999 less than 40 % of average GDP in the EU-15 at purchasing power parities, and at 15 % at current exchange rates. The differences in per capita GDP levels between the EU and the CEECs are associated with marked differences in factor endowments and factor costs: the book value of the capital stock in the ten candidate countries is reported at 10 % of those of the EU-15, the incremental capital output ratio (ICOR) is substantially lower than that of the EU, and wages number around 10-15 % of those in the EU (Boeri/Brücker, 2001b, table 1). Differences in per capita income levels and factor endowments between the EU and other potential accession candidates are even higher (Figure 6.1).

Against this background, there are mounting concerns in the EU member states that the extension of the free movement will involve a mass migration from the East into the countries and regions adjacent to the CEECs, and will affect employment and wages of natives there. As a consequence of these concerns, the present European Union and its member states pursue with regard to the free movement a prudent enlargement policy. If the European Council at the Goteborg summit follows the proposal of the European Commission, then the free movement of workers will be suspended for the first five years after accession, and, after a review of the labour market conditions in the present member states, for another two years. Moreover, individual member states can ask for a further prolongation of the

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[57] Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia. All ten CEECs are involved in the accession negotiations at the present, but many observers expect that at least Bulgaria and Romania will not participate in the first accession round. We exclude Cyprus and Malta from our discussion here, since these rather small countries are characterised by per capita GDP levels similar to many EU members.

transitional period if they fear labour market disruptions. This implies, that the introduction of the free movement is postponed for the CEECs at least until 2010, presuming that the first countries will accede in 2005. During the transitional period, each member state can admit workers from the CEECs. These workers will benefit from equal treatment under the *acquis*.

Figure 6.1:**Population and PPP-GDP in the EU and potential accession candidates, 1999**
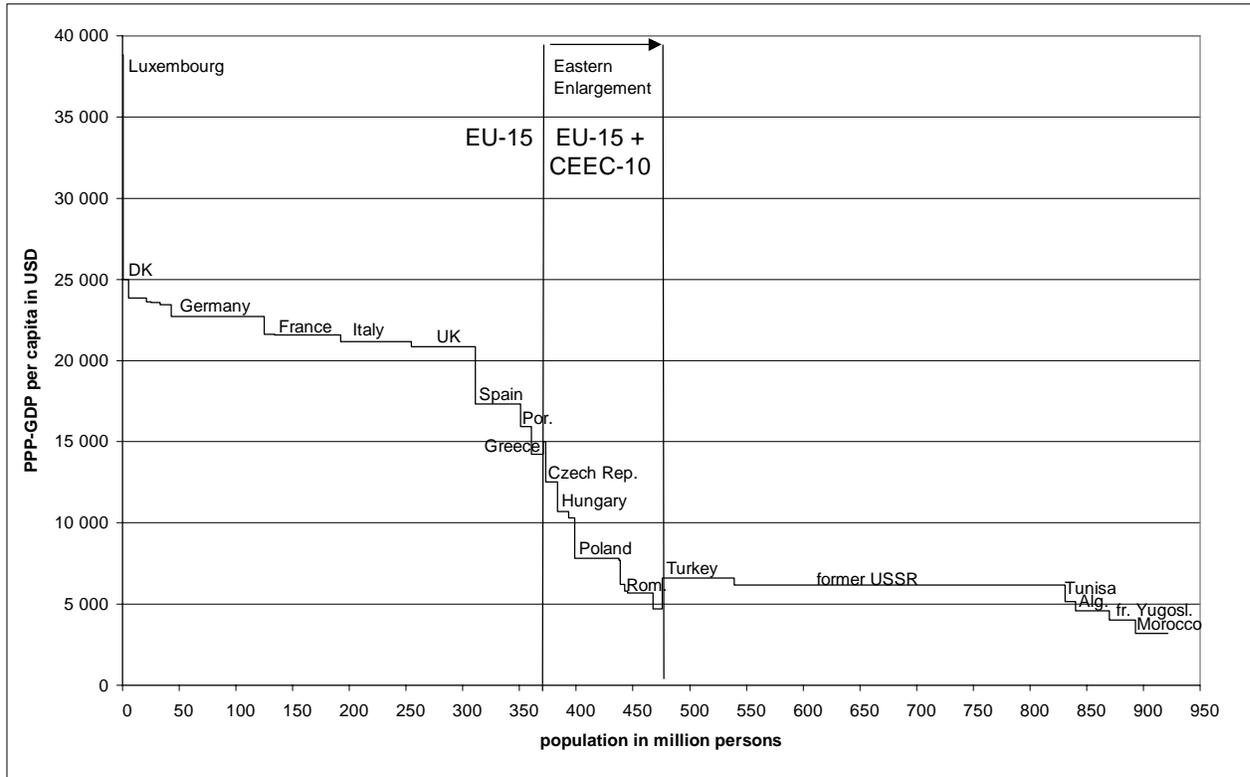
Source: Own calculations based on World Bank (1998) and Eurostat (2000).

How will the extension of the free movement to countries with low per capita income levels affect welfare of natives in the present EU? We address two questions in this section: firstly, we ask whether introducing the free movement will indeed involve a mass migration wave. Secondly, we assess briefly the implications of migration from the East on labour markets in the affected countries of the EU. The alternatives to the prudent enlargement policy of the EU are discussed in the final chapter.

6.1 Will Eastern enlargement swamp EU labour markets?

Incentives to migration will be stronger than in past enlargement rounds. Accession candidates border countries which possess income levels above the EU average, and, perhaps most importantly, present immigration from the CEECs is rather low: at present, around

840,000 nationals from the CEECs reside in the EU, this is roughly 0.8 per cent of the population in the CEECs. The number of employees from the CEECs working in the EU can be estimated at around 300,000 workers, including commuters and the full-time equivalent of temporary employment. These rather moderate figures reflect tight restrictions on labour mobility. It seems therefore reasonable that the migration potential from the East is -- in contrast to Southern enlargement -- has not yet been exhausted.

Numerous studies, starting with Layard et al. (1992), have tried to reduce uncertainty as to the migration potential from the East. These studies apply basically three approaches: opinion polls, extrapolations from South-North migration, and multivariate analysis of past migration episodes in econometric models.

Opinion polls face several methodological problems: firstly, they provide only information on the supply side, i.e. on the propensity of workers to migrate, but not on the demand side, i.e. on the ability of labour markets to absorb an additional labour demand. Secondly, it is not known whether somebody who reveals in an opinion poll a general propensity to migrate has indeed serious intentions to move. Thirdly, migration from the East is largely a temporary phenomenon, such that the share of the population which will move to another country and perhaps return within a certain *period* of time is much higher than the share of the population which will live in a foreign country at a given point of time[58]. Thus, although opinion polls provide interesting qualitative information on the structure of migration, it is hard to draw any quantitative conclusions about the migration potential from them.

The extrapolation exercises take as reference the migration flows from the southern European countries to the Western and Northern European countries in the 1950s and 1960s, and the migration of Mexicans to the US in the 1970s and 1980s (Layard et al., 1992; Lundborg, 1998; Bauer/Zimmermann, 1999). These studies conclude that no less than 3% of the population in the CEECs will migrate to the West, which corresponds to an immigration of around 200,000 people p.a. for all CEECs (incl. the former USSR) or 130,000 persons from the Czech Republic, Hungary, Poland and Slovakia (Hönekopp, 1999). However, these studies do not control for differences in incomes differences and unemployment in the

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[58] As an example, around 200,000 temporary workers from the CEECs have been employed per annum in Germany with an average duration of stay of three month for the last 5 years. Under the (unrealistic) assumption, that each worker from the CEECs has been employed in Germany only once, this figure corresponds to a total immigration of one million workers in 5 years. However, only 40,000 temporary workers from the CEECs have been employed in Germay at each point of time on average during this period.

countries of destination and origin, nor for differences in the institutional conditions to migrate.

A number of econometric studies tried to exploit the information of post-war migration episodes in Western Europe to assess potential migration after free enlargement have been introduced. Needless to say, these studies suffer from various methodological problems, too. The main cause for these problems is that the estimates are based on migration episodes which differ in several respects from the conditions of East-West migration. Moreover, there exists large heterogeneity in the propensity to migrate between countries, which creates a number of estimation problems (see Alecke et al., 2001, Fertig/Schmidt, 2000, for a discussion).

The estimates presented here rely on a time-series analysis of migration to Germany (where, in 1998, two-thirds of the migrants from CEECs settled) from 18 European countries of origin in the period from 1967 to 1998[59]. The empirical model we used was inspired by Hatton (1995)[60]. In line with other approaches, it assumes that migration is an investment in human capital, whose returns are determined by expectations regarding future income (Sjaastad, 1962). Expectations of income in the country of destination are conditioned by the opportunity to find a job in its labour market. Following Harris and Todaro (1970), the average employment rate serves as a proxy for the individual probability to find a job. Individuals are heterogeneous, i.e. they differ in their preferences and human capital characteristics which are relevant for migration. As a consequence, the propensity to migrate declines the higher the share of the population which lives already abroad. For a given differential in per capita incomes and other relevant variables, the stock of migrants will eventually reach a steady state, where its growth is solely determined by the natural rate of population growth and the rate of regularisations. This does not rule out the possibility that chain- or network effects affect migration positively. But in the long run these effects are dominated by declining preferences to migrate in the population. The adjustment of migration stocks to its steady state levels is modelled in terms of an error-correction mechanism. Note that the error-correction mechanism imposes less restrictions on the data than other dynamic models do. (see Box 6.1 for technical details).

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[59] The model presented here relies largely on the model presented in Boeri/Brücker (2001). Nevertheless, several changes have been applied: the interaction between institutional variables such as the free movement and guestworker recruitment is considered, more freedoms are allowed in the error correction mechanism and more recent data are used.

[60] See Fertig (1999) for a first application of the Hatton-model to a panel of European countries.

The model estimated here relies on the assumption that a dynamic equilibrium between the stock of migrants, or more precisely, between the share of the population which resides in the foreign countries, and the economic variables such as the difference in the log of per capita incomes and the employment rates, exists. Migration stocks do not adjust immediately to changes in the economic variables. We model the adjustment process to the equilibrium levels in form of a simple error-correction mechanism, which imposes less restrictions on the data than other dynamic models. For a derivation of the adjustment process from a model which takes explicitly the formation of expectations into account see Hatton (1995). The model we estimated has the form

$$
\begin{aligned}
\Delta mst_{ht} = {} & \alpha_h + \beta_1 \Delta \ln(y_f/y_h)_t + \beta_2 FREE \cdot \Delta \ln(y_f/y_h)_t + \beta_3 GUEST \cdot \Delta \ln(y_f/y_h)_t + \beta_4 \Delta \ln(e_f)_t \\
& + \beta_5 \Delta \ln(e_h)_t + \beta_6 \ln(y_f/y_h)_{t-1} + \beta_7 FREE \cdot \ln(y_f/y_h)_{t-1} + \beta_8 GUEST \cdot \ln(y_f/y_h)_{t-1} \\
& + \beta_9 \ln(e_f)_{t-1} + \beta_{10} \ln(e_h)_{t-1} + \beta_{11} \cdot FREE + \beta_{12} \cdot GUEST + \beta_{13} mst_{ht-1} + \sum_n \beta_{13+n} \Delta mst_{ht-n} ,
\end{aligned}
\tag{1}
$$

where mst_h denotes the ratio of the stock of migrants to the population in the home country in per cent, w_f and w_h represent wages, and e_f and e_h the employment rate, in the foreign (host) and the home country respectively, $FREE$ and $GUEST$ are two dummy variables that cover the free movement of labour within the EU and guest-worker recruitment agreements between the foreign and the home country, respectively. The term α_h denotes the country specific fixed effects. Thus, we considered both, the level effect of free movement and guest worker recruitment and their interaction with the income variables. The number of lags for the dependent variable has been chosen by different information criteria.

The model is estimated with the seemingly unrelated regression technique in order to account for a unevenly distribution of the variance across the sample and correlation in the error terms caused by common shocks. Our tests suggests that both is present in our data. Note that coefficient for the lagged depended variable may be distorted in dynamic panel models with fixed effects. Simulation studies have however shown that we have to expect in our data set only moderate distortions.

Note that the migration stock and the wage and employment variables enter the model as levels as well as rates of change. The first variables determine a dynamic equilibrium relation between the migrant stock and the income and wage variables in the long run, while the changes in the variables determine the response of migration to short-term fluctuations of the explanatory variables. The equilibrium stock of migrants can be derived from equation (1) if we set all changes as null. The model specified in (1) presumes that a dynamic equilibrium relation holds for the stock of migrants and the wage and employment variables. In technical terms, the variables have to be "co-integrated", i.e. the estimation of the model in requires that the variables have to satisfy certain statistical properties (Engle and Granger, 1987). Indeed, we found a co-integration relationship for the variables in (1). The results from the statistical tests and the descriptive statistics are available from the author on request.

Table 6.1: **Estimation results for the error-correction model**

	PPP-GDP				GDP at current exchange rate			
	regression (1)		regression (2)		regression (3)		regression (2)	
dependent variable	Δmst_t		Δmst_t				Δmst_t	
observations	30		30				30	
panel-observations	540		540				540	
variable	coefficient	t-statistics	coefficient	t-statistics	coefficient	t-statistics	coefficient	t-statistics
$\Delta\ln(y_f/y_h)_t$	-0.006	-0.369	0.140 ***	5.419	0.007	1.171	0.023 **	2.171
$FREE*\Delta\ln(y_f/y_h)_t$			-0.244 ***	-8.448			-0.070 ***	-5.063
$GUEST*\Delta\ln(y_f/y_h)_t$			-0.779 ***	-4.070			-0.015	-0.166
$\Delta\ln(e_f)_{t-1}$	0.749 ***	3.809	0.700 ***	3.456	0.806 ***	4.500	0.697 ***	2.938
$\Delta\ln(e_h)_{t-1}$	-0.427 ***	-10.218	-0.348 ***	-7.372	-0.479 ***	-11.389	-0.437 ***	-8.892
$\ln(y_f/y_h)_{t-1}$	0.045 ***	8.285	0.056 ***	9.489	0.039 ***	9.186	0.022 ***	4.534
$FREE*\ln(y_f/y_h)_{t-1}$			0.009	1.291			0.029 ***	6.774
$GUEST*\ln(y_f/y_h)_{t-1}$			-0.005	-0.189			0.010	0.781
$\ln(e_f)_{t-1}$	0.262 ***	3.371	0.201 ***	2.453	0.218 ***	3.141	0.182 **	2.037
$\ln(e_h)_{t-1}$	-0.145 ***	-8.863	-0.143 ***	-7.227	-0.156 ***	-9.024	-0.160 ***	-7.389
mst_{t-1}	-0.126 ***	-18.087	-0.127 ***	-15.430	-0.128 ***	-18.570	-0.112 ***	-15.475
Δmst_{t-1}	0.416 ***	17.391	0.407 ***	15.732	0.414 ***	17.672	0.391 ***	14.909
FREE	0.003 **	2.404	0.001	0.684	0.004 **	2.767	-0.010 ***	-4.031
GUEST	0.128 ***	18.963	0.134 ***	10.674	0.137 ***	18.822	0.146 ***	9.415
CIVIL WAR	0.574 ***	12.286	0.538 ***	10.733	0.539 ***	11.488	0.596 ***	13.212
REPATRIATION	-0.088	-1.308	-0.104	-1.411	-0.119 *	-1.741	-0.100	-1.471
Log likelihood	1530		1526		1511		1501	
forecast indicators (dynamic forecast in sample)								
RMS error	0.165		0.159		0.167		0.166	
RMS percentage error	0.307		0.290		0.322		0.298	
Theil's U	0.054		0.052		0.055		0.055	
bias proportion	0.000		0.001		0.000		0.000	
variance proportion	0.001		0.001		0.001		0.000	
covariance proportion	0.999		0.999		0.999		1.000	
memo item: unweighted statistics								
adjusted R^2	0.742		0.745		0.744		0.740	
standard error of residuals	0.067		0.067		0.067		0.067	
autocorrelation: estimated ρ	0.076		0.062		0.089		0.099	
F-test: (H_0: pooled model vs. H_1: fixed effects)	***		5.44 ***				10.95 ***	
LM-Test (H_0 = homoskedasticity vs. H_1: groupwise heterosecadasticity)	***		108 ***				113 ***	
LR-Test (H_0: groupwise heteroskedasticity vs. H_1: heteroskedasticity + groupwise correlation)	***		814 ***				813 ***	

Notes: ***, **,* nullhypothesis is rejected at the 1%-, 5%-, 10%-level, respectively.

The dependent variable in the model is the annual change in the ratio of the stock of migrants to the home population in per cent. Four sets of variables have been used:

- the difference of the PPP-GDP per capita between the host and the home country as a proxy for the differential in real wages (regressions 1 and 2 in Table 6.1). In further regressions, the GDP at current exchange have been used in order to analyse the sensitivity of results to different income variables (regressions 3 and 4);

- the employment rate (1-unemployment rate) in the home and the host country as proxy for employment opportunities,

- the lagged ratio of the stock of migrants to the home population,

- dummy variables, which capture the institutional conditions to migrate such as guest-worker recruitment before 1973 and free movement of labour in the EU.

Furthermore, we included two dummy variables for the civil war in the former Yugoslavia and the repatriation of refugees and some dummy variables for breaks in the statistics (1974, 1983, 1990). In a variant of the model we analysed the interaction of the institutional dummies with the income variables (regressions 2 and 4).

The results are reported in Table 6.1. The coefficients of the level variables are highly significant and have the expected signs: the difference in per capita income levels and the employment rate in the host country have a significant positive impact on migration, while the employment rate in the home country has a negative impact. However, the impact of the employment rate in the home countries is, as expected, smaller than the impact of the employment rate in the host country. Note that the coefficients for the income variable are substantially lower in the models which use the GDP per capita at current exchange rates than in the models which use the GDP per capita at purchasing power parity. Both, guest worker recruitment and the free movement, have a significant positive impact on migration (see regressions 1 and 3). However, the impact of the free movement is much smaller than the impact of guest worker recruitment. The interaction of the institutional dummies with the income variables brought not in all cases significant results (see regressions 2 and 4). The variables in differences have, with the exception of the income variable in the first regression, the expected signs and are significant, too. The results turned out to be robust to changes in the time period (e.g. 1968-1990) and to changes in the country sample (e.g. the 5 southern European countries, exclusion of Yugoslavia, etc.)[61].

The model is estimated with fixed effects which capture all constant factors that may affect migration, such as distance, language, culture and long-term differences in the quality of life across countries. For a forecast of potential migration from the CEECs an explanation of the country specific effects is needed. We 'explained' the fixed effects in a second regression with the Human Development Index (HDI), which should capture long-run differences in the quality of life, and two dummy variables which capture the geographical location of the source countries in Europe (*WEST* and *NORTH*)[62]. Note that the ranking of the

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[61] The results are available from the author on request.
[62] The dummy-variable ‚*WEST*‘ has a value of 1 for Portugal, Spain, UK add Ireland, and of 0 otherwise; the dummy-variable ‚*NORTH*‘ has a value of 1 for Denmark, Sweden and Norway, and of 0 otherwise.

HDI is almost constant over time. The results in Table 6.2 point to the fact that we are able to 'explain' around 50 % of the variance in the fixed effects with these variables.

Table 6.2: **Estimation results for the fixed effects**

dependent variable:	fixed effects from							
	regression (1)		regression (2)		regression (3)		regression (4)	
observations	18		18		18		18	
variable	coefficient	t-statistics	coefficient	t-statistics	coefficient	t-statistics	coefficient	t-statistics
constant	1.294 ***	3.270	1.252 **	3.206	1.260 ***	3.198	1.2028 ***	3.350
Human Development Index	-1.243 **	-2.815	-1.199 **	-2.752	-1.210 **	-2.752	-1.1513 **	-2.875
WEST	-0.111 **	-2.025	-0.119 **	-2.185	-0.122 **	-2.227	-0.1210 **	-2.425
NORTH	-0.098 *	-1.734	-0.099 *	-1.776	-0.091	-1.620	-0.0878	-1.707
R^2	0.591		0.596		0.590		0.617	
adjusted R^2	0.503		0.509		0.502		0.535	
standard error of regression	0.090		0.089		0.090		0.082	
F-statistic	6.737		6.874		6.707		7.512	

The results of these estimates have been used for the simulation of potential migration flows from the CEECs to Germany under a set of different assumptions. Needless to say, all these simulations should be treated with great caution and give just broad indications as to the magnitude of the actual migration potential. In our baseline scenario, the number of foreign residents in Germany who have come from the CEECs is estimated to grow at around 220 000 initially if the free movement was introduced for all ten candidate countries in 2002. This number increases to around 300 000 persons, but declines within one decade to 50 000 persons p.a. (see Figure 6.2). The migration stock will grow at around 140 000 persons on average in the first decade. The long-run migration stock is reached at some 2,2 million residents from the CEEC-10 after around 15 years, which will then decline in the course of converging per capita incomes (Figure 6.3a). Note that these figures refer to residents. The share of employees in the total number of residents can be estimated at around 35 %. If the regional distribution of migrants in the EU remains constant after enlargement, the baseline scenarios implies that the stock of migrants from the CEEC-10 will grow at some 335 000 persons initially and that, in the long run, some 3.5 million nationals from the CEEC-10 will reside in the EU-15.

In the baseline scenario, a convergence of per capita PPP-GDP levels to the average per capita PPP-GDP at a rate of 2 % p.a. is assumed; the 1999 unemployment rates in Germany and the CEECs are assumed to remain unchanged; the population projections rely

on the World Bank (2000) scenario. All results apply to the estimates based on PPP-GDP as an income variable.[63] The estimates based on the GDP at current exchange rates bring only slightly higher results (see Figures 6.2 and 6.3a).

**Figure 6.2: Annual growth in the number of residents from the CEEC-10 in Germany**
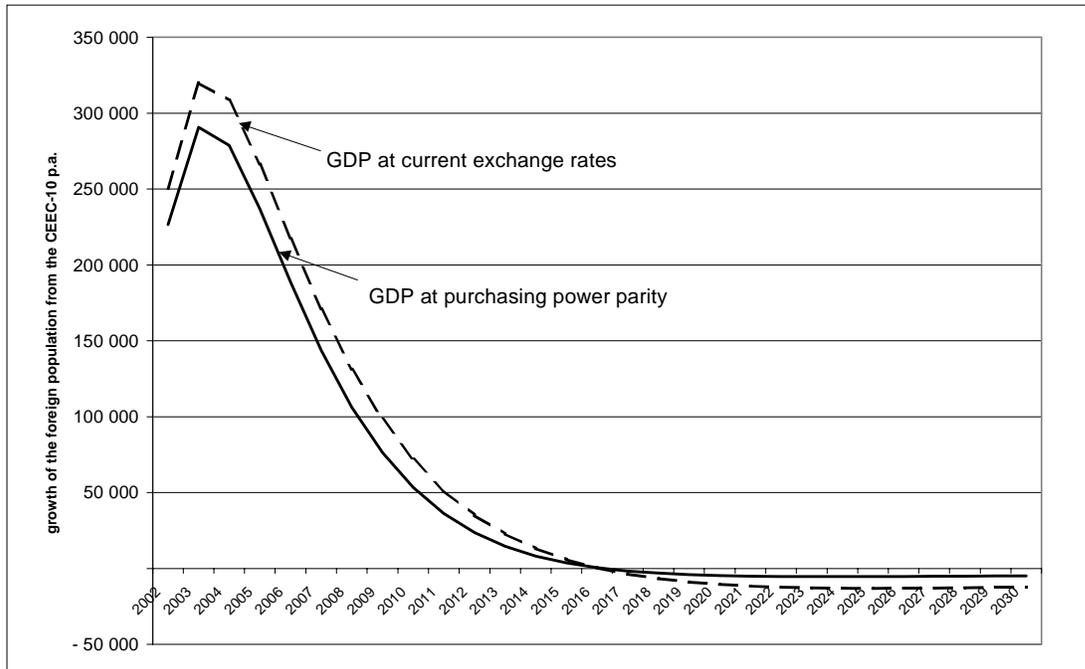
In two other scenarios, different rates of convergence and employment have been applied. Firstly, we have assumed that per-capita GDPs of the CEECs will converge at a rate of 3 % p.a., that the unemployment rate of Germany will be at 10 per cent, and that the unemployment rates of the CEECs will be at 5 % over the period. This yields an initial increase of some 175 000 residents p.a. and a long-run stock of some 1,9 million residents. Conversely, a convergence rate of 1 per cent, an unemployment rate of 5 % in Germany, and an unemployment rate of 15 % in the CEECs yield an initial increase of some 250 000 and nearly 2,5 million residents in the long-run (Figure 6.3b).

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[63] The baseline scenario is based in regression 2.

Figure 6.3a: Scenario of the number of residents from the CEEC-10 in Germany
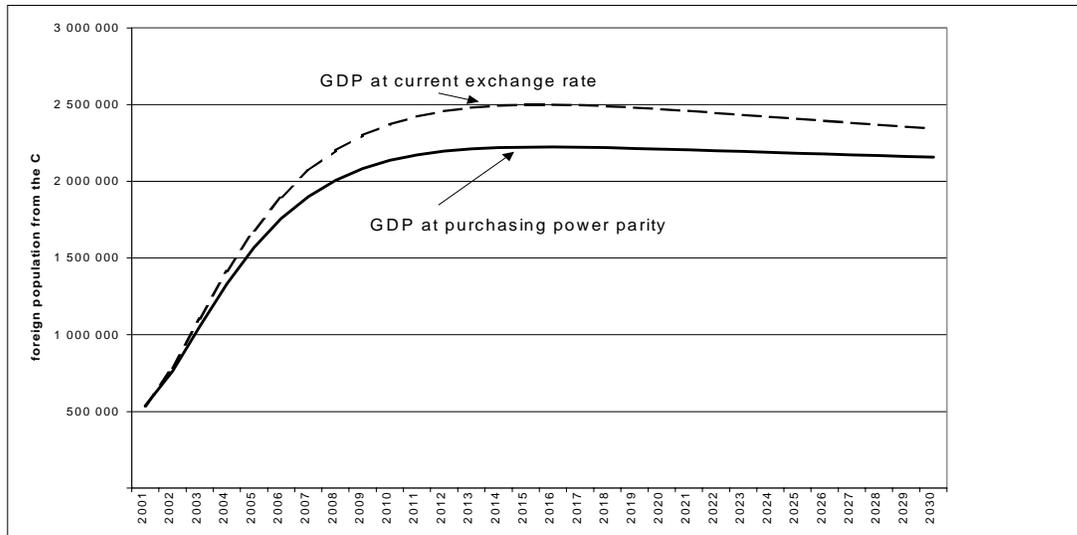
Figure 6.3b: Scenario of the number of residents from the CEEC-10 in Germany
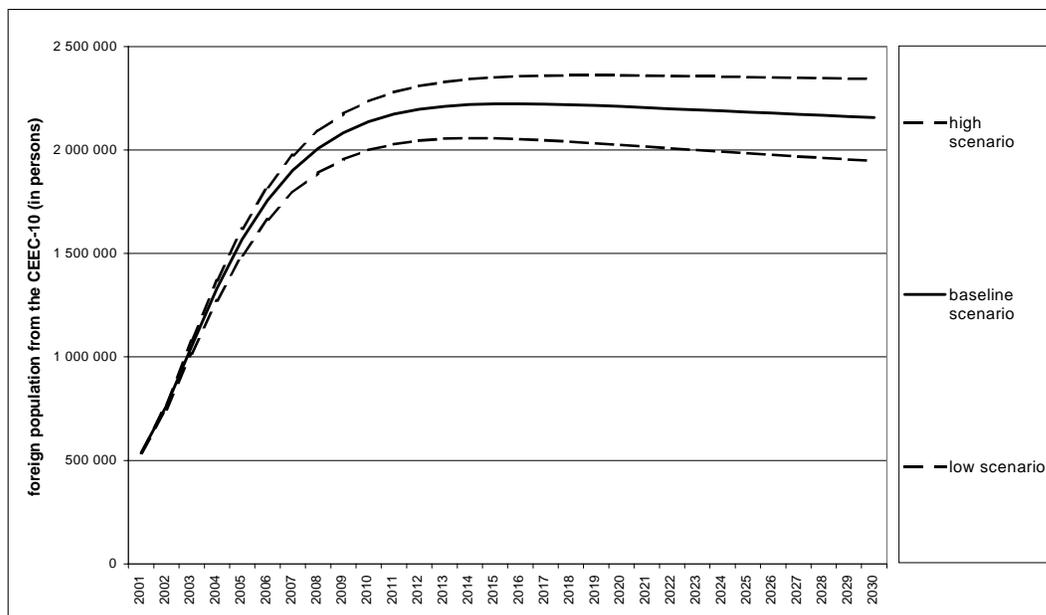
Finally, we have simulated different accession scenarios. To postpone the free movement until 2010, as is planned by the European Commission, will reduce the migration potential only be small numbers: introducing the free movement for all ten CEECs will reduce initial net migration by around 10 000 persons (Figure 6.4). This can be traced back to the rather moderate rate of convergence. However, if Bulgaria and Romania is excluded from the first accession round, then initial net migration will decline from some 220 000 persons to around 130 000 persons.

Figure 6.4: Simulation of different accession scenarios
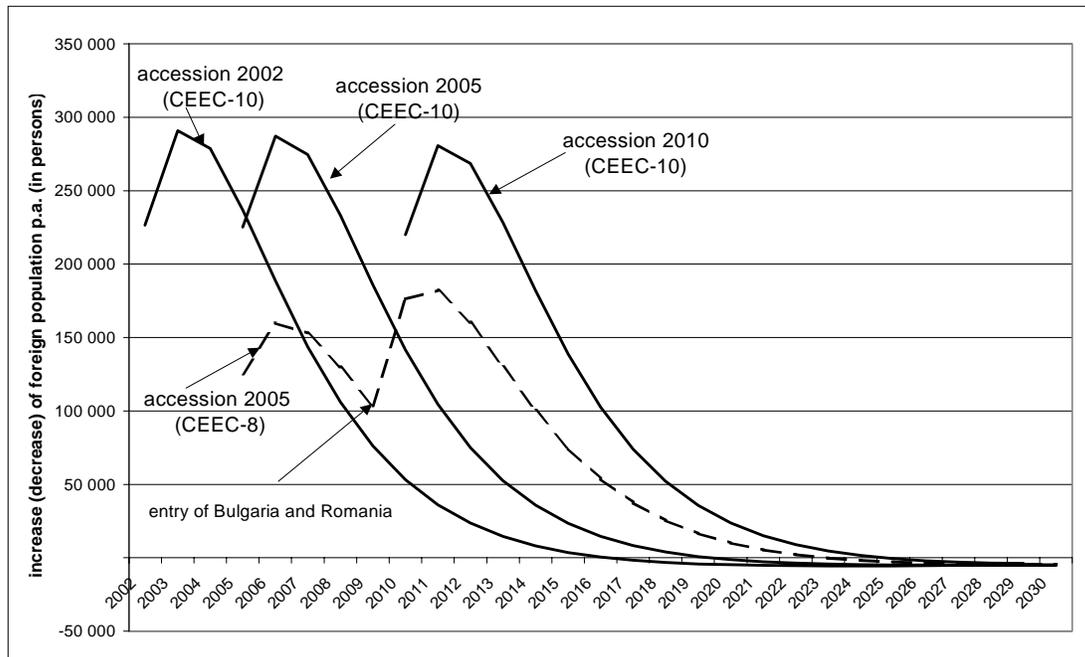
These simulations illustrate the consequences of different enlargement policies and give a clue as to the order of magnitude involved by extending the free movement to the CEECs, but should not be understood as an accurate forecast of actual migration flows and stocks. Interestingly enough, our results are roughly in line with the estimates which are based on the extrapolation of South-North migration (Layard et al., 1992; Bauer/Zimmermann, 1998). There are, of course, findings that point either to lower or higher numbers, an example for the first case is Fertig/Schmidt (2000), one of the latter is Sinn et al. (2000)[64]. Altogether, we can draw three conclusions from our estimates: firstly, it is reasonable guess that free movement will involve a migration of 2 % and 4 % of the population from the CEECs into the present EU in the long-run. Secondly, the adjustment of the migration stock to the income differential will take time. Thus, average net migration rates will hardly exceed 200 000 persons in Germany and 300 000 persons in the EU-15 in the first decade after introducing the free movement. However, immediately after the introduction of the free movement, migration rates can be higher. Moreover, they are expected to vary widely with the business cycle. Thirdly, postponing the free movement will not reduce the migration potential by large numbers, if we base our expectations on realistic assumptions as to the pace of convergence of per capita incomes.

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6.2 What are the consequences for host labour markets?

Migrants from the CEECs concentrate at the present in countries and regions adjacent to the CEECs: around 80 % of the migrants from the CEECs living in the EU reside in Germany and Austria, and this pattern seems to be stable over time. However, not all border regions are affected. Migrants from the CEECs tend to move into prosperous regions with above-average growth rates of GDP and employment, and a high density of working places. Conversely, border regions with high unemployment rates, low wage growth and a low population density receive only negligible numbers of migrants. As an example, the share of migrants from the CEECs in the population and employment of Eastern Germany amounts only to one-third of the German average, while the shares in the border regions in Bavaria and lower Austria are at around three times of the country averages in Germany and Austria. Border commuting is at the present negligible, with around 6,000 workers in Austria and Germany. It will however increase notably if the free movement is introduced. Recent estimates based on the East-West migration between both parts of Germany estimate potential border commuting at around 95,000 (Alecke et al., 2000). If the migration forecasts cited above will hold true, the share of workers from the CEECs will altogether increase to around 7% -12 % of employment in the most affected regions of the present EU.

These are non negligible numbers, but labour markets in the border regions will be hardly 'swamped' by migrants from the East. Against the background of the empirical findings on the wage and employment impact of labour migration, it is unlikely that the affected regions and countries will adjust by reducing wages or increasing unemployment, as predicted by one-sector, closed economy models. Conversely, it is likely that the affected regions and countries will absorb the migration surge by increasing production and adjusting the output-mix. Preliminary evidence from the border regions in Austria and Germany confirms this view: employment and production grows there above the country average, and changes in the output-mix (e.g., increasing shares of wood-processing can be observed (Huber et al., 2000).

Notice that the CEECs form a specific group of countries: on the one hand, per capita income levels are not much above those of the main source countries of the foreign population in the present EU. On the other hand, human capital endowments are much richer than in countries at comparable income levels. Moreover, incomes have been relatively equally distributed in the past, although inequality is increasing rapidly. Recent migrants from the East tend to be more qualified than natives in the host countries, according to labour force

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[64] The differences are due to different methodologies and assumptions, which we cannot discuss in detail here.

survey data (Hönekopp, 1999; Boeri/Brücker, 2001). These figures should however be taken with a grain of salt, since temporary migrants with - presumably - lower qualifications are systematically underreported. Moreover, the skill level of migrants from the East may deteriorate with the increasing earnings inequality in the East. Nevertheless, the average skill composition of migrants from the CEECs will be, in any case, higher than that of other non-EU foreigners. As a consequence, migrants from the East will probably perform better in labour markets and are less likely to depend on welfare than the recent migrant cohorts in Europe.

7. Managing European Immigration

Opening EU labour markets

The political backdrop in Europe provides a clear message that a "window" has opened to promote changes in European migration policies. The European Council, meeting at Tampere in October 1999, determined that a common EU policy on "asylum and migration" was called for. The complex and wide ranging impact of immigration policy over social, economic, legal, and cultural areas were considered to undermine reliance on a piecemeal individual country approach to legislation as anticipated in Article 63 of the EC Treaty. Furthermore, the Commission reviews the "zero migration" policies of the past twenty years – mindful of the co-existence of illegal immigration, estimated by Europol at 500,000 persons per annum, and growing skilled labour shortages – and considers that channels for legal immigration to the Union should now be made available for migrants. What then should be the commonly agreed objectives and policy proposals of EU migration policy? We are mindful that migration policies go beyond the immediate issues of the grounds for admission to the EU to include policy against racism, towards assimilation etc, but in this context we have nevertheless limited our discussion to the more narrow task of policy towards migration flows. We have organised our response by examining migration policy under the channels for migration: Eastern enlargement, family unification, asylum for refugees, illegal migration and economic migration.

7.1 Eastern enlargement

It is unlikely that Eastern enlargement will have significant effects on employment and income distribution in the affected regions. However, there is a high degree of uncertainty as to the actual outcome of introducing the free movement: migration from the CEECs has been restricted so far. Enlargement policies have to take into account this uncertainty, since introducing the free movement is an irreversible decision.

The policy proposal of staggered integration by the European Commission will however neither reduce this uncertainty nor mitigate the adverse implications on labour markets. First, given the slow speed of convergence, the migration potential from the East will decline only by marginal numbers until 2010. Moreover, by simply postponing migration, little can be learned about the actual migration potential from transitional periods. As a consequence, the EU will stand roughly at the same square in 2010. Secondly, migration will be channelled, according to statements of the member states (see e.g. Schröder, 2000), mainly by temporary work permits during the transitional period. Temporary work permits

may mainly select low-skilled migrants. This may have, as in the case of guest worker recruitment, long-term implications for the skill composition of migrants which are enforced by chain migration. As a consequence, transitional periods may have an adverse impact on the skill composition of migrants from the East.

In contrast to this proposal, quota arrangements and safeguard clauses have three advantages: Firstly, they can help to reduce uncertainty on the size of actual migration. If properly designed, utilisation rates of quotas provide information on the propensity to migrate. They can be lifted if application rates show that they are not filled up. Both, quotas and safeguard clauses can be easily monitored through work permits. Secondly, they reduce migration pressures after the end of the transitional period. In contrast to simply postponing migration, the migration potential is step by step reduced if quotas or safeguard clauses are applied. This allows a smooth adjustment. Thirdly, they are either neutral for the selection of migrants (safe guard clauses) or they can affect the skill composition of migrants favourably, e.g. when quotas are allocated by point systems which take human capital characteristics into account.

The introduction of the free movement may have adverse implications on the sending countries and regions. The outflow of labour, in particular of high-skilled labour, may reduce welfare of those left behind. Although fears of a 'brain drain' are exaggerated, compensatory policies of the EU should address the sending rather then the receiving regions. Instead of preventing migration, compensatory measures such as allocating some means from the structural- and cohesion-funds to the education sector in the CEECs will help to increase welfare on both sides.

7.2 Family Unification

About half of migration into EU countries arises from the right of those settled in the EU to bring dependants to live with them. This right is subject to qualifying criteria such as non-dependence on public funds. The share of family unification migration is even greater in the US, comprising 72% of permanent settlers in 1998. The extent to which this channel of immigration will continue to rise in the EU will have a major influence on the direction of legal inflows: the acceleration in the US of legal immigration in the 1990's is partly due to the emphasis on family ties to persons living in the US as the factor that determines whether a visa applicant is admitted, and the increased tendency for migrants in the past decades to come from low or middle income countries. The incremental recent migration into the EU is also primarily from low and middle income countries, and it would be unsurprising if a

similar pattern of rising family unification migration occurs in the EU. In the UK family unification migration rose by 20% in 1999 and 15% in 1998.

Although there is evidence that family unification has contributed to welfare dependency in some EU countries, the case for restricting such migration is weak. Policies supporting family cohesion and the nurturing of children lie at the heart of EU social policy, and a change in this area is not recommended, although EU countries should consider the implications of differing policies towards family criteria for entry. The importance of family unification migration in the EU may be in setting a baseline of unexceptionable migration that together with the internal social constraints on immigration – described in chapter 2 – will limit the acceptability of migration through other channels.

7.3 Developing a Common European asylum and refugee policy

EU member states are signatories of the 1951 Geneva Convention which "provides for access to work as a direct individual right stemming from the status of refugee and cannot be made dependent on an economic needs test"[65]. The choice of the countries of destination by humanitarian migrants is, similar to other forms of migration, affected by economic benefits and costs.[66] National standards with regard to asylum and refugee policies differ widely, and, as a consequence, humanitarian migrants are extremely unequally distributed across individual countries in the EU as well as the rest of the world. Moreover, empirical evidence suggests that the labour market performance of humanitarian migrants lags behind those of other foreigners and that they depend on welfare in a disproportionate fashion (Hanson, 2000; Pederson, 2000). As a result, national standards of admitting asylum seekers and refugees have been tightened in several EU countries, among them the most affected country, Germany. Further measures to restrict the admission of humanitarian migrants are under discussion in several member states (section 4.1). Thus, the national regulation of humanitarian migration is producing a "race to the bottom". The commitment to an unchanging policy of family unification, combined with the expected Eastern enlargement will place pressure on the scale of humanitarian migration that the EU residents perceive they can accept. Insofar as an economic migrant category "door" is opened to potential EU immigrants then the EU might simply give preference to those coming with humanitarian cases, or vary the economic places by skill according to the scale of humanitarian migration in that skill category.

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[65] p12, Communication from the Commission to the Council and the European Parliament on a Community Immigration Policy, 2000

As long as the EU members and their constituencies rely on the same set of norms, the solution is straightforward: agree on the same set of rules for admitting asylum seekers and refugees in the EU, co-ordinate the implementation of the rules, and share the costs of humanitarian migration equally, e.g. by a fund for asylum seekers, refugees and other humanitarian migrants. This will internalise costs and prevent that countries with more generous policies are penalised. Against the background of large differences in national standards, the policy problem is to agree on a common set of norms which guide European asylum and refugee policies. A set of minimum standards, which are financed at the European level, while national policies remain free to admit further humanitarian migrants, may be a first step in the right direction toward a common European asylum and refugee policy.

The administrative costs of large fluctuations in the number of asylum seekers that accompanies the present non-coordinated outcomes are very large as the UK is finding – post 1998 – with more than twice as many asylum seekers presently entering the UK than the US. These dramatic fluctuations reduce the demand for refugees in the host country, and make a humanitarian policy less popular. The EU countries may need to reach agreement on which refugees should be protected, but this should not be insuperable.

This co-ordination concerning refugees within the EU might also strengthen the influence of the EU on immigration policy in the other affluent countries. This is not unimportant from the EU viewpoint. Despite very slow population growth, Western Europe remains one of the most densely populated areas of the world, with high marginal congestion costs in comparison with most of the other OECD countries that might absorb refugees.

7.4 Economic and Illegal Migration

The EU, with other OECD countries, will experience a secular shift in the demographic structure of its population in the next decades. Low fertility rates and increasing life expectancy will substantially increase dependency ratios, i.e. the ratio of the non-working age population to the working-age population. Figure 7.1 displays the general trend on basis of the demographic scenario of the World Bank: the dependency ratio will start to increase from levels of slightly below 50 per cent in the present EU after 2010, and tend to converge to levels of above 80 per cent around four decades later. This scenario relies, as any other

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[66] See Rotte/Vogler, 1999, for empirical evidence.

demographic scenario, on a set of strong assumptions, and presumes that migration has only a minor impact on population growth[67] The general demographic trend holds for all EU members. Germany and the southern European countries are, due to extraordinarily low fertility rates, particularly affected.

Figure 7.1   Ageing in the EU and a sample of immigration countries
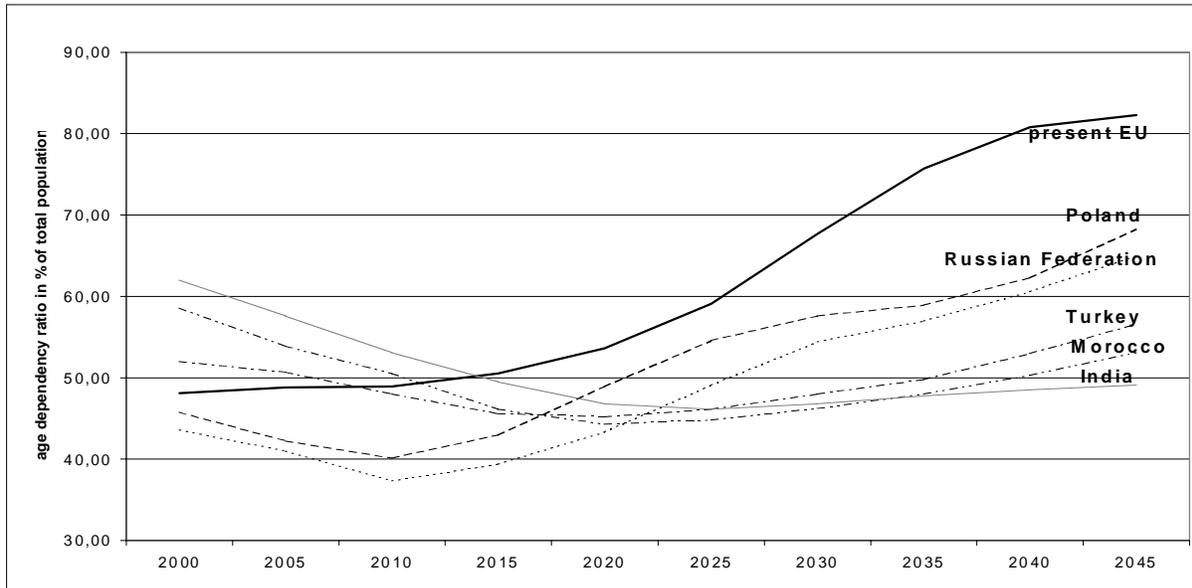
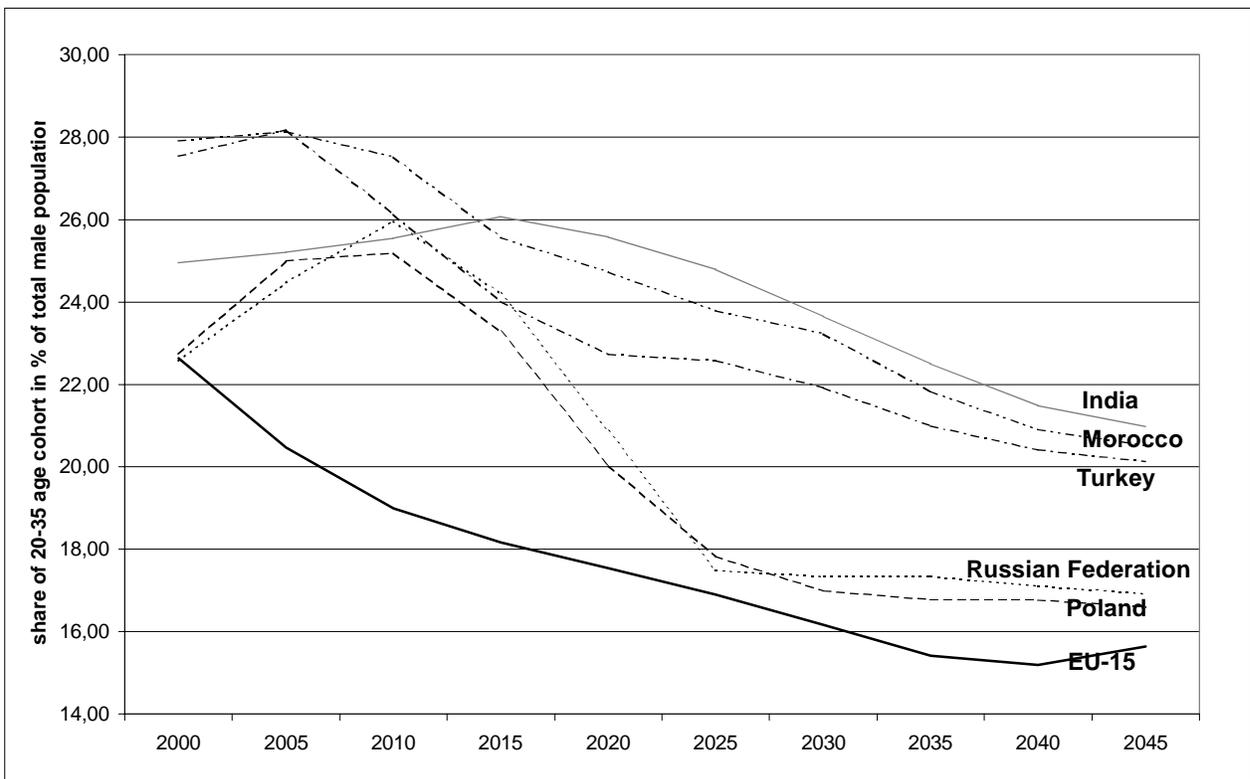Source: World Development Indicators, 2000; own calculations.

There is a long debate whether it makes sense to manage the demographic structure of societies. Whereas a large number of authors are critical (e.g. Coleman, 1992; OECD 1991), some authors argue that immigration can help to provide time for the economic system to adjust (Börsch-Suphahn, 1993; Straubhaar/Zimmermann 1993). Generational accounting exercises indeed demonstrate that, after setting off the net present value of claims and contributions to social security systems, the native population will receive a net gain (Bonin, 2001). The electorate, which as we found in Chapter 2 is unsympathetic to policies to facilitate immigration, might also be offered a democratic choice between an older retirement age and greater immigration.

The contribution of migration to mitigate demographic pressures on the welfare systems will nevertheless be in any case limited: following a recent study of the UN (UN, 2000), an average net migration of around 1.4 million people is needed between 1995 and 2050 to maintain a stable share of the working age population in the EU (2005-2010: 550,000 p.a., 2010-2050: 1.6 million per year). It is unlikely that a net migration of this size can be achieved, since ageing is a global phenomenon: in Figures 7.1 and 7.2 we have displayed the

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[67] The World Bank presumes that net migration will decline: starting from 0.8 per thousand of the EU's population in the period 2000-05, it declines to 0.4 in 2006-10, 0.2 in 2010-15, 0.1 in 2015-25 and then to zero.

dependency ratios and the share of the 20-35 aged in the male population, i.e. the share of individuals which have the highest propensity to migrate, for a representative sample of the main source countries of non-EU foreigners. In source countries with relatively high human capital endowments, i.e. the Central and Eastern European countries, we observe a similar pattern as in the EU, with one interesting exception: dependency ratios tend to decline until 2010, since relative large cohorts reach the working-age until this time. After a peak in 2010, the decline in birth rates after transition can be felt and the demographic structure converges to that of the EU (see Coleman, 1993, for a detailed discussion). In contrast, in source countries with relatively low human capital endowments, we observe until 2025 falling dependency ratios. The share of the young cohorts in the working-age population tend to fall from 2010 onwards, but they are nevertheless substantially higher than those of the EU and the CEECs. Thus, the shares of the age cohorts with high propensity to migrate tend to fall in countries with relatively high human capital endowments, but remain high in countries with relatively low human capital endowments. As long as education does not improve in these countries substantially, the supply of unskilled labour will therefore tend to increase relative to skilled labour.

Figure 7.2: **Share of the 20-35 age cohort in the male pop. for the EU-15 and main source countries, 2000-2045**

Source: World Development Indicators, 2000; own calculations.

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As a consequence of the demographic challenge, the opening of EU labour markets to non-EU immigrants is under discussion in the EU[68] and its member states[69]. The demographic challenge is however not the only reason to revise "zero" labour immigration policies. As we have seen in the previous sections, an emphasis upon family unification and humanitarian has not given proportionate representation to highly skilled immigration. Economic migration provides an opportunity to balance the skill composition of migrants. Whatever the reasons are, a revision of the policy of "zero" labour immigration is now on the EU agenda.

Laissez-faire vs. selective immigration policies: Complete *laissez-faire* is not a political option, but it forms the implicit counterfactual to all policy proposals. In an economy without externalities or international remittances, the laissez-faire approach yields the optimal allocation of labour across countries. However, migrants pay taxes and contribute to social security systems, receive social benefits and consume goods which are provided by public means. As a consequence, a selective migration policy which attempts to increase the social benefits from migration by admitting migrants from which it expects that their social contribution exceeds social costs can increase welfare in the host countries relative to a laissez-faire approach.

Selecting high-skilled vs. less-skilled workers: in the closed-economy framework, the benefits from migration increase if factor endowments of immigrants are complementary to those of natives. Thus, a country with a high-skilled labour force benefits more from the immigration of relatively low-skilled labour and vice versa – at least if low-skilled labour does not suffer from unemployment. However, in addition to the adverse effect on the income distribution of EU natives, the post-war immigration episode provides rich evidence that unemployment and welfare dependency risks are closely related to the skill levels of migrants. These welfare risks tilt the comparative EU country benefits of migration towards migrants with favourable skill endowments. Moreover, the demand for unskilled labour has declined continuously due to factors such as skill-biased technological change. As a consequence, most OECD countries pursue an immigration policy that favours high-skilled workers, and the EU

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[68] The formulation of a Common Immigration policy is demanded in Art. 63 of the Treaty of Amsterdam from 1997, without stating a specific time schedule. The European Council asked the European Commission to elaborate policy proposals, see e.g. the recent Communication of the European Commission (EC, 2001). A comprehensive proposal is however still missing.
[69] In Germany, a council of experts under the head of Rita Süssmuth has been commissioned by the federal government to provide proposals for a revised immigration policy. The Süssmuth-report proposes inter alia the provision of 40,000 work permits p.a. to non-EU foreigners (FR, June 29, 2001).

countries appear poised to recruit extensively university level immigrants to enable economic growth to continue without wage inflation or increased wage inequality.

Point-systems vs. auctions: For an immigration policy which explicitly addresses the selection of migrants, there are basically two mechanisms to organise the allocation: point-systems and auctions. Point systems have been adopted in Canada, Australia and, more recently, in Switzerland. The immigration commission of the German government has recently proposed a similar system. Point systems may improve the allocation significantly relative to policies which channel migration by family reunification and other non-economic mechanisms. Point systems are relatively easy to implement, but have a series of deficiencies: i) the criteria of the system may distort an efficient allocation, since they need not match actual demand on host labour markets, ii) even if an efficient allocation is achieved initially, time lags between the allocation and the actual landing of migrants my distort the selection, iii) point systems cannot address unexpected events such as recessions (Bauer/Zimmermann, 2000). Auctions can allocate work and residence permits either to migrants or to firms. At first glance auctions are quite appealing, because an auction selects migrants or firms according to their abilities and needs and their willingness to pay. However, they have two main drawbacks: first, selecting migrants by auctions may yield an unfavourable selection, since high-skilled migrants may move to countries which have no auctions in place. If firms auction for migrants, transaction costs are high. Moreover, the allocation is difficult to monitor and to enforce. Thus, for practical reasons, a favourable composition of migrants with regard to their skills and other human capital characteristics is probably best achieved by an allocation using a points system.

Overall, opening EU labour markets to the immigration from non-EU countries is a chance to affect the composition of migrants with regard to their skills and other human capital characteristics favourably. This does not imply that labour immigration should be restricted solely to high-skilled workers, but systematic immigration policies should balance skills and family characteristics of migrants in a way that assures that future immigrants will not depend on welfare in disproportionate fashion and strengthen incentives to invest in country specific and other human capital. However, the extent to which a given intake of skilled migration into the EU will balance less skilled migrants from other categories, may well vary between EU countries, so that such a policy may reflect more favourably on the UK, than say, France.

The scale of illegal immigration and refugee arrivals (together, about 700,000 per annum) into the EU reduces the issue of whether to attract 150-250,000 high skill migrants to rather modest proportions. Arguments regarding the mitigation of the costs of illegal and refugee migration are important to the EU and contribute to us advancing a further proposal.

7.5 Towards a Co-ordinated Policy With Countries of Origin

There are two economic reasons which suggest that the EU should cease to pursue unilateral policies towards migration from low/middle income countries of origin: 1) the costs of high (500,000 per annum) illegal flows and the gains from policies to induce efficient policing, and 2) the costs of refugee migration. The origin countries may value the remittances and reductions in unemployment which accompany unskilled migration, but would wish to adopt policies to mitigate the externality costs that result from skilled worker/entrepreneur migration. It is in the interests of both recipient and origin countries that skilled labour works where, net of all non-pecuniary considerations, it is most productive. The origin countries are likely to be concerned that skilled labour should gain overseas experience and savings, but return after a brief period, on the grounds that such workers generate externalities of various kinds and are thus net contributors to the country. The essence of the agreement would provide a framework within which the EU compensates the origin country (assumed middle or low income) for the estimated mean externalities lost by skilled workers migration, but would reduce the sum with "fines" arising from illegal flows and violations of domestic human rights standards, partly measured by refugee flows. This is intended to produce a pool of income to origin LDCs, and to encourage origin countries to assist with policies to control illegal outflows.

To implement this, the EU might determine "skill" by the earnings of migrants in the EU country concerned, and given a base line of (say) mean EU earnings, repatriate x% of the individuals tax payments above the tax contribution of a household earning the mean income in that country – along the lines of the brain drain tax as discussed by Bhagwati. Against this income the EU would deduct fines for illegal immigrants, and refugee flows (Sample surveys could be used to gauge tax contributions in order to safeguard invasion of individual migrant's privacy). The partnership with origin countries might prompt the view that permanent migration of skilled workers should be limited to a quota below the *laissez-faire* level, and a policy institution sought to preserve some of this gain from skilled migration. We have discussed in Chapter 5 how a rotation of temporary migrants allows potentially more workers to acquire savings and skills to use in the origin country, than with permanent

migrants who, evidence suggests, gradually lose contact with their origin country. The implementation of such a policy framework would require careful preparation, but by working in partnership with a group of LDC's, this would be a quite different political contract to the "guest worker" programmes of the 1960's, and instead should be partly viewed as part of the EU international development programme.

The OECD countries presently aim, through foreign aid, various charities, the World Bank and other institutions, to enable LDC's to gradually reach Western living standards. If the talent pool is substantially eroded by unilateral policies prompting a race to hire and assimilate LDC talent, the more realistic future for these countries may at best be slower growth and at worst, be as a permanently lagging region within a world economy in which the US and EU become increasingly dominant. The political, social and economic implications of this may prove much more costly to unpack than the plunder of third world resources during the colonial period, and reinforce the case for co-operative policies towards immigration.

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