

# Long-term international migration scenarios for the European Economic Area

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## 1 Introduction

In March 1995 Eurostat commissioned Statistics Netherlands to revise and extend the national and regional population scenarios for the countries of the European Economic Area (15 European Union countries, Iceland, Liechtenstein, Norway) which were compiled in 1991-1992.

This report discusses the assumptions on international migration underlying the new population scenarios. In contrast to the previous scenarios which consisted of a Low and High scenario, this report will present three scenarios. Besides a Low and High scenario, also a Baseline scenario will be presented. The Baseline scenario describes a situation in which observed developments are continued, and resembles the national forecasts whenever possible. The Low and High scenarios describe possible alternatives, assuming a different economic and political context.

The data used for the development of the scenarios are based on historical time series. The registered migrants recorded in these series are basically the traditional migrant groups like those who come for family reunion/formation, workers, asylum seekers and those with constitutional rights. However, not all migration into the European Economic Area (EEA) is recorded in these series. In fact probably quite a substantial number of unregistered, illegal and irregular immigration is not included in the data (Salt and Singleton, 1995). It should therefore be stressed that this report only describes the migration as it has been measured in the official demographic statistics, and that the scenarios do not foresee in unrecorded migration.

In order to develop a framework which clarifies migration processes, and which allows for the development of scenarios, this report will start with a brief overview of migration theories. Push and pull factors still prove to be a framework in which most of the theories can be placed. In section 3 these theories will be elaborated in connection with recent migration patterns to, within and from the EEA. Section 4 tries to verify important aspects of these theories based on empirical analyses of migration patterns. Section 5 presents a monitoring of previous population scenarios compiled by Eurostat. Section 6 provides information on official migration, which has been used in the making of the new scenarios. In section 7 three long-term scenarios will be presented, both in qualitative and quantitative terms. Section 8 discusses a refinement of the three scenarios to the regional level. Finally, a summary will be given in section 9.

## 2 Theoretical aspects of international migration

To explain the origin of migration and its continuation over time, several theories have been developed. To provide a framework in which past and current developments in migration can be placed, some of the main aspects of these theories will be reviewed here. For a more detailed overview of theories on migration see Massey et al. (1993).

*Neo-classical* economists see geographical differences in labour demand and wage earnings as the main cause for migration. Migration decisions are based on a cost benefit analysis of (expected) costs and returns, including costs of travel, job probabilities etc. and are made on an individual basis. Countries with high wages will attract workers from low wage countries if the international wage differential is larger than the costs of movement.

According to the *new economic theory*, migration decisions are primarily made in the context of families, households or some other group of related persons, which try to reduce feelings of relative deprivation and to diversify risks. By allocating members to a foreign labour market the economic position of this group will be strengthened due to the stream of remittances.

The *dual market theory* sees migratory flows as a consequence of labour demands of low skilled workers in market economies. The low pay and an unpleasant working environment of jobs at the bottom of the hierarchy of the labour market leads to a structural shortage of nationals willing to accept these jobs. Immigrants often form a solution.

*World systems theory* links migration with the structure and expansion of the capitalist world market which causes at the periphery problems like landlessness, low paid jobs in mining and assembling industries and social disintegration. In such circumstances traditions are disturbed, and the socially and economically uprooted population is more inclined to migrate. The resulting migration flows often are directed towards those countries with which cultural links were established during the expansion phase.

Migration sustains itself through networks, migration supporting institutions and cumulative causation. *Networks* can be seen as interpersonal links between persons in the sending and receiving countries. They reduce the risks and costs of migration and increase the expected returns. Not only finding jobs and housing will be easier because migrants are assisted by relatives and friends who migrated earlier but also the psychological support makes it easier to find their own place in the new society. As networks grow more and more migrants are attracted.

*Institutions and organisations*, both legal and illegal, arise which assist migrants in entering and adapting to countries. As these institutions and organisations become better known, they can be used by potential migrants to gain access to the countries in which these organisations operate.

The *theory of cumulative causation* mentions several factors which can explain why migration, once started, continues. Factors are related to remittances sent home which increases the income of the migrants' household. Often the remittances are used to purchase land which is left fallow, or they are used for investments in capital intensive modes of production. This causes landlessness and unemployment, resulting in feelings of relative deprivation which increases the motivation - of the ones who do not profit from the remittances - to also migrate.

Other factors at play in the sending countries are accustomisation to migration and appreciation of migrants, depletion and social disintegration of the local communities because of loss of human capital. Furthermore, in the receiving countries employment needs in especially 'immigrants jobs' can be held responsible for the continuation of migration.

Trade with, foreign investment in, and government assistance to migrant sending countries, can reduce the migration pressure in these countries if they stimulate economic development. Because economic development takes time, the effects are only noticeable in the long run. Furthermore, the motives underlying the decision to migrate can remain strong if relative differences in economic development between countries do not decrease.

Migration by itself carries the potential to straighten out economic differences. If for example wages in one country are relatively high, labour-migrants are attracted. This will result in a labour surplus in the high wage country and a labour deficit in the labour losing countries. This process will only continue as long as wage differences exist. As soon as the relative wage differences diminish (because in the labour receiving country labour surplus will influence the wages negatively), the migration flows between the countries will have a tendency to move to a balance.

From the above mentioned theories it can be deduced that disparities between locations, information flows between locations, networks in and distance between locations are important factors at play.

With respect to disparities also the terms *push* and *pull* are used. Push factors are at play in the place of origin and push migrants out of their home area. Besides economically motivated migration, also political and environmental motivated migration should be distinguished.

The push factors disperse migrants without a specific direction and are responsible for the so called migration pressure from within an area. Pull factors work in the area of destination and give a direction to migration flows. Pull factors can be defined as those factors (mainly economically and socially) that migrants perceive to be better in the receiving area than in the area of origin.

Push and pull factors generate migration flows, and depending on the kind of factors at play, different types of migration flows can be distinguished. Political turmoil for example can generate refugees, while poverty and unemployment can generate labour migrants.

*Distance*, in terms of financial, physical and psychological costs, is a factor which is the link between push and pull forces. The greater the distance, the less likely migration is to take place, and the more likely that the migration flows will be directed towards less 'costly' destinations where benefits are expected. Distance can be bridged by access to transport, communication and networks.

Important factors in the migration process are *information flows* and *networks*. Information is necessary to base the migration decision on. Information is received through media and networks. With the globalisation of the information channels and the expansion of networks, migrants can be well informed about countries of destination. People tend to make decisions which contribute to their well-being. Since security is one of the basic needs to be fulfilled, any move which might increase insecurity will be avoided. However the insecurity of migration can be reduced by the existence of friends and/or family members at the place of destination.

It should be noted that although often migration flows from poorer to richer regions are explained by the theories, also migration in the opposite direction exists. This migration not only consists of return migrants, but also of nationals from relatively rich regions. In the analysis of the size of return migration the network is again a factor at play. The assistance offered by the network lowers the return propensities of newcomers (Waldorf, 1996). In contrast, active policies of governments may stimulate return migration. To encourage return migration reintegration aid, bonuses and loans for house construction and for starting new enterprises might be given (Bähr and Köhli, 1995).

Van de Kaa (1996) points to the fact that the migration process according to the different theories cannot unfold in a natural fashion because governments and other international actors try to steer the process. Common is nowadays a setting whereby the flow of migrants between countries is regulated by charters, covenants, treaties and similar agreements involving groups of states.

### 3 Analysis of migration patterns of the EEA

#### 3.1. Introduction

In the first decades after World War II the end of the colonial era and the economic boom were the dominant features influencing the course of international migration in Western Europe (see Fassmann and Münz, 1992). In the wake of decolonization several hundreds of thousands Europeans (including 'native' people) returned home. More than a million former French residents of Algeria resettled in France during and after the war of independence (1954 to 1962). The Netherlands was confronted with a sizeable immigration surge from Indonesia in the fifties followed by flows from Surinam and the Antilles in the seventies. In the seventies Portugal experienced large immigration flows from its former African colonies. The United Kingdom received in the early sixties large inflows of immigrants from the Commonwealth countries, especially India, Pakistan and Bangladesh. The economic upswing in the sixties led to a growing demand for labour by recruitment. The most important host countries were Germany, France, Great Britain, the Netherlands, Belgium and Sweden. At first the dominant sending countries were the Mediterranean countries Italy, Spain, Portugal and Yugoslavia and later Morocco, Algeria, Tunisia and Turkey.

In the middle of the seventies economic recession led to reduced demand for guest workers. Western European governments imposed restrictive immigration regulations. However, these restrictions only slowed down rather than halted immigration. Family reunion became an important vehicle to immigrate legally. Meanwhile, closed borders led to rising number of illegal immigrants.

In the eighties the character of immigration changed again. Especially the large streams of refugees, displaced persons and asylum seekers trying to find a safe home in Europe attracted public attention.

In the remainder of this section recent migration developments will be discussed. First, recent migration developments will be discussed. Next, immigration will be examined in the framework of push and pull factors. Then, attention will be paid to emigration. Finally, the geographic patterns of recent European migration will be discussed.

### 3.2 Recent migration developments

This section gives information on recent developments in immigration, emigration and net migration. Net migration will be computed in two ways. First, net migration can be defined as the difference between immigration and emigration. However, time series on total annual numbers of immigrants and/or emigrants are lacking for several countries, i.e. Austria, France, Greece, Portugal and Spain. Further, in the other countries of the EEA net migration computed in this way together with natural growth does not completely add up to total population growth, notably in Belgium, Italy and the Netherlands. Alternatively, net migration can be computed by subtracting natural growth (births minus deaths) from the annual change in the number of inhabitants. By computing net migration in this way corrections are included that are due to population censuses, register counts, etceteras which could not be classified as births, deaths and migration. Due to the fact that birth and death registration systems are usually rather accurate, under- or overestimation of migration measurement systems are taken into account (Muus and Crujsen, 1991).

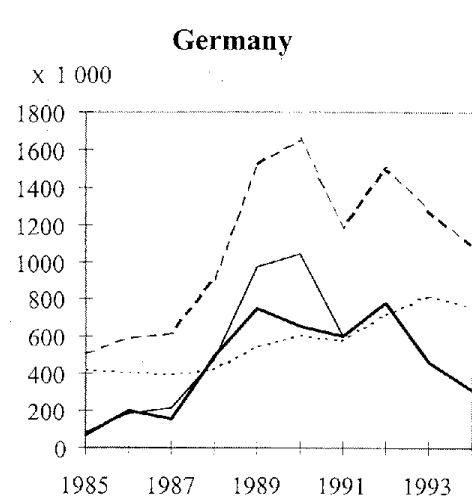
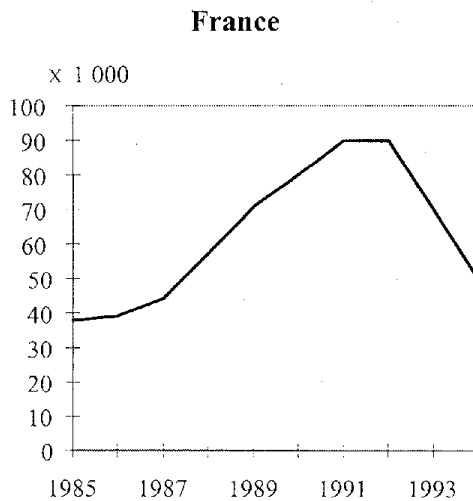
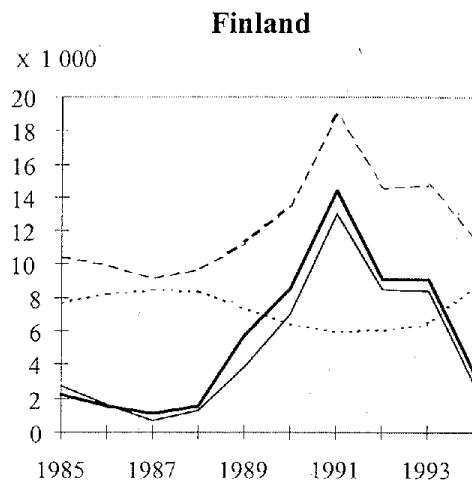
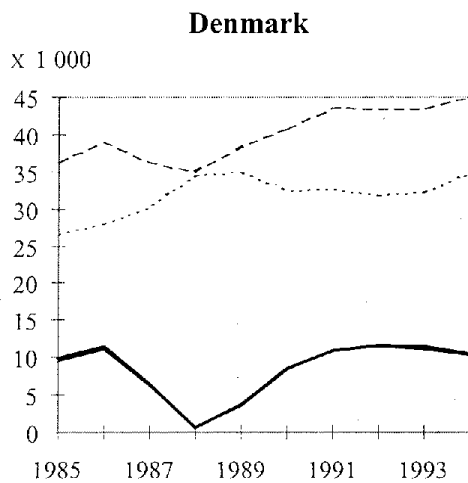
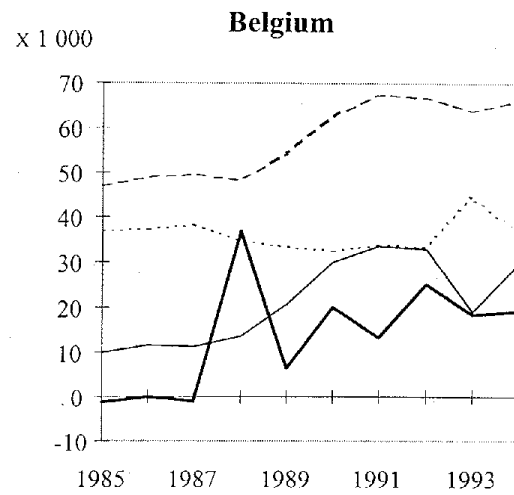
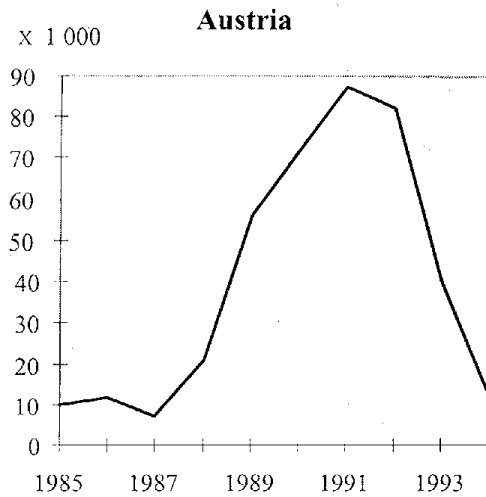
In the making of the new migration scenarios an internationally consistent data set was needed. For this reason net migration computed as national annual population growth minus natural growth has been used. *Figure 1* shows developments in immigration, emigration and net migration (computed in two ways) for the period 1985-1994.

The EEA experienced a strong increase in net migration between 1985 and 1992. Net migration rose from 0.2 to 1.4 million persons. Since then a steep fall could be registered, which led to a figure of 0.8 million persons in 1994. To a large extent this pattern is caused by the migration developments in Germany. However, in Austria, Finland, France, Greece and the Netherlands trends in net migration are too similar to that of the EEA as a whole. To a lesser extent this applies to Belgium due to the fact that the flow of immigrants hardly shrunk after 1992. In Denmark net migration shows a continuous increase after 1988. Preliminary information indicates that in 1995 the number of immigrants will again be higher due to a surge of asylum seekers. In Iceland the number of immigrants nearly equals the number of emigrants which causes net migration to fluctuate between a positive and a negative level. In the second half of the eighties more persons left than came to Ireland. In the nineties negative net migration has nearly disappeared. In Italy there is hardly any correspondence between net migration computed in the two ways. The immigration peak of 1990 does not lead to a peak in net migration computed as population growth minus natural growth. Net migration computed in this way shows an upsurge in 1992 in contrast, followed by a decline. This is in accordance with the general pattern in the EEA. Luxembourg is becoming more and more popular as an immigration country during the whole period 1985-1995. In Norway net migration shows some fluctuations; the gap between immigration and emigration is relatively small and rather stable. Portugal experienced a loss of inhabitants through negative net migration until 1993. However, between 1990 and 1993 the negative figures diminished very rapidly. More or less the same pattern applies to Spain, although the negative figures were relatively modest and a positive net migration was already reached in 1991. Sweden shows, just like Norway a fluctuating net migration pattern. In the United Kingdom the difference between the number of immigrants and emigrants is relatively small. The trends in both flows are rather stable. As a result, net migration shows fluctuations but the EEA-pattern of a steep rise followed by a fall does not apply.

In the following of this section an analysis of migration will be presented, inspired by a model developed by Salt and Singleton (1995). They have identified four major restructuring processes, namely economic, social, spatial and political and legal, which are affecting existing flows and generating new types of migration flows into and within Europe.



# 1. Immigration, emigration and net migration in the countries of the EEA



----- immigration ..... emigration ——— net migration : ——— net migration:  
immigration minus emigration annual population growth minus natural growth

### 1. Immigration, emigration and net migration in the countries of the EEA (continued)

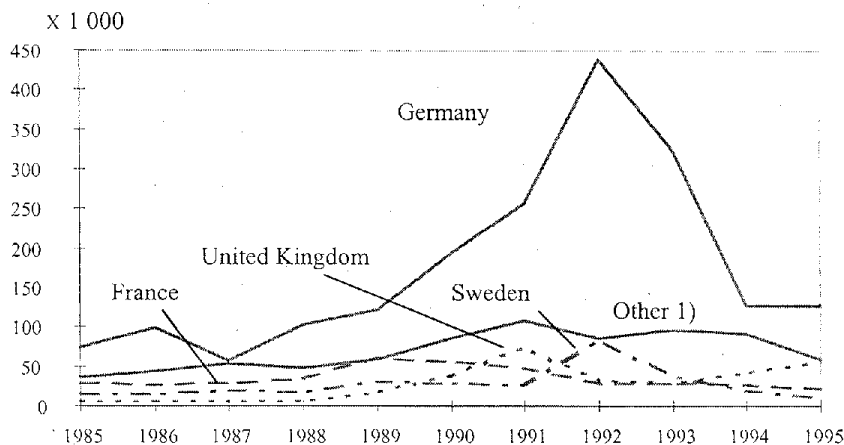
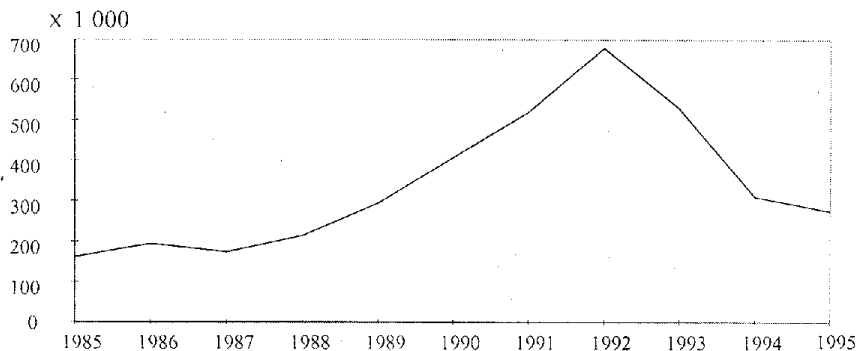
----- immigration      ----- emigration      ----- net migration :      ----- net migration:  
immigration minus      annual population growth  
emigration      minus natural growth

### 3.3 Immigration: push factors

#### *Political circumstances*

Violation of human rights, wars and ethnic conflicts, are important explanatory factors why people flee their countries. Often these migrants arrive as asylum seekers. The influx of asylum seekers is a quite recent phenomenon. Since the early 1980s the number of asylum applications in the major asylum receiving EEA countries has more than quadrupled and reached a peak in 1992 with almost 700 000 (see *graph 2*). The majority of the asylum seekers arrive in Germany (in 1992/1993 about two-third). Main areas producing substantive migration flows to Western Europe in the early nineties were the former Yugoslavia, Romania, Turkey and Bulgaria.

## 2. Asylum seekers in the EEA



1) Netherlands, Spain, Belgium, Denmark, Greece, Italy, Austria, Ireland, Iceland, Luxembourg, Portugal, Finland.

Source: Eurostat.

Except from the crises in the former Yugoslavia the increase cannot only be related to situations generating new refugees. Also economic motives can be held responsible (Eurostat, 1993), in combination with more restrictive entry regulations under which migrants are not able anymore to enter as regular immigrants. Though the majority of the asylum seekers is not recognised as a refugee under the Geneva Convention of 1951 they are not necessarily expelled. In Germany for example, in 1990 only about 5% of the asylum seekers waiting for the asylum procedure were granted asylum, and almost 25% were *de facto* refugees: not recognised but granted to stay for other legal or humanitarian reasons (Eurostat, 1993).

Since 1992 (France 1989 and the Netherlands 1995) the number of asylum seekers has decreased in the major asylum receiving countries. Besides more strict asylum policies aimed at deterring bogus applicants, also the emergence of nationalist feelings and hostilities against foreigners could have played a role in the decrease. Furthermore, because of the political reforms in Central and Eastern European countries, less political refugees (according to the Geneva Convention) are produced. The observed increase in some countries and the late decrease in the Netherlands could have been related to the creation of bridgeheads (Zairians in Belgium and Somalians in the Netherlands and Denmark).

#### *Economic circumstances*

Another push factor is relative poverty, which induces economically motivated migration. The size of the flow of economically motivated migration is amongst others a function of the difference in wealth between countries. The greater this difference the greater the relative attractiveness, the greater the motivation for people to migrate.

Promotion of economic development in developing countries by free trade and development assistance can curb economically motivated migration if it reduces income inequalities. However, during the last decade the income gap between Europe and Africa for example, has continued to grow. While Europe saw during the period 1981-1990 an annual percentage change of the Gross National Product (GNP) per capita of plus 2 percent, Africa's GNP declined during the same period by 1.2 percent per year (UN, 1991).

Population growth, poverty, unemployment and environmental degradation are closely linked. In many developing countries these factors create a vicious circle in which population growth is aggravating the socio-economic and environmental conditions, and in which the worsening socio-economic conditions in turn induce population growth. The resulting downwards moving spiral is an important explanatory factor in the emergence of economic and environmental refugees.

Sometimes these aggravating conditions are seen as one of the causes of the prevailing political tensions between rival groups, causing large groups of political refugees. However, this does not always result in an increase in immigration to Europe. In the cases of Rwanda and Burundi for example, the resulting migration flows towards Europe are small; the costs to bridge the 'distance' apparently are too high.

The restructuring of the economies of Central and Eastern European countries so far has resulted in more unemployment and relative poverty. In combination with more freedom to move this increased the migration pressure. In 1992 almost one third of all immigrants to the EEA countries (except Belgium, France, Ireland, Italy, Luxembourg and Austria) came from Central and Eastern Europe (not including the former Yugoslavia and Turkey which

contributed almost a quarter). However, in 1994 the share of immigrants from this part of Europe to the EEA (excluding Ireland, Italy and Austria) diminished to 15%. In Germany the number of immigrants from the Central and Eastern countries increased from 493 thousand in 1991 to 617 thousand in 1992. After this peak smaller numbers of immigrants were recorded; in 1994 only 226 thousands (i.e. 20% of all immigrants to Germany).

Within the EEA, also economic differences between countries affect the migration flows. The existence of large emigrant groups (Greeks and Italians in Germany, and Spaniards and Portuguese in France for example), can be explained by economic differences between countries.

It was noted earlier that migration tends to straighten out differences between countries. Another factor which has the potential to contribute to the elimination of economic differences between the EEA countries, is the policy of the European Union with respect to the allocation of structural funds. These funds are skewed towards rural and/or poor regions (The Economist, 1995). The result is that countries like Greece, Spain and Portugal which are net receivers of funds of the European Union, are encouraged to develop economically more than the economies of the net contributors.

### 3.4 Immigration: pull factors

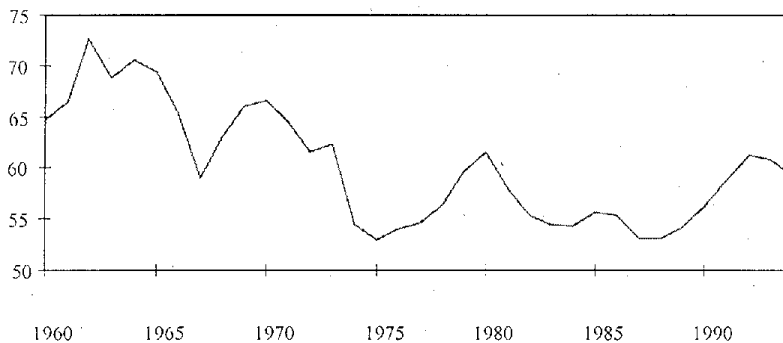
#### *Economic opportunities*

Employment opportunities and wage levels are important factors which play a role in the migration decision process of especially the economically motivated migrants.

Within the EEA, economic opportunities can explain migration patterns between the more advanced economies (which experience a positive net migration) and the less advanced economies (which experience a negative net migration). Since relative differences between EEA countries are much smaller than between EEA countries and non-EEA countries, pull factors explaining migratory flows of EEA nationals within the EEA can be expected to be relatively weak.

In the period 1960-1973, many migrants from the Mediterranean Basin came to Western Europe to work. Labour shortages and bilateral treaties with some Mediterranean countries provoked the influx of migrants into Western Europe. The labour migrants were predominantly male. In Germany for example, two-thirds of the immigrants in the 1960s were male (*graph 3*). Due to the economic recession in 1973, labour migration agreements with the Mediterranean countries were cancelled. However, migration into Europe did not diminish, since labour migration was followed by family reunification.

#### 3. Percentage of male immigrants in Germany



Source: Eurostat

The prospect of Europe's employment possibilities looks bleak. Although Europe's economies are booming, this will not be enough to solve joblessness according to estimates of the OECD. If policies aiming at more flexible labour laws, reduction of minimum wages, trimming of unemployment benefits, and relaxing the labour protection laws are not introduced, the OECD expects that even if the economic growth will remain 3% for the rest of the decade, the unemployment rate in Europe will still be 10.9% at the end of 1996 and 9.6% at the end of this decade (The Economist, 1994).

The extent to which unemployment rates affect migration is difficult to assess. In 1990 for example, labour migration into Europe was estimated at 350,000. Apart from the influx in Germany where the reunification caused a surge of the economy there is no economical

explanation since the economies in Europe were at that time stagnating or even worsening. However, since the mid 1980s, labour migration has been increasing (Coleman, 1990).

The emerging economies in Asia are likely to change the migration direction of migrant groups away from Europe, especially for those migrant groups which did not experience migration before and do not yet have established networks. Another trend which transfers employment opportunities from Europe to other countries and therefore might redirect the migration flows is the transfer of labour and labour cost intensive branches of multinationals to cheap labour countries.

### *Migration policies*

Migration policies are designed to regulate migration. Until the end of the sixties or the beginning of the seventies none of the countries of the European Union had a real policy on migration and foreign workers; the predominant attitude was *laissez faire* (Bähr and Köhli, 1995). At the best the state created conditions making it easy for the business and industry to import foreign workers via recruitment agreements.

In the middle of the seventies the demand for guestworkers diminished as the receiving countries experienced an economic downturn. Now, governments intervened and attempted to control immigration by tight immigration rules and encouraging return migration.

Since the middle of the eighties the increasing number of asylum seekers led to political reactions. The persons seeking asylum come from Eastern and South-eastern Europe as well as various African and Asian countries. Partly they are not victims of political persecution, but economic refugees (Bähr and Köhli, 1995).

Germany and Greece are countries which support the return of ethnic nationals, while Spain has a migration policy which tries to encourage the return of former emigrants. Especially the case of Germany deserves more attention since *Aussiedler* (ethnic Germans from the East of Europe, who have the right to enter Germany) and *Übersiedler* (Germans moving from former East Germany to former West Germany) formed in 1990 the most important group which migrated into the former European Union. About 800 thousand arrived that year. After the reunification of Germany, the flow of Germans from former East Germany ceased to be registered as international migration. Since 1991 the number of *Aussiedler* is on a level of about 220 thousand per year. This is the maximum (quoted) number which is allowed to enter. The total number of *Aussiedler* was initially estimated to be 2 million (Roth, 1991). More recent estimates however are much higher (4 to 5 million). Nevertheless, because their number is limited the immigration of *Aussiedler* will come to a stand still in the beginning of the next century.

Quotation of immigrants not only occurs in Germany. Austria and Spain try to regulate migration through the introduction of maximum numbers of work permits to be distributed to non-EEA nationals.

Though countries have their own migration policies, in general individual national policies are limited in scope since they have to be in line with international conventions on migration. To be mentioned are more specifically the Geneva Convention (which protects refugees from being returned to a country in which they face persecution), the European Convention for the protection of Human Rights and Fundamental Freedoms, the Treaty of free movement for EU nationals, the Dublin Convention (which deals with the right of asylum, the country which is responsible for the examination of an application for asylum,



and family reunification), and - more recently - the Schengen Agreement (free movement of the nationals of the countries signing the agreement, and prevention of asylum shopping in these countries).

Furthermore it can be observed that changes in immigration policies of one country may have an impact on the immigration in other countries. If one country limits the inflow of asylum seekers, the neighbouring countries will see their number of asylum applications grow, until also they introduce new/more restrictive measures. This process levels migration policies. Because of this levelling mechanism, EU migration policies and migration policies of the EEA countries which are no EU members, interact and will have the tendency to converge.

Current migration policies still allow for family reunification and family formation. In the 1970s and beginning of the 1980s, migration because of family reunification became important. This was amongst others reflected in the reduction of the percentage of male immigrants (for the German case see figure 2). In the Netherlands it was found that more recently among the Turks and Moroccans family reunification was on the decrease and that family formation became more important (De Beer et al, 1993). Although data about family formation are scarce, still existing (not eroded) customs, beliefs and values, networks, and little alternatives to enter a country on other grounds, can be seen as main driving forces behind family formation across the border. Only well established assimilation and integration policies and strict control on fake marriages might be able to reduce this migration flow in the future.

Though Western European populations are ageing, it is not justified to believe that migration will ease dependency ratios. A loosening in migration policies in the near future is therefore not to be expected. To ease dependency ratios significantly, a very large influx of migrants would be necessary (Blanchet, 1988). Moreover, since unemployment rates are higher among migrants than average, and (legal) immigrants are - under certain conditions - entitled for family formation and reunification, it may be questioned to which extent migrants really do contribute to an easing of the dependency ratio in a country. It should also be mentioned that migrants - if not returned to their home country - one day become old and dependent on the society, and therefore would contribute to an extra needed influx of young immigrants.

In view of the pressure of asylum seekers on public spending as well as in view of the public opinion with respect to (a large influx of) foreigners, the tendency with respect to migration policies is likely to be a further restriction of existing migration regulations and asylum procedures. This tendency can be reinforced by growing negative public attitudes towards foreigners caused by the foreigners themselves in open controversies between rival immigrant groups (Turkish and Kurds for example in Germany, and Pakistanis and Indians in Bradford/UK). Also the emerging fundamentalist movements can damage the image of the Moslem population residing in the EEA. Restrictions however, will be only applicable for non-EEA nationals, since barriers restricting the movements of EEA-nationals are eliminated as far as possible.

It can be expected that the more difficult it becomes to enter the EEA, the more persons will try to illegally enter the community because migration pressure will remain high. Also the improvement of the status of illegal immigrants (Spain, Italy and France for example) might stimulate new immigration (Joachim and Nowotny, 1990).

Dependent on the degree of integration into social, economic and political structures, illegal immigrants can contribute to or benefit from the society. Costs are related to social services and welfare benefits for illegals, loss of income tax and social security contributions. On the other hand illegals can generate economic benefits for the employers recruiting them by providing them with cheap labour. For the most part, illegal immigrants entail costs (IGC, 1995).

In order to reduce the attraction of Europe for potential illegal immigrants, their stay in Europe is obstructed by the introduction of registration requirements for employment and social benefit payments. Also punitive measures against employers with illegal labourers make it unattractive to employ illegals. However, measures taken against illegal immigrants should be well considered, since only obstructing the access to basic needs could result in more criminality and social unrest.

### *Networks*

Networks provide potential migrants with the necessary information on which the migration decision can be based. The existence of networks furthermore reduces the psychological costs, the financial costs and the risks of migrating, since some support (mental, financial, shelter etc.) can be expected. The availability of networks therefore makes the decision to migrate easier, thereby reducing the importance of economic advantages of a country.

Networks grow as each new immigrant will have relations with people in the country of origin and therefore networks can contribute to the continuation and increase of migration flows.

The existence of certain networks can be explained by historical ties between countries. After the decolonisation, many former colonies had a more or less privileged access to their "mother countries". Similarities in language and institutional structures greatly facilitated the migration decision. Once a foreign community was established in the mother country, networks ensured a continuation of the migration process. Large concentrations of Indians and Pakistanis in the UK, Algerians in France, and Indonesians, Surinamese and Antilleans in the Netherlands are some examples.

The immigration from the former labour sending countries resulted in networks which form the basis of the more recently occurring immigration flows, supported by migration policies with respect to family reunification and family formation.

Fassmann (1994) concluded in a study in Austria that existing networks (measured as % foreign population) explained more about the distribution of immigrants than for example unemployment rates or housing. Another factor found to be important in the explanation of the distribution of foreigners was urban settlement structure. The more urbanised an area, the more likely it is to find foreigners.

Also Coleman (1990) found that migrants tend to cluster on the basis of their networks. Networks are important because they fulfil to a certain extent cultural and societal needs like mutual understanding with respect to customs, values, norms, religion and language. Also the availability of shops with special (culture based) products, and cultural activities organised by the local community are for many a reason to stay in the proximity of the own group.

Networks furthermore assist in the search for jobs and housing. Because a network member's knowledge about, and control over such opportunities is limited in space, it can be expected that new immigrants locate themselves in or nearby the area where this network functions. Concentrations of groups of immigrants might therefore be expected.

### 3.5 Emigration

Time series on total (i.e. within the EEA and to/from the EEA) net migration for the EEA countries suggest that immigrants outnumber emigrants, and that therefore migration contributes to the population increase of a country. Exceptions were Greece, Spain, Portugal, Italy and Ireland in the beginning of the sixties, and the UK at the end of the sixties and in the seventies. In the eighties Belgium, Ireland, Spain, Italy and Portugal were net losers with respect to migration (Eurostat, 1996).

Though migration contributes to the population growth in most of the EEA countries, this does not mean that emigration to non-EEA countries is neglectable. EEA nationals migrate to non-EEA countries, and also many former immigrants from non-EEA countries, after some become emigrants. Labour migrants for example might return after they have accumulated enough savings for a living in their home country while refugees might return after the situation in their home countries has improved. Some countries (Germany, France and the Netherlands for example) provided (financial) assistance to return migrants.

Governments may try to curtail the growing numbers of non EU-nationals not only by restrictive immigration policies but also by encouraging return migration. The French government began an active policy of encouraging return migration in 1975. In the eighties former East Germany, Belgium and the Netherlands followed (see Bähr and Köhli, 1995).

If a proportion of the immigrants returns after a certain period of time, it implies that there is - with a certain time lag - a correlation between the level of immigration (to an EEA country) and emigration (from that EEA country to the non-EEA area), and between the number of immigrants residing in an EEA country and the level of emigration out of that country (to the non-EEA area).

### 3.6 Geographic patterns

Recent migration flows from sending countries to receiving countries can be characterised by the following main patterns.

In the sixties and seventies migration from Southern to North-western Europe played an important role. In the eighties and nineties *immigration from the Third World* led to massive inflows of migrants. In certain aspects the new streams were reminiscent to those before. In first instance, economic disparities stimulate migration to rich countries while later on they induce migration by family reunification. However, armed conflicts, political persecutions and ethnic intolerance are of growing importance in the explanation why people want to move (Van de Kaa, 1996). The growing number of refugees, asylum seekers and illegal workers are considered as a threat to the socio-economic stability of the receiving countries. Hence governments try to ward it off by intensifying administrative control over the entry and stay of migrants.

The *East to West flows* are especially of importance for Germany. During the period 1950-1992/93 at least 14 million people moved from East to West (Fassmann and Münz, 1994, 1995). West Germany took in more than 8 million ethnic Germans during that period. More recently the ethnic conflicts have created sizeable migration streams. The number of former Yugoslavs leaving the country in the early nineties has been estimated at somewhere between 1.2 and 1.5 million (Economic Commission for Europe, 1995). Also armed struggles in the successor states of the Soviet Union and the downfall of the Iron Curtain may result in migration flows to the European Union.

The *migrant flows into Southern Europe* can be considered as a relatively new phenomenon (see Misiti et al, 1995). The countries of the Mediterranean shores played a vital role in the supply of labour to their northern neighbours during the boom years of post-war economic growth in North-western Europe. In the seventies the economic recession in North-western Europe led to large-scale return migration of people who had left Southern Europe earlier. Much of this return was brought about by improving prospects in Southern Europe witnessing relatively rapid economic growth through the seventies. In the eighties and the nineties the foreign populations increased rapidly in Southern Europe. Niches in Southern European economies attracted (clandestine) migrant labour. This new migration development has a political dimension: due to the progressive tightening of immigration controls in the traditional Northern European destinations, migrants from Third World Countries went to Southern Europe, which developed to 'buffer states'. The proximity of North Africa stimulated this process.

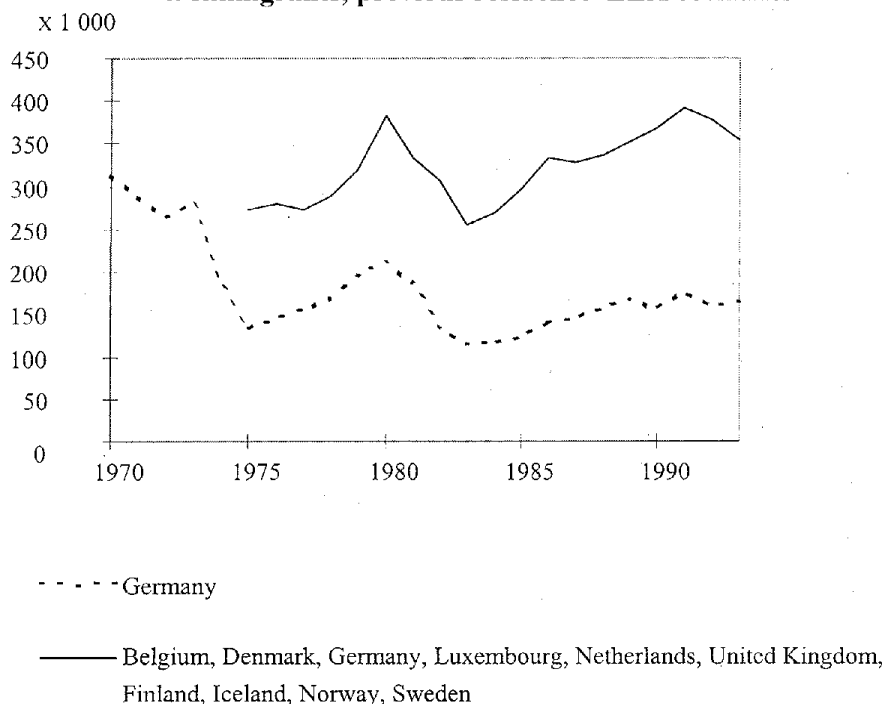
#### 4. Empirical analysis of the effects of economic changes on migration flows

In section 2 and 3 the importance of economic factors in explaining migration flows is emphasised. On the basis of historical data, the relationship between migration and economic development will be analysed more closely in this section.

In section 2 it has been mentioned that migration flows may be invoked by economic disparities. High economic growth concentrated in some countries may lead to a shortage of labourers and in this connection to high wages in those countries. This will invoke migration from low wage countries with a abundance of labourers.

Business cycles may lead to temporary distortions in migration patterns. Fluctuations in mobility seem to coincide with economic changes. In the first half of the eighties the economy stagnated and unemployment figures went up. *Graph 4* shows that in this period immigration with its origin in one of the EEA countries, fell. During the second half of the eighties the economy recovered and immigration showed an upward trend. For Germany similar developments could also be observed during and after the oil crisis in the beginning of the seventies (see again graph 4).

**4. Immigrants, previous residence EEA countries**



Source: Eurostat (including estimates of certain migration flows)

The fact that an rise of economic growth leads to an increase in mobility may be explained by factors such as the creation of employment, a general improvement of incomes, better access to information and easier (or even the abolishment of) entry regulations. So, in times of economic prosperity there are more possibilities to get a (well paid) job in another country.

An analysis of immigration data for the Netherlands also suggests that economic growth causes an increase in mobility. Data on immigration to the Netherlands by country of previous residence were regressed on unemployment rates (expressed as a percentage of the labour force) of the Netherlands and the country of previous residence. It can be expected that a rise in unemployment in the Netherlands will have a negative influence on immigration (in other words, this will act as a weakening of the pull factor) while a rise in unemployment in the country of previous residence will have a positive effect on immigration to the Netherlands (the push factor will be stronger). If unemployment in the Netherlands and the country of previous residence have a similar development, unemployment in the Netherlands will be used as explanatory variable and it will be considered as a general indicator of economic growth.

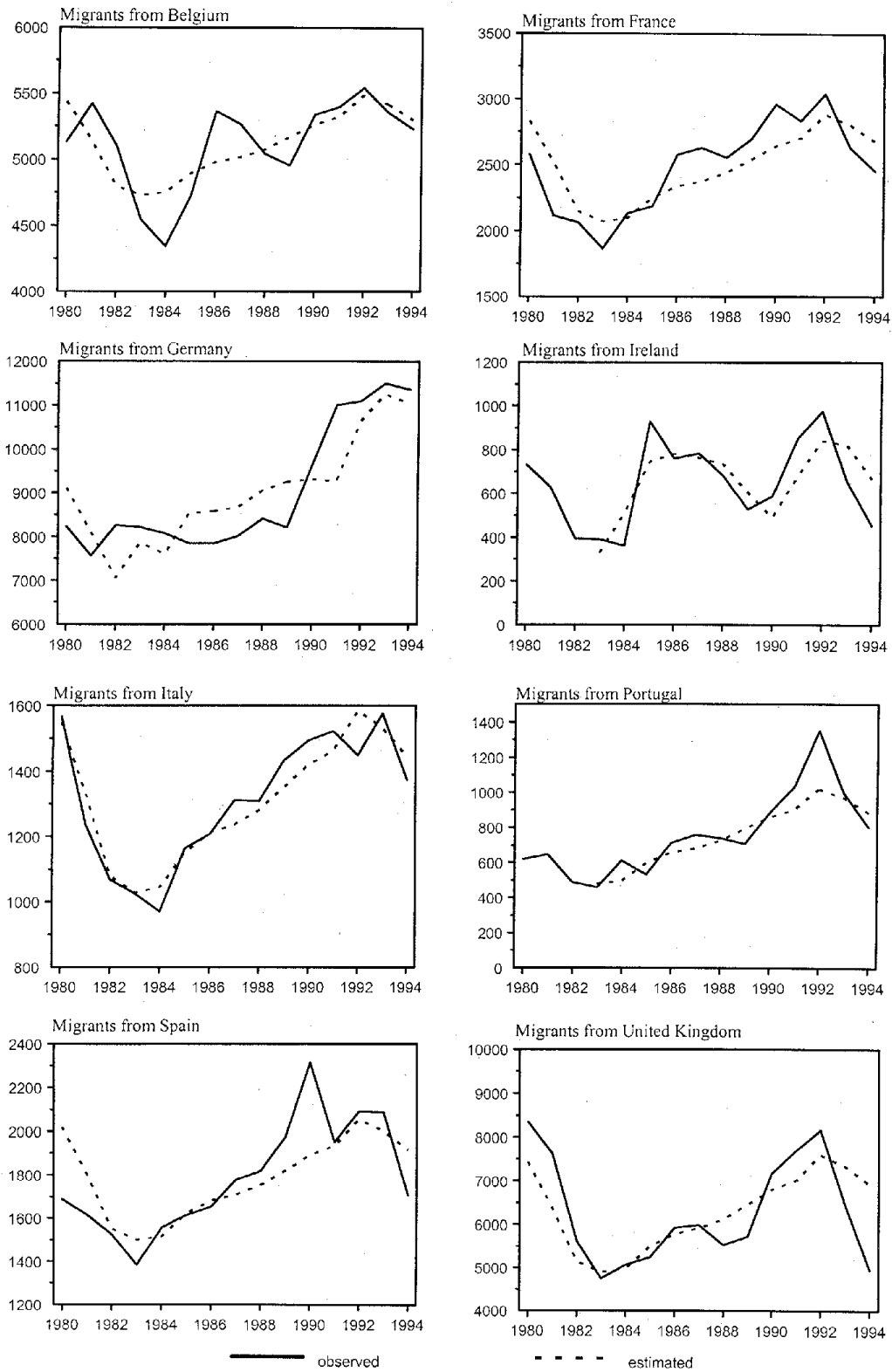
Table 1 presents the regression results while graph 5 shows the estimated figures of migrants together with the observed figures.

### 1. Immigration to the Netherlands: regression results

country of previous residence	unemployment in:		country of		constant	explained variance	number of cases
	the Netherlands		previous residence				
	regression coefficient	t-value	regression coefficient	t-value			
						%	
Belgium	-118	-3.9	-	-	6146	54	15
France	-126	-4.5	-	-	3586	61	15
Germany	-779	-5.1	713	2.9	11722	69	15
Ireland	-54	-2.5	113	2.9	-614	57	12
Italy	-87	-10.0	-	-	2073	89	15
Portugal	-84	-4.3	-	-	1486	58	12
Spain	-87	-3.8	-	-	2537	53	15
United Kingdom	-423	-4.0	-	-	9970	55	15

The regression model explains more than 50% of the variance of immigration to the Netherlands. In Belgium, Portugal, Spain and the United Kingdom the resemblance of the pattern in unemployment with that of the Netherlands is so strong that in the model with both unemployment in the Netherlands and the sending country as explanatory variables multicollinearity causes non significant regression coefficients. For France and Italy the unemployment patterns do not resemble strongly. However, the level of unemployment in those countries does not have a significant effect on the migration towards the Netherlands. For all those countries the regression model only uses unemployment in the Netherlands as explanatory variable. Only for Germany and Ireland the unemployment levels in both the Netherlands and the country of previous residence have been used. The signs of the regression coefficients are as expected: negative for the unemployment level in the Netherlands and positive for the unemployment level in the country of previous residence. The estimated migration flows towards the Netherlands reasonably describe the observed migration flows (see graph 4). Especially for Ireland the fit is convincing: the pattern of two peaks is reproduced well.

## 5. Immigration to the Netherlands: regression estimates



A negative relationship between unemployment in the country of destination and mobility may not only apply to migrants within the EEA, but also to migrants from outside the EEA towards most of the EEA countries. In this case, economic growth might not only lead to an increase of the push and pull factors at play, also to a reduction of 'relative' distance due to growing networks and cheaper transportation fares.

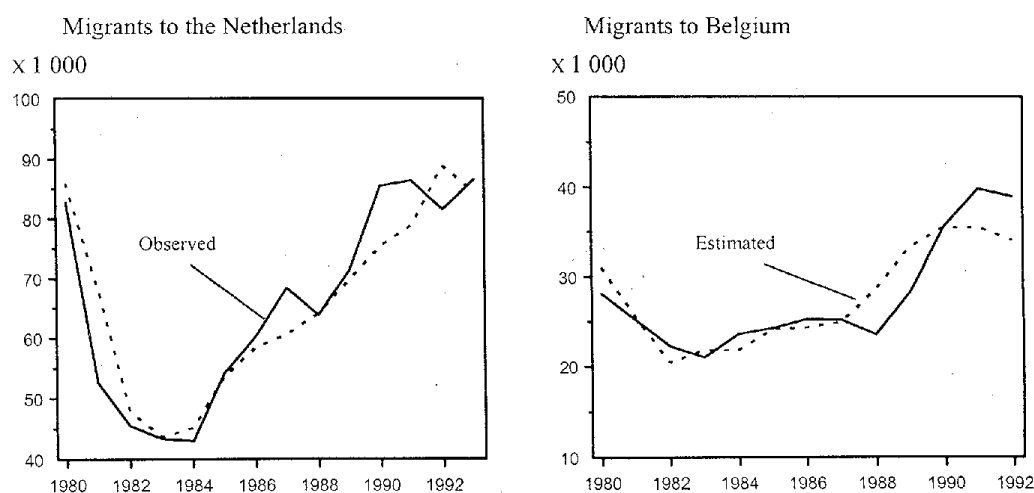
Data on migration to the Netherlands and Belgium from non EU countries were regressed on unemployment rates (expressed as a percentage of the labour force) of the Netherlands and Belgium respectively. It was expected that a rise in unemployment in these two countries of destination will have a negative influence on immigration (in other words, this will act as a weakening of the pull factor).

The regression results confirm this assumption, see *table 2*. The estimated migration flows towards the Netherlands and Belgium reasonably describe the observed migration flows (see *graph 6*).

## 2. Migrants from non-EU countries: regression results

country of destination	unemployment in country of destination		constant	explained variance	number of cases
	regression coefficient	t-value			
Netherlands	-7053	-8.2	128304	85	14
Belgium	-2800	-6.1	55675	77	13

## 6. Migrants from non-EU countries: regression estimates





## 5 Evaluation of previous population scenarios for the EEA

This section will review the quality of the national and regional long-term population scenarios compiled by Eurostat in Spring 1991 (former European Community) (Muus and Crujlsen, 1991 and Netherlands Economic Institute, 1994) and also the national long-term population scenarios compiled by Eurostat in Spring 1993 (former European Free Trade Association) (Eurostat, 1993a).

Even though the scenarios were compiled only a few years ago monitoring of the long-term scenarios is useful because they may give early warnings of errors and may lead to a revision of the assumptions. The results of the monitoring have been taken into account in the preparation the new scenarios.

The observed values of net migration are not calculated by the difference between immigration and emigration since registration of migration flows may suffer from more or less serious shortcomings (see section 3.2). Therefore, observed net migration has been computed by the difference of the change in total population between 1 January and 31 December for a certain calendar year and the difference between births and deaths.

In most countries of the EEA net migration levels increased rapidly in the second half of the eighties and early nineties, reaching an all-time high in 1992 (see *figure 7*). Since then, immigration has dropped, mainly due to a sharp decrease in the number of asylum-seekers. According to *figure 7* this rather unstable pattern turns out to have been rather well projected by the high scenario, compiled for the 12 European Community Member States as a whole. For the whole period 1990-1994 net migration for the EC 12 was overestimated by 0.2 million or only 3%. The low scenario, which assumed a sharp decrease right from the beginning underestimated net migration seriously: an underestimation by about 2.1 million or 45%.

The monitoring of the scenarios made for the EEA countries which were former members of the European Free Trade Association (i.e. Austria, Finland, Iceland, Liechtenstein, Norway and Sweden), is limited to the year 1994. For these countries the high scenario turned out to be too high, except for Sweden with an observed figure above the high scenario. For the other countries, the low scenario is more accurate, especially for Norway. In both Austria and Finland the observed figure of 1994 is slightly below the low scenario, while in Iceland underestimation is more seriously.

For the EC 12 countries the years 1990-1994 are monitored. In Belgium the high scenario is very close to observed net migration. In Denmark net migration was somewhere between the low and high scenario. In France net migration was far above the high scenario in the first year. However, a drop in net migration in 1994 led to a level in between the high and low scenarios. In Germany the high scenario projected the actual development very accurately. In Greece, even the high scenario underestimated real net migration in the beginning of the nineties while observed net migration was in between the high and low scenarios in 1994. In Iceland both scenarios turned out to be too low. Italy shows a serious overestimation in 1990 and 1991 and an severe underestimation in 1992- 1994. In Luxembourg observed net migration was higher than foreseen in both scenarios. In the Netherlands the high scenario approached observed net migration in the early nineties while the low scenario is appropriate for 1994. In Portugal both scenarios underestimated observed net migration. Nevertheless, the reversal of negative net migration in the beginning of the nineties into positive net migration in the middle of the nineties was foreseen rather well. The upswing of net migration in Spain was foreseen in both scenarios, especially the low scenario gives a accurate representation of real developments. The United Kingdom experienced much more net migration than expected in both scenarios.

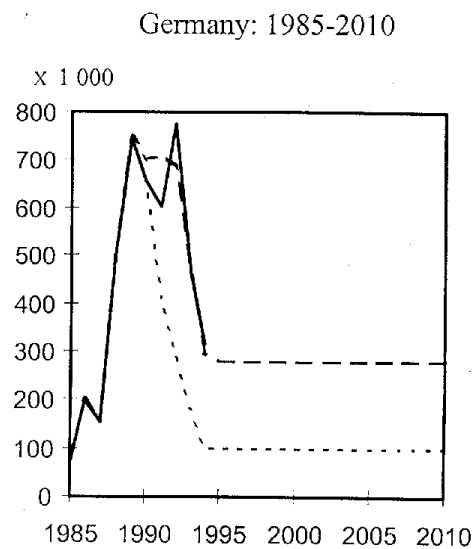
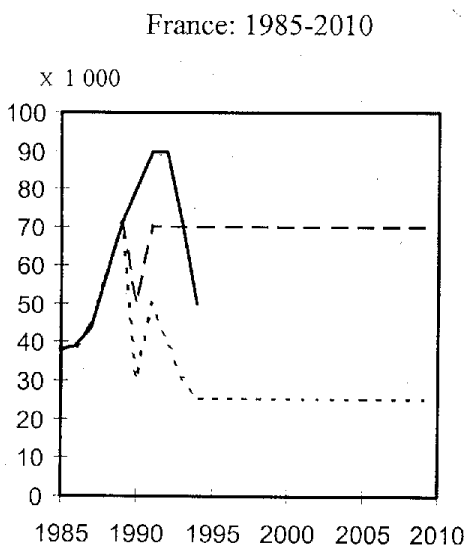
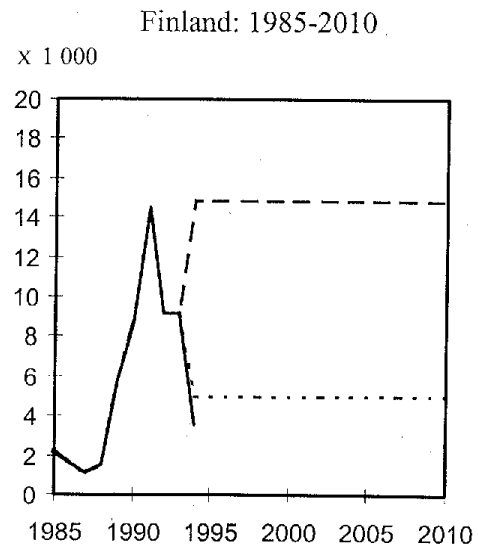
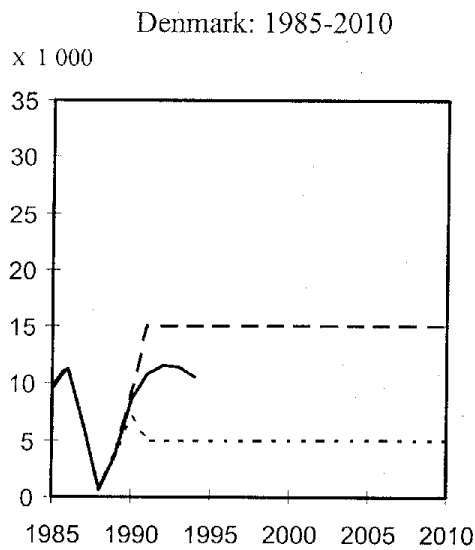
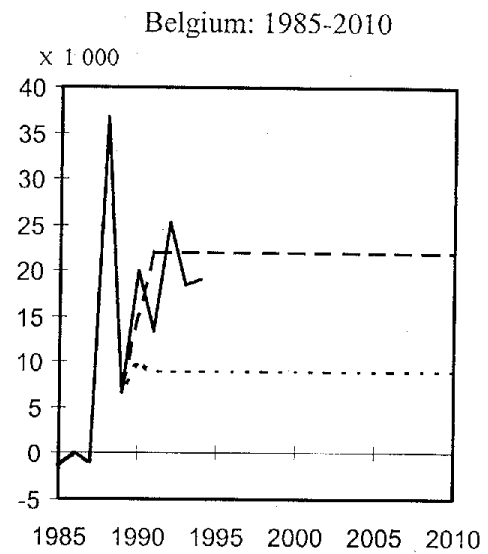
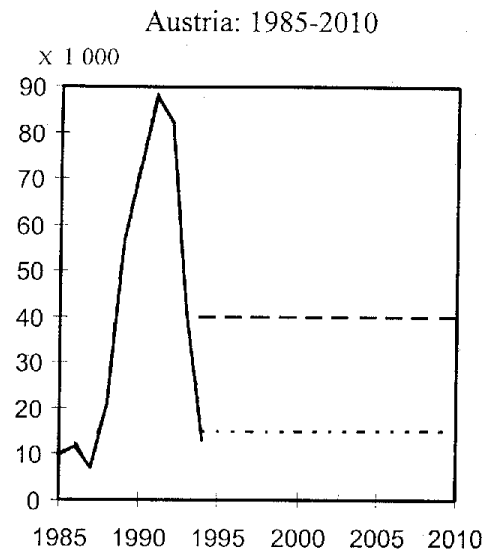
It may be concluded that for the EEA as a whole the high scenario proved to be fairly accurate. This is largely due to the fact that net migration of Germany was accurately projected by the high scenario. Concerning most other countries, either the high or the low scenario was appropriate. However, for some countries both scenarios could not give a reliable description of real developments.

*Table 3* presents an evaluation of the quality of the scenarios at the regional level for the countries of the EU 12. For the calendar year 1995 observed figures are derived from the Baseline scenario of the new scenarios which will be discussed in chapter 8; this has been done because for several countries no observed regional figures were at our disposal.

For Belgium 'observed' migration in 1995 is between the low and high scenario. For the two regions with relatively large net migration figures (i.e. Antwerpen and Brabant) observed migration also lies between these two boundaries. For Denmark both scenarios are well below observed net migration in 1995 (primarily based on preliminary information); as a result the regional figures of the previous scenarios are not accurate. For France observed net migration falls in the range between the two scenarios. Ile De France is by far the most important region. The low scenario gives a reasonable indication of 'realised' net migration. Several regions have a relative large positive net migration figure while the two scenarios did not expect this to happen. The (new) Baseline scenario expects, based on preliminary information, a considerable rise in net migration in Germany in 1995. This makes the previous scenarios rather outdated, due to a serious underestimation. Nevertheless, some remarks can be made about the quality of the previous regional scenarios. Several regions attract relatively large migration flows according to both observation and the (high) scenario. However, other regions have a relatively high observed net migration figure while they are relative unimportant in the high scenario. This applies in particular to the capital Berlin, but also to Brandenburg, Braunschweig, Weser-Ems and Schleswig-Holstein. In Greece observed net migration falls between the margins of the previous scenarios. The region Attica, in which Athens is located, has a positive net migration figure in 1995 while both the low and the high scenarios expected a negative figure. A serious underestimation on the other hand, applies to the region Kentriki Makedonia. In Italy net migration is in between expected net migration according to the low and the high scenarios in 1995. The same applies to the regions which attract relatively large migration flows. For the Netherlands both previous scenarios overestimate the observed numbers. According to the two scenarios Zuid-Holland will attract considerably more migrants than Noord-Holland. However, the observed net-migration flows to these two regions are nearly equal. Also in Portugal the two scenarios turned out to be too high. The region Lisboa e Vale Do Tejo was expected to have by far the highest figure, whereas in reality it was equally important as two other regions. In Spain the low scenario is rather accurate. However, especially for the two regions Pais Vasco and Comunidad de Madrid expected figures deviate considerably from observations. For the United Kingdom both scenarios are too low in 1995. The region London is of paramount importance: nearly 60 % of the net migration figure of the United Kingdom can be attributed to this region. In both scenarios a percentage of only 50% was assumed.

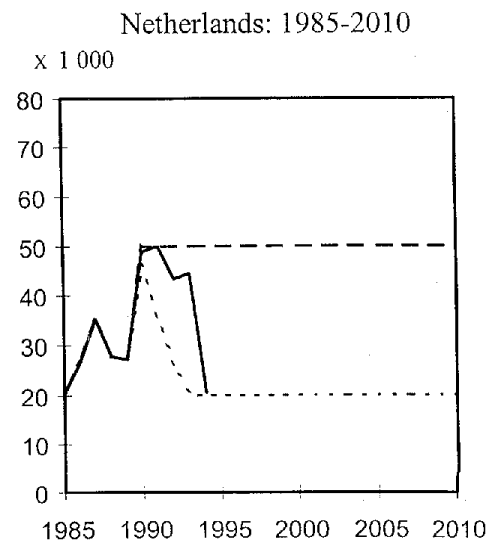
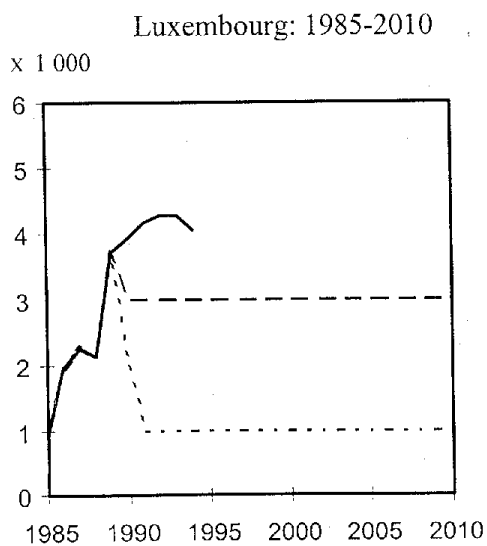
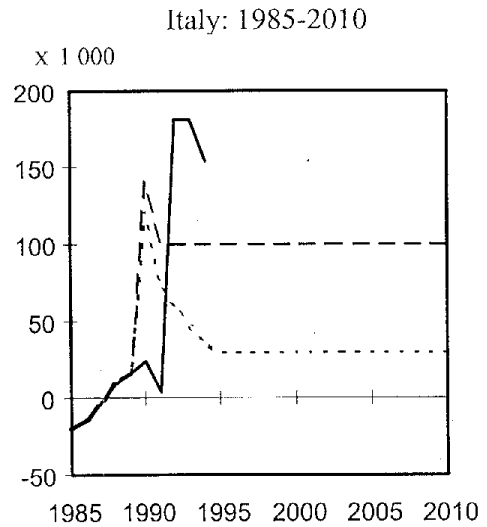
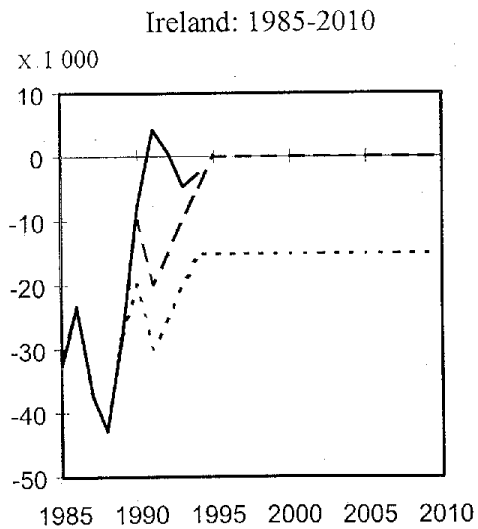
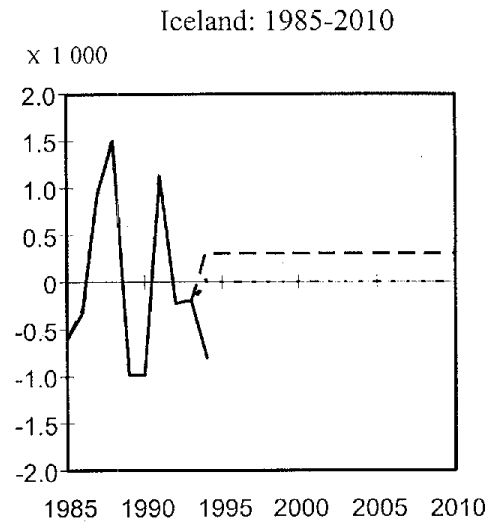
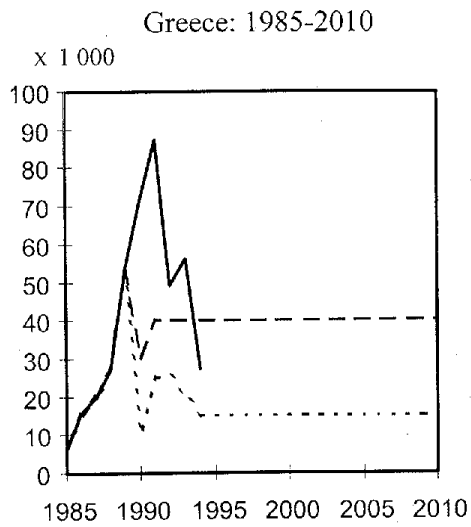
In conclusion, the quality of the regional scenarios seems rather poor. However, the observed figures for 1995 are derived from the new Baseline scenario, due to a lack of reliable observed figures. A scarcity of reliable observed figures existed already when the previous scenarios were compiled. So, for a large part the differences between the outcomes of the scenarios and observation can be attributed to the quality of the national population measurement systems.

## 7. Net migration, observation and previous scenarios



— observed ..... low scenario (previous) - - - - - high scenario (previous)

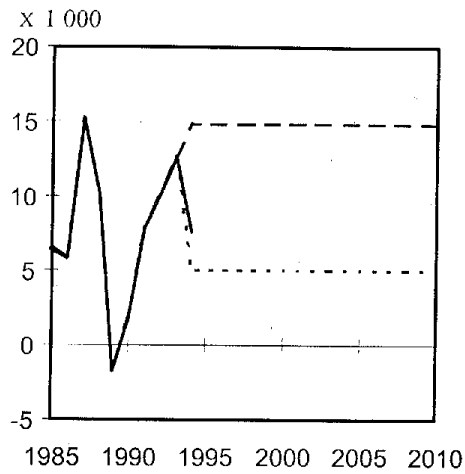
# 7. Net migration, observation and previous scenarios (continued)



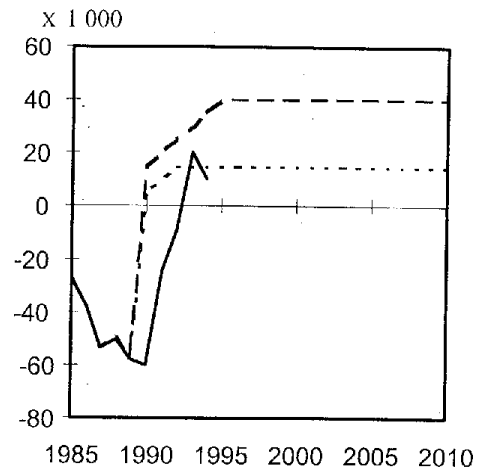
— observed ..... low scenario (previous) ..... high scenario (previous)

# 7. Net migration, observation and previous scenarios (continued)

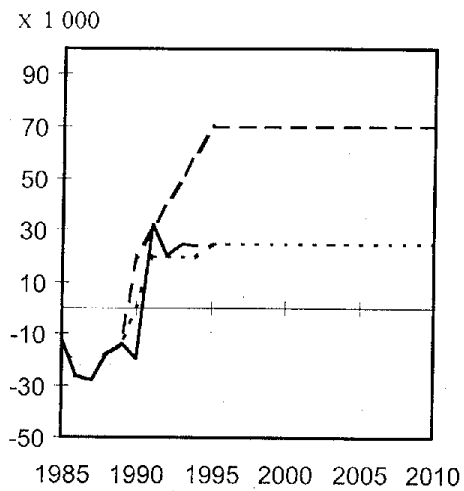
Norway: 1985-2010



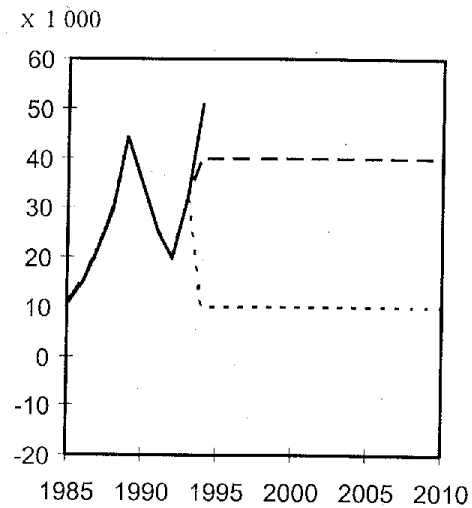
Portugal: 1985-2010



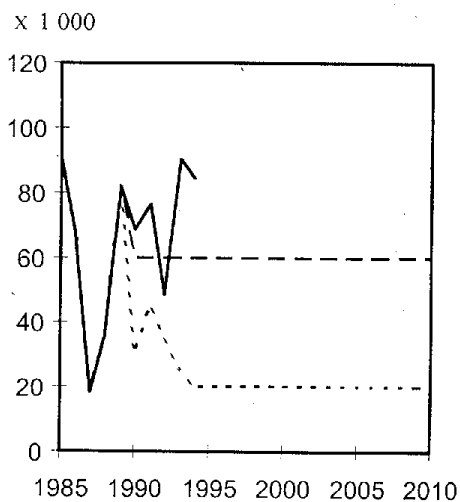
Spain: 1985-2010



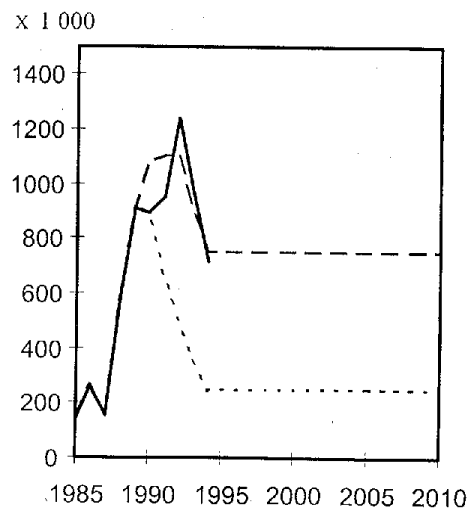
Sweden: 1985-2010



United Kingdom: 1985-2010



European Union 12: 1985-2010



— observed ..... low scenario (previous) - - - - - high scenario (previous)

## 3. Net migration by region, previous scenarios and observation 1)

	Previous scenarios		Absolute differences between scenarios and observation		Relative differences between scenarios and observation		
	1995 1)	Low	High	Low	High	Low	High
	x 100			x 100		%	
Belgium	180	90	220	-90	40	-50	22
Antwerpen	31	12	32	-19	1	-61	3
Limburg	15	3	10	-12	-5	-80	-33
O-Vlaanderen	11	7	21	-4	10	-36	91
Brabant	89	35	72	-54	-17	-61	-19
W-Vlaanderen	7	6	18	-1	11	-14	157
Hainaut	3	8	23	5	20	167	667
Liege	15	12	26	-3	11	-20	73
Luxembourg	4	3	7	-1	3	-25	75
Namur	5	4	9	-1	4	-20	80
Denmark	286	50	150	-236	-136	-83	-48
Hovedstadsregionen	99	16	48	-83	-51	-84	-52
Ost For Storebaelt,	35	7	21	-28	-14	-80	-40
Vest For Storebaelt	153	27	81	-126	-72	-82	-47
France	500	250	700	-250	200	-50	40
Ile De France	159	132	350	-27	191	-17	120
Champagne-Ardenne	7	-2	-3	-9	-10	-129	-143
Picardie	1	-1	-1	-2	-2	-200	-200
Haute-Normandie	4	5	14	1	10	25	250
Centre	-1	0	4	1	5	-100	-500
Basse-Normandie	2	0	1	-2	-1	-100	-50
Bourgogne	14	0	1	-14	-13	-100	-93
Nord-Pas-De-Calais	38	1	7	-37	-31	-97	-82
Lorraine	33	1	5	-32	-28	-97	-85
Alsace	38	2	7	-36	-31	-95	-82
Franche-Comte	7	-3	-7	-10	-14	-143	-200
Pays De La Loire	24	6	19	-18	-5	-75	-21
Bretagne	18	11	32	-7	14	-39	78
Poitou-Charentes	16	2	7	-14	-9	-88	-56
Aquitaine	21	21	57	0	36	0	171
Midi-Pyrenees	12	16	44	4	32	33	267
Limousin	7	0	0	-7	-7	-100	-100
Rhone-Alpes	42	13	38	-29	-4	-69	-10
Auvergne	2	0	2	-2	0	-100	0
Languedoc-Roussillon	20	20	54	0	34	0	170
Provence-Alpes-Cote D'azur	31	25	69	-6	38	-19	123
Corse	5	0	0	-5	-5	-100	-100

### 3. Net migration by region, previous scenarios and observation (continued)

name	Previous scenarios		Absolute differences between scenarios and observation		Relative differences between scenarios and observation		
	1995 1)	Low	High	Low	High	Low	High
	x 100			x 100		%	
Germany	4200	1000	2800	-3200	-1400	-76	-33
Stuttgart	163	66	179	-97	16	-60	10
Karlsruhe	253	54	145	-199	-108	-79	-43
Freiburg	80	31	86	-49	6	-61	8
Tübingen	74	24	66	-50	-8	-68	-11
Oberbayern	254	75	203	-179	-51	-70	-20
Niederbayern	45	8	24	-37	-21	-82	-47
Oberpfalz	41	8	23	-33	-18	-80	-44
Oberfranken	37	9	25	-28	-12	-76	-32
Mittelfranken	80	32	87	-48	7	-60	9
Unterfranken	53	12	36	-41	-17	-77	-32
Schwaben	72	16	47	-56	-25	-78	-35
Berlin	216	33	94	-183	-122	-85	-56
Brandenburg	181	5	21	-176	-160	-97	-88
Bremen	25	16	43	-9	18	-36	72
Hamburg	122	50	135	-72	13	-59	11
Darmstadt	204	72	195	-132	-9	-65	-4
Giessen	68	11	31	-57	-37	-84	-54
Kassel	75	16	46	-59	-29	-79	-39
Mecklenburg-Vorpommern	38	4	16	-34	-22	-89	-58
Braunschweig	184	25	70	-159	-114	-86	-62
Hannover	89	26	72	-63	-17	-71	-19
Lüneburg	60	7	22	-53	-38	-88	-63
Weser-Ems	231	15	46	-216	-185	-94	-80
Düsseldorf	127	75	207	-52	80	-41	63
Köln	138	50	141	-88	3	-64	2
Münster	54	9	32	-45	-22	-83	-41
Detmold	57	17	50	-40	-7	-70	-12
Arnsberg	370	110	293	-260	-77	-70	-21
Koblenz	67	9	27	-58	-40	-87	-60
Trier	19	4	10	-15	-9	-79	-47
Rhein Hessen-Pfalz	86	34	92	-52	6	-60	7
Saarland	50	14	38	-36	-12	-72	-24
Sachsen	137	22	71	-115	-66	-84	-48
Dessau	33	2	8	-31	-25	-94	-76
Halle	32	5	15	-27	-17	-84	-53
Magdeburg	43	5	17	-38	-26	-88	-60
Schleswig-Holstein	264	17	52	-247	-212	-94	-80
Thüringen	75	12	38	-63	-37	-84	-49

### 3. Net migration by region, previous scenarios and observation (continued)

name	1995 1)	Previous scenarios		Absolute differences between scenarios and observation		Relative differences between scenarios and observation	
		Low	High	Low	High	Low	High
	x 100			x 100		%	
<b>Greece</b>	300	150	400	-150	100	-50	33
Anatoliki Makedonia, Thraki	15	-20	-1	-35	-16	-233	-107
Kentriki Makedonia	60	90	122	30	62	50	103
Dytiki Makedonia	14	-27	-16	-41	-30	-293	-214
Thessalia	12	47	65	35	53	292	442
Ipeiros	22	29	37	7	15	32	68
Ionia Nisia	13	24	26	11	13	85	100
Dytiki Ellada	14	33	47	19	33	136	236
Stereia Ellada	32	19	31	-13	-1	-41	-3
Peloponnisos	25	54	62	29	37	116	148
Attiki	73	-147	-43	-220	-116	-301	-159
Voreio Aigaio	5	15	19	10	14	200	280
Notio Aigaio	10	19	25	9	15	90	150
Kriti	6	14	25	8	19	133	317
<b>Italy</b>	500	300	1000	-200	500	-40	100
Piemonte	42	30	95	-12	53	-29	126
Valle d' Aosta	1	1	3	0	2	0	200
Liguria	14	16	47	2	33	14	236
Lombardia	116	46	152	-70	36	-60	31
Trentino-Alto Adige	12	5	17	-7	5	-58	42
Veneto	55	23	76	-32	21	-58	38
Friuli-Venezia Giulia	15	7	24	-8	9	-53	60
Emilia-Romagna	46	20	67	-26	21	-57	46
Toscana	41	18	60	-23	19	-56	46
Umbria	12	6	18	-6	6	-50	50
Marche	18	8	26	-10	8	-56	44
Lazio	73	41	126	-32	53	-44	73
Campania	7	62	183	55	176	786	2514
Abruzzo	17	11	32	-6	15	-35	88
Molise	3	2	7	-1	4	-33	133
Puglia	8	23	75	15	67	188	838
Basilicata	0	3	10	3	10		
Calabria	3	15	46	12	43	400	1433
Sicilia	8	-29	-56	-37	-64	-463	-800
Sardegna	9	-5	-8	-14	-17	-156	-189



## 3. Net migration by region, previous scenarios and observation (continued)

name	1995 1)	Previous scenarios		Absolute differences between scenarios and observation		Relative differences between scenarios and observation	
		Low	High	Low	High	Low	High
	x 100			x 100		%	
<b>Netherlands</b>	135	200	500	65	365	48	270
Groningen	3	5	13	2	10	67	333
Friesland	3	5	13	2	10	67	333
Drenthe	2	3	8	1	6	50	300
Overijssel	4	9	24	5	20	125	500
Gelderland	10	19	49	9	39	90	390
Flevoland	2	3	8	1	6	50	300
Utrecht	8	15	36	7	28	88	350
Noord-Holland	41	47	112	6	71	15	173
Zuid-Holland	43	60	144	17	101	40	235
Zeeland	3	3	9	0	6	0	200
Noord-Brabant	9	21	57	12	48	133	533
Limburg	7	10	27	3	20	43	286
<b>Portugal</b>	50	150	400	100	350	200	700
Norte	17	-13	88	-30	71	-176	418
Centro (P)	13	40	80	27	67	208	515
Lisboa e Vale Do Tejo	12	63	145	51	133	425	1108
Alentejo	-1	38	46	39	47	-3900	-4700
Algarve	3	19	25	16	22	533	733
Acores	2	-11	-2	-13	-4	-650	-200
Madeira	4	14	19	10	15	250	375
<b>Spain</b>	285	250	700	-35	415	-12	146
Galicia	47	48	72	1	25	2	53
Principado de Asturias	7	14	25	7	18	100	257
Cantabria	0	5	11	5	11		
Pais Vasco	2	114	112	112	110	5600	5500
Comunidad Foral de Navarra	1	0	7	-1	6	-100	600
La Rioja	-2	-4	1	-2	3	100	-150
Aragon	2	-4	13	-6	11	-300	550
Comunidad de Madrid	63	-51	27	-114	-36	-181	-57
Castilla y Leon	10	59	78	49	68	490	680
Castilla-La Mancha	8	47	57	39	49	488	613
Extremadura	5	32	39	27	34	540	680
Cataluna	50	76	136	26	86	52	172
Comunidad Valenciana	20	-1	49	-21	29	-105	145
Islas Baleares	17	-66	-40	-83	-57	-488	-335
Andalucia	26	62	137	36	111	138	427
Region de Murcia	7	-4	11	-11	4	-157	57
Ceuta Y Melilla	1	-2	0	-3	-1	-300	-100
Canarias	23	-77	-37	-100	-60	-435	-261

## 3. Net migration by region, previous scenarios and observation (continued)

name	1995 1)	Previous scenarios		Absolute differences between scenarios and observation		Relative differences between scenarios and observation	
		Low	High	Low	High	Low	High
	x 100			x 100		%	
<b>United Kingdom</b>	930	200	600	-730	-330	-78	-35
Cleveland, Durham	7	-5	-1	-12	-8	-171	-114
Cumbria	-2	-2	0	0	2	0	-100
Northumberland, Tyne and Wear	26	5	15	-21	-11	-81	-42
Humberside	14	-14	-14	-28	-28	-200	-200
North Yorkshire	-11	3	9	14	20	-127	-182
South Yorkshire	8	5	14	-3	6	-38	75
West Yorkshire	46	7	22	-39	-24	-85	-52
Derbyshire, Nottinghamshire	24	5	18	-19	-6	-79	-25
Leicestershire, Northamptonshire	20	15	29	-5	9	-25	45
Lincolnshire	6	5	10	-1	4	-17	67
East Anglia	-9	8	23	17	32	-189	-356
Bedfordshire, Hertfordshire	16	17	32	1	16	6	100
Berkshire, Buckinghamshire, Oxfordshire	-20	-3	7	17	27	-85	-135
Surrey, East-West Sussex	31	14	33	-17	2	-55	6
Essex	36	-5	2	-41	-34	-114	-94
Greater London	542	196	307	-346	-235	-64	-43
Hampshire, Isle of Wight	-17	-21	-19	-4	-2	24	12
Kent	20	4	14	-16	-6	-80	-30
Avon, Gloucestershire, Wiltshire	34	1	13	-33	-21	-97	-62
Cornwall, Devon	6	-9	-4	-15	-10	-250	-167
Dorset, Somerset	1	-7	-3	-8	-4	-800	-400
Hereford & Worcester, Warwickshire	0	-6	-1	-6	-1		
Shropshire, Staffordshire	-5	-7	-1	-2	4	40	-80
West Midlands (County)	50	8	26	-42	-24	-84	-48
Cheshire	6	1	7	-5	1	-83	17
Greater Manchester	45	12	31	-33	-14	-73	-31
Lancashire	51	12	24	-39	-27	-76	-53
Merseyside	-4	-15	-13	-11	-9	275	225
Clwyd, Dyfed, Gwynedd, Powys	4	-1	5	-5	1	-125	25
Gwent, Mid-South-West, Glamorgan	23	1	11	-22	-12	-96	-52
Borders-Central-Fife-Lothian-Tayside	3	-8	6	-11	3	-367	100
Dumfries & Galloway, Strathclyde	-35	-10	6	25	41	-71	-117
Highlands, Islands	-14	-1	0	13	14	-93	-100
Grampian	1	-2	0	-3	-1	-300	-100
Northern Ireland	28	-4	3	-32	-25	-114	-89

1) Baseline scenario

## 6 International migration forecasts in the European Economic Area

This section contains information on the national projections by the countries of the EEA. One of the new scenarios to be discussed in the next chapter is the Baseline scenario which can be regarded as a scenario describing a continuation of current trends in the short and medium term. In the long run, for most countries the Baseline scenario will correspond closely to the target value according to the medium variant of the official national forecasts provided by the member countries. *Table 4* shows which values according to official forecasts were available at the moment the scenarios were compiled.

**Table 4. Net migration according to recent official forecasts**

Country	Base year (year)	2000			2020			Target year
		Low	Main	High	Low	Main	High	
x 1000								
Austria	27 (1993)	10	17	24	10	17	24	1995
Belgium	14 (1991)	0	10	20	0	10	20	constant
Denmark	11 (1993)		10.5			10.5		constant
Finland	9 (1992)		2			2		constant
France	80 (1990)	0	50		0	50		constant
Germany	614 (1993)	316	380	444	100	200	300	2010
Greece	56 (1993)	4	12	20	0	5	10	2020
Iceland								
Ireland	-6 (1993)	-7.5		-17.5		0		2006
Italy					30	50	70	2020
Liechtenstein								
Luxembourg	2 (1990)		1.6			1.6		constant
Netherlands	44 (1993)	9	36	62	0	35	70	2010
Norway	10 (1992)	4	8	12	4	8	12	1998
Portugal		-20	0	20	-10	0	30	2020
Spain	35 (1991)		35			35		constant
Sweden	32 (1993)	5	15	30	5	15	30	1996
United Kingdom	51 (1993)		50			50		2015

Source: Van der Gaag et al, 1997

All countries foresee positive net migration for the future, except for Ireland in the short run and Portugal in the Low variant. Most countries use a constant net migration figures in their forecasts. Some countries expect changes in net migration in the short run. Only a few countries also make long term assumptions.

Forecasts on net migration at the regional level are scarce. For six countries, international migration is not distinguished from internal migration. Of the remaining countries only Germany and the Netherlands formulate region-specific migration assumptions.

For more detailed information, see Van der Gaag et al, 1997.

## **7 Scenarios of international migration**

### **7.1 Introduction**

In this section three scenarios of international migration will be presented. The assumptions made for the separate scenarios are mainly related to possible economic developments and political responses to economic developments which are assumed to affect push and pull factors, in particular the need for workers and migration policies.

It is important to distinguish between short term developments in migration and long term trends. Until the year 2000 the scenarios are basically a mixture of extrapolations of existing trends in migration and expectations based on expert opinions and elaboration of theoretical notions. In the long run, after the year 2000, the scenarios become more and more scenarios in a true sense: a realistic future course based on a coherent set of theoretical notions. The year 2010 is used as target year, because it is believed that it is nearly impossible to make realistic assumptions on developments in migration after 2010. Therefore, the migration levels are kept constant after 2010.

The three scenarios are called the Baseline, the Low and the High scenario. The Baseline scenario heavily relies on developments in the last decade. Developments are assumed to continue. The two remaining scenarios give an indication of the extent to which changes in migration can be expected, if deviations from current economic and policy developments will occur.

The quantitative assumptions of the scenarios are stated in terms of net migration. Although from a methodological point of view a separation of the two migratory flows - immigration and emigration - is preferable, this has not been done. Especially emigration data are known to be unreliable in a number of cases. However, preliminary scenarios have been developed for each country in which future immigration and emigration flows have been estimated, based on extrapolations of observed trends and assumptions on future developments in background variables. In order to arrive at the final scenarios the preliminary scenarios were adjusted, mainly due to considerations on international consistency.

## 7.2 Qualitative assumptions on short term developments in net migration

It cannot be expected that in the next decade the economic gap between Europe and the developing countries will be reduced to such an extent that migration pressure diminishes, while networks most probably continue to play an important role in migration processes.

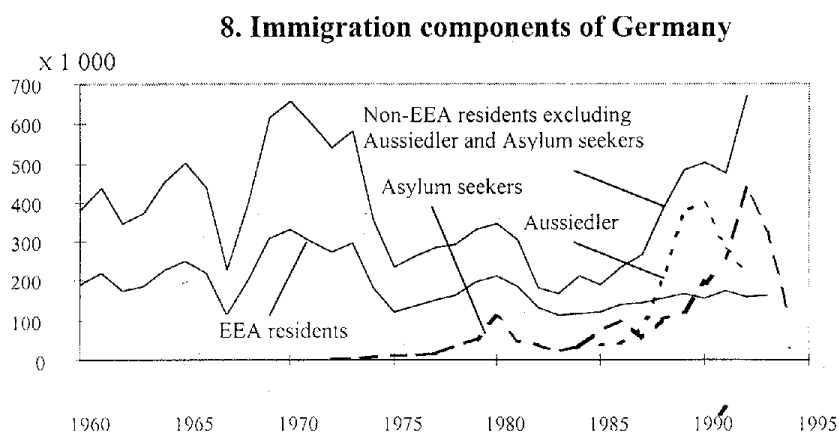
So, it is assumed that push factors outside the EEA will continue to play an important factor in the explanation of migration pressure, and the difficult controllable emergence of new conflicts is likely to further increase this pressure. Fassmann and Münz (1992) foresee that ethno-political, ecological and demographic changes in the eastern part of Europe, the successor states of the former Soviet Union and in North Africa will generate new migration potentials and pressures. Fassmann (1994) expects that the high levels of immigration in 1990 and 1991 which consisted largely of persons living alone, will result in a new influx of follow migrants. In 1991 it was estimated that at least 7 million persons in the Soviet Union wished to emigrate to the West (Heyden, 1991).

Immigration policies will become tighter because of high spendings on asylum-seekers and because of the public opinion with regard to non-EEA nationals. These policies are likely to limit the inflow of asylum seekers and labour migrants especially if measures are accompanied by growing effectiveness of administrative barriers. Also the emergence of new economies will redirect future migrant-flows away from Europe. Trade and development assistance will ultimately reduce the migration pressure in the developing countries, and UN interventions to protect human rights might become more effective.

Limiting the entrance of legal immigrants may cause the influx of illegal migrants to increase. Illegal immigrants normally do not appear in the official statistics of the EEA countries and are therefore beyond the scope of this report. Only in cases where illegals are legalised, effects on migration will become visible in the migration statistics.

International conventions dealing with asylum seekers and family reunification and formation will make it possible for many to legally enter the EEA. The large influx of immigrants in the beginning of the nineties therefore will the first coming years create another influx of follow migrants, reducing the effects of national migration policies.

Germany is the most important country of the EEA, considering net migration figures. A breakdown of immigrants may explain why Germany has to be treated as a special case in the formulation of migration assumptions (see *graph 8*).



The immigration from outside the EEA consisted up to recently of *Aussiedler*, *Übersiedler* and *Ausländer*. The immigration of *Übersiedler* (i.e. Germans from former East Germany) and *Aussiedler* (i.e. ethnic Germans from mainly the other East European countries) reached a peak in 1990 with 800 thousand. After the collapse of the Berlin Wall, the *Übersiedler* disappeared as a separate group. The number of *Aussiedler* immigrating in 1991 and 1992 equalled - according to the Statistisches Bundesamt (1994) - 220 thousand per year. This is the level on which Germany has limited the inflow of *Aussiedler* (quota). Similar with the latest official national population forecasts for Germany, it is assumed that the inflow of *Aussiedler* will gradually decline in the near future.

The immigration of *Ausländer* from outside the EEA varied during the period 1975-1985 between 200 and 400 thousand. The immigration of *Ausländer* increased last decade, from 200 thousand in 1983 to almost 1.2 million in 1992. After this peak the numbers are declining: 1 million in 1993 and 0.8 million in 1994. It can be expected that immigration will continue to decline in view of the tightening of the immigration regulations. The decline may be steep, which is not only suggested by the declining number of asylum seekers, but also by the latest available observations on net migration.

Based on the notions given above, it may be concluded that due to economic disparities between EEA and non-EEA countries, and established networks in the EEA area of non-EEA nationals, the migration pressure from outside the EEA will continue to remain high. However, in view of the declining number of asylum-seekers and non-EEA immigrants it is assumed that policies limiting the immigration to the region will sort effect. With respect to the net migration surplus caused by migration to the EEA, therefore a reduction is to be expected, though the decline in net migration levels will be modest because of provisions dealing with family reunification and formation in combination with the high persisting migration pressure.

### 7.3 Qualitative assumptions on long term developments in net migration

Long term trends are mainly related to possible economic developments and political responses to economic developments.

The analysis presented in section 4 has indicated that economic growth stimulates mobility. Though the OECD (1994) foresees a moderate economic growth in the years to come, this does not necessarily mean that employment will rise. In Germany, France and the United Kingdom for example, GDP doubled since 1960, while employment decreased. According to the OECD (1994) the cause of high unemployment in Europe can be attributed to the lack of incentives for employers to offer employment and the insufficient incentives for employees to accept many of the jobs that are offered. Heavy taxation makes it attractive for employers to substitute labour for capital, while post-income transfers cause the differences between workers and non-workers salaries to be small. Depending on government policies, economic growth therefore can result in more or less employment.

If it can be concluded that employment and mobility interact, assumptions on the conversion of economic growth into employment need to be made. In the development of the scenarios these assumptions are elaborated. It is assumed that conditions of economic growth will support endeavours of the EU to achieve a more balanced development between countries, because money is in surplus and can be allocated. Economic stagnation is supposed to frustrate the integration efforts of the EU because countries will first consider themselves, leaving little surplus to be allocated.

Another factor which might influence the size of the migration flows in the future is related to the ageing of the (working) population. Ageing of the population is not only due to an increase of the life expectancy but also to a decline of persons aged below 24, caused by a fall in fertility. Migrants distinguish themselves from the average population with respect to age, sex and several socio-economic background variables. Migrants often are relatively young. Ageing of the population in the EEA countries will therefore reduce the migration of the EEA nationals. This process may however be counter- balanced by the growing popularity of retirement migration towards countries like Spain, Portugal and Greece, which offer attractive natural environments.

The three scenarios discussed below, mainly describe the effects of the different economic and political developments on net migration.

The *Baseline* scenario is mainly an extrapolation of developments observed during the last decade. This means in terms of economic development that the economy continues to grow. This economic growth causes a moderate creation of new jobs and government interventions are not able to change the unemployment rates much. Only a modest increase in the labour demand is expected, resulting in a slight increase in job mobility.

The labour demand is recovering too slowly to be able to absorb additional foreigners. Migration regulations will be strict and effective, while negative public opinion towards foreigners will furthermore restrain migrants from their decision to search their fortune in the West. Nevertheless, migration pressure is likely to remain high, and continuing family formation and reunification will cause the immigration levels to decline only moderately.

With respect to asylum seekers it is assumed that EU policies will introduce the principle of 'burden sharing'. This means that asylum seekers will be allocated over the receiving countries for example according to the population size of a country. The result of the

allocation will be that countries currently receiving a larger than average share of the total number of asylum seekers (especially Germany and Sweden) will get less, while the other countries with a less than average share will experience an increase.

All in all, the Baseline scenario expects slightly increasing mobility due to moderate economic growth. With respect to immigration policies, there will be some effective measures taken, exerting a continuous downward pressure on immigration flows from outside the EEA, while it is expected that asylum seekers will be more evenly distributed over the EU countries.

The *High scenario* assumes higher economic growth than the Baseline scenario. Increasing economic activities in combination with milder labour taxation will increase the demand for labour. Attitudes towards work will - as opinion polls suggest - change away from materialistic values towards values like self-development, self-fulfilment and self-organisation and towards a more aesthetic and intellectual orientation (OECD, 1994). Furthermore, educational levels of the EEA citizens will increase in a high pace. These changes in attitudes and educational levels of EEA citizens will cause imbalances in demand for and supply of especially low skilled labour.

Restrictions on immigration regulations and immigration procedures will be relaxed, resulting in an increase of labour migration to the EEA. This increase will be reinforced by family reunification and family formation. Due to the necessity to import labourers and due to the increasing prosperity of EEA citizens - which will cause the perception that foreigners compete for the same limited resources to vanish - public opinion towards foreigners will improve. Immigration pressure from asylum seekers will remain high, while emigration will decline.

A policy of burden sharing with respect to asylum seekers will result in a more even distribution over the countries. Furthermore, economic growth is supposed to benefit the poorer countries more than the richer ones, and therefore labour migrants will no longer only concentrate on the most prosperous countries.

All together, the High scenario assumes higher economic growth, conversion of this growth into employment, increasing mobility, and need for workers from outside the EEA. As in the Baseline, asylum seekers will be allocated to the different countries according to the population size.

In the *Low scenario* economic stagnation is supposed to be predominant in all EEA countries, but worse in poorer countries than in richer ones. Unemployment is high, negative attitudes towards foreigners increase, and migration policies will be strict.

Economic recession coincides with a decrease in mobility. High unemployment rates and high public spending on unemployment benefits for nationals, leave little room - political and financial - for the allocation of funds to non-nationals. Refugees will, to the highest extent possible, be returned to their home countries, while their entrance will significantly become more restricted.

Also the higher than average unemployment rates amongst foreigners will bias the expenditures on unemployment benefits too much in an unwanted direction, resulting in a negative public opinion about foreigners, and resulting in a restrictive policy with respect to immigration regulations. The restrictive measures are supposed to be effective, resulting in a decrease of immigration into the EEA. Emigration of foreigners will increase as a result of increasing poverty and negative public attitudes towards them.

Summarised, in the Low scenario mobility will be curtailed due to hampering economic growth while strict immigration policies will lead to a decrease of migration from outside the EEA.



#### 7.4 Quantitative assumptions on net migration: three scenarios

On the basis of the qualitative assumptions discussed in sections 7.2 and 7.3 quantitative assumptions on the future size of net migration are specified. The Baseline scenario is assumed to describe a continuation of past trends, while the High and Low scenarios are meant to indicate the effects of diverging economic and political trends.

The levels of net migration to be reached in the target year are based on observed net migration levels for all the countries of the EEA together.

In the early eighties net migration to the EEA dropped from a half million to about zero. Since then net migration has risen rapidly. In 1992 a peak was reached with 1.4 million. Particularly immigration to Germany rose drastically. In the early nineties net migration to Germany amounted to well over half of total net migration to the EEA. Especially the number of asylum seekers increased strongly. However, due to restrictive immigration policies, net migration fell rapidly in most countries of the EEA in the early nineties. In 1994 net migration equalled just below 0.8 million. This means a decrease by almost forty percent in only 2 years. However, the net migration figures of 1995 equalled that of 1994.

It seems unlikely that the rate of reduction of net migration during 1992-1994 will continue in this pace in the future. The migration pressure from Third World countries and the countries of what used to be the Second World may challenge the efficacy of restrictive immigration policies of the countries of the EEA. However, this rate of decrease can give an indication of what net migration level may be reached in short notice in case immigration policies keep on to be very successful. In the Low scenario it is assumed that the net migration figure of the EEA will halved in the next decade. So, a level of nearly 400 thousand will be reached in 2005. It is supposed that an even lower level seems to be not plausible. In the first half of the 1980s migration was temporarily very low due to an economic setback. However, in the Low scenario economic growth is supposed, although at a lower level than in the Baseline and High scenario. Hence, given a continuous high immigration pressure, a net migration level of about 400 thousands per calendar year will be assumed from 2005 on.

The Baseline scenario is in essence a continuation of past developments. It is assumed that in the long run net migration of the EEA moves to a level that equals the average level of net migration over the years 1980-1994, i.e. 600 thousand. The reasons for choosing this base period are:

- the base period for assessing long-run projections should not be too short; hence, for projecting the level of net migration 15 years ahead a base period of 15 years seems reasonable,
- the base period since 1980 includes both a period of low migration (the early 1980s) and a period of high migration (the early 1990s); hence, the *average* level during the whole period seems a reasonable basis for the Baseline scenario in the long run, as this scenario aims to project some 'average' level of migration.

Further, it is assumed that the rate of decrease of net migration will slow down between 1995 and 2010.

In the High scenario net migration is assumed to increase in the short run: relatively high economic growth leads to a less restrictive attitude towards the immigration of people from outside the EEA. However, in the long run this will invoke a political reaction resulting in a severe reduction of the influx of migrants. These assumptions can be operationalized by

using the mean value of net migration during the period 1990-1994 as an indication of the level to be reached in the next five years. The observed average level turns out to be 1.1 million. As the extremely high level of 1992 is not likely to be repeated due to more strict policies, the assumed level of net migration for the year 2000 is slightly lower: 1 million. In the long run a decline is assumed, as it is expected that the high level of net migration cannot continue for a long period without political reactions. However, because of a positive economic development the reduction will be smaller than the decline observed in recent years (by 40% in 2 years). Hence a decline by 20% is assumed: from 1 million in 2000 to 0.8 million in 2010.

In order to determine net migration levels for each separate country, net migration levels of the EEA according to the three scenarios were distributed over the individual countries on the basis of population size, past migration experiences and consultations with Eurostat (de Beer, 1995). As to the course of net migration in the period 1994-2010, preliminary figures based on extrapolation of immigration and emigration flows has been used as a basis (see chapter 5.1). It is assumed that a proportion of immigrants returns after a certain period of time. This implies that there is - with a certain time lag - a relationship between the level of immigration and emigration, and between the number of immigrants residing in a country and the level of emigration out of that country. As a result, for several countries net migration figures in the period 1995-2000 may be lower than in the period after 2000 in the Low scenario and sometimes even in the Baseline scenario. Due to the recent -observed- immigration peak emigration may be temporarily high in the coming years. After 2000, as this effect has declined, emigration figures will fall and net migration will go up.

The next step was to determine the age composition of net migration flows for each country. This has been done by using the observed average age composition (per sex) of all countries of the EEA. It was assumed that all countries would have this age composition in the target year 2010. For the other years in the scenario period the age composition was calculated by a linear interpolation between the observed composition of 1994 and the target composition of 2010. For the countries with negative net migration flows (Ireland) or zero net migration in 2010 (Finland/Iceland) a different procedure has been used because otherwise net migration flows per age would seriously be underestimated.

### 7.5 Three scenarios of net migration

Based on the qualitative and quantitative assumptions discussed before, three scenarios have been constructed. *Figure 9* presents net migration in the past and the results of the three scenarios for each country and the EEA as a whole. *Table 5* summarises for each country the findings and also presents the previous Eurostat scenarios (only a Low and High scenario were compiled) while *map 1* to *5* give a comprehensive overview of the results for the countries of the EEA per scenario.

The summation of net migration between EEA countries is expected to equal zero. This means that net migration on the EEA level reflects the difference between immigrants coming from countries outside the EEA and emigrants leaving the EEA.

Up to the nineties net migration flows were relatively low. Ireland was an exception with large flows of migrants going to the United Kingdom in the sixties. Moreover, in several countries a peak in net migration could be witnessed at the time colonies became independent.

Due to the small size of net migration flows the effect on population developments was limited in the past. However, in recent years net migration is becoming a decisive factor for the population growth: natural population growth is continuously declining or even already negative (Germany, Italy) while the numbers of migrants are becoming higher.

Net migration to the countries of the EEA has shown a fast increase during the last decades. For the period 1980-1984 the yearly average amounted to about 90 thousand. In the second part of the eighties a net inflow of half a million was recorded. In the early nineties this figure was more than doubled to well over one million.

The arrival of such a huge flow of immigrants led to political reactions in many countries. Restrictive laws were introduced in a lot of countries. Particular the policy towards asylum seekers has become more severe. As a result net migration went down after the peak in 1992 of 1.36 million. In 1994 net migration was nearly halved, namely to 791 thousand.

For some decades Germany has received the largest number of immigrants of all countries of the EEA. In the period 1960-1975 non-German immigrants mainly came from Italy, Spain and Greece. Since the mid seventies Germany has received large flows of immigrants from Turkey and Yugoslavia. Especially since the mid eighties ethnic Germans returning to Germany became of prominent significance due to easing of travel restrictions everywhere. The leading countries of origin were the former Soviet Union, Poland and Romania. In these countries the German minority group is still quite large. Germany has also been confronted with greatly increased number of persons seeking asylum in the last decade. In 1990 193 thousand persons applied for asylum. These asylum seekers come increasingly from Eastern and South-eastern Europe as well as various African countries. The majority are not victims of political persecution, but economic refugees (Bähr and Köhli, 1993).

In 1992 net migration in Germany amounted to nearly 800 thousand. However, net migration had fallen to 316 thousand in 1994 due to new restrictive immigration laws. According to the three scenarios Germany will remain the country receiving most immigrants, even though in the Baseline scenario net migration will decline to a level of 200 thousand. There are three explanations of this decline: first, overall migration is declining in this scenario; secondly, the flow of *Aussiedler* returning to Germany will shrink (see also section 7.6) and thirdly, asylum seekers will be distributed more evenly

over the countries of the EEA in the future. In the short run the decline will be modest. Preliminary figures for 1995 indicate that net migration will turn out to be around 400 thousand persons. Monitoring results of previous scenarios (see section 5) showed that the high variant (an annual net migration of 280 thousand from 1994 on) was just high enough to keep up with observed figures until 1994. After having taken into account the expected rise in net migration in 1995, it is assumed that in the Baseline scenario net migration will be about 100 thousand higher than the previous high scenario until 2000 (and the High variant will even be about 200 thousand higher).

After Germany, Europe's main destination countries nowadays are Italy, United Kingdom and France.

In the sixties Southern European countries (i.e. Italy, Spain, Portugal and Greece) were clear examples of emigration countries. Economic growth combined with new democratic structures has changed this situation. The expanding economies have increased the demand for unskilled labour. However, to some extent these countries serve as transit states for migrants who wish to settle in North-western Europe. Immigration restrictions and tighter border controls among Northern European states have encouraged clandestine immigration from the developing countries into Southern Europe. By the mid eighties labour shortages existed in areas unattractive to the indigenous population, especially in the service industries. The underground economies also began to flourish (Salt, 1995).

Economic deprivation, political instability and ethnic violence are still present - and often in a more acute form - in countries in the proximity of Southern Europe (amongst others North Africa, Middle East, Yugoslavia, Albania, former Soviet Union), which accentuates the attractiveness of the Mediterranean countries.

The demographic pressure may be compounded by large differences in population growth. The countries of North Africa are characterised by high fertility figures in the past and as a result more than 40 percent of the population of Algeria, Morocco, Tunisia and Egypt are currently under 15 (Salt, 1995). In a situation of stagnating economic growth this leads to excess supply - now and also in the near future - which may cause mass movements. In contrast, the fertility figures are very low in the southern European countries. Without migration, zero population growth or even negative population growth could be possible in the near future (especially in Italy and Spain). The ageing process is well under way which might lead to labour shortages in the near future, especially in the margins of the labour market. Over recent years immigrants have found jobs most easily in agriculture and fisheries and in the service sector (Misiti et al., 1995).

Hence, immigration can play a decisive role in the near demographic future: as a counterweight to changes caused by the incipient decline in the indigenous population and economically as a solution for labour shortages of especially less qualified and heavy manual work.

A caveat is in place when interpreting migration figures of the south European countries. For several countries, most recent census results showed a large discrepancy between the migration figures based on data from the population register of the municipalities and the size of the population according to the census. Hence, it is not completely certain what the actual levels of immigration to these countries are. Obviously this complicates the making of assumptions on future migration.

Italy is the most attractive migration country in the future, after Germany. In 1994 Italy counted 153 thousand more immigrants than emigrants. In the Baseline scenario this figure will shrink to 80 thousand in 2010. Spain is the third most popular immigration country with a net migration figure of 60 thousand in 2010 according to the Baseline scenario.

Immigration to the United Kingdom is still rooted in its relationships with former dominions and colonies (Fassmann and Münz, 1992). Most of the ethnic minority has a Indian, Pakistani or Bangladeshi descent. Labour migration from Yugoslavia or Turkey is practically non-existent. Except for Ireland, immigration from other European countries is comparatively low.

In France, immigration can also be tied to relationships with former colonies. The recruitment area of French immigration comprises especially Algeria, Morocco and Tunisia.

During 1990-1994 both the United Kingdom and France had a net migration figure of about 80 thousand per year. According to the Baseline scenario these countries will share the fourth position as most important immigration country. Around 2010 net migration will be nearly the same with 50 thousand in France and 45 thousand in the United Kingdom according to the Baseline scenario.

Belgium and the Netherlands too had significant immigration from their former colonies. These countries were also the destination of sizeable flows of guestworkers from the Mediterranean countries. Remarkable is a considerable number of Dutch citizens living in Belgium in order to pay lower taxes. The location of headquarters of international organisations in Brussels may also have led to additional immigration to Belgium.

According to Bähr and Köhli (1993) the Netherlands (and also Sweden) has openly accepted the concept of a multi-ethnic and multi-cultural society. Policies are directed towards minorities and aim to create a society in which such groups have an equal place and full opportunities to develop both individually and as groups.

In the Baseline scenario the Netherlands will have a net migration figure of 35 thousand in 2010 against 15 thousand for Belgium.

Austria can be considered as a gateway for asylum seekers, expatriates, refugees and transmigrants to the West (Fassmann and Münz, 1992). Neighbouring countries in Central and Eastern Europe are becoming important as suppliers of foreign labour.

In the Baseline scenario Austria will count more than 20 thousand net migrants in 2010.

Sweden is the most important immigration country in Northern Europe. Immigrants come from a relatively large number of countries, probably attracted by the historically strong economy.

Sweden had a high net migration in 1994, due to a rather large influx of asylum seekers.

The Baseline scenario assumes a net migration figure of 20 thousand in 2010.

Countries with negative net migration in the nineties are Ireland and Iceland. Ireland was also characterised by negative figures in the past, although in the seventies positive net migration figures could be observed. The remarkable change from a negative net migration figure of -43 thousand in 1989 to a positive net migration figure of 4 thousand in 1991 can be explained by the high economic growth in the last decade. In 1987 Ireland was one of Europe's poorest countries, while nowadays Ireland's economy has surpassed Britain's and stands close to the average for the European Union (The Economist, 1997).

Migration has served Ireland for centuries as a kind of economic safetyvalve: in bad times people emigrate and in good times they come back. The exodus reached its peak after the Famine of the 1840's but also in the last decades the outflow has been considerable. Due to the booming economy emigration has diminished. It is assumed that this situation will prolong in the future. So, net migration will nearly be zero in 2010 according to the Baseline scenario.

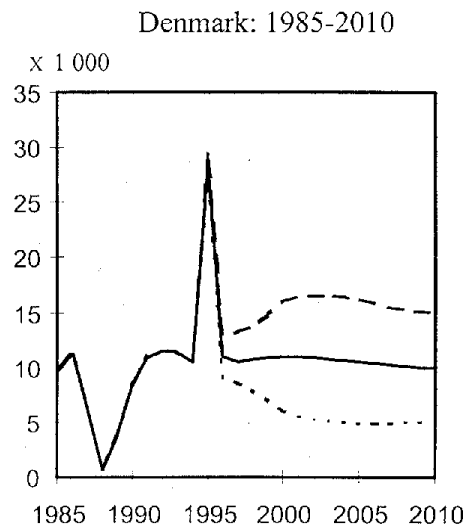
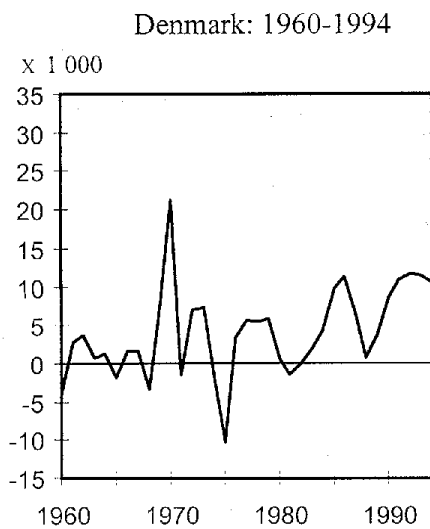
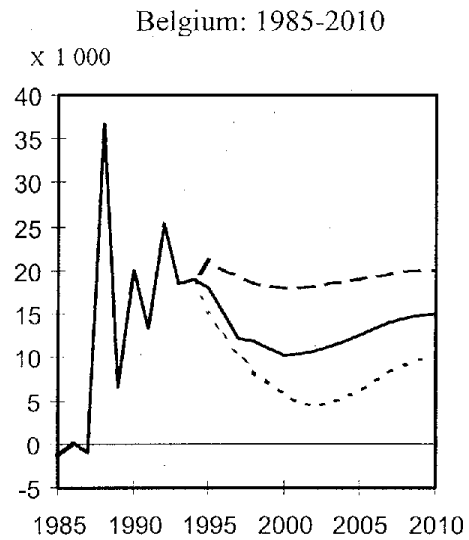
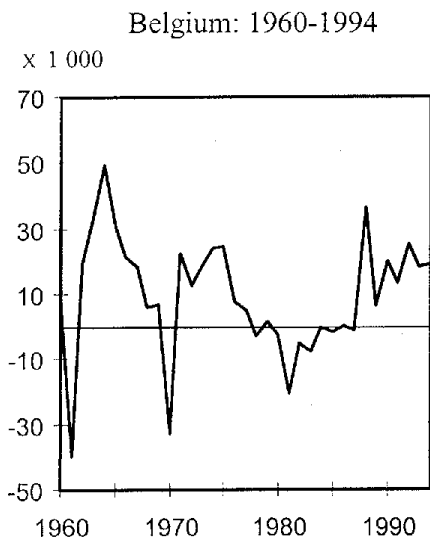
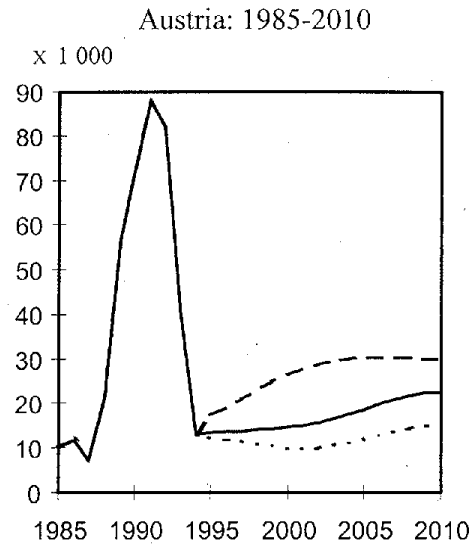
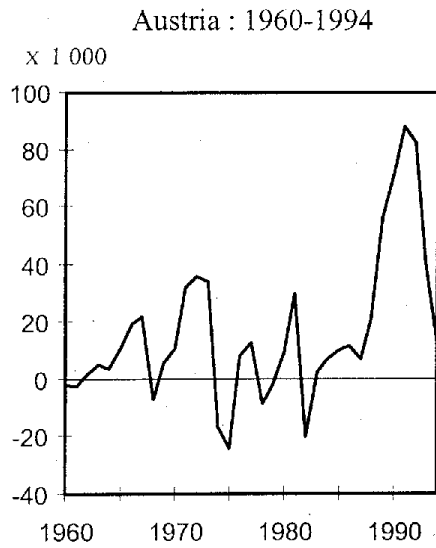
If we relate net migration to the population size of each country, Germany is still the most important country (see map 2). The crude rate of net migration was also very high in Sweden and Luxembourg in 1994. High crude rates of net migration could also be observed in Italy, Denmark and Greece.

According to the Low scenario the only country with over 100 thousand net migrants in 2010 will be Germany (see map 3). France, Italy and Spain constitute a group of countries with over 30 thousand net migrants. In the Baseline scenario United Kingdom and the Netherlands have also joined this group (see map 4). In the High scenario Italy joins Germany as a country with over 100 thousand migrants while Austria, Greece, Portugal and Sweden move to the group of countries with over 30 thousand migrants (see map 5).

A comparison of the new scenarios with those made by Eurostat in 1990 learns that in the short run the margins between the Low and High scenario are almost the same, while in the long run the margin is somewhat smaller. In 2000 the margin is about 600 thousand which equals the margin of the previous scenarios (valid from 1995 on). In 2010 the margin is reduced to 400 thousand. The main reason is that in the current High scenario the increase of net migration is curtailed due to political reactions which results in increasingly restrictive immigration policies. As a result in the long run net migration will decline even in the High scenario. In the current Low scenario net migration is higher than in the previous Low scenario because high observed migration levels in the beginning of the nineties have been taken into account.

The time horizon of the current scenarios is longer: the target year is set at 2010, i.e. 16 years after the last observed year, in stead of 1995 for the previous scenarios, i.e. 6 years after the last observation.

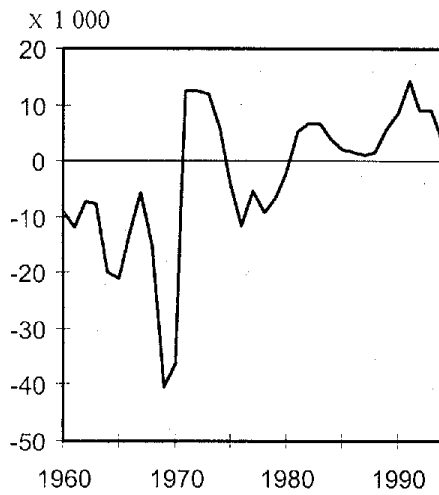
### 9. Net migration, according to three scenarios



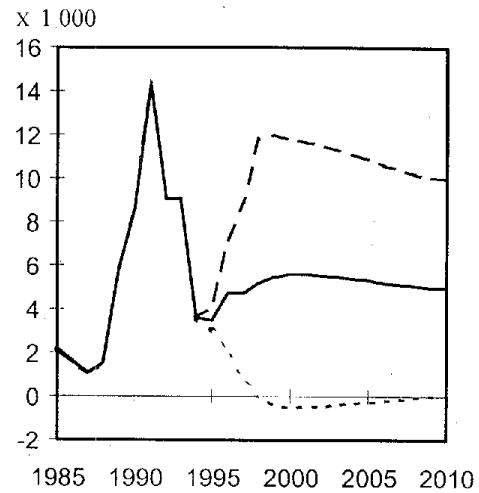
— observed/ baseline scenario    ..... low scenario    - - - - - high scenario

## 9. Net migration, according to three scenarios (continued)

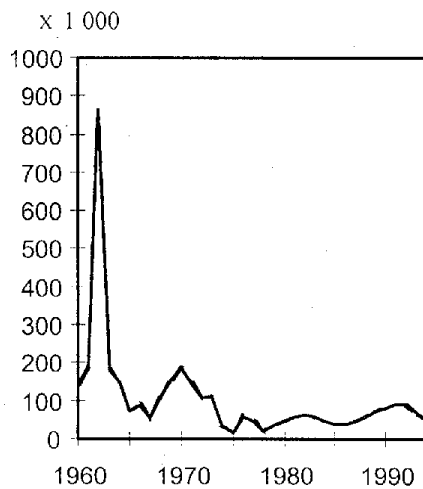
Finland: 1960-1994



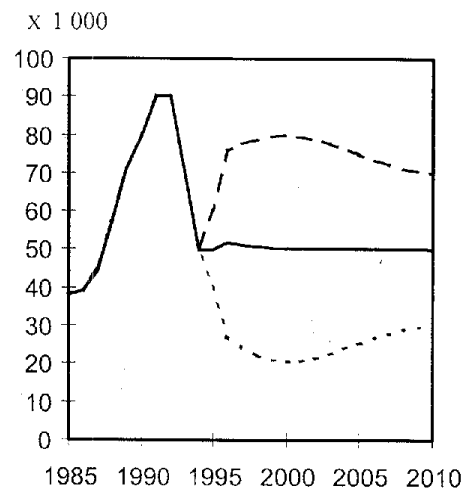
Finland: 1985-2010



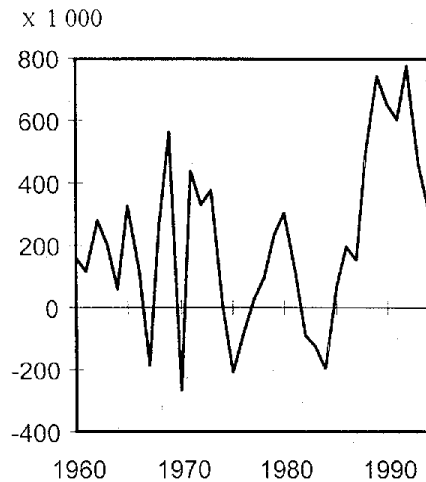
France: 1960-1994



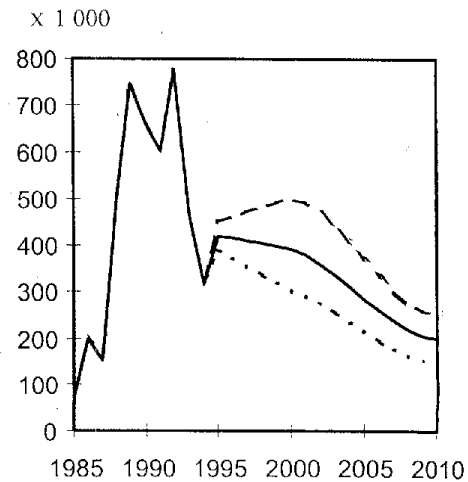
France: 1985-2010



Germany: 1960-1994



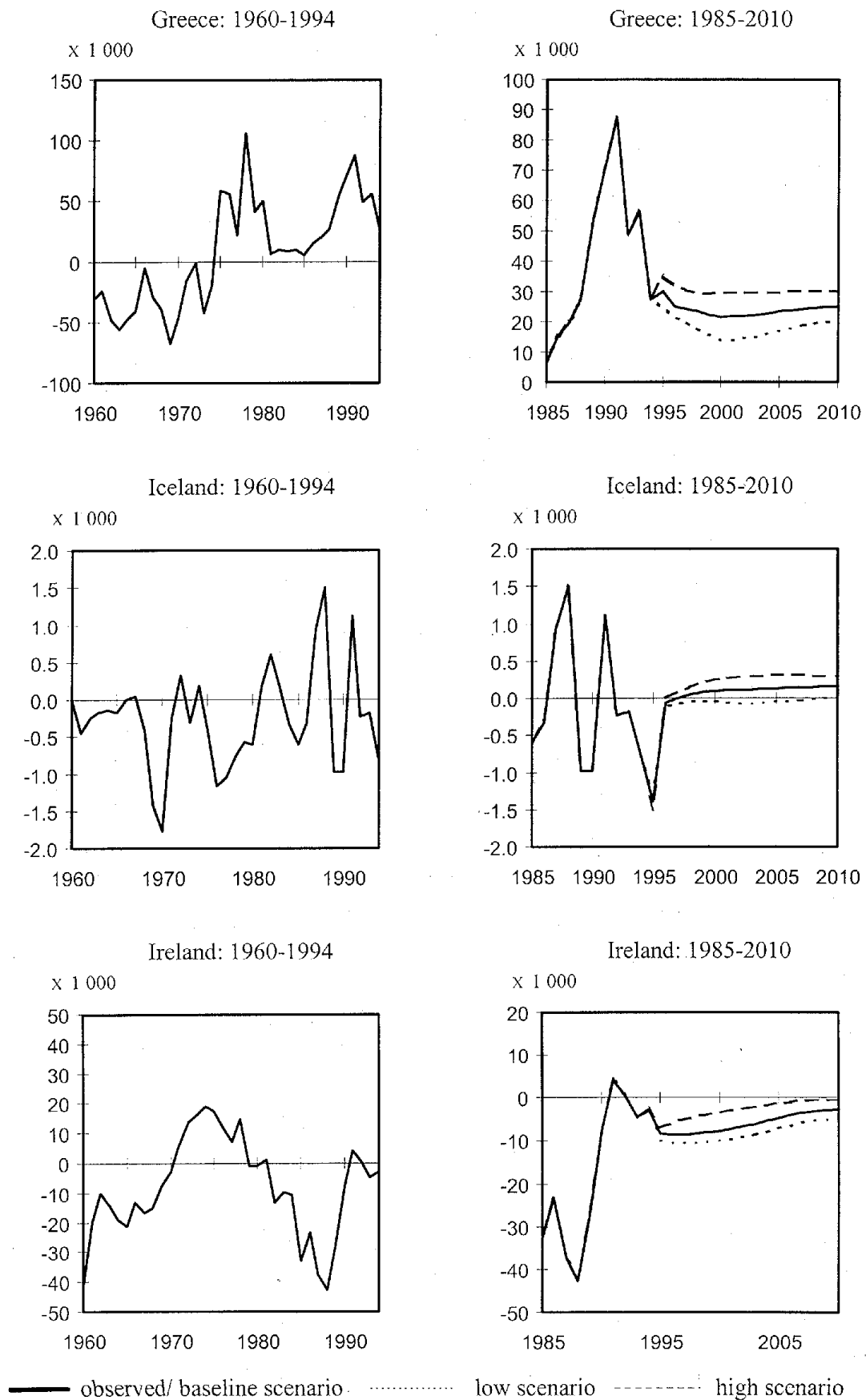
Germany: 1985-2010



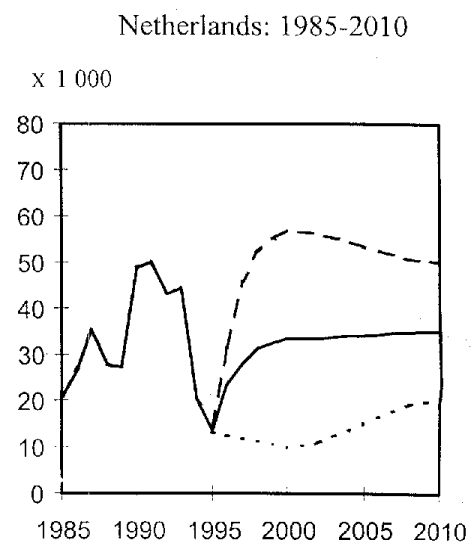
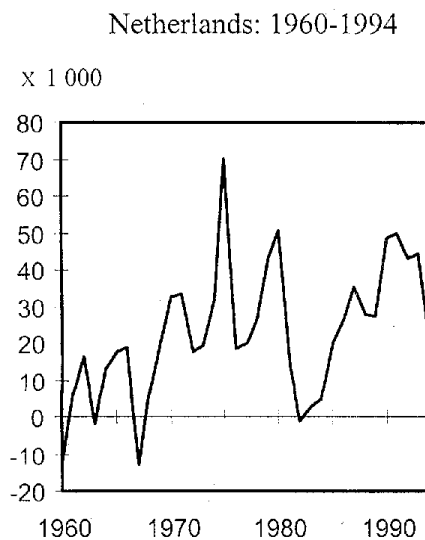
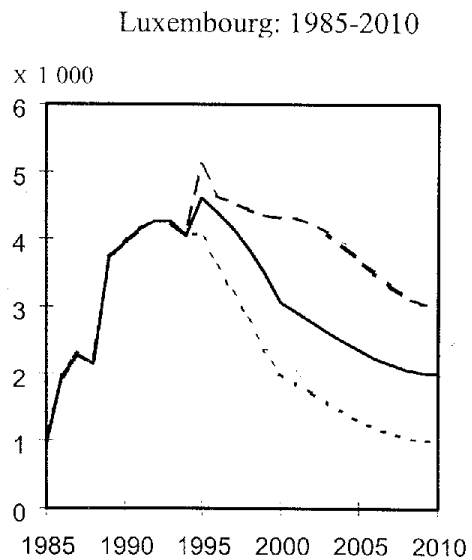
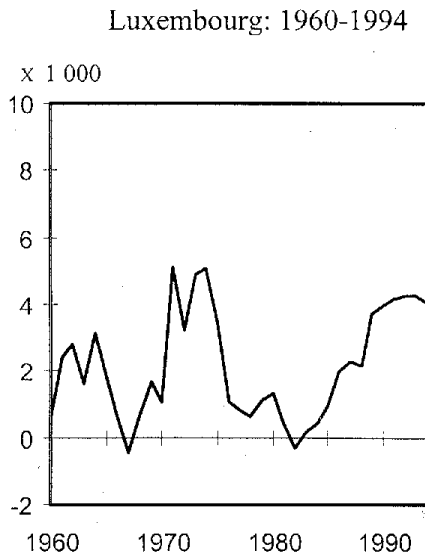
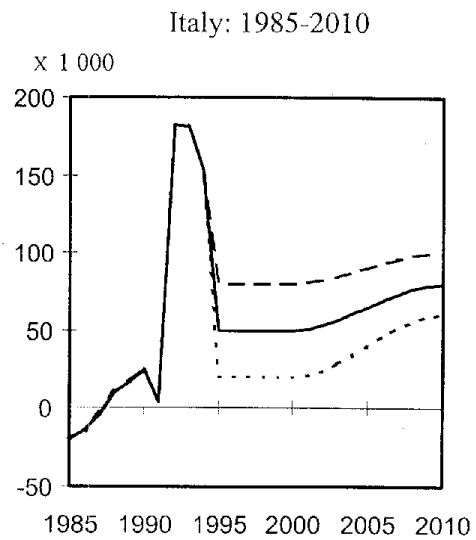
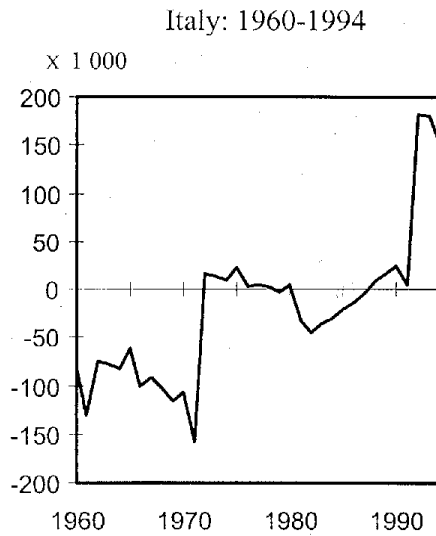
— observed/ baseline scenario    ..... low scenario    - - - - - high scenario



## 9. Net migration, according to three scenarios (continued)

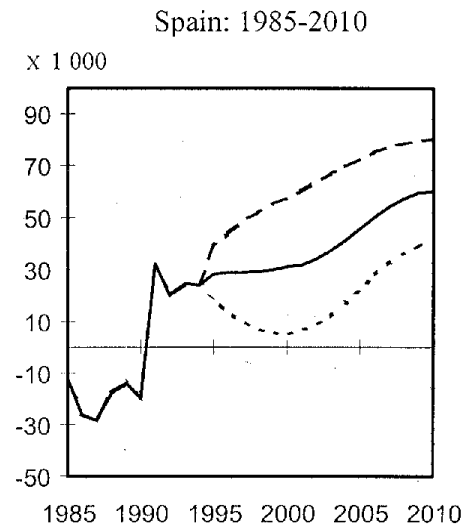
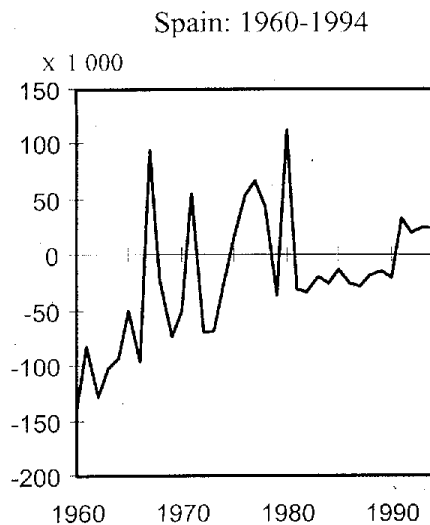
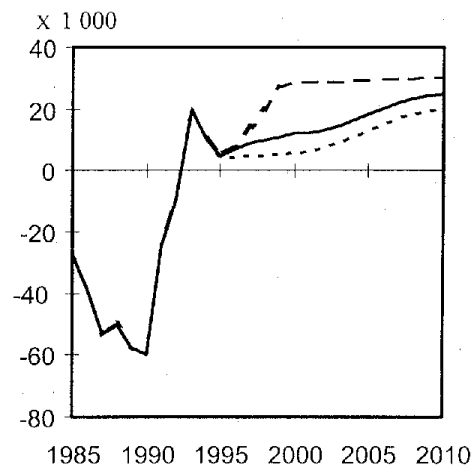
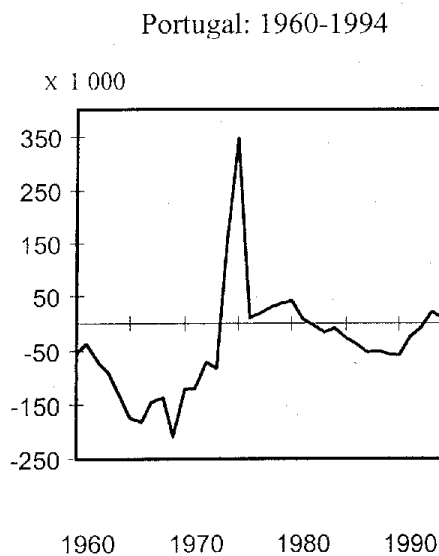
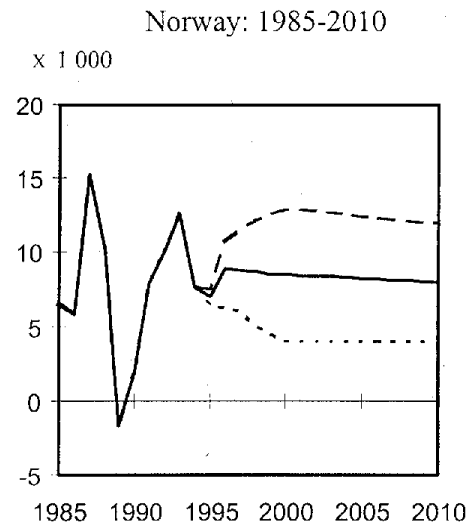
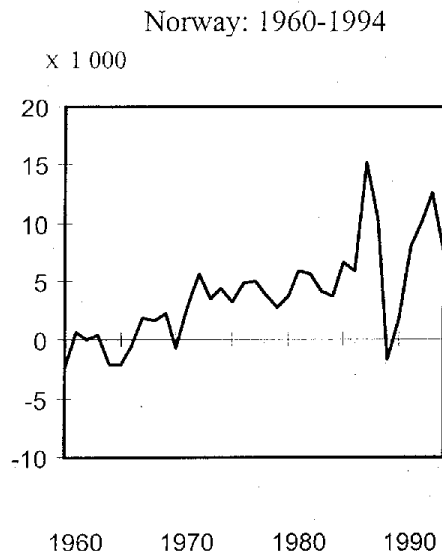


## 9. Net migration, according to three scenarios (continued)



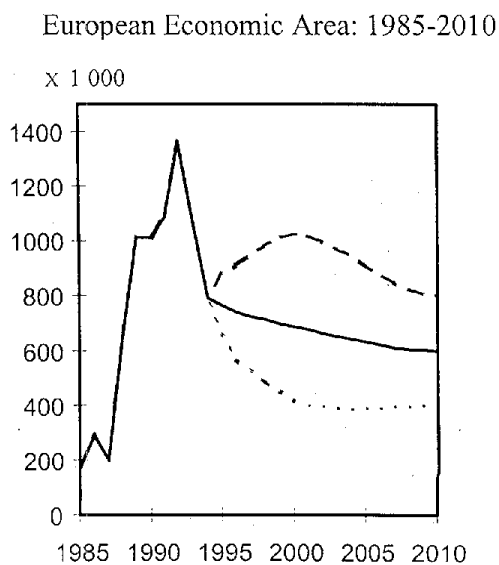
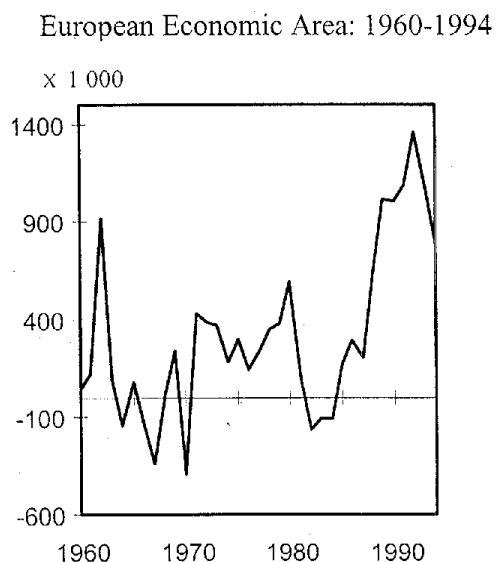
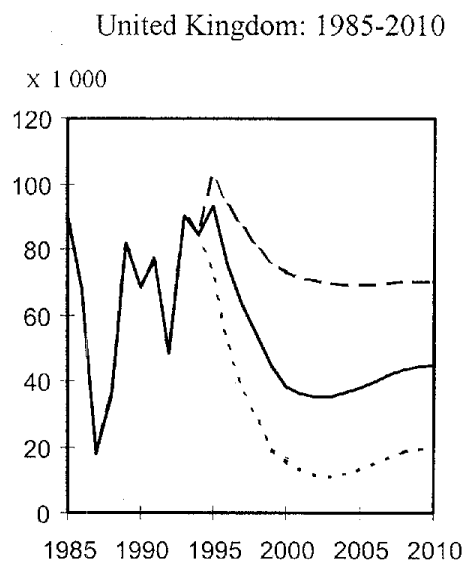
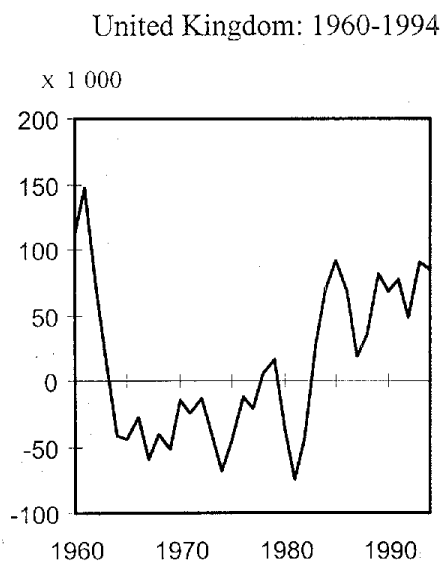
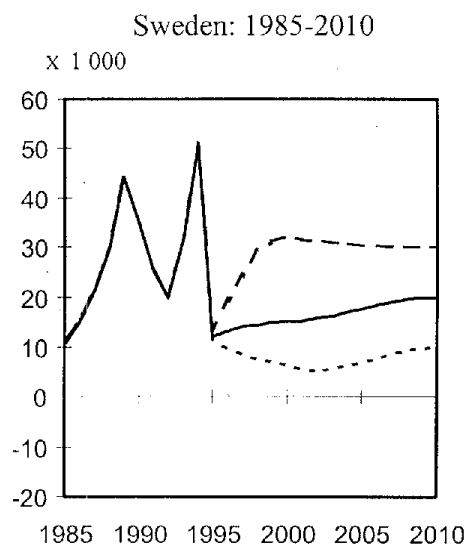
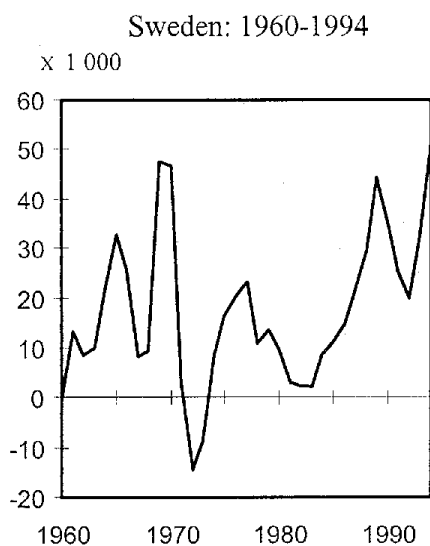
— observed/ baseline scenario    ..... low scenario    - - - - - high scenario

### 9. Net migration, according to three scenarios (continued)



— observed/ baseline scenario    ..... low scenario    - - - - - high scenario

## 9. Net migration, according to three scenarios (continued)



— observed/ baseline scenario    ..... low scenario    - - - - - high scenario

## 5. Net migration, observation and three scenarios 1)

	Austria	Belgium	Denmark	Finland	France
x 1,000					
1960/1964	1.0	14.3	0.9	-11.2	303.4
1965/1969	10.0	16.7	1.0	-18.9	95.3
1970/1974	19.1	9.0	6.5	1.3	114.8
1975/1979	-3.0	7.2	2.0	-7.3	33.8
1980/1984	5.6	-7.1	1.1	4.1	52.3
1985/1989	21.1	8.2	6.4	2.4	49.8
1990/1994	59.0	19.2	10.6	9.0	76.0
1994	13.1	19.1	10.5	3.6	50.0
Low scenario					
2000	9.9	5.9	6.0	-0.5	20.4
2005	11.8	6.1	4.9	-0.3	25.2
2010	15.0	10.0	5.0	0.0	30.0
2010 (previous)	15.0	9.0	5.0	5.0	25.0
Baseline scenario					
2000	14.8	10.2	11.0	5.6	50.1
2005	18.6	12.6	10.5	5.3	50.0
2010	22.5	15.0	10.0	5.0	50.0
High scenario					
2000	26.4	18.0	16.0	11.7	79.8
2005	30.1	19.0	16.1	10.9	74.9
2010	30.0	20.0	15.0	10.0	70.0
2010 (previous)	40.0	22.0	15.0	14.8	70.0

### 5. Net migration, observation and three scenarios (continued)

	Germany	Greece	Iceland	Ireland	Italy
	x 1,000				
1960/1964	162.9	-41.2	-0.2	-20.9	-89.5
1965/1969	220.7	-35.8	-0.4	-14.8	-94.3
1970/1974	175.1	-24.8	-0.4	10.3	-45.2
1975/1979	12.6	56.7	-0.8	10.1	6.0
1980/1984	1.8	17.2	0.0	-6.6	-27.8
1985/1989	332.1	24.4	0.1	-32.9	-2.5
1990/1994	562.6	58.1	-0.2	-2.0	108.9
1994	315.6	27.3	-0.8	-2.6	153.4
Low scenario					
2000	300.0	13.8	0.0	-10.0	20.0
2005	212.5	16.9	-0.1	-7.2	40.0
2010	150.0	20.0	0.0	-5.0	60.0
2010 (previous)	100.0	15.0	0.0	-15.0	30.0
Baseline scenario					
2000	390.6	21.7	0.1	-7.7	50.0
2005	282.8	23.3	0.1	-4.7	65.0
2010	200.0	25.0	0.2	-2.7	80.0
High scenario					
2000	500.0	29.5	0.2	-3.4	80.0
2005	368.8	29.8	0.3	-1.3	90.0
2010	250.0	30.0	0.3	-0.4	100.0
2010 (previous)	280.0	40.0	0.3	0.0	100.0

## 5. Net migration, observation and three scenarios (continued)

	Liechtenstein	Luxembourg	Netherlands	Norway	Portugal
x 1,000					
1960/1964	0.3	2.1	4.2	-0.6	-78.4
1965/1969	0.1	0.9	9.6	0.6	-169.7
1970/1974	0.4	3.9	26.7	3.1	-45.0
1975/1979	0.3	1.4	35.7	4.0	88.9
1980/1984	0.0	0.4	14.2	4.6	4.5
1985/1989	0.2	2.2	27.4	7.2	-45.4
1990/1994	0.2	4.1	41.4	8.0	-12.8
1994	0.2	4.0	20.4	7.6	10.3
Low scenario					
2000	0.0	2.0	10.0	4.0	5.8
2005	0.0	1.3	15.0	4.0	12.9
2010	0.0	1.0	20.0	4.0	20.0
2010 (previous)	0.0	1.0	20.0	5.0	15.0
Baseline scenario					
2000	0.1	3.1	33.4	8.4	12.1
2005	0.1	2.3	34.2	8.2	18.6
2010	0.1	2.0	35.0	8.0	25.0
High scenario					
2000	0.1	4.3	56.8	12.9	28.6
2005	0.1	3.7	53.4	12.4	29.3
2010	0.1	3.0	50.0	12.0	30.0
2010 (previous)	0.3	3.0	50.0	14.8	40.0

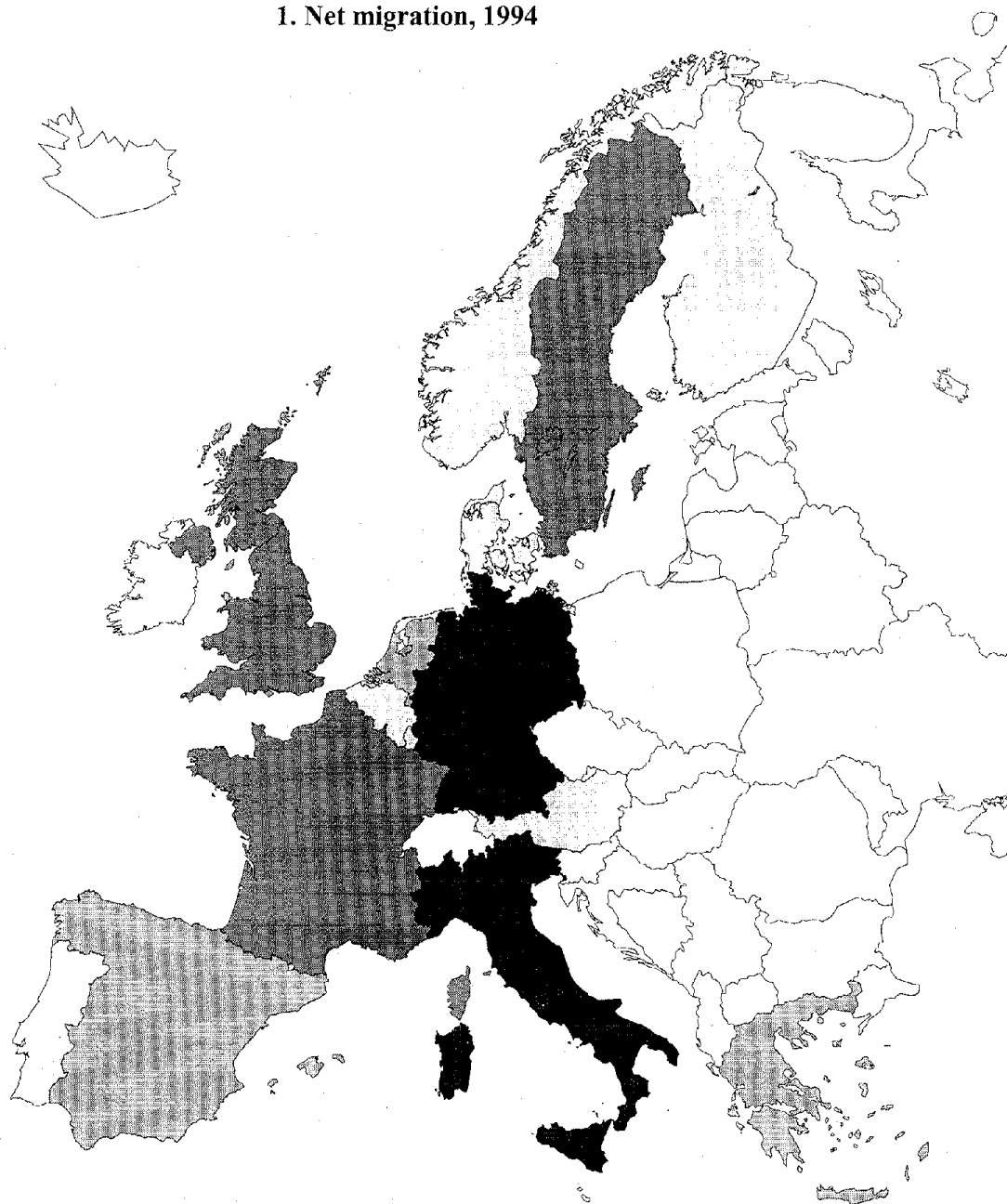
### 5. Net migration, observation and three scenarios (continued)

	Spain	Sweden	United Kingdom	EEA
	x 1,000			
1960/1964	-109.7	10.6	59.8	207.7
1965/1969	-30.1	24.6	-44.7	-29.1
1970/1974	-32.1	6.9	-32.1	197.5
1975/1979	28.3	16.7	-11.2	281.3
1980/1984	0.8	5.2	-11.2	59.1
1985/1989	-19.7	24.1	58.9	464.1
1990/1994	16.2	32.5	73.5	1064.4
1994	24.0	50.9	84.2	790.7
Low scenario				
2000	4.9	6.3	16.2	414.8
2005	22.5	6.9	13.1	385.6
2010	40.0	10.0	20.0	400.0
2010 (previous)	25.0	10.0	15.0	285.0
Baseline scenario				
2000	31.1	15.2	38.3	687.9
2005	45.5	17.6	37.9	628.0
2010	60.0	20.0	45.0	600.0
High scenario				
2000	57.2	32.0	73.0	1023.2
2005	72.4	30.4	69.0	909.1
2010	80.0	30.0	70.0	800.0
2010 (previous)	70.0	40.0	60.0	860.0

1. In this table, net migration is the difference between the total population on 1 January and 31 December for a certain calendar year, minus the difference between births and deaths. Therefore the (observed) figures in this table include corrections and may differ from the difference between immigration and emigration.



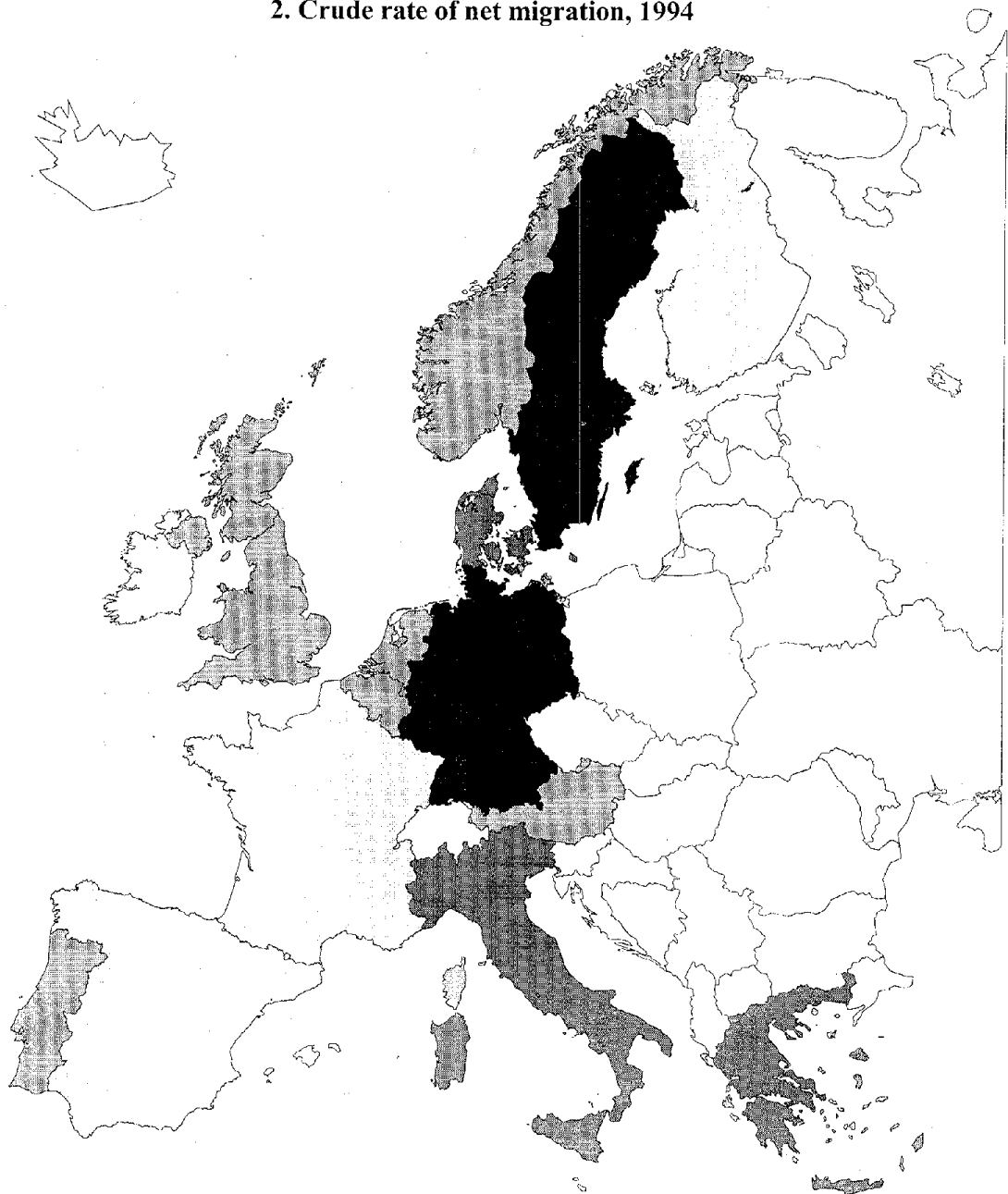
## 1. Net migration, 1994



x 1000

<= 0	0 - 20	20 - 30	30 - 100	>= 100
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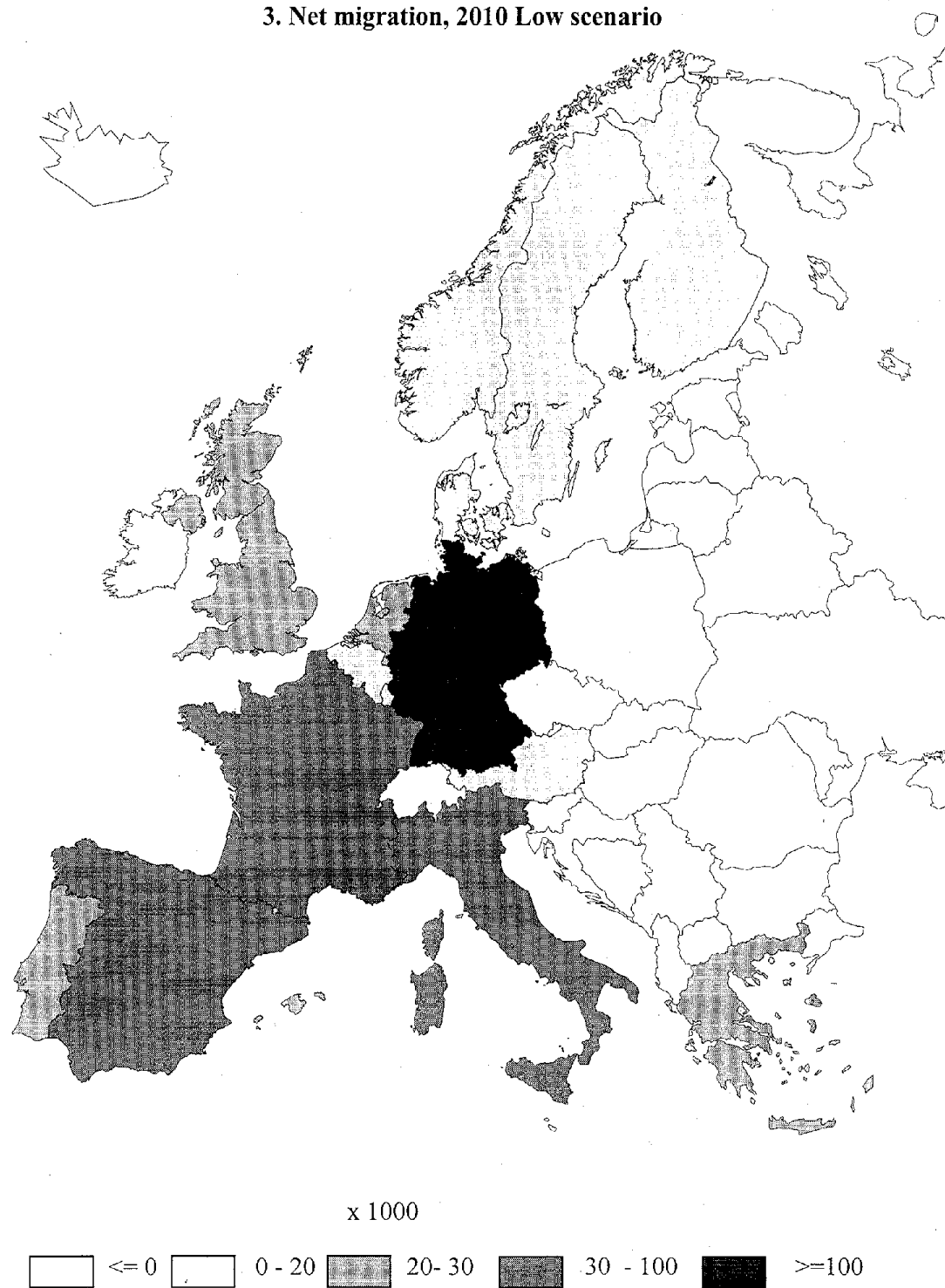
## 2. Crude rate of net migration, 1994



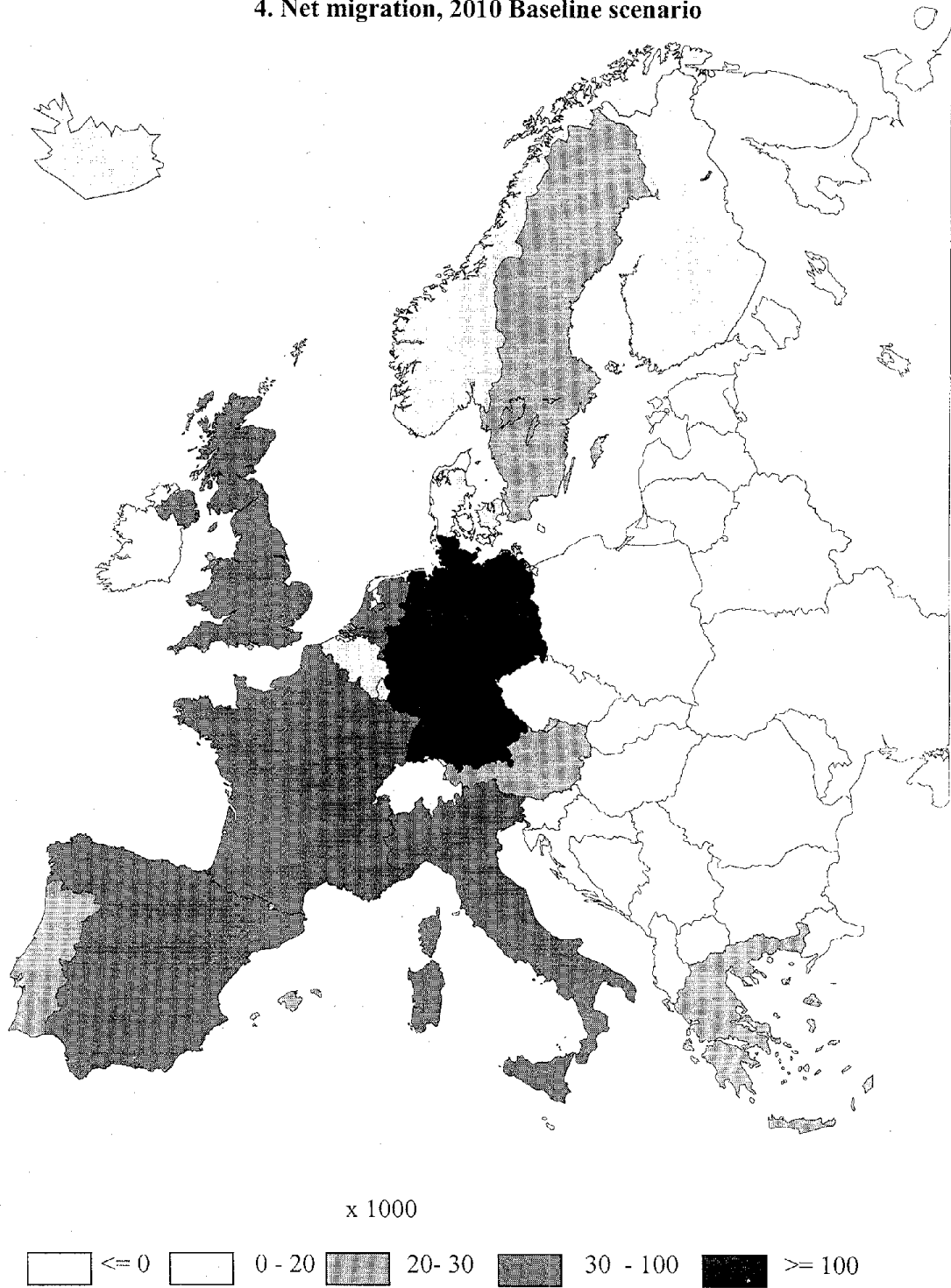
per 1000 inhabitants



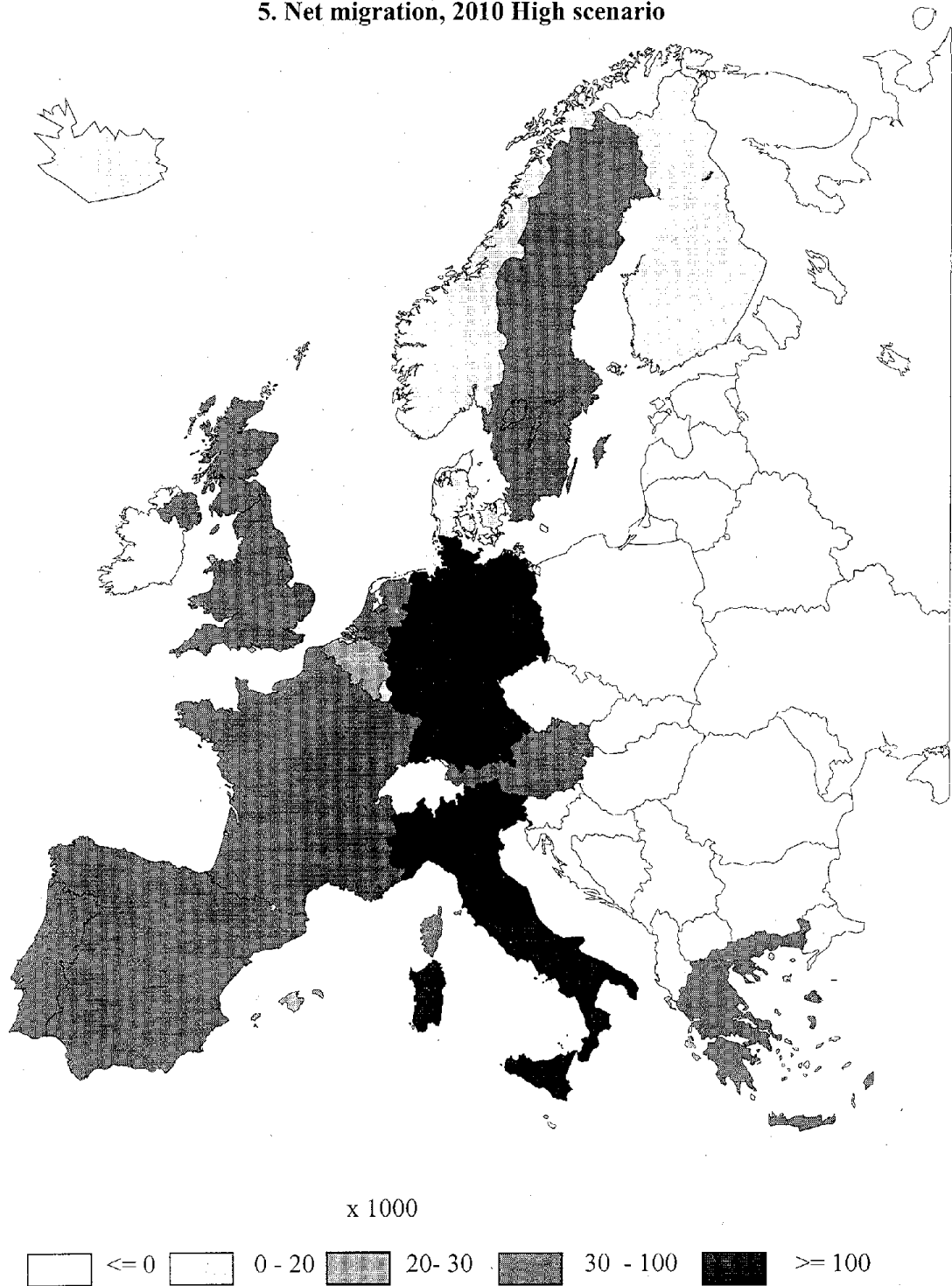
### 3. Net migration, 2010 Low scenario



#### 4. Net migration, 2010 Baseline scenario



## 5. Net migration, 2010 High scenario



## 7.6 Composition of net migration flows

Trends in net migration are caused by different developments of various categories of migrants. Due to lack of reliable data it is very difficult to assess the size of these groups of migrants. For that reason, in specifying the size of separate migration categories in the scenarios it was decided to follow a top-down approach rather than a bottom-up approach. This implies that the size of the separate groups is determined after the assessment of the size of total migration instead of the other way round. Further, given the uncertainty connected with (trends in) the observed data, it is decided to make estimates only for the short run, i.e. until the year 2000.

The method can be described as follows. Based on the most recent available data, shares of different migrant groups in total net migration have been calculated. Then, assumptions have been made about how these shares might change in the Baseline scenario. For the Low and High scenario the Baseline shares were used as a standard and plausible differences from the standard were chosen. The assumptions were made on the basis of the specific economic conditions of these scenarios. In the case of *Aussiedler*, however, a different procedure has been followed. Because now and most probably also in the future, the entrance in Germany is regulated by quota, the assumptions have been stated in terms of numbers of migrants. Consequently, the shares of the other migrant groups refer to their respective shares in net migration after having subtracted the number of *Aussiedler*.

Five migrant groups are distinguished:

- *Aussiedler*;
- asylum seekers;
- labour migrants;
- nationals;
- persons entering because of family formation and reunification, and others (e.g. students).

There are severe data limitations in assessing the size of the separate categories of migrants. In many cases only data on asylum seekers (number of applications) and inflow of foreign workers (numbers of work permits issued, often not required for EEA members) are available (Sopemi, 1995). Also some data on the migration of nationals to/from the EEA could be obtained from migration statistics (Eurostat, 1994).

In the following section, *Aussiedler*, asylum seekers, labour migrants and nationals will be discussed as separate groups, while immigration due to family reunification and formation and other reasons will be dealt with as part of the remaining group.

With respect to the development of the number of *Aussiedler* the assumptions are rather straightforward. As has been said before, the number of aussiedler immigrating in 1991 and 1992 amounted to around 220 thousand per year (Statistisches Bundesamt, 1994). This is the level to which Germany has limited the inflow of *Aussiedler* (quota). It is assumed that the inflow of *Aussiedler* will gradually decline in the near future (in the year 2000 some 30 thousand less than now), because the 'reservoir' of *Aussiedler* will gradually be depleted. Furthermore, it is expected that socio-cultural motives are much more important than economic motives for this kind of migrants. So, in the Low scenario an unfavourable economic growth only leads to slightly less *Aussiedler* (10 thousand annually) coming to Germany than in the High scenario.

In the beginning of the 1980s the inflow of asylum seekers was low. Gradually, during the decade, the share of asylum seekers in the total inflow increased, and reached an absolute peak in the beginning of the 1990s. Governments tightened the immigration regulations, due to amongst others a negative public opinion. The acceptance of the Treaty of Schengen in 1995 constitutes a new legal barrier to curtail the arrival of asylum seekers: they can be sent back to the countries they travel through. This means that only asylum seekers coming directly from countries outside the EEA have to be accounted for.

The immigration regulations appeared to be effective: from *table 6* can be deduced that between 1992 and 1994 the number of asylum seekers as a percentage of total immigration of a group of selected countries of the EEA has dropped from around 40% to 25%. It should be noticed that not all asylum seekers are registrated as immigrants and that there may be a time-lag between the request to be admitted as an asylum seeker and the registration as immigrant. Nevertheless, this percentage of 25% has been used in the Baseline scenario as the share of asylum seekers in total net migration (minus the number of Aussiedler) of the EEA. By using this percentage it is implicitly assumed that the shares of the specified migrant groups in emigration are equal to that in immigration. It is hard to assess the validity of this assumption due to lack of data on emigration of the specified migrant groups. It is also assumed that in the non-selected countries of *table 6* similar proportions occur.

#### 6. Asylum seekers and labour migrants since 1983 for some selected countries.

	Country group 1)			Country group 2)		
	immigration 3)	asylum seekers	II as a	immigration 3)	labour migrants	II as a
	I	II	% of I	I	II	% of I
1983	459837	33400	7	389375	46000	12
1984	517288	62600	12	444633	49000	11
1985	567192	114900	20	480610	58800	12
1986	659654	135500	21	560988	66500	12
1987	635338	112200	18	525507	81400	15
1988	808310	151700	19	691126	104900	15
1989	980630	199100	20	848296	135600	16
1990	1090018	304200	28	949244	192900	20
1991	1119057	303100	27	987463	295300	30
1992	1440616	611200	42	1315887	461700	35
1993	1248100	480300	38	1096152	374700	34
1994	1040219	263100	25			

1) Belgium, Denmark, Finland, Germany, Netherlands, Norway, Sweden, United Kingdom.

2) Belgium, Denmark, Germany, Luxembourg, United Kingdom.

3) Immigration exclusive Aussiedler.

Sources: asylum seekers: SOPEMI-OECD report, 1994;  
labour migrants: SOPEMI-OECD report, 1994;  
immigration: Eurostat, 1994.

In the Low scenario it is assumed that the percentage of asylum seekers will be lower. The reason for assuming a lower percentage is that in this scenario high unemployment leading

to a negative attitude towards immigrants is supposed. Moreover, government policies proved to be able to regulate immigration of asylum seekers, while - because of international conventions - migration related to family reunification/formation is less easy to regulate. However, the decrease in the share will be small because the migration pressure will remain high, while entrance as a worker will - because of the economic situation - be even more difficult. This will leave little other alternatives to legally enter the EEA. The share of asylum seekers in net migration in the Low scenario has been set at 5 percent points lower than in the Baseline scenario.

In the High scenario it is assumed that economic growth will stimulate asylum seekers to immigrate, because there are more possibilities to participate in the economic production process. The share of asylum seekers in net migration in this scenario has been set at 5 percent points higher than in the Baseline scenario.

Not only the share of asylum seekers in immigration has grown in the eighties and early nineties, but also the share of labour migrants. For the countries Belgium, Denmark, Germany, Luxembourg and the United Kingdom taken together, the share amounted 34% in 1993. This percentage has been used as the share of labour migrants in net migration (after subtraction of the number of Aussiedler) in the Baseline scenario. In the Low scenario the share of labour migrants should be less in view of lower labour demand in this scenario. Because labour migration can be better regulated by the individual countries than the immigration of refugees, and because potential migrants might try to enter as refugees instead of as labourers, it is assumed that the decrease of the share of labour migration in net immigration in the Low scenario compared with the Baseline scenario, will be larger than the decline of the share of asylum seekers. For asylum seekers a decrease of 5 percent points was assumed, while for labour migrants the decrease has been set at 7.5 percent points.

In the High scenario, which assumes more growth in the labour market than experienced in the past decade, the share of labour migrants in net migration will be, as was the case with asylum seekers, 5 percent points higher than in the Baseline scenario.

The share of nationals in net migration has been set at zero in the Baseline scenario. This implies that the flow of citizens going to another country is as large as the flow of citizens returning home. In the Low scenario a slight negative net migration of nationals is assumed since worse economic conditions in the EEA might stimulate out-migration, while in the high scenario slightly positive net migration numbers are assumed since economic prosperity is likely to attract nationals who left before. The share of nationals in net migration is set at -0.025 percent points in the Low scenario and 0.025 in the High scenario.

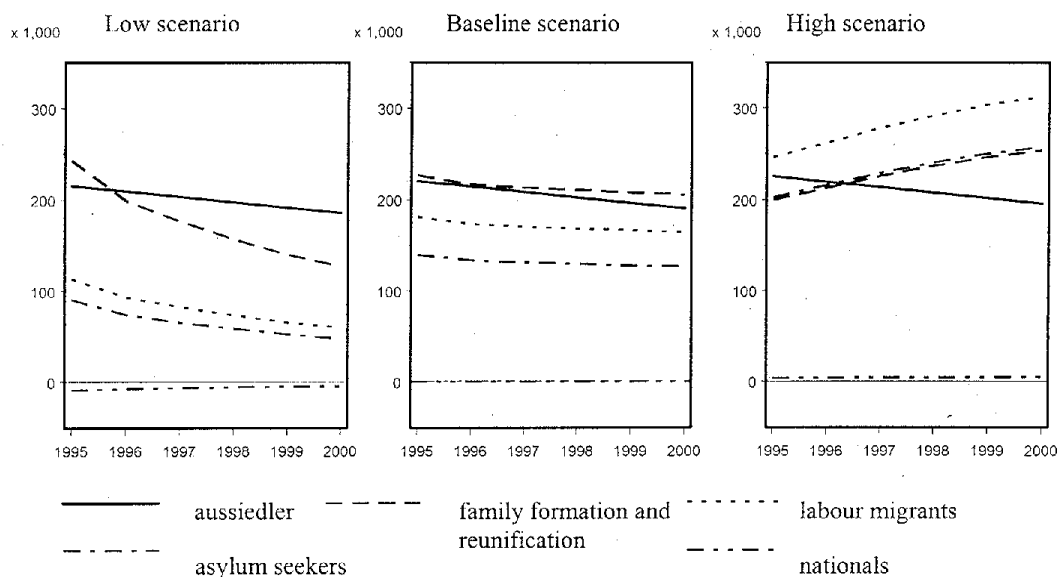
Family formation and reunification has been for many years in most EEA countries the largest component in net migration. However, its share has been diminishing rapidly in the eighties, as a reflection of the increasing number of asylum seekers and labour migrants while the numbers immigrating for family formation and reunification remained fairly constant over time. Given the shares of the other migrant groups, the share of family formation and reunification in net migration (exclusive the number of Aussiedler) can be estimated at 41% in the Baseline scenario, 56% in the Low scenario and 30% in the High scenario. The reason for a relative high share of family formation and reunification in the Low scenario is that it is assumed that the number of labour migrants and asylum seekers are more sensitive to economic circumstances and immigration policies than family formation and reunification. Consequently the share of labour and asylum migration is



lower in the Low scenario than in the Baseline scenario, and as a result the share of family formation and reunification is higher than in the Baseline scenario. In the High scenario the reverse is true, and the share therefore should be lower.

Graph 10 and table 7 present net migration of the separate migrant categories. It turns out that in the Low scenario *Aussiedler* will be the largest migrant group around the turn of the century. In the Baseline scenario the group of *Aussiedler* will be close to that of family formation and reunification, while in the High scenario labour migrants will be by far the largest migrant group around the year 2000.

### 10. Net migration of some selected groups



### 7. Net migration of some selected groups, according to three scenarios 1)

	Low scenario		Baseline scenario		High scenario	
	1995	2000	1995	2000	1995	2000
x 1,000						
asylum seekers	90	45	140	125	195	250
labour migrants	115	60	185	170	245	315
nationals	-10	-5	0	0	10	15
family formation	245	130	225	205	195	250
aussiedler	215	185	220	190	225	195
total	650	415	765	690	875	1025

1) Figures are given with a accuracy of 5,000.

## 8 Regional scenarios of international migration

### 8.1 Introduction

In this section net migration figures of each country, according to the national scenarios will be distributed over the regions. For each national scenario (i.e. Low, Baseline and High) a specific regional scenario will be developed. However, in contrary to the national scenarios the interpretation of the differences between the three scenarios is not in terms of (low, medium or high) level but in terms of rate of convergence. In case of the Low scenario it is assumed that the most recent 'observed' regional distribution will remain unchanged in the future while in the High scenario international migrants will spread more equally over the regions, considering the size of the regional population. The Baseline scenario also uses this assumption although the rate of convergence is lower.

The regions for which figures will be presented are obtained from the Nomenclature of Territorial Units for Statistics (NUTS), established by Eurostat. Although the NUTS has no legal value per se, it has been used since 1988 in the Community legislation. The NUTS is a hierarchical classification, subdividing each Member State of the EU into a whole number of NUTS 1 regions, each of which is in turn subdivided into a whole number of NUTS 2 regions and so on. In this publication regional figures will be presented at the NUTS 2 level. The number of regions in the EU at the NUTS 2 level is 208, namely 11 provinces in Belgium, 3 regions in Denmark, 38 Regierungsbezirke in Germany, 13 Development regions in Greece, 17 Comunidades autonomas + Ceuta y Mellila in Spain, 22 Régions + 4 DOM in France, Ireland as 1 region, 20 Regioni in Italy, Luxembourg as 1 region, 12 provinces in the Netherlands, 9 Bundesländer in Austria, 5 Comissaoes de coordenação regional and 2 Regioes autonomas in Portugal, 6 Suuralueet in Finland, 8 Riksområden in Sweden, and 35 Groups of counties in the United Kingdom.

In quite a lot of cases, getting a clear picture of the recent regional distribution is hampered by serious shortcomings in the statistical material. Only for the Scandinavian countries (Finland, Sweden, Denmark), Austria, the Netherlands and Italy regional figures on external migration were available. In all other cases (i.e. Germany, United Kingdom, Belgium, France, Spain, Portugal and Greece) no regional figures were at our disposal, so the regional distribution had to be estimated. This has been done by applying the so called "fourth-component"-method. This means that the differences in population figures which result after adjustments for births, deaths and internal migrants, are considered to be caused by external migrants. The initial results were discussed with the countries concerned. When necessary, revisions were made.

Section 8.2 gives a description of the method that has been used to arrive at scenarios on regional international migration flows. Section 8.3 will elaborate on the results of the regional scenarios.

## 8.2 Method

In order to distribute national figures on net migration over the regions, index figures are used. At first, index figures which indicate how much a region deviates from the national average were computed. In order to avoid random fluctuations, not only the last 'observed' calendar year is used in the assessment of the jump off value of this index, but also some earlier calendar years (the exact number may differ across countries).

Secondly, assumptions were made concerning the degree to which the index figures will change in the period covered by the scenarios. In the Low scenario it is assumed that the index of regional inequality will remain constant at the observed level until 2010 (and thereafter). This implies that neither divergence nor convergence will occur between regions in a country. In the High scenario a rather strong convergence is assumed: the difference between the national index figure (by definition 1) and the regional index figure in 2010 will be half of that of 1994. In the Baseline scenario slow convergence is assumed: the difference between the national and the regional index figure will decrease by one-fourth between 1994 and 2010.

In order to arrive at the index figure of regional inequality the crude net migration rate is computed, using recent observations

$${}^rCNMR = {}^rNM / {}^rP$$

where

${}^rCNMR$  = Crude Net Migration Rate of region  $r$ ;

${}^rNM$  = Net Migration of region  $r$ ;

${}^rP$  = Population size of region  $r$ .

This figure is not only computed for each region of a specific country but also for the country itself. At this point, it is possible to compute the start value of the index of regional inequality by

$${}^rI_{soy} = {}^rCNMR / {}^cCNMR$$

where

${}^rI_{soy}$  = Index figures of regional inequality of region  $r$  in set off year (= 1995);

${}^cCNMR$  = Crude Net Migration Rate of country  $c$ .

In the Low scenario the difference of the index figure minus 1 of each region will remain until 2010. In the Baseline scenario it will decline by 25% and in the High scenario by 50%. The index figure of each year between 1994 and 2010 is obtained by using linear interpolation.

Net migration of each region for each year in the scenario period can be computed as follows

$${}^rNM_y = {}^rI_y \times {}^cCNMR \times {}^rP_{1994}$$

where

${}^rP_{1994}$  = Population size of region  $r$  in year 1994.

It might be noticed that the formula uses as a constant the population size of a region in 1994 in each year of the scenario period. The reason is that the migration assumptions were assessed before the projected size of the population in each region was known.

In order to arrive at age- and sex specific net migration figures the national proportional distribution of net migration has been applied.

### 8.3 Three regional scenarios

*Figures 11.1 to 11.13* show the indices of regional inequality of net migration in 2010, according to the three regional scenarios for the countries which consist of more than one NUTS II region.

The spread of net migration flows over the regions depends on several factors. In the first place, regional disparities in economic development (the availability of jobs) may influence the direction of the flow of international migrants. Secondly, networks are important in the explanation of flows of migrants coming for reasons of family formation and reunification. Further, policies on facilities concerning the arrival of asylum seekers may steer the regional distribution.

In most countries international migrants are attracted by regions of high economic growth in view of the job opportunities and existing networks of migrants. In several countries the capitals are extremely important. According to Champion (1995), an economic core region can be distinguished in Europe, which can be seen as the principal area for migrants to move to. This area stretches from south-east England through Benelux, south-west Germany, Switzerland to Lombardy in north-west Italy. Further, a 'Sunbelt' can be distinguished as a second major European growth zone, which consists of Mediterranean tourist areas. This is especially the location for persons seeking retirement in the sun.

In the following a brief discussion will be given of the main results on the index of regional inequality (depicted in graphs 11.1 to 11.13). Background information about the regions is generally derived from the Commission of the European Communities (1993).

It should be emphasised that because of problems concerning both the availability and quality of the data, it is difficult to assess to what extent the jump off level of the index of regional inequality is accurate.

In Austria the region (and capital) Wien attracts most international migrants, followed by Salzburg.

In Belgium, again the capital region is by far the most popular destination. The fact that many institutes of the European Union are settled in Brussels may have contributed to this.

Also in Finland, the importance of the capital region is evident; all other regions of Finland have an index of below 1.

In France the region Ile de France (with Paris in its territory) is a popular region to settle, although the regions Alsace and Corse relatively attract considerably more international migrants. Further, the region Lorraine is just as popular as the region Ile de France. The region Alsace can be considered as one of the strongest economic regions. Historically and economically it is part of the Rhineland area. The presence in Strassbourg of prestigious institutions such as the Council of Europe and the European Parliament may have led to the popularity for migrants of this region. The attractiveness of the region Corse may stem from its popularity as a tourist centre, especially for retired persons. Unfavourable destinations for international migrants are the predominantly agricultural regions around the region Ile de France, i.e. the regions Picardi, Haute-Normandie, Basse-Normandie and Centre. Not only does the rural character of these regions offer few job opportunities for potential international migrants, also high unemployment levels and virtually non-existence of networks further contributes to the low popularity of these regions.

In Germany the index of regional inequality of Berlin is slightly higher than one, while five regions have high index values, i.e. Braunschweig, Weser-Ems, Arnsberg, Karlsruhe and Schleswig-Holstein. The index values of the region Hamburg and Brandenburg are also relatively high. Probably, the location of Berlin in the territory of former Eastern Germany is not a stimulus for potential migrants because the economy of this part of Germany is still facing many problems. The region Braunschweig can be characterised as a resurgent old industrial region. The NUTS I region Nordrhein-Westfalen is the most populated German federal *Land*, it contains coal-mining areas and the old industrial Ruhr region. These areas used to be known as congested and polluted areas. However, a structural change has taken place from coal and steel industries to the service sector. The NUTS II regions Düsseldorf, Köln, Münster and Detmold are still not considered as attractive regions to move to, in contrast to the region Arnsberg which has adapted successfully to new conditions. However, the high value on the index may also stem from the fact that this region has got relatively many facilities for asylum seekers and Aussiedler. The region Karlsruhe is again an example of a region where structural changes in the industry sector have led to new economic prosperity.

Probably, the above-average economic growth of the region Hamburg has attracted many migrants to this region (and also to its neighbour Schleswig-Holstein).

The three regions Mecklenburg-Vorpommern, Sachsen and Thuringen are not considered as attractive destinations. All three regions are located in former East Germany, where the transition to the market economy has gone hand in hand with recession, closures and unemployment.

The capital of Greece, Athens, is located in the region Attica. In contrast with the countries discussed above, the region which contains the capital has an index of regional inequality below one, i.e. the relative number of international migrants settling in this region is below that of Greece as a whole. Athens is the leading centre of population, economy and culture. However, the concentration of both economic activity and population has led to uncontrolled building, high land and housing costs, high unemployment and crime rates and serious environmental problems (air pollution).

Italy may be characterised economically by a North-South divide. External migration streams are not only attracted to the centre of Italy where population and economic activity has concentrated, i.e. the regions Lazio with the capital Roma and Umbria, but also the regions in the north and northwest Lombardia, Trentino-Alto Adige, Veneto,

Friuli-Venezia Giulia, Emilia-Romagna, Toscana, Abruzzo and Marche, which contains large cities as Turin, Milan and Genoa.

In contrast, the rural regions in the south of Italy, Campania, Puglia, Basilicata, Calabria, Sicilia and Sardegna attract relatively few international migrants. These regions are characterised by for Italy relatively high fertility rates in combination with almost chronic unemployment. In the past this has forced the indigenous population to move to areas which provided better opportunities for work.

The majority of the international migrants go to the economic heart of the Netherlands, i.e. the regions Noord-Holland and Zuid-Holland. Surprisingly, the neighbour regions Utrecht and Noord-Brabant which also have strong economies are not so popular. An explanation may be that networks are less developed in these regions.

In Portugal the island-regions Azores and Madeira may be seen as typical examples of the high attractiveness of the Sunbelt regions. The fact that the capital Lisbon is located in the predominantly depopulated agricultural region Lisboa e Vale Do Tejo may explain why the index of regional inequality is below one.

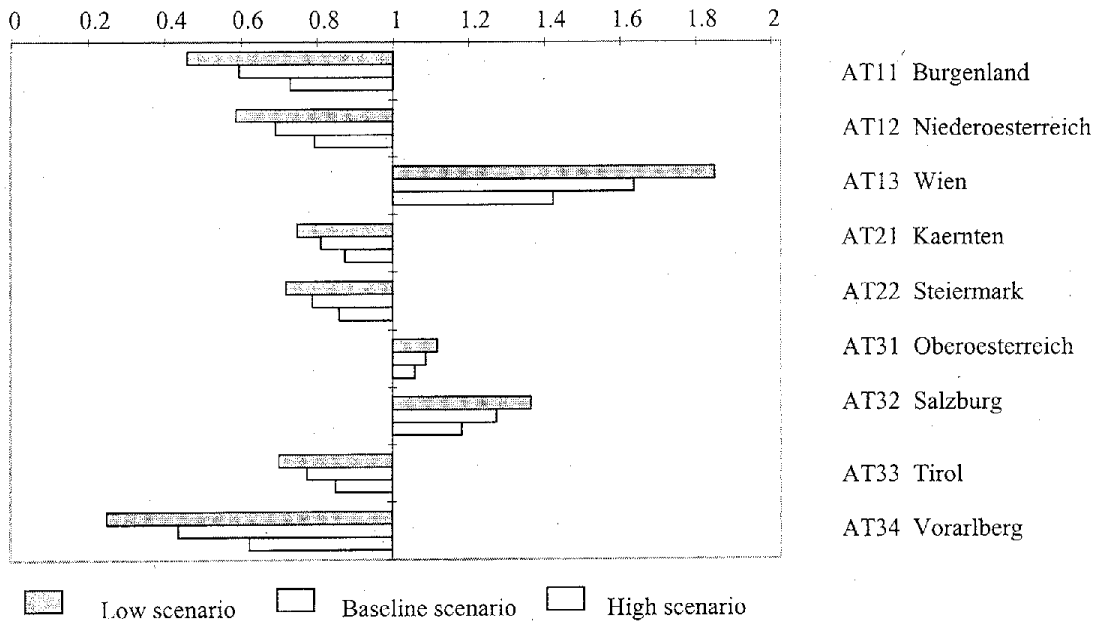
Also in Spain the Sunbelt islands/regions, i.e. Islas Baleares and Canarias, attract many international migrants. The capital Madrid, located in the region Comunidad de Madrid is also a popular destination due to a strong concentration of economic activity and population.

In Sweden, immigration of retired people (especially Germans) may explain the high score of the region Smaaland Med Oearna on the index of regional inequality. The index of the capital/region Stockholm is below one.

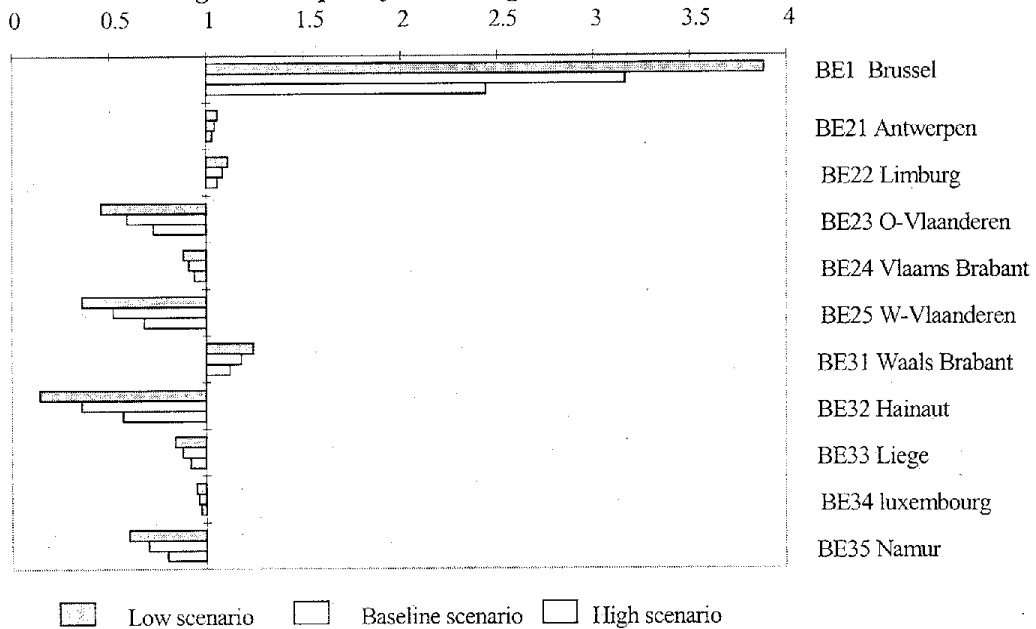
In the United Kingdom the region Greater London, being the economic and cultural heart, occupies a dominant position. Also, the region Lancashire has a index of inequality that exceeds two. Due to the predominantly agricultural character of the regions Highlands, Islands and North Yorkshire the attractiveness for international migrants is very low.

*Table 8* gives the absolute numbers of net migration per region in the years 1995, 2000, 2005 and 2010. Regions with positive net migration figures show higher values in the Baseline scenario than in the Low scenario, while in the High scenario the figures are again higher. Some regions (especially predominantly agricultural regions in the United Kingdom) have negative net migration figures. It is assumed that these regions do not attract immigrants and negative net migration figures are caused by relatively high emigration rates. Lack of employment may stimulate the indigenous population to try their luck abroad. International economic prospects are much better in the High scenario than in the Low scenario. Consequently, relatively more people will find employment abroad, so emigration will be higher in the High scenario (while immigrants still will not go to the unattractive regions). As a result, in the short run net migration is more negative in the High scenario than in the Low scenario. However, this situation changes in the long run as economic growth will lead to more local employment. New opportunities for the indigenous population will cause emigration flows to dry up. So, in the long run net migration will be lower in the Low scenario, in which emigration pressure continues due to stagnating economic growth. The same assumptions have been used in the Baseline scenario; in this case the differences with the Low scenario are smaller.

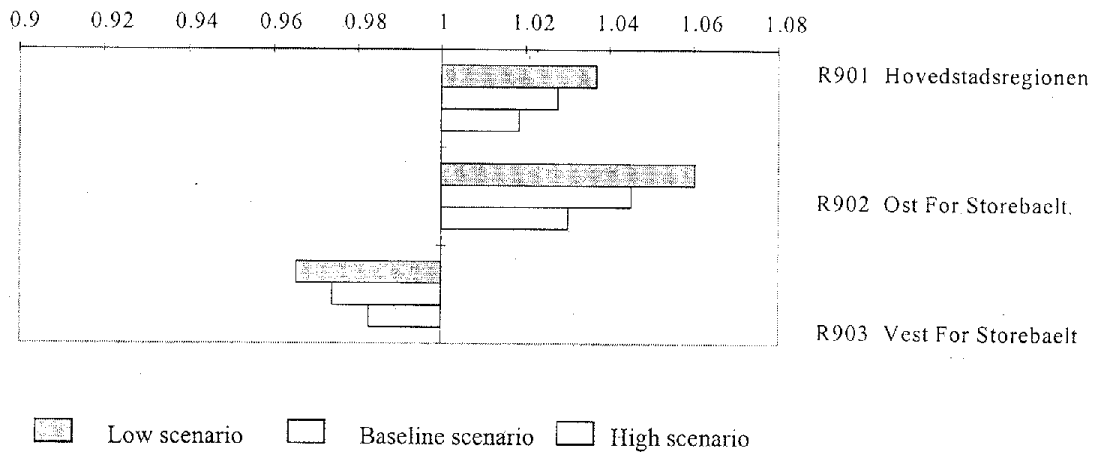
### 11.1 Index of regional inequality of net migration at 2010: Austria



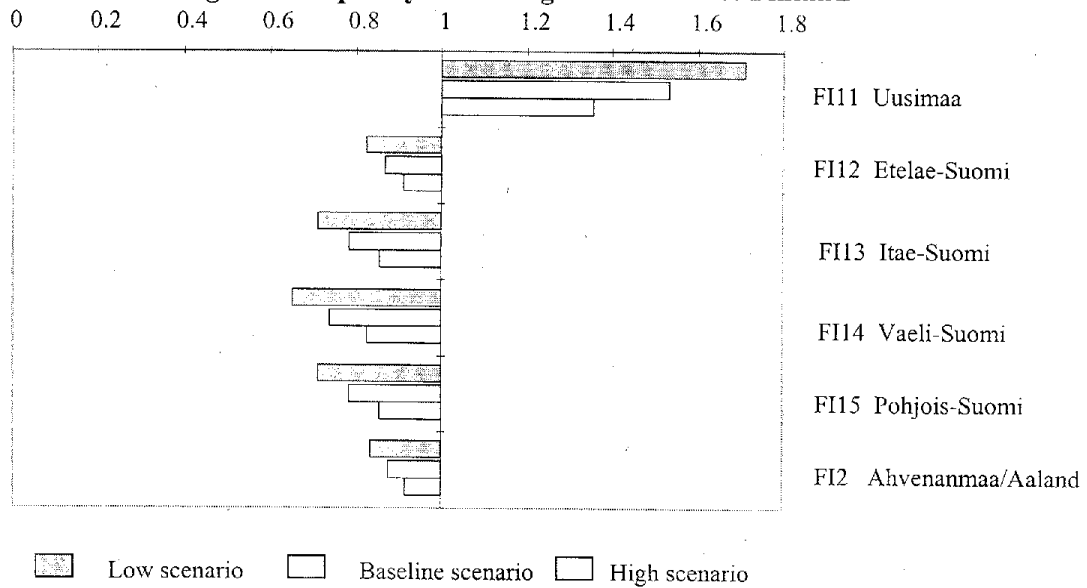
### 11.2 Index of regional inequality of net migration at 2010: Belgium



### 11.3 Index of regional inequality of net migration at 2010: Denmark

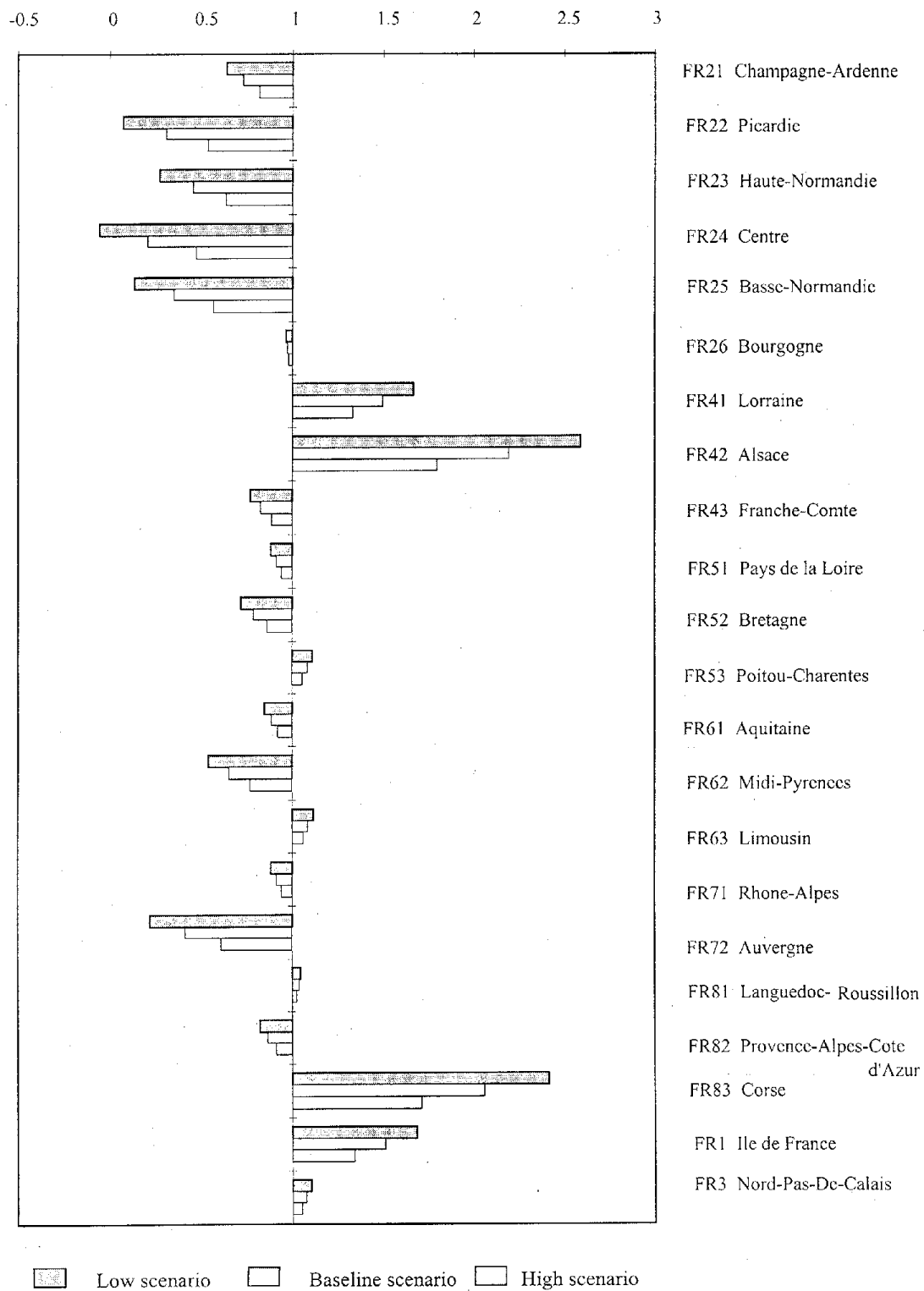


### 11.4 Index of regional inequality of net migration at 2010: Finland

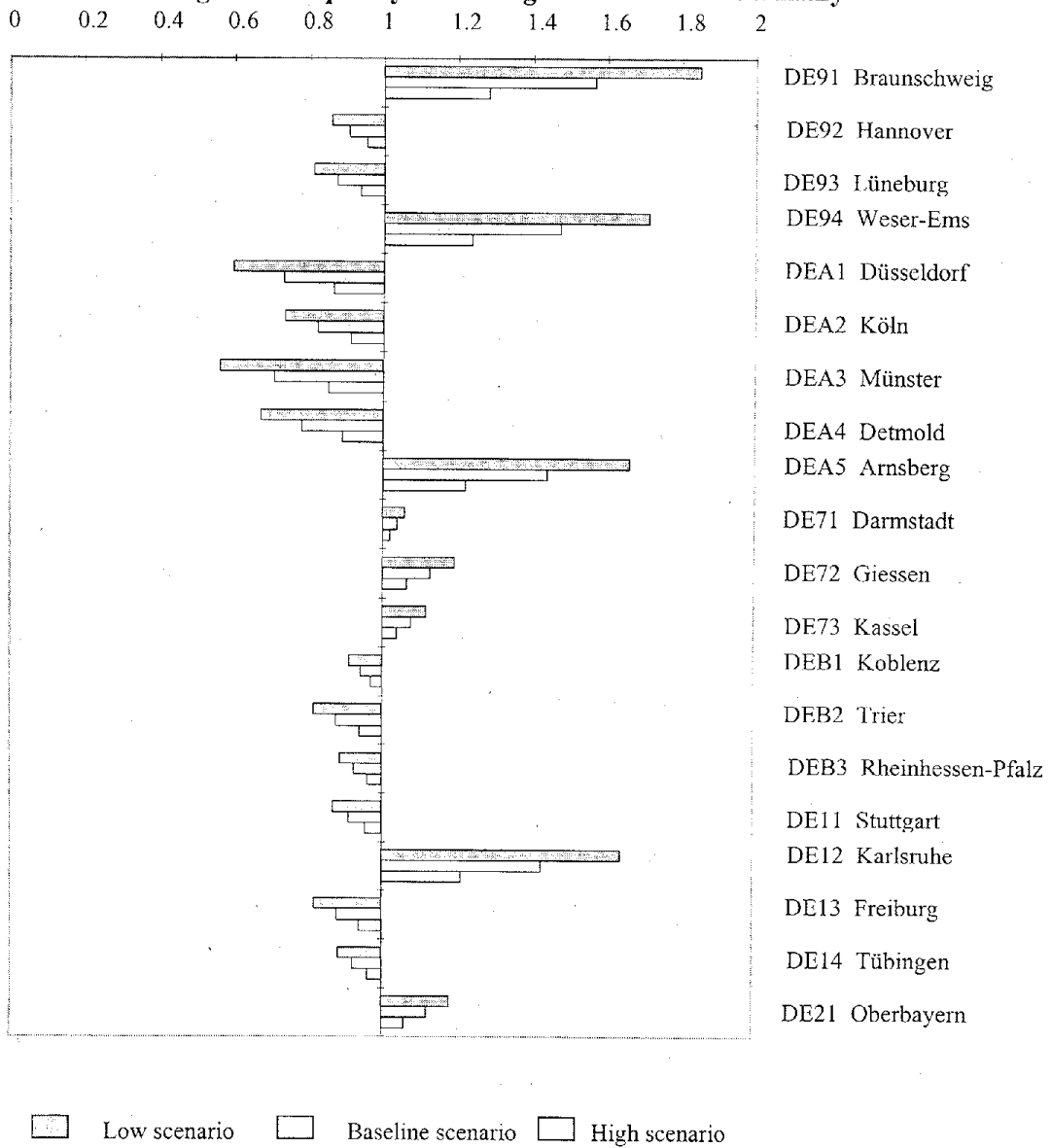




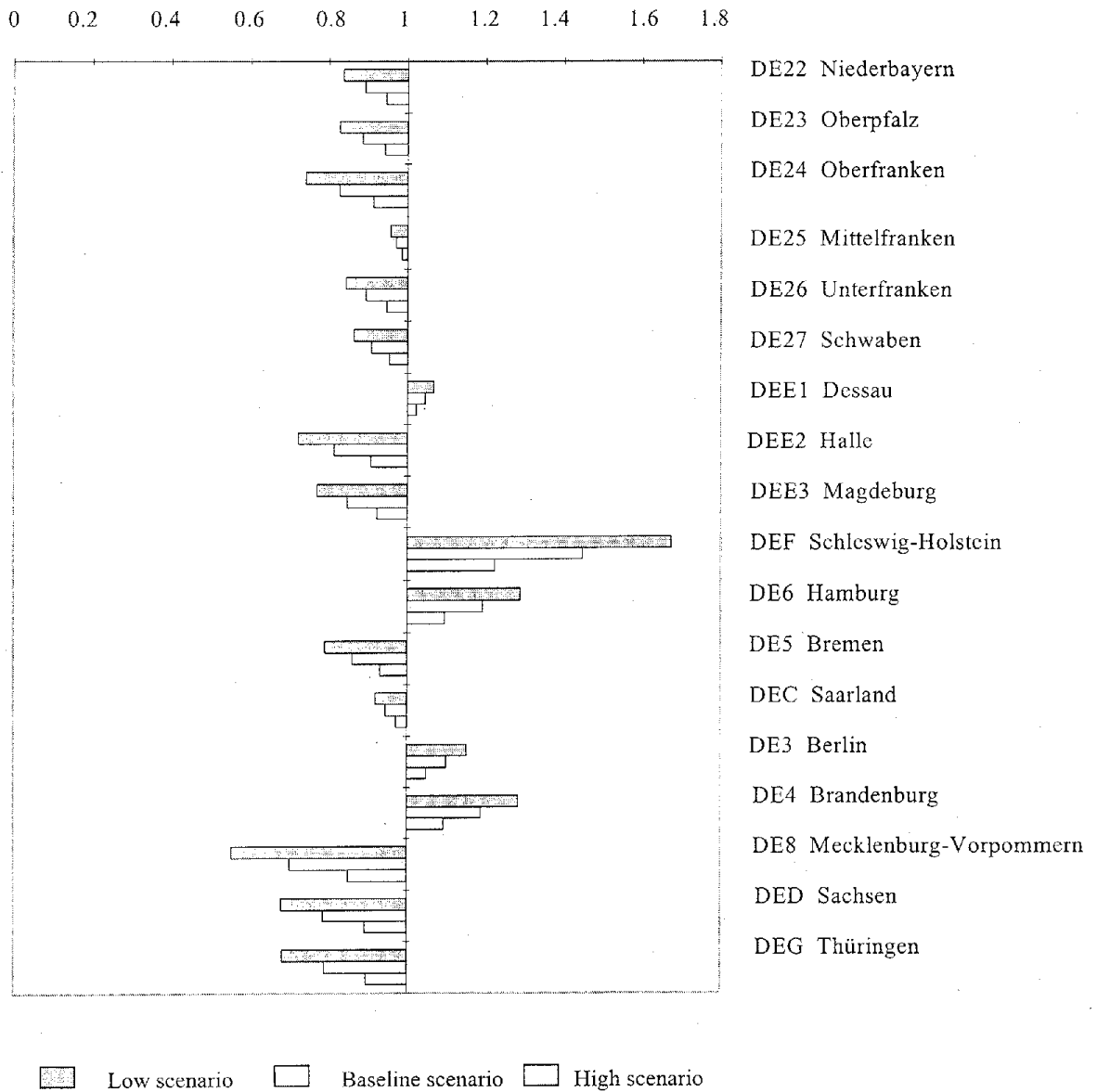
### 11.5 Index of regional inequality of net migration at 2010: France



### 11.6 Index of regional inequality of net migration at 2010: Germany

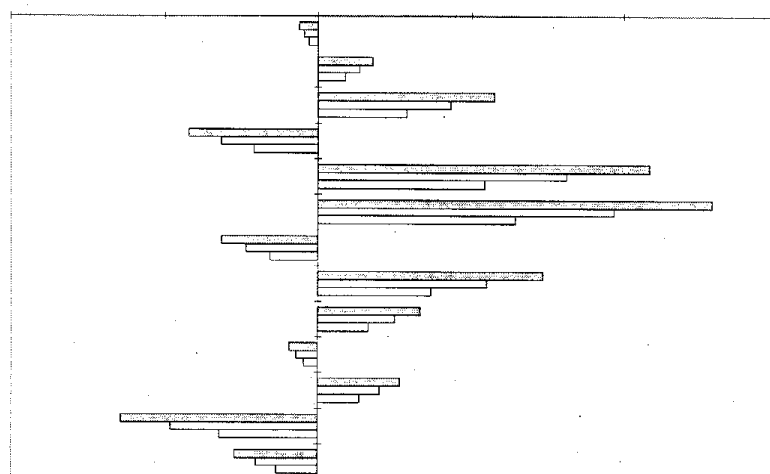


### 11.6 Index of regional inequality of net migration at 2010: Germany (continued)



### 11.7 Index of regional inequality of net migration at 2010: Greece

0 0.5 1 1.5 2 2.5

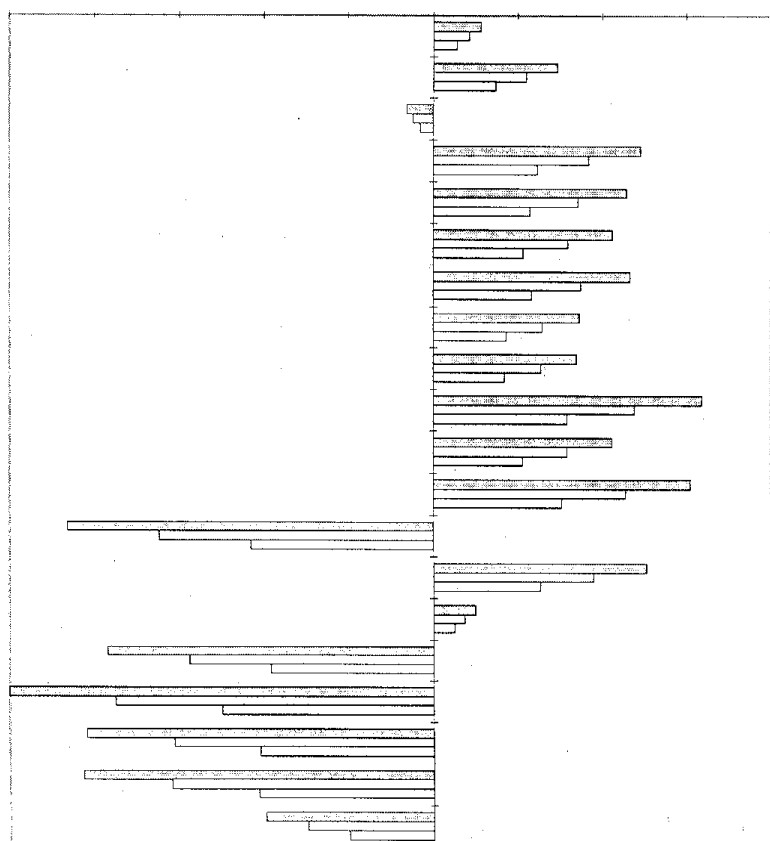


GR11 Anatoliki Makedonia,  
GR12 Kentriki Makedonia  
GR13 Dytiki Makedonia  
GR14 Thessalia  
GR21 Ipeiros  
GR22 Ionia Nisia  
GR23 Dytiki Ellada  
GR24 Sterea Ellada  
GR25 Peloponnisos  
GR41 Voreio Aigaio  
GR42 Notio Aigaio  
GR43 Kriti  
GR3 Attiki

Low scenario Baseline scenario High scenario

### 9.8 Index of regional inequality of net migration at 2010: Italy

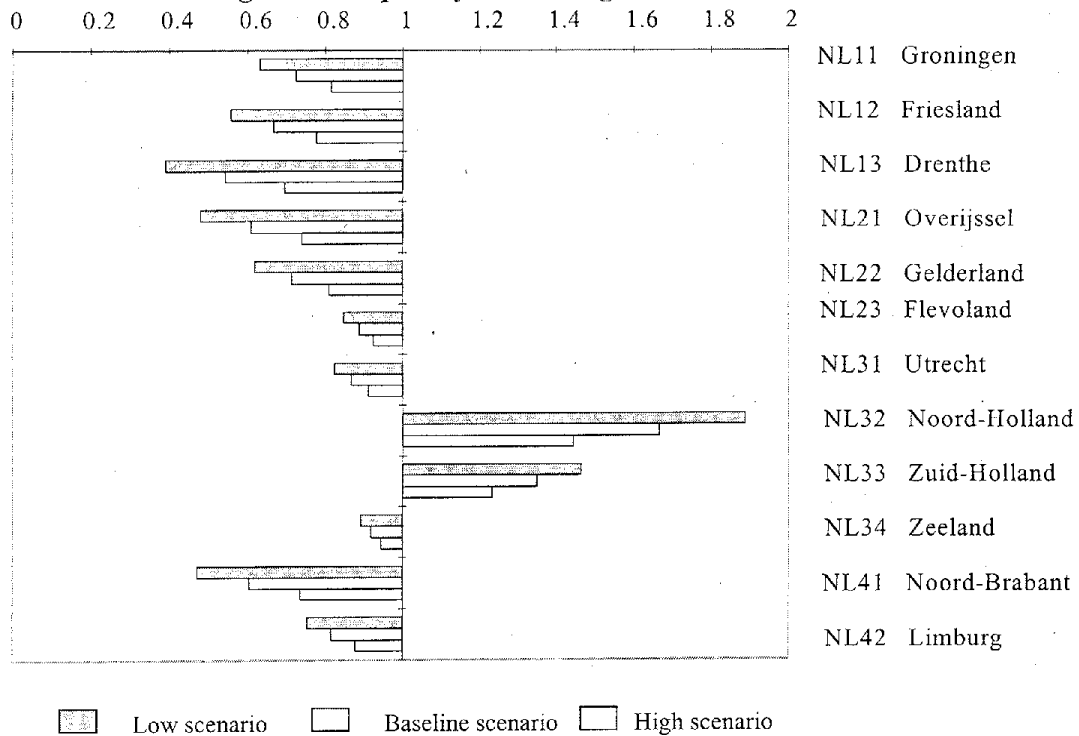
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8



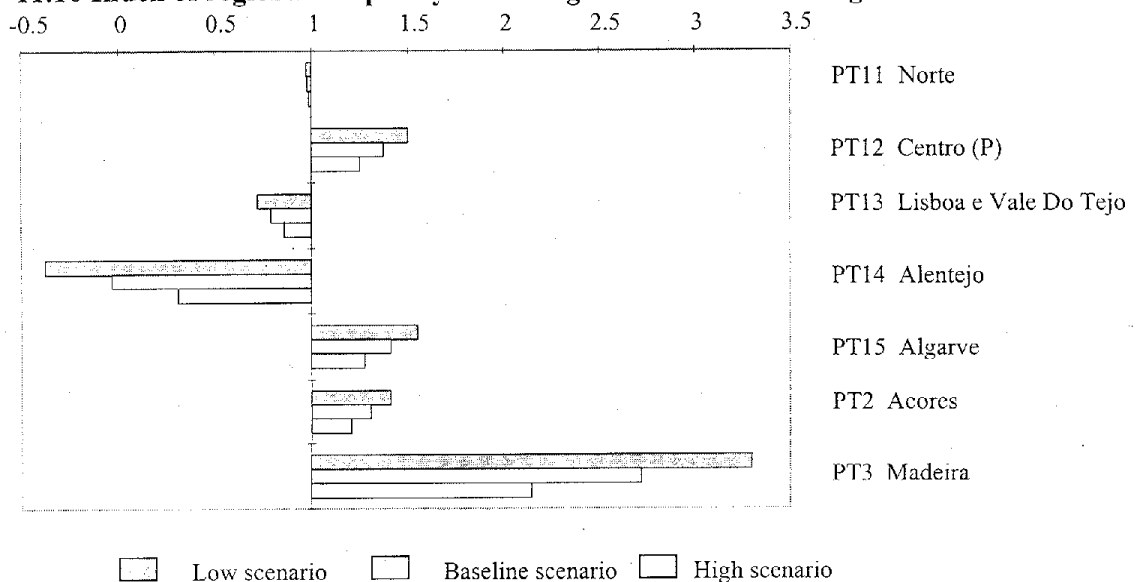
IT11 Piemonte  
IT12 Valle d' Aosta  
IT13 Liguria  
IT2 Lombardia  
IT31 Trentino-Alto Adige  
IT32 Veneto  
IT33 Friuli-Venezia Giulia  
IT4 Emilia-Romagna  
IT51 Toscana  
IT52 Umbria  
IT53 Marche  
IT6 Lazio  
IT8 Campania  
IT71 Abruzzo  
IT72 Molise  
IT91 Puglia  
IT92 Basilicata  
IT93 Calabria  
ITA Sicilia  
ITB Sardegna

Low scenario Baseline scenario High scenario

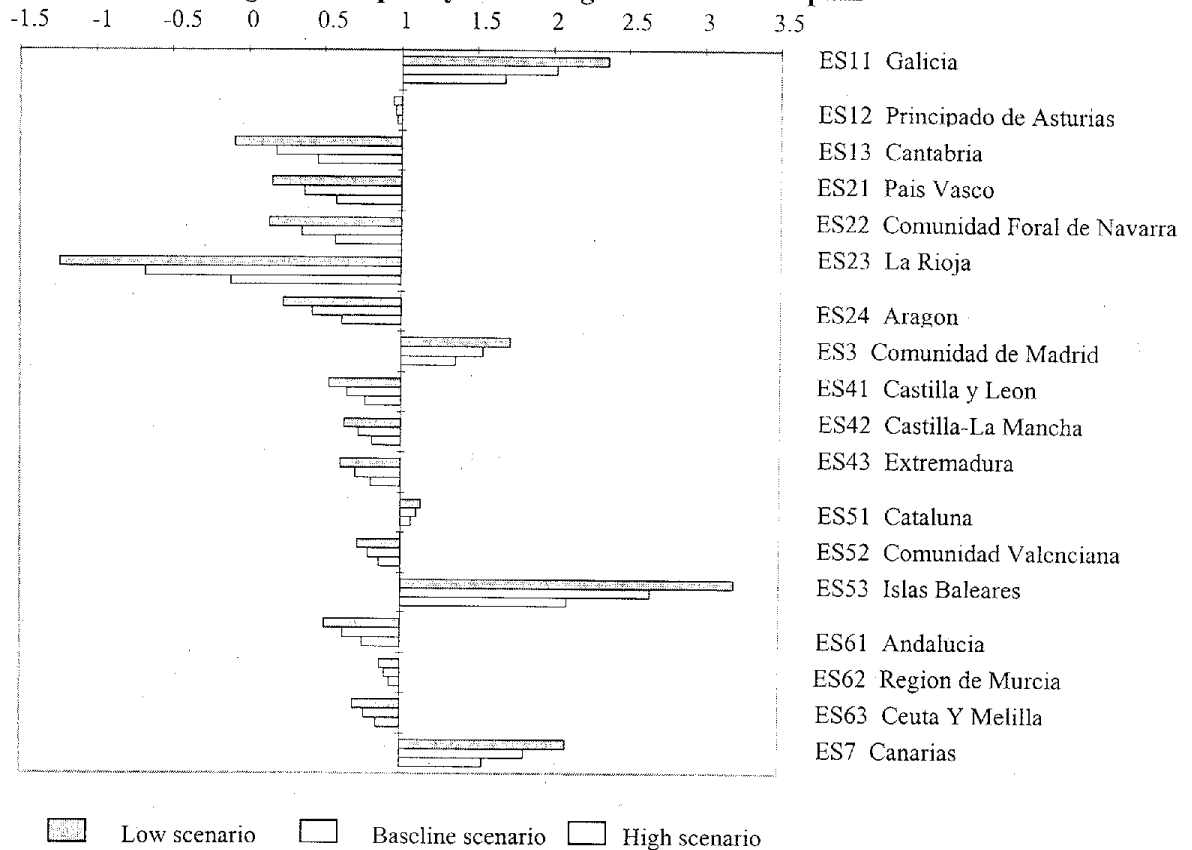
### 11.9 Index of regional inequality of net migration at 2010: Netherlands



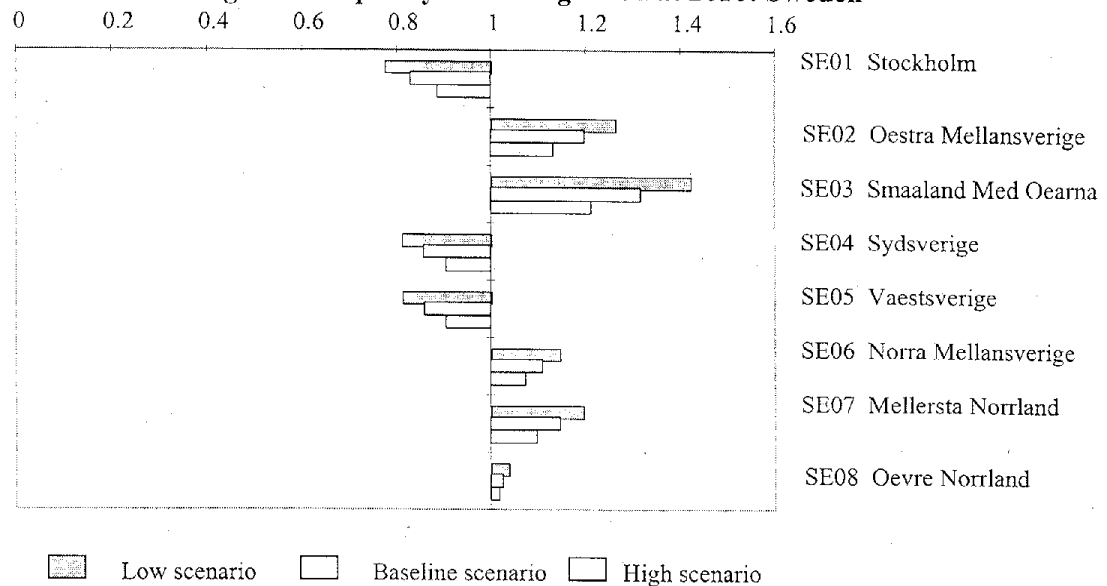
### 11.10 Index of regional inequality of net migration at 2010: Portugal



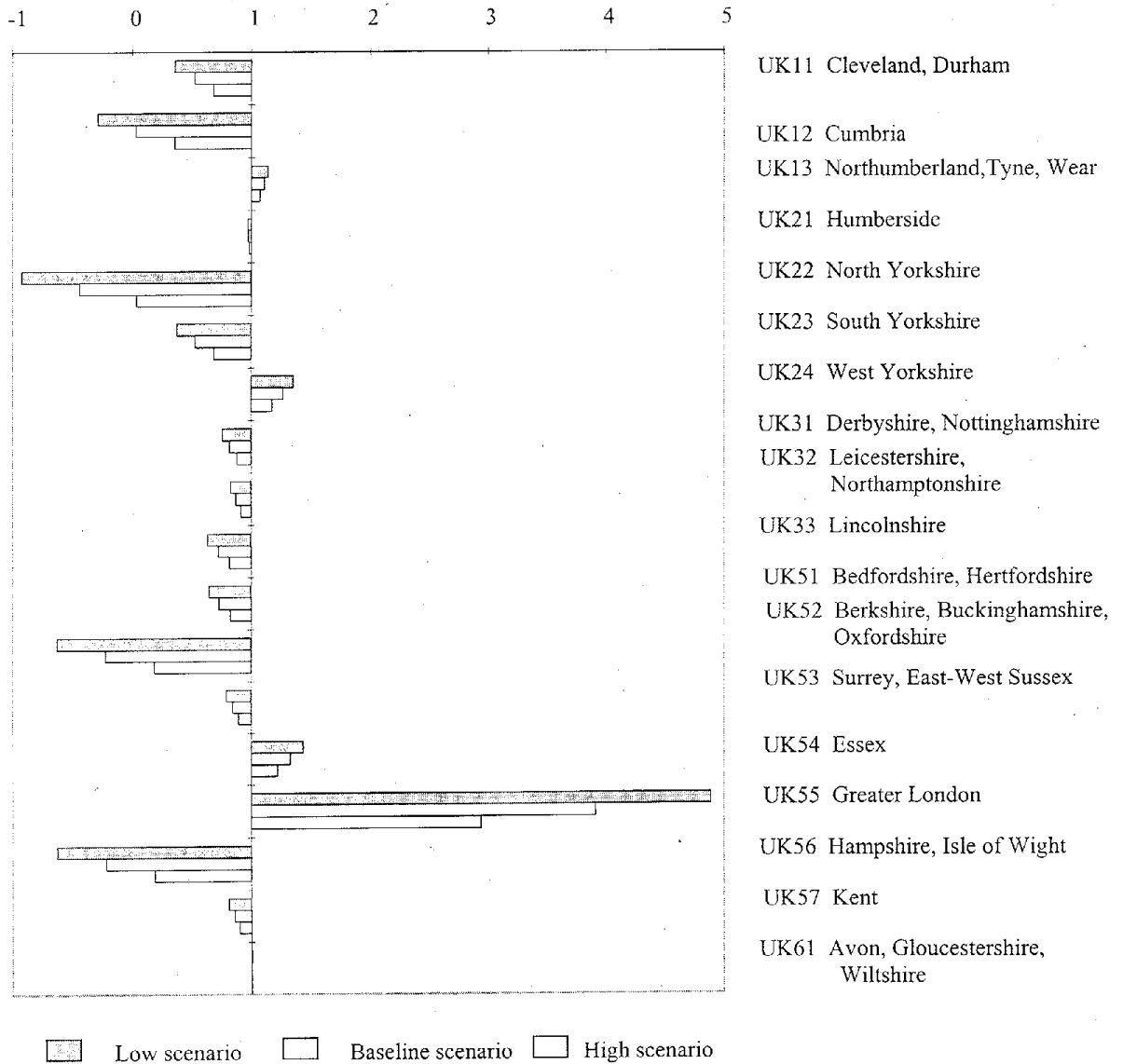
### 11.11 Index of regional inequality of net migration at 2010: Spain



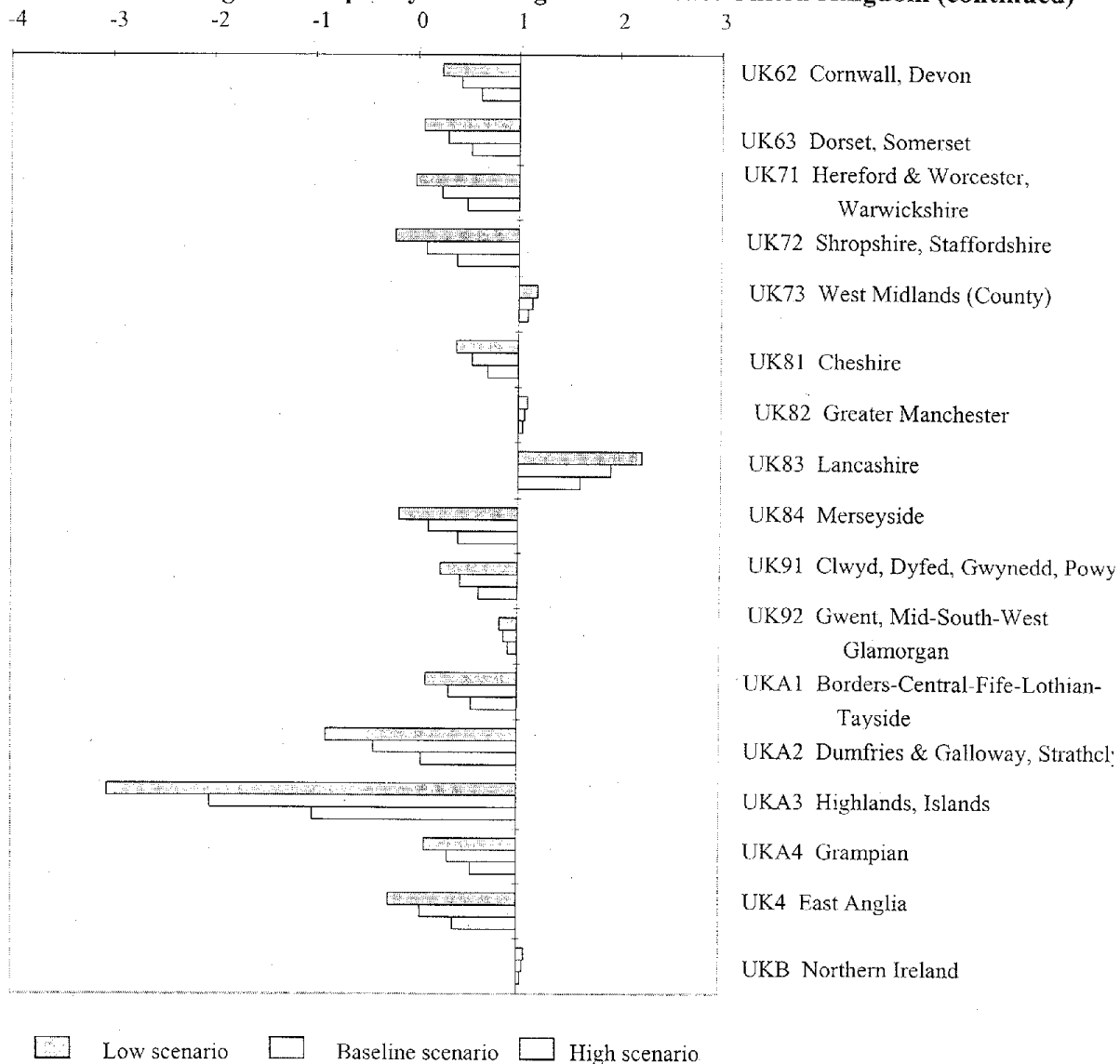
### 11.12 Index of regional inequality of net migration at 2010: Sweden



### 11.13 Index of regional inequality of net migration at 2010: United Kingdom



### 11.13 Index of regional inequality of net migration at 2010: United Kingdom (continued)





## 8. Net migration by region, three scenarios

[illegible]

## 8. Net migration by region, three scenarios (continued)

code	name	Low scenario				Baseline scenario			High scenario		
		1995 1)	2000	2005	2010	2000	2005	2010	2000	2005	2010
x 100											
France		500	204	252	300	501	500	500	798	749	700
FR1	Ile De France	159	65	80	95	154	149	143	237	206	178
FR21	Champagne-Ardenne	7	3	4	4	8	8	9	13	13	13
FR22	Picardie	1	0	1	1	2	4	5	6	9	12
FR23	Haute-Normandie	4	2	2	3	5	6	7	10	12	14
FR24	Centre	-1	0	-1	-1	1	3	4	4	9	14
FR25	Basse-Normandie	2	1	1	1	3	3	4	5	8	10
FR26	Bourgogne	14	6	7	8	14	14	14	22	20	19
FR3	Nord-Pas-De-Calais	38	16	19	23	38	38	37	60	55	51
FR41	Lorraine	33	14	17	20	32	31	30	50	43	37
FR42	Alsace	38	15	19	23	36	34	32	54	45	37
FR43	Franche-Comte	7	3	4	4	8	8	8	12	12	12
FR51	Pays De La Loire	24	10	12	14	24	24	25	39	37	36
FR52	Bretagne	18	7	9	11	18	19	19	30	30	30
FR53	Poitou-Charentes	16	6	8	9	15	15	15	24	22	21
FR61	Aquitaine	21	9	11	13	21	22	22	34	33	32
FR62	Midi-Pyrenees	12	5	6	7	12	13	14	21	22	23
FR63	Limousin	7	3	4	4	7	7	7	11	10	9
FR71	Rhone-Alpes	42	17	21	25	43	43	44	69	66	63
FR72	Auvergne	2	1	1	1	3	4	5	6	8	10
FR81	Languedoc-Roussillon	20	8	10	12	20	20	20	32	29	27
FR82	Provence-Alpes-Cote D'azur	31	13	16	19	32	32	33	52	50	49
FR83	Corse	5	2	3	3	5	5	5	8	7	5
Germany		4200	3000	2125	1500	3906	2828	2000	5000	3688	2500
DE11	Stuttgart	163	118	85	61	157	117	86	204	158	113
DE12	Karlsruhe	253	174	118	80	217	144	93	266	171	98
DE13	Freiburg	80	59	43	31	79	60	44	103	82	59
DE14	Tübingen	74	54	39	28	71	53	39	93	71	50
DE21	Oberbayern	254	178	124	86	228	160	109	287	201	129
DE22	Niederbayern	45	33	24	17	44	33	25	58	45	33
DE23	Oberpfalz	41	30	22	16	40	31	23	53	42	30
DE24	Oberfranken	37	28	20	15	38	29	22	50	41	31
DE25	Mittelfranken	80	58	41	29	75	55	39	97	73	50
DE26	Unterfranken	53	39	28	20	52	39	29	67	53	38
DE27	Schwaben	72	52	38	27	69	52	38	90	70	50
DE3	Berlin	216	152	106	74	195	137	94	246	174	112
DE4	Brandenburg	181	126	87	60	160	111	74	200	137	85
DE5	Bremen	25	19	14	10	25	19	14	33	27	20
DE6	Hamburg	122	85	59	41	108	75	50	135	92	57
DE71	Darmstadt	204	145	102	72	188	134	94	239	173	115
DE72	Giessen	68	48	33	23	61	42	29	76	53	34
DE73	Kassel	75	53	37	26	68	48	33	86	61	40
DE8	Mecklenburg-Vorpommern	38	31	24	19	45	39	32	63	59	48
DE91	Braunschweig	184	126	85	57	156	102	65	190	119	66
DE92	Hannover	89	65	47	34	86	65	47	112	87	62
DE93	Lüneburg	60	44	32	23	59	45	34	78	62	45
DE94	Weser-Ems	231	158	107	72	197	130	83	241	153	87
DEA1	Düsseldorf	127	99	76	58	141	118	95	194	176	141

## 8. Net migration by region, three scenarios (continued)

code name	Low scenario				Baseline scenario			High scenario		
	1995 1)	2000	2005	2010	2000	2005	2010	2000	2005	2010
x 100										
<b>Germany (continued)</b>	4200	3000	2125	1500	3906	2828	2000	5000	3688	2500
DEA2 Köln	138	103	76	56	140	110	84	187	155	116
DEA3 Münster	54	43	34	26	63	54	44	88	82	67
DEA4 Detmold	57	44	33	24	60	49	38	81	70	54
DEA5 Arnsberg	370	254	173	117	317	210	135	389	249	143
DEB1 Koblenz	67	48	34	25	63	47	34	82	62	44
DEB2 Trier	19	14	10	7	19	14	11	25	20	14
DEB3 Rheinhessen-Pfalz	86	62	45	32	82	61	45	107	82	58
DEC Saarland	50	36	26	18	47	35	25	61	47	32
DED Sachsen	137	104	78	58	143	115	89	193	164	127
DEE1 Dessau	33	23	16	11	30	21	15	38	27	18
DEE2 Halle	32	24	18	13	33	26	20	44	36	28
DEE3 Magdeburg	43	32	24	17	43	34	25	57	47	34
DEF Schleswig-Holstein	264	181	123	83	226	150	96	277	177	101
DEG Thüringen	75	57	43	32	79	63	49	106	91	70
<b>Greece</b>	300	138	169	200	217	233	250	295	298	300
GR11 Anatoliki Makedonia, Thraki	15	7	9	10	11	12	13	15	15	16
GR12 Kentriki Makedonia	60	27	34	40	43	45	48	57	56	55
GR13 Dytiki Makedonia	14	6	8	9	10	10	10	13	12	11
GR14 Thessalia	12	6	7	8	9	11	12	14	15	17
GR21 Ipeiros	22	10	12	14	15	15	16	19	18	16
GR22 Ionia Nisia	13	6	7	9	9	9	9	12	10	9
GR23 Dytiki Ellada	14	7	8	10	11	12	13	15	16	18
GR24 Sterea Ellada	32	15	18	21	22	23	24	29	27	25
GR25 Peloponnisos	25	12	14	17	18	19	20	24	23	22
GR3 Attiki	73	34	41	49	54	60	66	76	81	87
GR41 Voreio Aigaio	5	2	3	3	4	4	4	5	5	5
GR42 Notio Aigaio	10	4	5	6	7	7	8	9	9	9
GR43 Kriti	6	3	3	4	5	6	7	7	9	11
<b>Italy</b>	500	200	400	600	500	650	800	800	900	1000
IT11 Piemonte	42	17	34	50	42	54	65	66	73	80
IT12 Valle d' Aosta	1	1	1	2	1	2	2	2	2	2
IT13 Liguria	14	5	11	16	14	18	22	22	25	28
IT2 Lombardia	116	46	93	139	113	143	171	176	186	194
IT31 Trentino-Alto Adige	12	5	9	14	11	14	17	17	19	19
IT32 Veneto	55	22	44	66	54	68	82	84	89	94
IT33 Friuli-Venezia Giulia	15	6	12	18	15	19	23	23	25	26
IT4 Emilia-Romagna	46	18	37	55	45	58	69	71	76	81
IT51 Toscana	41	17	33	50	40	52	62	63	68	72
IT52 Umbria	12	5	9	14	11	14	17	18	18	19
IT53 Marche	18	7	14	22	17	22	27	27	29	31
IT6 Lazio	73	29	58	88	71	89	106	110	115	118
IT71 Abruzzo	17	7	13	20	16	20	24	25	27	28
IT72 Molise	3	1	3	4	3	4	5	5	6	6

## 8. Net migration by region, three scenarios (continued)

code	name	Low scenario				Baseline scenario			High scenario		
		1995 1)	2000	2005	2010	2000	2005	2010	2000	2005	2010
x 100											
<b>Italy (continued)</b>											
		500	200	400	600	500	650	800	800	900	1000
IT8	Campania	7	3	5	8	10	18	28	22	38	57
IT91	Puglia	8	3	7	10	10	17	24	20	31	44
IT92	Basilicata	0	0	0	0	0	1	2	1	3	5
IT93	Calabria	3	1	3	4	5	8	11	9	15	22
ITA	Sicilia	8	3	6	9	11	18	27	22	36	52
ITB	Sardegna	9	4	7	10	9	13	16	16	19	23
<b>Netherlands</b>											
		135	100	150	200	334	342	350	568	534	500
NL11	Groningen	3	2	3	5	8	9	9	14	15	15
NL12	Friesland	3	2	3	4	8	9	9	14	15	15
NL13	Drenthe	2	1	2	2	4	5	6	8	9	10
NL21	Overijssel	4	3	5	7	12	13	15	22	24	25
NL22	Gelderland	10	7	11	15	26	28	30	47	48	49
NL23	Flevoland	2	1	2	3	5	5	5	8	8	8
NL31	Utrecht	8	6	9	11	19	20	21	33	32	31
NL32	Noord-Holland	41	30	45	60	97	95	93	158	136	116
NL33	Zuid-Holland	43	32	47	63	103	102	102	170	151	133
NL34	Zeeland	3	2	3	4	7	7	8	12	12	11
NL41	Noord-Brabant	9	7	10	14	25	28	31	47	51	54
NL42	Limburg	7	6	8	11	19	20	21	33	33	32
<b>Portugal</b>											
		50	58	129	200	121	186	250	286	293	300
PT11	Norte	17	20	45	69	42	65	87	100	102	105
PT12	Centro (P)	13	15	34	52	31	46	59	70	68	65
PT13	Lisboa e Vale Do Tejo	12	14	31	48	30	48	66	74	80	86
PT14	Alentejo	-1	-1	-3	-4	-2	-1	0	-2	1	5
PT15	Algarve	3	3	7	11	6	9	12	15	14	13
PT2	Acores	2	2	4	7	4	6	8	9	9	9
PT3	Madeira	4	5	11	17	10	14	18	22	19	17
<b>Spain</b>											
		285	49	225	400	311	455	600	572	724	800
ES11	Galicia	47	8	37	66	49	68	85	85	96	94
ES12	Principado de Asturias	7	1	6	11	8	12	16	15	19	22
ES13	Cantabria	0	0	0	-1	0	1	1	1	3	5
ES21	Pais Vasco	2	0	2	3	4	7	12	9	17	25
ES22	Comunidad Foral de Navarra	1	0	0	1	1	2	3	2	4	6
ES23	La Rioja	-2	0	-2	-3	-2	-3	-3	-3	-2	-1
ES24	Aragon	2	0	2	3	3	5	8	6	11	15
ES3	Comunidad de Madrid	63	11	49	88	66	93	118	117	137	139
ES41	Castilla y Leon	10	2	8	14	11	18	25	22	32	40
ES42	Castilla-La Mancha	8	1	6	11	9	13	18	17	23	28
ES43	Extremadura	5	1	4	7	5	8	11	10	15	17
ES51	Cataluna	50	9	40	71	54	79	103	99	123	133
ES52	Comunidad Valenciana	20	3	16	28	23	35	47	43	58	68
ES53	Islas Baleares	17	3	13	24	17	24	29	30	33	31

## 8. Net migration by region, three scenarios (continued)

code name	Low scenario				Baseline scenario			High scenario		
	1995 1)	2000	2005	2010	2000	2005	2010	2000	2005	2010
x 100										
<b>Spain (continued)</b>	285	49	225	400	311	455	600	572	724	800
ES61 Andalucia	26	4	20	36	30	48	67	60	87	108
ES62 Region de Murcia	7	1	5	9	7	11	15	14	18	20
ES63 Ceuta Y Melilla	1	0	1	1	1	1	2	1	2	2
ES7 Canarias	23	4	18	33	24	34	43	43	49	48
<b>Sweden</b>	120	63	69	100	152	176	200	320	304	300
SE01 Stockholm	18	10	10	15	23	28	32	50	50	52
SE02 Oestra Mellansverige	26	14	15	22	32	36	41	66	61	58
SE03 Smaaland Med Oearna	15	8	9	13	19	21	24	39	35	33
SE04 Sydsverige	14	7	8	12	18	21	25	39	38	39
SE05 Vaestsverige	20	10	11	16	25	30	34	54	53	54
SE06 Norra Mellansverige	14	7	8	11	17	19	22	35	33	32
SE07 Mellersta Norrland	6	3	4	5	8	9	10	17	15	15
SE08 Oevre Norrland	7	4	4	6	9	11	12	20	19	18
<b>United Kingdom</b>	930	162	131	200	383	379	450	730	690	700
UK11 Cleveland, Durham	7	1	1	1	3	4	5	7	8	10
UK12 Cumbria	-2	0	0	0	-1	0	0	0	1	2
UK13 Northumberland, Tyne and Wcar	26	5	4	6	11	11	12	20	19	19
UK21 Humberside	14	2	2	3	6	6	7	11	10	10
UK22 North Yorkshire	-11	-2	-1	-2	-4	-3	-2	-5	-2	0
UK23 South Yorkshire	8	1	1	2	4	4	5	8	9	11
UK24 West Yorkshire	46	8	6	10	18	18	21	34	31	30
UK31 Derbyshire, Nottinghamshire	24	4	3	5	10	10	12	20	20	21
UK32 Leicestershire Northamptonshire	20	3	3	4	8	8	10	16	16	17
UK33 Lincolnshire	6	1	1	1	3	3	3	5	5	6
UK51 Bedfordshire, Hertfordshire	16	3	2	3	7	7	9	14	14	15
UK52 Berkshire, Buckinghamshire, Oxfordshire	-20	-4	-3	-4	-7	-5	-3	-9	-2	4
UK53 Surrey, East-West Sussex	31	5	4	7	13	13	16	26	25	27
UK54 Essex	36	6	5	8	14	14	16	27	24	23
UK55 Greater London	542	95	76	117	208	192	210	369	296	246
UK56 Hampshire, Isle of Wight	-17	-3	-2	-4	-5	-4	-3	-8	-2	4
UK57 Kent	20	3	3	4	8	8	10	16	16	17
UK61 Avon, Gloucestershire, Wiltshire	34	6	5	7	14	14	16	26	25	25
UK62 Cornwall, Devon	6	1	1	1	3	4	5	7	9	11
UK63 Dorset, Somerset	1	0	0	0	1	2	3	3	5	7
UK71 Hereford & Worcester, Warwickshire	0	0	0	0	1	1	2	2	5	7
UK72 Shropshire, Staffordshire	-5	-1	-1	-1	-1	0	1	0	3	7
UK73 West Midlands (County)	50	9	7	11	20	20	23	38	35	35
UK81 Cheshire	6	1	1	1	3	3	4	6	7	8
UK82 Greater Manchester	45	8	6	10	18	18	21	35	32	32

## 8. Net migration by region, three scenarios (continued)

code name	Low scenario				Baseline scenario			High scenario		
	1995 1)	2000	2005	2010	2000	2005	2010	2000	2005	2010
	x 100									
<b>United Kingdom (continued)</b>	930	162	131	200	383	379	450	730	690	700
UK83 Lancashire	51	9	7	11	20	19	21	36	31	28
UK84 Merseyside	-4	-1	-1	-1	-1	0	1	0	4	7
UK91 Clwyd, Dyfed, Gwynedd, Powys	4	1	1	1	2	3	4	5	7	8
UK92 Gwent, Mid-South-West Glamorgan	23	4	3	5	10	10	12	19	19	20
UKA1 Borders-Central-Fife- Lothian-Tayside	3	1	0	1	2	3	5	6	9	12
UKA2 Dumfries & Galloway, Strathclyde	-35	-6	-5	-7	-12	-9	-8	-18	-7	2
UKA3 Highlands, Islands	-14	-2	-2	-3	-5	-4	-4	-8	-6	-3
UKA4 Grampian	1	0	0	0	1	1	1	2	2	3
UK4 East Anglia	-9	-2	-1	-2	-2	-1	1	-2	4	9
UKB Northern Ireland	28	5	4	6	12	11	13	22	20	20

1) Baseline scenario

## 9 Summary

This report discusses the assumptions on international migration underlying the long-term population scenarios for the countries of the European Economic Area (EEA). In contrast to the previous scenarios which consisted of a low and high scenario, this report presents three scenarios. Besides a low and high scenario, also a baseline scenario is presented. The baseline scenario describes a situation in which recently observed developments are continued, and resembles the national forecasts whenever possible. The low and high scenarios describe possible alternatives, assuming a different economic and political context.

Several theories aim to explain the origin of migration and its continuation over time (e.g. neo-classical theory, new economic theory, dual market theory, world systems theory, theory of cumulative causation). From the theories it can be deduced that disparities between locations, information flows between locations, networks in and distance between locations are important factors at play. With respect to disparities also the terms *push* and *pull* are used. Push factors are at play in the place of origin and push migrants out of their home area. Push factors can be of economic, political or environmental nature. The push factors induce migration without a specific direction and are responsible for the so called migration pressure from an area. Pull factors give a direction to migration flows. Pull factors can be defined as those factors (mainly economic and social) that migrants perceive to be better in the receiving area than in the area of origin.

With respect to immigration to the EEA the following *push factors* seem to be at play.

*Political circumstances* (e.g. violation of human rights, wars and ethnic conflicts) are important explanatory factors why people flee their countries. Often these migrants arrive as asylum seekers. The influx of asylum seekers is a quite recent phenomenon. Since the early 1980s the number of asylum applications in the major asylum receiving EEA countries has more than quadrupled and reached a peak in 1992. The majority of the asylum seekers arrived in Germany. Main areas producing substantive migration flows to Western-Europe in 1992 were the former Yugoslavia, Romania, Turkey and Bulgaria. Since 1992 the number of asylum seekers in most of the major asylum receiving countries has decreased. Besides more strict asylum policies, also the emergence of nationalist feelings and hostilities against non-EEA nationals could have played a role in the decrease. Furthermore, because of the political reforms in Central and Eastern European countries, simply less political refugees (according to the Geneva Convention) are produced and/or accepted.

*Economic circumstances* induce economically motivated migration. The size of the flow of economically motivated migration is amongst others a function of the difference in wealth between countries. The greater this difference the greater the relative attractiveness, the greater the motivation for people to migrate. The restructuring of the Central and Eastern European countries economies so far has resulted in more unemployment and poverty. In combination with more freedom to move, this has increased the migration pressure.

The following *pull factors* have stimulated migration to the EEA.

*Economic opportunities* have attracted many migrants from the Mediterranean countries to Western Europe in the period 1960-1973. Labour shortages and bilateral treaties with some Mediterranean countries provoked the influx of migrants into Western Europe. Due to the economic recession in 1973, labour migration agreements with the Mediterranean countries

were cancelled. However, migration into Europe did not diminish, since labour migration was followed by family reunification.

In several countries (e.g. Germany, Greece and Spain) *migration policies* aimed at the promotion of the return of ethnic nationals or former emigrants. This was especially of importance for Germany: more than 2 million *Aussiedler* (ethnic Germans from Central and Eastern Europe) have returned to Germany.

In view of the pressure of asylum seekers on public spending as well as in view of the public opinion with respect to (a large influx of) non-EEA nationals, the tendency with respect to migration policies is likely to be a further restriction of existing migration regulations and asylum procedures. This tendency can be reinforced by growing negative public attitudes.

*Networks* provide potential migrants with the necessary information on which the migration decision can be based. The existence of certain networks can be explained by historical ties between countries. After the decolonisation, many former colonies had a more or less privileged access to their "mother countries". Similarities in language and institutional structures greatly facilitated the migration decision. Once a foreign community was established in the receiving country, networks ensured a continuation of the migration process. Large concentrations of Indians and Pakistanis in the UK, Algerians in France, and Indonesians, Surinamese and Antilleans in the Netherlands are some examples.

In the analysis of migration patterns of the EEA, *emigration* is also of importance. Time series on total (i.e. within the EEA and to/from the EEA) net migration for the EEA countries indicate that in most EEA countries immigrants outnumber emigrants, and that therefore migration contributes to the population increase of a country. This does not mean that emigration to non-EEA countries is ignorable. EEA nationals migrate to non-EEA countries, and also many former immigrants from non-EEA countries, after a period of time become emigrants. Labour migrants for example might return after they have accumulated enough savings for a living in their home country while refugees might return after the situation in their home countries has improved.

Governments may try to curtail the growing numbers of foreigners not only by restrictive immigration policies but also by encouraging return migration.

In the analysis of migration patterns of the EEA the importance of economic factors is emphasised. On the basis of historical data, the relationship between migration and economic development was analysed empirically. Data on immigration to the Netherlands by country of origin were regressed on unemployment rates (expressed as a percentage of the labour force) of the Netherlands and the country of origin. It can be expected that a rise in unemployment in the Netherlands will have a negative influence on immigration while a rise in unemployment in the country of origin will have a positive effect on immigration to the Netherlands. The regression model could explain more than 50% of the variance of immigration to the Netherlands.

A negative relationship between unemployment in the country of destination and mobility may not only apply to migrants within the EEA, but also to migrants from outside the EEA towards most of the EEA countries. Data on migration to the Netherlands and Belgium from non European Union countries were regressed on unemployment rates (expressed as a percentage of the labour force) of the Netherlands and Belgium respectively. The regression results confirm the negative relationship.



From monitoring previous national and regional long-term population scenarios (compiled by Eurostat in Spring 1991 and in Spring 1993) it was concluded that for the EEA as a whole the high scenario proved to be fairly reliable. This is largely due to the fact that net migration of Germany was accurately projected by the high scenario. Concerning most other countries, either the high or the low scenario was appropriate. However, for some countries both scenarios could not give a reliable projection of actual developments. The quality of the previous regional scenarios seems rather poor. However, given a lack of reliable observed figures the differences between the outcomes of the scenarios and observation can for a large part be attributed to the quality of the national population measurement systems.

On the basis of an analysis of migration patterns of the EEA and taking into account the results of monitoring previous scenarios and also taking into account the target values of national projections, three scenarios of international migration have been developed. The assumptions made for the separate scenarios are mainly related to possible economic developments and political responses to economic developments which are assumed to affect push and pull factors.

It is important to distinguish between short term developments in migration and long term trends. Until the year 2000 the scenarios are a mixture of extrapolations of existing trends in migration and expectations based on expert opinions and elaboration of theoretical notions. In the long run, after the year 2000, the scenarios become more and more scenarios in a true sense: a realistic future course based on a coherent set of theoretical notions. The year 2010 is used as target year, because it is believed that it is nearly impossible to make realistic assumptions on developments in migration after 2010.

The three scenarios are called Baseline, Low and High scenario. The Baseline scenario relies heavily on developments in the last decade. Developments are assumed to continue. The two remaining scenarios give an indication of the extent to which changes in migration can be expected, if deviations from current economic and policy developments will occur.

For the *short term* the following qualitative assumptions have been formulated. It is not likely that in the near future the economic gap between Europe and the developing countries will be reduced to such an extent that migration pressure diminishes, while networks most probably continue to play an important role in migration processes. Therefore, it is assumed that push factors outside the EEA will continue to play an important factor in the explanation of migration pressure, and the difficult controllable emergence of new conflicts is likely to further increase this pressure.

Immigration policies will become tighter because of high spending on asylum seekers and because of the public opinion with regard to foreigners. These policies are likely to limit the inflow of asylum seekers and labour migrants especially if measures are accompanied by growing effectiveness of administrative barriers. So, it is concluded that due to economic disparities between the EEA and non-EEA countries, and established networks in the EEA area of non-EEA nationals, the migration pressure from outside the EEA will continue to remain high. However, it is assumed that policies limiting the immigration to the EEA will sort effect. With respect to the net migration surplus caused by migration to the EEA, therefore a reduction is expected, though the decline in net migration levels will be modest because of provisions dealing with family reunification and formation in combination with the high persisting migration pressure.

Qualitative assumptions on *long term* developments in net migration can be summarised as follows.

The *Baseline* scenario is mainly a continuation of developments observed during the last decade. This means in terms of economic development that the economy continues to grow. This economic growth causes a moderate creation of new jobs and government interventions are not able to change the unemployment rates much. Only a modest increase in labour demand is expected, resulting in a slight increase in job mobility. So, the *Baseline* scenario expects slightly increasing mobility due to moderate economic growth. With respect to immigration policies, there will be some effective measures taken, exerting a continuous downward pressure on immigration flows from outside the EEA, while it is expected that asylum seekers will be more evenly distributed over the EU countries.

The *High scenario* assumes higher economic growth than the *Baseline* scenario. Increasing economic activities in combination with milder labour taxation will increase the demand for labour. Furthermore educational levels of the EEA citizens will increase fast. So, the *High scenario* assumes higher economic growth, conversion of this growth into employment, increasing mobility, and need for workers from outside the EEA. As in the *Baseline*, asylum seekers will be allocated to the different countries according to the population size.

In the *Low scenario* economic stagnation is supposed to be predominant in all EEA countries, but worse in poorer countries than in richer ones. Unemployment is high, negative attitudes towards foreigners increase, and migration policies will be strict.

Economic recession coincides with a decrease in mobility. High unemployment rates and high public spending on unemployment benefits for nationals, leave little room - political and financial - for the allocation of funds to non-nationals. Refugees will, to the highest extent possible, be returned to their home countries, while their entrance will significantly become more restricted. So, in the *Low scenario* mobility will be curtailed due to hampering economic growth while strict immigration policies will lead to a decrease of migration from outside the EEA.

On the basis of these qualitative assumptions discussed above quantitative assumptions on net migration are specified.

The levels of net migration to be reached in the target year are based on observed net migration levels for all the countries of the EEA together. In the early eighties net migration to the EEA dropped from a half million to about zero. Since then net migration has risen rapidly. In 1992 a peak was reached with 1.4 million. However, due to restrictive immigration policies net migration fell rapidly in most countries of the EEA in the early nineties. In 1994 net migration equalled 0.8 million. This means a decrease by about forty percent in only 2 years.

It seems unlikely that the rate of reduction of net migration will continue in this pace in the future. However, this rate of decrease can give an indication of what net migration level may be reached in short notice in case immigration policies keep on to be very successful. In the *Low scenario* it is assumed that the net migration figure of the EEA will halve in the next decade. So, a level of nearly 400 thousand will be reached in 2005. Given a continuous high immigration pressure in the next century, this level will be assumed from 2000 on.

The *Baseline* scenario is in essence a continuation of past developments. It is assumed that in the long run net migration of the EEA moves to a level that equals the average level of net migration during 1980-1994, i.e. 600 thousand. The reasons for choosing this base period are:

- the base period for assessing long-run projections should not be too short; hence for projecting the level of net migration 15 years ahead a base period of 15 years seems reasonable,
- the base period since 1980 includes both a period of low migration (the early 1980s) and a period of high migration (the early 1990s); hence the *average* level during the whole period seems a reasonable basis for the baseline scenario in the long run, as this scenario aims to project some 'average' level of migration.

In the High scenario net migration is assumed to increase in the short run: relatively high economic growth leads to a less restrictive attitude towards the immigration of people from outside the EEA. However, in the long run this will invoke a political reaction resulting in a severe reduction of the influx of migrants. These assumptions can be operationalized by using the mean value of net migration during the last five years as an indication of the level to be reached in the next five years. The observed average level turns out to be 1.1 million. As the extremely high level of 1992 is not likely to be repeated due to more strict policies, the assumed level of net migration for the year 2000 is slightly lower: 1 million. In the long run a decline is assumed, as it is expected that the high level of net migration cannot continue for a long period without political reactions. However, because of a positive economic development the reduction will be smaller than the decline observed in recent years (by 40% in 2 years). Hence a decline by 20% is assumed: from 1 million in 2000 to 0.8 million in 2010.

In order to determine net migration levels for each separate country, net migration levels of the EEA according to the three scenarios were distributed over the individual countries on the basis of population size, past migration experiences and consultations with Eurostat.

Trends in net migration are caused by different developments of various *categories of migrants*. Due to lack of reliable data it is very difficult to assess the size of these groups of migrants. Given the uncertainty connected with (trends in) the observed data, it is decided to make estimates only for the short run, i.e. until the year 2000. The assumptions were made on the basis of the specific economic conditions of the scenarios. In the Low scenario, *Aussiedler* will be the largest migrant group around the turn of the century. In the Baseline scenario the group of *Aussiedler* will equal that of family formation and reunification, while in the High scenario labour migrants will be by far the largest migrant group around the year 2000.

Finally, net migration figures are broken down by their *regional component*. For each scenario net migration figures of each country, according to the national scenarios are distributed over the regions. In contrast to the national scenarios the interpretation of the differences between the three scenarios is not in terms of (low, medium or high) level but in terms of rate of convergence. In case of the Low scenario, it is assumed that the most recent 'observed' regional distribution will remain unchanged in the future while in the Baseline and even more in the High scenario international migrants will spread more equally over the regions, considering the size of the regional population.

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