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Active Population Growth and Immigration Hypotheses in Western Europe

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Abstract. The paper examines, in respect of twelve Western European countries over a period of twenty years, the widely held view that any decline in their working population should be offset by greater reliance on immigrant labour.

This research, based on demographic projections and forecasts regarding labour market participation rates by age and sex for each of the countries concerned, focuses on the two most likely scenarios. It appears that only Italy will be faced with a fall in its working population. All other western countries will either maintain the same level or, more generally, see their workforce grow substantially. Accordingly, we may safely assert that there is no risk of a shortage of workers between now and the year 2020, and that an increasing supply of labour will render reliance on a greater influx of immigrant workers unnecessary.

The second part analyses changes in the structure of the demand for labour. We deal chiefly with the phenomenon of the concentration of foreign manpower in each sector, its flexibility and mobility in a context of unemployment, as well as the impact of new technologies and globalisation on the main determinants of international migration of labour.

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Résumé. Cet article examine le point de vue largement répandu selon lequel tout déclin dans la population active devrait être compensé par un appel plus important de main-d'œuvre immigrante, pour les douze pays d'Europe de l'Ouest sur une période de vingt ans.

Ce travail, basé sur des projections et des perspectives démographiques sur les taux de participation, par âge et par sexe au marché du travail dans chacun des pays concernés, se concentre sur les deux scénarios les plus probables. Il apparaît que seule l'Italie devra faire face à une baisse de sa population active. Tous les autres pays d'Europe de l'Ouest, ou bien maintiendront le même niveau, ou, plus généralement, verront leur population active croître substantiellement. Ainsi, nous pouvons affirmer avec certitude qu'il n'y aura aucun risque de manque de main-d'œuvre entre la période actuelle et l'année 2020, et qu'une offre croissante de travail ne rendra pas nécessaire l'appel à un fort flux d'immigrants.

La seconde partie analyse les changements dans la structure de la demande de travail. Nous avons principalement affaire au phénomène de concentration de main-d'œuvre étrangère par secteurs, à

sa flexibilité et à sa mobilité dans un contexte de chômage, aussi bien qu'à l'impact de nouvelles technologies et de la mondialisation des principaux déterminants de la migration internationale du travail.

Key words: international migration, foreign labour force, demographic projection

Introduction: Immigration and labour market in Western Europe

We shall examine the role that the international migration of labour should play in the Western European labour market over the next twenty years. There is a widely held view that because of a decline in their total populations the host countries are witnessing a decrease in their active populations which can only be offset through a considerable increase in migratory flows. In the course of this demographic-economic study we shall attempt to assess the nature and the magnitude of these imbalances in the labour market.

Firstly, we shall examine a number of demographic forecasts linked to hypotheses regarding labour market participation in order to ascertain whether the active population will actually diminish in some countries, when this would happen and the extent to which it is influenced by immigration. Afterwards the focus will be shifted to the present economic transformations which manifest themselves in structural changes, underemployment, new technologies and globalisation in order to evaluate their impact on the demand for "national" or "immigrant" workers, and the specific role of the recrutment of foreign workers within this new context.

The first part will deal with labour supply.

In the first section an overview of the literature, together with realistic hypotheses in terms of the volume and fluctuations in entry flows, reveals that, by itself, immigration cannot change the population structure and bring about a demographic equilibrium.

Based on the demographic projections by the Council of Europe and Eurostat the second section puts forward a wide range of scenarios for the population trends within twelve countries of western Europe. It will become clear that in most of these hypotheses the majority of these countries will witness an increase in total population by the year 2020. According to high variant forecasts, the potentially active population (20–64 age group) will continue to increase in all countries until 2020, whereas a cumulation of the least favourable hypotheses shows a drop in only two countries (Germany and Italy). The ageing of the potentially active population is a general trend. However, the extent and rate varies from one country to another, depending on the specific economic situation, whereas the various immigration hypotheses have a marginal impact.

The third section will focus on the core of the analysis. Starting from two demographic projections and two projections regarding the development of labour force participation rates linked to age and sex for each of the countries we will establish four scenarios for trends in the active population. If we restrict ourselves to the two most likely scenarios, it appears that only Italy will be faced with a decline

in active population. At the end of the same time span a small minority of other Western European will have active population close to today's levels, whereas most will have experienced a substantial increase.

If we retain the high projection hypothesis, which takes into account a combined total annual flow of 900,000 immigrants in these twelve countries, we may safely say that there is no risk of a shortage of workers between now and 2020.

The labour supply in the medium term of twenty years will generally increase and there will thus be no reason to boost it by increasing migration in order to compensate a shortfall in manpower.

The second part contains an analysis of the likely changes in the trends and structure of labour demand and the implications for the specific demand for foreign workers.

The first section shows the changes caused by structural transformations on the phenomenon of the concentration of foreign manpower in certain sectors. The second section will deal with the specific role of the flexibility and mobility of foreign workers against the backdrop of considerable underemployment. In the third section we shall discuss the impact of new technologies and of increased globalisation on the main determinants of international labour migration.

The general predictable trends in labour demand reveal that the traditional factors related to massive immigration flows of workers have lost their relevance.

2. Immigration and labour supply

Any estimate of the job situation in the traditional countries of immigration in the coming years will require a more detailed examination of the links between demographic trends, the active population and employment. Within these aggregates it will be necessary to distinguish between national and immigrant components.

2. IMMIGRATION AND THE SIZE OF THE POPULATION

2.1.1. *Theoretical aspects*

A brief survey of the literature will help to identify most of the criteria put forward, and to assess their content and also their validity with a view to establishing an immigration policy.

Coale (1972), highlighted the circumstances in which immigration makes up for a less-than-replacement birth rate and maintains a stable population, while Espenshade et al. (1982) demonstrate the conditions in which a declining population receiving a constant annual number of immigrants would become stationary in the long term. There have been many models for the structural effects. A certain type of population balance may be achieved by taking migration into account, provided arrivals are constant enough for sufficiently long periods – a constraint which very much limits the effectiveness of the mathematical model in any attempt to establish the probable practical effects of migration (Zlotnik, 1991). Furthermore, as gross

and net migration rates have varied considerably over the past 40 years it is unlikely that they will stabilise in any predictable way in the future.

A second approach is to determine what level of migratory movement would either guarantee a constant proportion of nationals to foreigners or dictate a process whereby that proportion would change. The first of these objectives is behind Switzerland's population projections (Federal Office, 1987) and the second is reflected in the projections of the Netherlands (Kuijsten, 1990), the USA (Espenshade, 1986) and Germany (Feichtinger and Steimann, 1992).

Other works have measured, in practical situations, the size of the contribution which migration needs to make as an instrument of demographic policy in the strict sense of the term. Can immigration partially replace births and head off a decline in the total population? How much migration would be required annually to avoid a decline in the population of the European Union in the assumption that migrant birth rates would eventually fall to the generational replacement level (Wattelar and Roumans, 1991)?

The aim of preventing the ageing of the population of the European Union by means of a permanent influx of young migrants cannot be achieved under any realistic hypotheses. After many projections, the conclusion is that the ageing trend would abate but could not be stopped over the next 75 years, even supposing a maximum influx of 400 000 migrants p.a. and even if they halted their transition to a replacement-level birth rate (Lesthaeghe et al., 1988, p. 16).

Lastly, all available simulations suggest that the aim of guaranteeing the dependency ratio of 65+/24–26 at a constant 1:3 is equally unachievable. The scenarios for Belgium, Canada, Spain and Austria show (Wattelar and Roumans, 1991, p. 66) that migration policies designed to make up for the weight of the ageing section of the population would in some years require an influx of migrants five to 10 times the size of the gross influx in previous years, lead ultimately to a doubling of the total population and generate a process of auto-induction as the working immigrants aged. Maintenance of the current age structure would imply cyclical variations in migratory movements, which will get bigger (Blanchet, 1988). Blanchet works out a "stop and go" plan for France, involving emigration between 1990 and the year 2005, followed by a 20-year period of immigration, then further emigration in the year 2025 and immigration starting again in 2045. From a social as well as an economic and political point of view, the successive, ever-larger waves of arrivals and departures required to achieve this specific aim are barely credible.

A more modest approach towards maintaining a constant volume of 20–65 year-old adults also supposes variations in flows, smaller ones but difficult to handle. So although constant, large migratory movements can slow down shrinkage and ageing, regardless of what migratory policy is adopted, they will probably not be justifiable solely in terms of population balance or purely demographic objectives. Experience has shown that, in the long term, migration is not sufficiently selective

to make any spectacular changes to the distribution by age and sex of a given population (Zlotnik, 1991, p. 12).

The range of simulations carried out for Italy also show the ineffectiveness of immigration as a means of ensuring a stable population. This is the conclusion reached by Gesano after having taken into account different variables (constant immigration flows, stable immigration rate, influx regulated as a percentage of the number of births, flows varying according to the total population size or the number of births) (Gesano, 1994).

This issue becomes even more complex when the 'rate of assimilation' is entered into the equation. This denotes the pace of mobility of one group towards the native population as well as the convergence criteria. To the extent that there may be substantial differences between the gross and net migration due to returns, the size of the inflows and impact on the host population should not be underestimated. Bouvier, for instance, stated that "zero net international migration is not the same and does not have the same demographic results and implications as zero international migration". Their case studies of Germany and the USA showed that in certain situations (TFR, age of arrival and return) that the size of gross migration affects the size of the host country even if it involves a case of zero net international migration (Bouvier, Poston and Zhai, 1997).

The concept of "demographic imbalance" remains as ill-defined as ever, which explains the great variety in roles ascribed to immigration. At the same time, we are quickly moving away from the concept of demographic "balance" inasmuch as age structure influences the balance of social security systems and the productivity of the factors of production.

2.1.2. *Demography – past trends and future prospects*

General demographic trends in a region that has attracted immigrants for many years clearly offer a valuable insight into the forces that will determine future patterns. Over the past 50 years, Europe as a whole has experienced a moderate but steady growth in its population. Very long-term forecasts indicate zero, followed by negative, growth rates. However, the most recent forecasts predict a tendency towards stability in the size of the population over the next 30 years. According to the medium variant of the latest UN forecast (1996), the population of Europe will remain between 728 million in 1995 and 709 million in 2020. The population of Southern Europe will fall from 143 million in 1995 to 139 million in 2020. During the same period, the population of Northern Europe will rise from 93 million to 95 million, whereas the population of Eastern Europe will drop from 310 million to 289 million, and that of Western Europe will increase from 180 to 182 million (United Nations, 1995[1]).

This general trend is confirmed by other sources. When it comes to the population of the Twelve (not including East Germany), Eurostat's medium variant forecasts indicate an increase from 327 million in 1989 to a peak of 334 million in 2005, followed by a fall to 324.5 million in 2020 – a 9.7 million decline over

15 years (or 0.2% p.a.). The low variant has the population figure peaking five years earlier, in the year 2000, whereas the high variant predicts continuous growth throughout the period (Eurostat, 1991a).

The Council of Europe presents other scenarios. These cover 20 member countries of the Council of Europe (all those with more than a million inhabitants, less Turkey). The reference variant shows the total population increasing from 449 million in 1991 to 481 million in 2020, with the lowest variant predicting 441 million in 2020 and the highest 522 million (Prinz and Lutz, Council of Europe, 1993).

It must be emphasised that the contribution which net international immigration makes to the total population growth of European countries varies considerably. In the period 1950–1989, for example, the ratio of net migration to population growth was 48:100 in Belgium, 41:100 in Sweden, 24:100 in France and 22:100 in the United Kingdom, but only 12:100 in the Netherlands, 10:100 in Norway, –1.5:100 in Greece and –9:100 in Spain (Macura, 1994).

When used to predict trends in migratory movements, population projections come in for numerous criticisms and reservations, which call for certain comments.

First of all, in the absence of explicit political objectives, many of the national statistical institutes use only the most improbable hypothesis, that of a zero migratory balance. Moreover, it would be wrong to use the exceptional movements of recent years – as regards pattern, type, underlying cause and relative importance of countries of origin – as a basis for reliable extrapolations.

Secondly, the relevant time horizons vary greatly, depending on whether the issue is considered from a demographic, migration or economic standpoint. Population projections have to be geared to the long term, so as to give the demographic phenomena, which change very slowly, time to manifest themselves fully. But the further the horizon, the less reliable the assumptions about migratory trends. The very nature of the phenomena involved – birth and death, and migration – makes for very different reference periods. Moreover, the traditional distinction between countries of immigration and countries of emigration is no longer currently applicable in Europe. The composition and pattern of the movements in recent years are not indicators which guarantee that trends will persist. The degree of acceptability of the movements will depend not only on demographic and economic factors, but on social and political criteria which can have various effects on the sort of control used for migrants of different types and origins.

So the best approach is probably to produce forecasts based on the most plausible assumptions about birth rate and life expectancy, to use constant levels of migratory flows and to propose the widest possible range of scenarios.

An analysis which confined itself to the median trend for all the countries of a given region would be of only very limited interest. First of all, regional aggregations conceal many specific national characteristics, which differ greatly, while the factors governing immigration depend on the individual characteristics of each country. Then, the range of demographic trends being very wide, the main point

of the exercise is to suggest a combination of possibilities to highlight the specific incidence of the migratory variable.

2.1.3. *Total population trends*

We will only consider 12 members of the Council of Europe – Austria, Belgium, France, Germany, Greece, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, and the United Kingdom. Although the list is not exhaustive, these countries in fact account for 95% of the net migration of all the countries in the Council of Europe (Council of Europe, 1991). They include countries which have long received migrating labour, ones which, typically, have "ethnic" immigration and others that have opened their doors to refugees and asylum seekers. Some of them have predominantly taken in migrants from the southern Mediterranean while others have mainly drawn from eastern Europe. In the first place, three groups can be identified – a western European group, a Nordic group and a southern European group.

Discussions on the impact of immigration on the total size of the population regularly raise the possibility of rapid demographic decline in a large number of host countries. It is therefore proposed, as a first step, to assess likely changes in total population, before going on to consider changes in population structure and finally trends in the active population. The year 2020 will be taken as the end year, thus providing a period sufficiently long to measure the sensitivity of the various demographic scenarios but not so long that economic and political parameters cease to be sufficiently relevant. A comparison will be made of projections based on two different sources setting out two sets of scenarios. The first series, based on the Eurostat projections will be examined in detail in section 2.3.

The Council of Europe offers a wider range of options regarding developments of fertility, mortality and of immigration. Depending on the scenario, the total fertility rates in 2015 are 1.3, 1.7 or 2.1. The life expectancies chosen are 83.5/89, 77/83 or 90/95. The net immigration levels are 1 million p.a., 500,000 p.a. and zero.

The projections put forward by these two Institutes are independant of the hypotheses used by the national statistics bodies of those countries. Consequently, the results differ significantly from the forecasts by each of the official national bodies.

Table I summarises the key information in the Eurostat projections for the 12 countries concerned over 30 years.

In the low scenario, only five countries, Belgium, Germany, Greece Italy and Spain, see a decline in their population by the year 2020, while the situation in the United Kingdom remains almost stationary, the 2020 figure being the same as in 1990. In Greece, Spain and Belgium the decline is tiny, more a quasi-stationary situation with the fall only occurring at the end of the period. Germany and Italy, in contrast, would experience a significant decline starting fairly early, in 2005 and 2008 (column 6). However, all these countries have seen positive growth over a

Table I. Total population projections for all countries, in two scenarios ('000s)

	Scen	Volume		Growth				Comparison, 1997		
	(1)	1990 (2)	2020 (3)	2020 (4)	Diff. (5)	(6)	(7)	Obs. (8)	Forecast (9)	(10)
Germany	High	79112831	89904728	113.6				82012.2	83018.3	
	Low	79112831	73189914	92.5	21	2005	1961		80458.2	
Austria	High	7660345	9807181	128.0				8067.8	8222.4	
	Low	7660345	8023012	104.7	23.3				8039.1	
Belgium	High	9947782	11309907	113.7				10170.2	10263.1	
	Low	9947782	9731332	97.8	15.9	2013	1973		10057.8	
	High	38924464	44548205	114.4				39299.0	40142.8	
	Low	38924464	38312046	98.4	16.0	2017	1984		39466.0	
	High	56581291	67743065	119.7				58493.9	59089.5	
	Low	56581291	59893922	105.9	13.9				58318.0	
Greece	High	10204496	12240550	120.0				10486.6	10571.6	
	Low	10204496	10155288	99.5	20.4	2019	1991		10325.6	
	High	57576429	62895181	109.2				57461.0	59103.5	
	Low	57576429	54061911	93.9	15.3	2008	1971		58113.6	
Norway	High	4233116	5367281	126.8				4392.7	4463.0	
	Low	4233116	4529509	107.0	19.8				4377.1	
Netherlands	High	14892574	18736885	125.8				15567.	15848.4	
	Low	14892574	15963066	107.2	18.6				15531.8	
Portugal	High	10336900	12756179	123.4				9934.1	10753.5	
	Low	10336900	10623056	102.8	20.6				10524.5	
	High	57313000	65167131	113.7				58871.0	59078.0	
	Low	57313000	57309608	100.0	13.7	2020	1989		58237.8	
Sweden	High	8527036	10897892	127.8				8844.5	9013.4	
	Low	8527036	8830647	103.6	24.2				8786.0	

(6) Year in which the volume of the total population was equal to the 1990 figure.
(7) Last year in which a level equivalent to the 2020 level was reached.
(8) and (9) Comparison of trend observed in 1997 and Eurostat projection.
(10) Over-estimation (+) of the projection after five years.
Source: Eurostat, 1991; AELE-Eurostat, 1993; Recent demographic developments in Europe, Council of Europe, 1998.

long period. The most recent year in which the projected 2020 level was recorded is shown in column 7.

The population of all these countries is on the increase in all the other low scenarios (and thus of course in the high ones), although the situation is perhaps not quite so clear cut, since a comparison after seven years of the projections and the most recent data available (for 1995) are already showing population figures below the low scenario for three Mediterranean countries – Italy, Portugal and Spain.

The Council of Europe data offer a much wider range of options with three fertility, three life expectancy and three migration hypotheses and a reference hypothesis, offering 27 variants. Only 9 scenarios are presented here, involving the highest and lowest demographic hypotheses. See Appendix 1 for a detailed discussion of the fertility and life expectancy hypotheses. For the Council of Europe the combination of fertility, mortality and migration hypotheses yields 27 possible scenarios. Our nine scenarios combine the maximum and minimum growth hypotheses. This permits systematic comparisons in which only the migration assumption is varied each time in order to assess the specific effect of immigration on the future size and structure of these countries' populations.

Figure 1 summarises the various thirty-year trends according to the nine scenarios. These are specified in the legend of the figure.

Legend to Figure 1

Scenario		Migration	Mortality	Fertility
Central		500,000	83.5/89	1.7
H H H	High Migration, High Mortality, High Fertility	1,000,000	77/83	2.1
H H L	High Migration, High Mortality, Low Fertility	1,000,000	77/83	1.3
H L H	High Migration, Low Mortality, High Fertility	1,000,000	90/95	2.1
H L L	High Migration, Low Mortality, Low Fertility	1,000,000	90/95	1.3
L H H	Low Migration, High Mortality, High Fertility	0	77/83	2.1
L H L	Low Migration, High Mortality, Low Fertility	0	77/83	1.3
L L H	Low Migration, Low Mortality, High Fertility	0	90/95	2.1
L L L	Low Migration, Low Mortality, Low Fertility	0	90/95	1.3

Countries and Acronyms: D: Germany, A: Austria, B: Belgium, SP: Spain, F: France, G: Greece, I: Italy, N: Norway, NL: Netherlands, P: Portugal, UK: United Kingdom, S: Sweden.

The relevant figure is the population in 2020 and the data have all been converted to a 1990 = 100 base to facilitate inter-country comparisons. Information is available to measure the impact of the three immigration flow hypotheses and relate them to various birth and death rate hypotheses. Given the way the problem has been presented, it is particularly interesting to compare the following scenarios – first the highest scenario, HLH (high migration, low death rate and high birth rate), with the LLH scenario (zero migration, low death rate and high birth rate), and second the lowest scenario, LHL (zero migration, high death rate and low birth rate) with the HHL scenario (high migration, high mortality and low fertility).

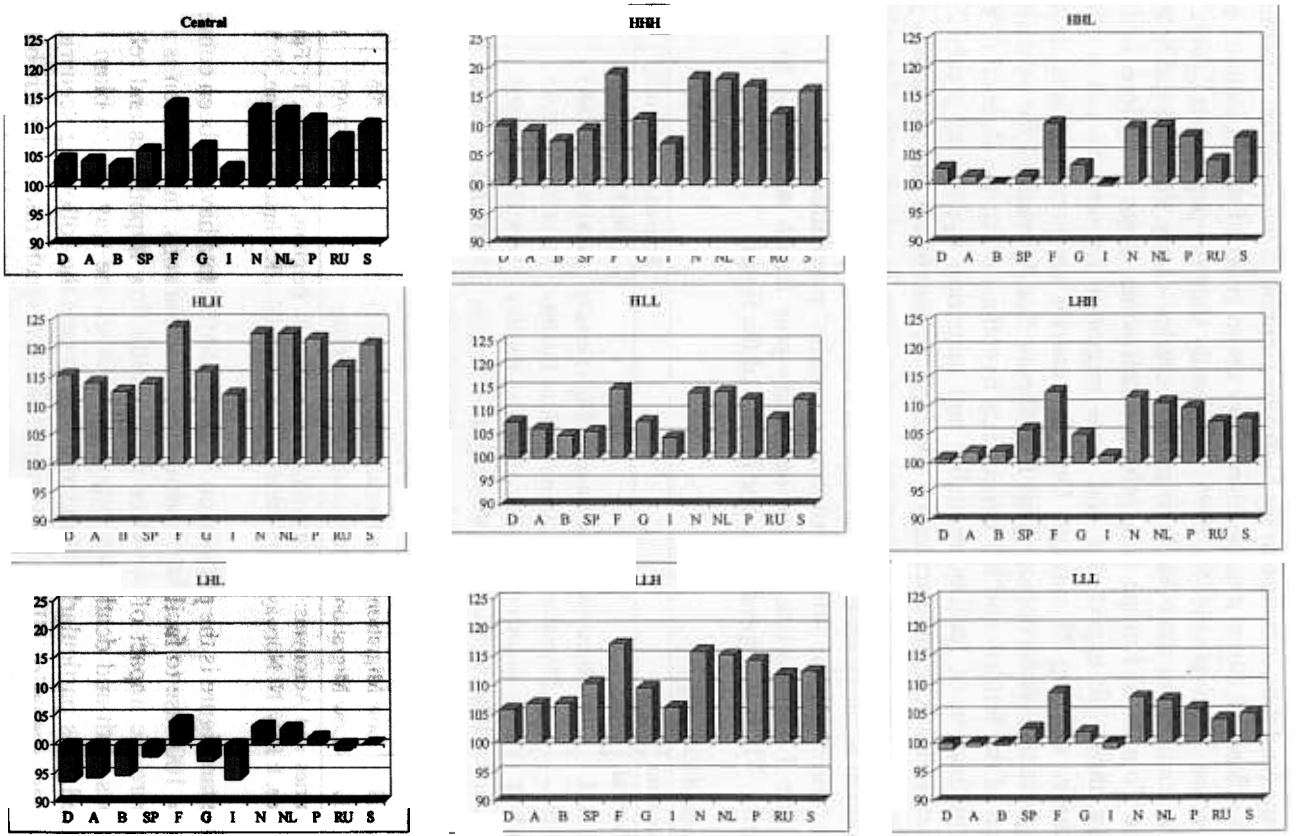

Figure 1. Total population growth in nine scenarios. 1990 = 100, Council of Europe (1993).

From a "high" point of view, the zero immigration scenario variant LLH guarantees a population increase for all the countries, ranging from 5% in Germany to 17% in France. From a "low" point of view, the high-immigration scenario HHL enables all countries, bar Italy and Belgium (with falls of 0,15 and 0,35% respectively), to record an increase in population. Only the scenario which combines zero migration, high mortality and low fertility results in a majority of countries' experiencing a decline in total population, the exceptions being France, Netherlands, Norway, Portugal and Sweden. The ranking of scenarios and the differences between them vary considerably from one country to another.

2.1.4. *Population aged 20–64*

Overall, the potential working population, which constitutes the pool of available labour and is traditionally used to calculate dependency ratios, will continue to rise until 2020 under the combined effect of natural increase and migration. Naturally, in Eurostat's high scenario (900 000 immigrants p.a.) (Figure 2), the 24–64 year old population expands, to varying extents, in all twelve countries. The last 'baby boomers', born after 1964, will go into the 65+category after 2030 and shift the trend.

In the low scenario (300 000 immigrants), the absolute figure for the working age population increases in the vast majority of these countries. There is a decrease in only four. In Belgium (5 915 000 in 2020, as against 6 002 600 in 1990) and Greece (6 072 000 in 2020, as against 6 072 200 in 1990), the situation is virtually stationary and only changes in the last years of the period. In Germany, the biggest decline (45 791 000, as against 50 064 000) begins in the year 2000 and Italy too sees a decline, going back down below the 1990 level in 2008 (33 149 000 in 2020, as against 35 174 000 in 1990). Germany and Italy are the two countries which have had the biggest migratory movements in recent years, thus confirming the migration assumptions of the two series of projections which allocate them the largest contingents of migrants of all the countries.

The series of scenarios obtained from Council of Europe data provide further information permitting a more detailed assessment of the effect of migration. Figure 3 gives the general trend and the size of the gap between scenarios for each country (ranging from 11% maximum to 7% minimum). To facilitate inter-country comparisons, growth is calculated on the basis of 100 in 1990. The German situation apart, there are two types of trend – one involving countries where it is always positive, whichever scenario is considered, and one involving countries where it depends on the type of scenario. The order of scenarios is identical for all countries. The greatest volume is achieved with the scenario HLH (high demographic growth, with high immigration), followed by scenario HHL (low demographic, high immigration), then LLH (high demographic, zero immigration) and LHL (low demographic, zero immigration).

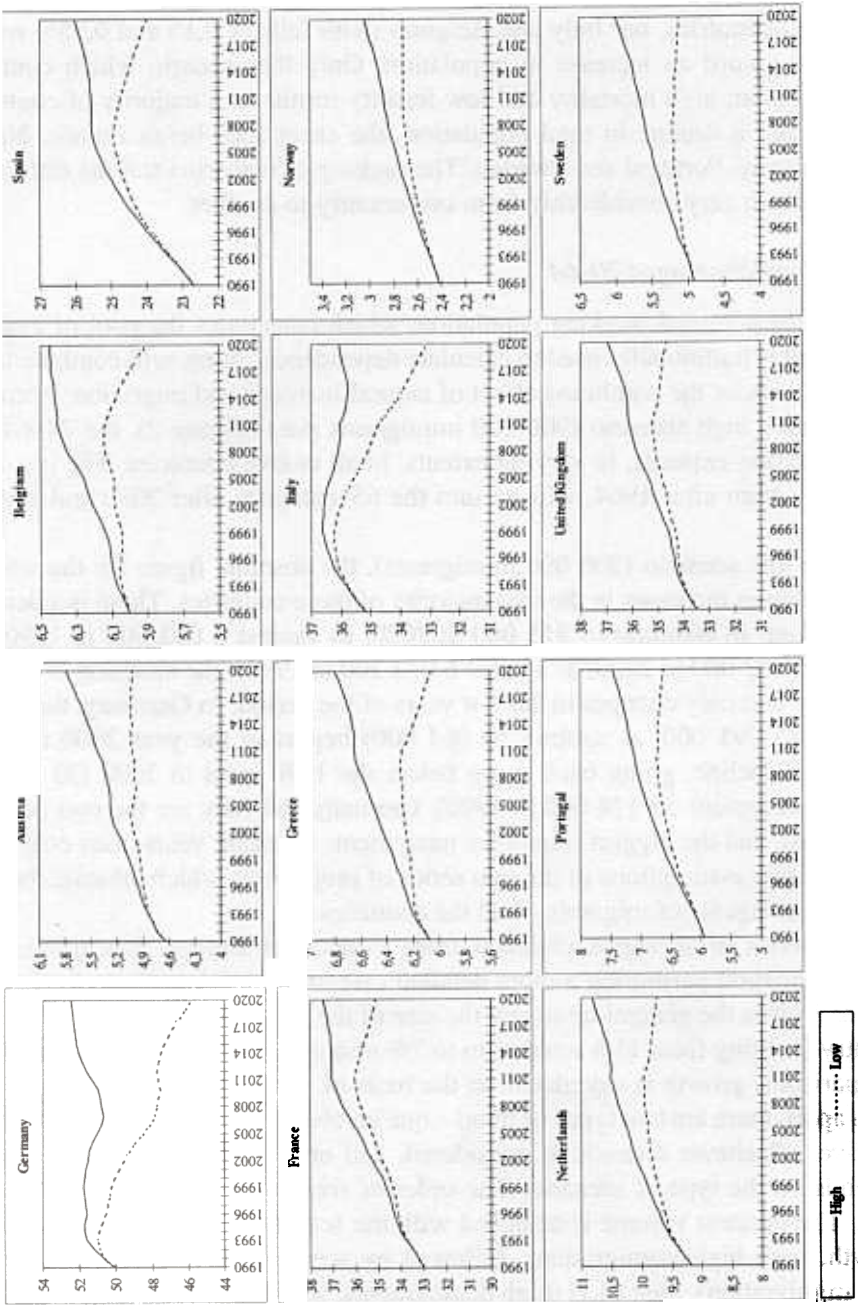

Figure 2. Evaluation of the working age population in two scenarios. Age 20–64 – millions – Eurostat (1991 and 1993).

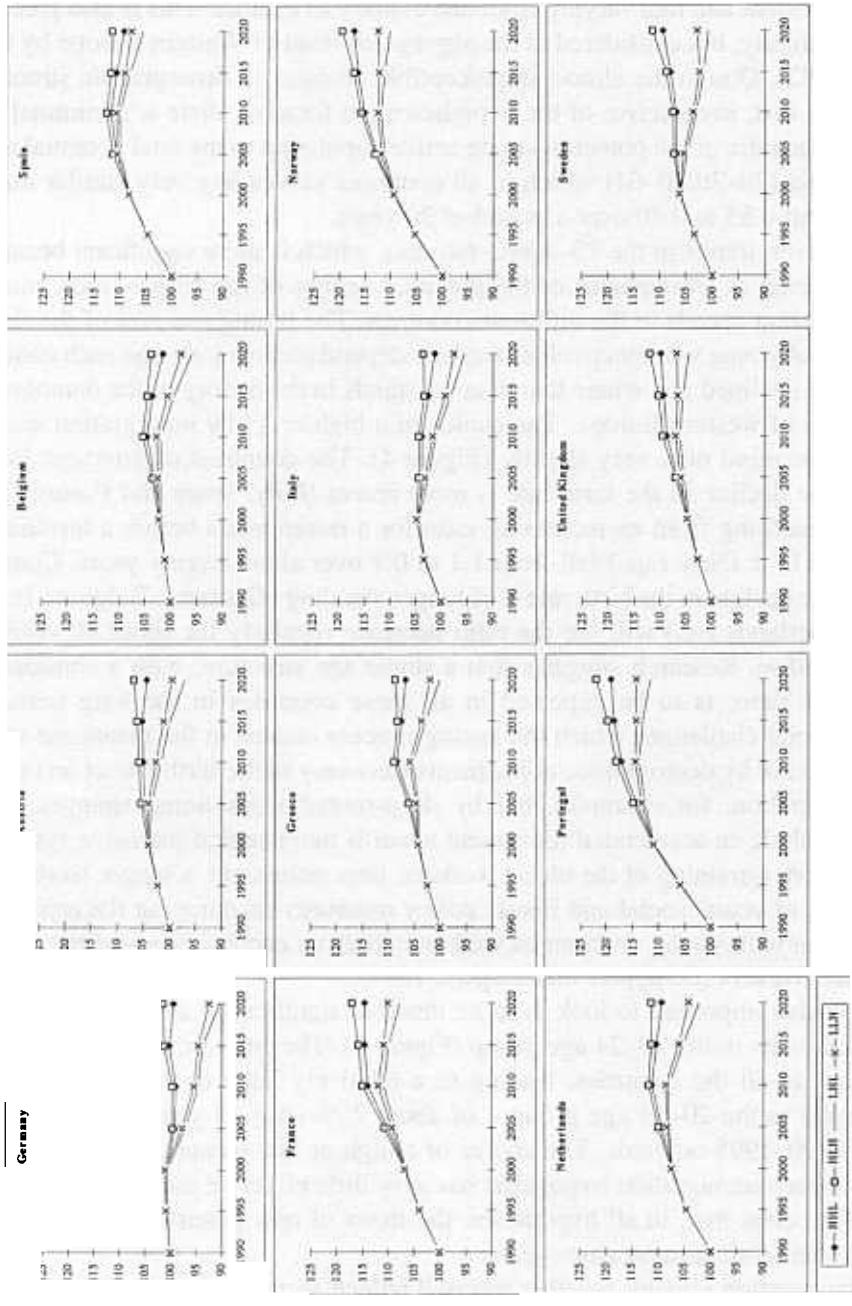

Figure 3. Growth of the working age population in four scenarios. Age 20–64 years (%), 1990 = 100, Council of Europe (1993).

2.1.5. *Ageing of the population in the countries of immigration*

For each set of assumptions, the secular process of population ageing continues, with the extent and rate varying from one country to another. This is also presented fairly similarly, but considered at the aggregated level of Western Europe by Coleman (1992). Due to the almost imperceptible changes in demographic structures, one finds that, irrespective of the hypotheses put forward, there is a minimal variation in the ratio of the potential young active population to the total potential active population (20–39/20–64) which in all countries moves in a very similar manner from about 0.55 to 0.40 over a period of 30 years.

However, trends in the 20–39/40–64 ratio, which is more significant because it is often used as an indicator of the potential ageing of the labour force, move at very different speeds in the different countries. The timing and size of the shift in the ratio of young workers to older workers depend on how long ago each country's birth rate declined and where that country stands in the history of the demographic transition of western Europe. The choice of a high or a low immigration scenario affects the trend only very slightly (Figure 4). The countries of Southern Europe where the decline in the birth rate is more recent (Italy, Spain and Portugal) will go on benefiting from an increasing ratio for a dozen years before a levelling off followed by a fairly rapid fall from 1.1 to 0.7 over about twenty years. Countries where the decline in the birth rate is of longer standing (Germany, Belgium, France, the Netherlands etc.) will see the ratio decrease regularly for about 20 years and then stabilise. Research suggests that a stable age structure, with a constant 20–39/40–64 ratio, is to be expected in all these countries in the long term. The major social challenges which the ageing process creates in the meantime will be answered not by demographic adjustments (recovery of the birth rate or an increase in immigration, for example), but by deep-rooted institutional changes. These might include an accelerated movement towards more capital-intensive systems of production, retraining of the oldest workers, later retirement, a longer working life (in terms of years) social and family policy measures encouraging the recruitment of women with young children as well as initiatives encouraging greater mobility of older workers (Schippers and Siegers, 1991).

It is also important to look in more detail at significance and the extent of the developments in the 20–24 age group (Figure 5). The end of the baby boom made its mark in all the countries, leading to a relatively large decline in the number of people in the 20–24 age group – of about 25% over 15 years in most cases – from 1990–1995 onwards. The choice of a high or low scenario combined with a high or zero immigration hypothesis has very little effect on the overall trend. It is therefore clear that, in all hypotheses, the flows of new potential workers will be much smaller than in previous years.

The question remains whether this will reduce sectoral mobility. Without offering precise answers, there are two comments to make. Firstly, the decline starts in the 1990s after a long period which saw the arrival of the bulge created by the

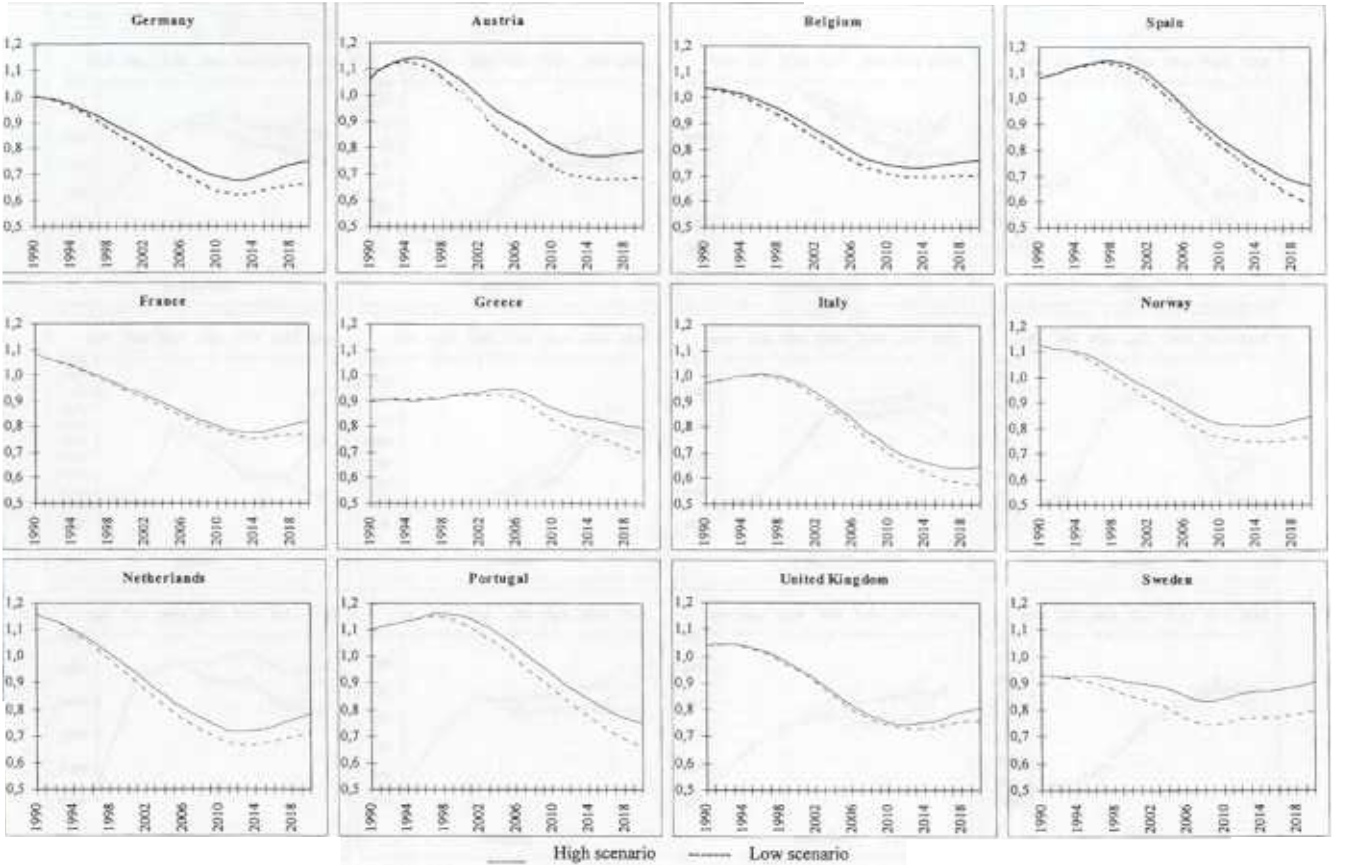

Figure 4. Ratio between 20–39 and 40–64 years in two scenarios Eurostat (1991 and 1993).

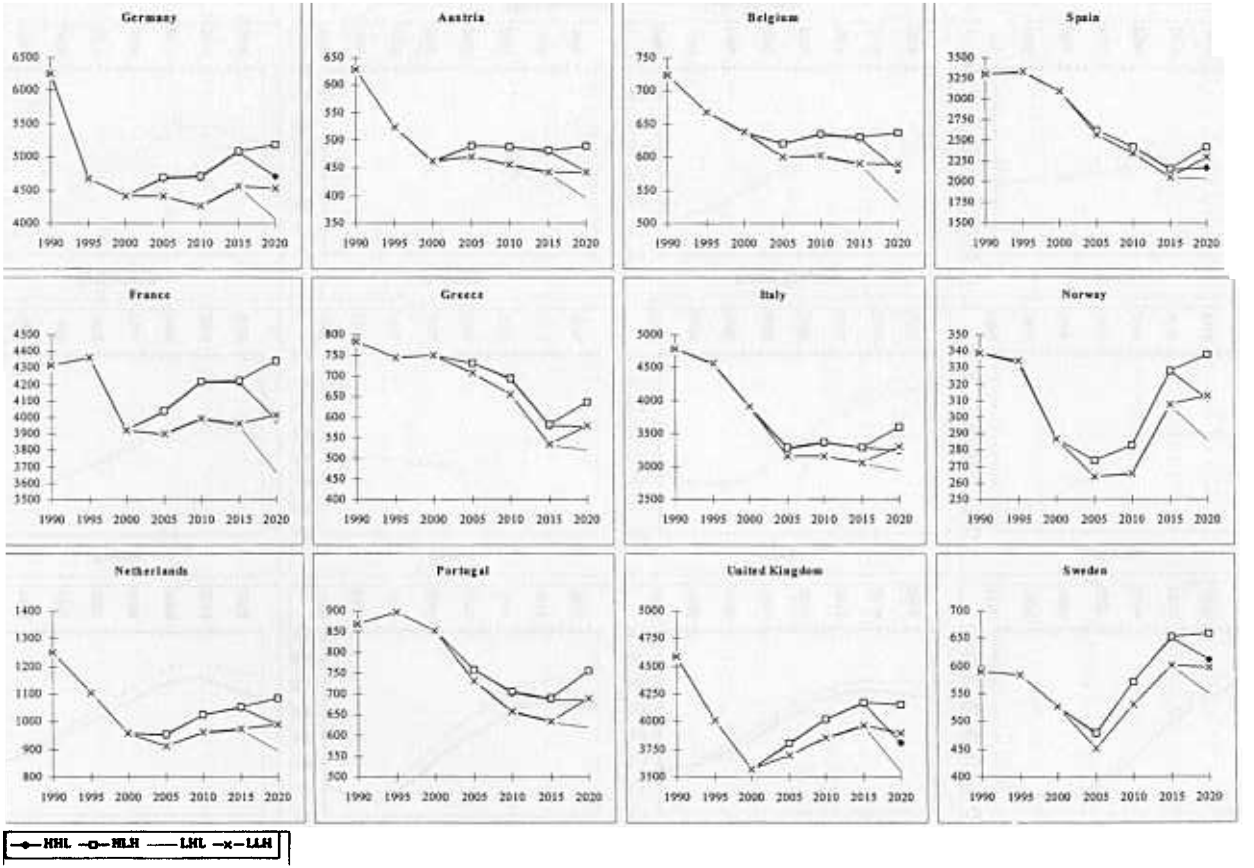

Figure 5. Trends in the population of 20–24 years olds in four scenarios – Thousands – Council of Europe (1993).

high birth rate of the post-war years and, secondly, in all countries, the 20–24s are second only to the 16–19 age group in terms of the current decline in their economic activity rates.

It is therefore much more important to endeavour to predict the structural changes which the working population of these countries will undergo than simply the changes undergone by those of working age.

2.2. TRENDS IN THE LABOUR FORCE

According to a widely-held view, western Europe will shortly be entering into a period of significant manpower decline, which may even lead to a shortfall in job supply. It will be accompanied by an end to growth followed rapidly by a fall in the number of employees and a faster ageing process. The changes that will affect the labour supply, that is the employed workforce and the unemployed, result partly from demographic factors, whose two components are the natural rate of population change and net migration movements, and partly from socio-economic factors which express themselves in terms of labour market participation rates by age and sex. Over the past 25 years, the average growth of the active population in all the countries of Western Europe has been 0.7% p.a. A large number of economic analyses and policy statements take it for granted that the trend will be reversed before the end of the century and will particularly affect countries such as Germany, Italy and the United Kingdom, whose active population will decline (ILO, 1986). UN projections suggest that: "Altogether, the EU Labour Force will contract by 5.5 per cent over the next three decades. This no doubt will partly be compensated for the technological change and higher labour participation of women and disadvantaged groups (OIM, 1991). But there may remain room for immigrants to fill the gaps." (Kuijsten, 1994, p. 29).

Since changes in the size and structure of host countries' labour supply are important determinants of the level of immigration, we shall now present the most significant results of a set of projections of the working population, which we have produced for each of the countries under scrutiny. There are several reasons for this. The first, and most obvious, arises from the observation that there are no recent and detailed projections of the working population. The majority of studies draw on old estimates that have been largely superseded by demographic and economic changes. Existing estimates supply no more than general figures for the western Europe as a whole for the last year of a period and for one, "medium" situation only. To get an accurate picture of the effect of the future labour supply on the labour market in the countries of immigration, we need to separate the data for each country, examine the year-on-year trends and put forward a sufficiently wide range of plausible scenarios. It is important to present these trends both as regards their duration and their national characters. The cross-sectional approach makes it possible to point out similarities and differences of labour supply in countries with

free circulation of manpower. Yearly figures give indications on the main changes in trends and on the frequency of changes.

2.2.1. *Hypotheses for the development of demographic and activity factors*

We shall adopt a two-phase approach, whereby the demographic projection scenarios will be followed by labour force projection scenarios. The former are based on Eurostat data for Member States of the European Union, and completed by projections for the former members of the European Free Trade Assocation (EFTA-Eurostat, 1993). The first Eurostat "low" scenario is predicated on the following hypotheses: a reduction in the Total Fertility Rate to 1.5 in 2020, and an average increase in life expectancy until 2000 to 73.3 for men, and 79.6 for women. In the second "high" scenario there will be an increase in the TFR for nearly all countries to 2.2 in 2020, and a rise in the e_0 until 2020 to the level of 78.0 for men, and 83.0 for women.

According to the "low" scenario there will be a constant immigration influx of 300,000 people, 250,000 of whom will head towards the 12 European countries, with 50,000 going towards the countries of the former EFTA. The "high" demographic scenario predicts an annual total net influx of 900,000 immigrants, divided into two categories of 750,000 and 150,000, respectively.

The selection of the 12 countries included in the analysis below will absorb 98% of the influx. It is worth noting that the Eurostat projections combine a "high" demography and substantial immigration, on the one hand, and a "low" demography and immigration, on the other. Consequently, the available data do not allow a comparison of the "high" and "low" hypotheses by distinguishing the specific impact of net migration.[2]

We propose four scenarios combining the two demographic projections and two scenarios for trends in the labour force participation rate.[3] These two labour force projection scenarios are based on econometric models and analyses of trends taken from labour force surveys. The "low" activity rate variant presupposes that past trends will generally continue and that the decline in rates will be spread over the period 1995 to 2020. It also means that there will be no convergence of age participation rates between the sexes or between countries. The "high" variant involves a set of assumptions implying increased participation of all age groups. It is accompanied by a strong tendency for the different European countries' and the two sexes' participation rates to converge.

So, these scenarios combine first, the data of the projections related to the population structure for each of the countries, by one-year age groups, sex, and also for each of the years from 1990 to 2020, secondly, the two scenarios for trends in activity rates to participation rates by age and sex, for each of the same countries and years.

So, there are four scenarios:

Scenario 4 "HH": "high" population (high fertility and high immigration) and "high" activity rates.

Scenario 3 "LH": "low" population (low fertility and low immigration) and "high" activity rates.

Scenario 2 "HL": "high" population and "low" activity rates.

Scenario 1 "LL": "low" population and "low" activity rates

2.2.2. *Projection of the labour force to 2020*

For most Western European countries, there are a number of hypotheses regarding demographic phenomena and the labour force participation rates which allow us to identify the likely trends in the size of the active population until 2020. Without however giving any precise numbers, it is possible, thanks to the scenarios available, to present a range of developments, to identify those which appear most plausible, and to draw general conclusions in respect of the link between immigration flows and labour supply.

Figure 6 provides a general overview of the entire period in question for all of the 12 countries and each of the projections. The basic reference for each of the scenarios is the 1990 population of each of the countries. An examination of the curves of Figure 6 immediately reveals the most significant trends resulting from a growth, stagnation, or drop in the active population as compared to that of the base year.

2.2.2.1. We can isolate a first largely significant trend. For five of the twelve European countries under scrutiny the sum of the range is nearly always situated beyond the 1990 figure, irrespective of the hypotheses regarding the development of participation rates according to sex and age, the birth rate or death rate hypotheses applied, and the size of the migration flows. The countries involved are Spain, Norway, Portugal, Austria, and France (for the last two countries the scores are –0.6% and –0.3%, respectively in the lowest scenario 4).

2.2.2.2. An examination of the extreme scenarios reveals useful information regarding the possible limitations to the increase or decrease in the active population. Scenario 4 "HH", which combines both "high" demographic projections and "high" activity rates results in a considerable increase in the active population in all 12 countries. The growth varies between a maximum of +50.3% in Austria, and a minimum of +27% in Germany. Throughout the period of 30 years, the annual growth rate is positive and lies between 1% and 2%.

Scenario 1 "LL" combines a "low" demography and "low" activity rates. In this respect it is advisable to mark distinctions based on the categories of the countries and the periods. The first category of Western European countries shows a decrease in the active population. This includes Germany, Belgium, Greece, Italy, the United Kingdom (–2.2%) and Sweden. Three countries almost maintain (a decrease of ca –0.5%) the size of their active populations in 2020 in comparison with that of 1990 despite the fact that we are applying the least favourable scenario. Moreover, in

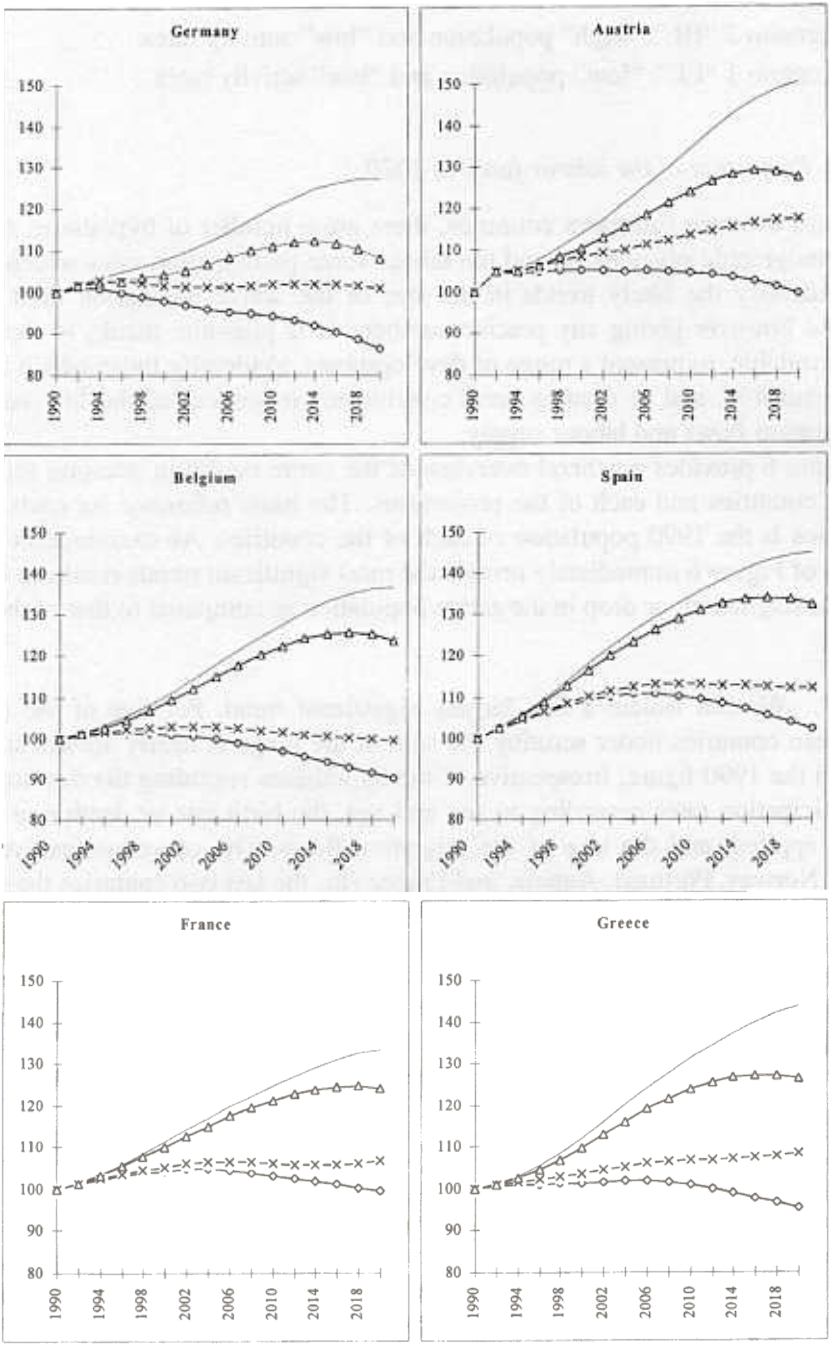

Figure 6. Growth of the labour force in four scenarios 1990 = 100, Eurostat (1991 and 1993).

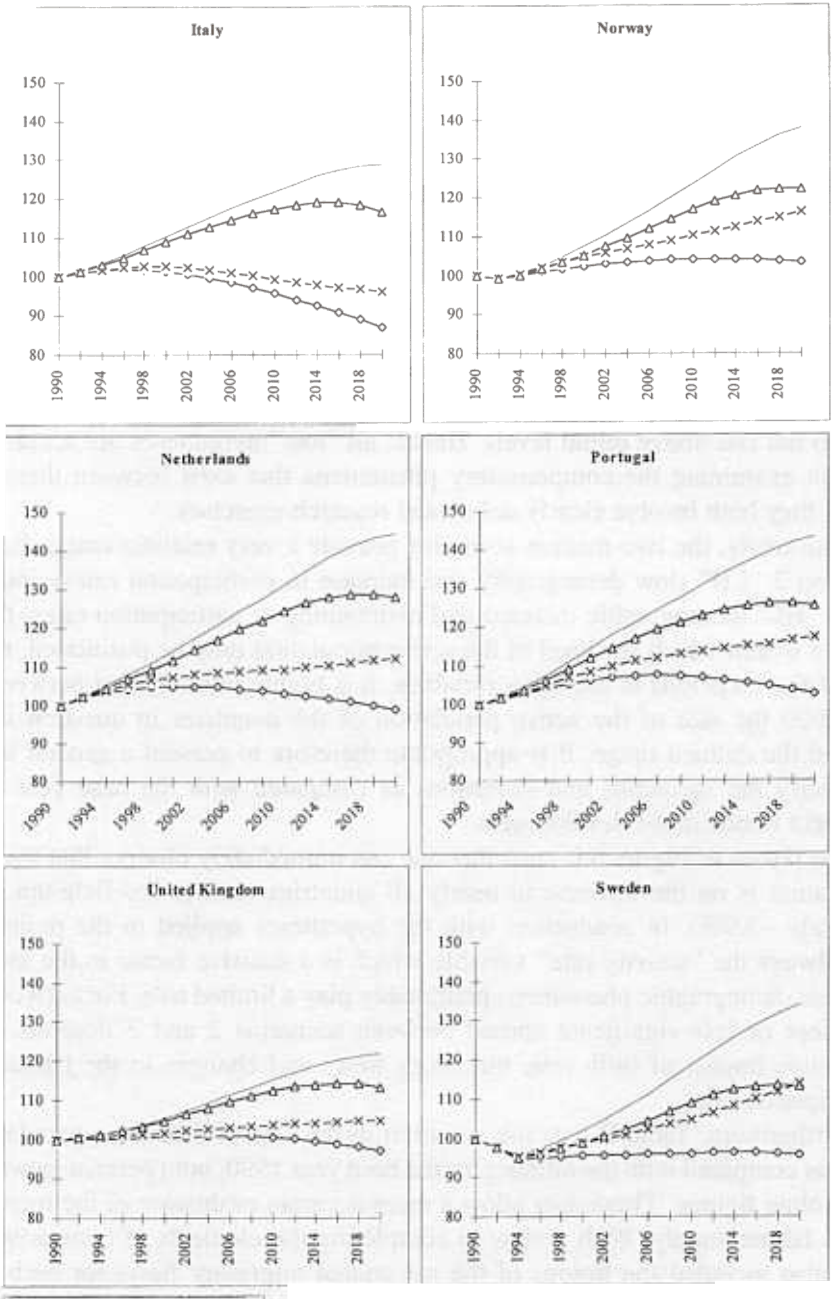

Figure 6. Continued.

the same scenario, Spain, Norway and Portugal would witness a small rise in their active populations.

In the case of a decrease, the year of onset presents a rather ambiguous picture. For Germany the decrease starts at the beginning of the period; for Italy and Belgium it is situated in 2004; for the United Kingdom and Greece it takes place in 2014.

2.2.2.3. Nevertheless it is the *median scenarios* that should be referred to in order to establish a forecast analysis which remains plausible. Indeed, neither of the two scenarios we have just discussed, i.e. nos 4 and 1, seems very realistic. The former is less than reliable since it involves demographic behaviour which would stimulate the birth rate, and is characterized by relatively high immigration rates, while at the same time giving rise to a substantial increase in activity rates. The latter scenario combines a "low" demography, very low immigration, as well as activity rates that do not rise above initial levels. Hence, all "low" hypotheses are accumulated without examining the compensatory phenomena that exist between them. As a result, they both involve clearly delineated research exercises.

Conversely, the two median scenarios provide a very realistic range. Between scenario 2 "LH" (low demography and increase in participation rates) and scenario 3 "HL" (demographic increase and maintaining of participation rates) there is an area within which the level of the active population may be positioned, regardless of the variations in the main variables. It is highly unlikely that between now and 2020 the size of the active population of the countries in question will go beyond the defined range. It is appropriate therefore to present a general outline, to specify the variations and deviations as compared with the base year and to highlight trends in the development.

The layout of Figure 6 is such that one can immediately observe that the active population is on the increase in nearly all countries (except for Belgium –0.4% and Italy –3.9%). In connection with the hypotheses applied to the projections, it is always the "activity-rate" variable which is a decisive factor in the increase, whereas demographic phenomena predictably play a limited role. For each country, the more or less significant spread between scenarios 2 and 3 depends on the respective impact of birth rate, migratory flows and changes in the labour force participation rates.

Furthermore, Table II lists the variation in the size of the active population in 2020 as compared with the number for the base year 1990, both percentagewise and in absolute figures. These data allow a more accurate evaluation of the increase in future labour supply. With a view to completing the elements of comparison, we have also included the figures of the net annual migratory flows for each of the countries in the two scenarios. By way of synthesis it is worth emphasising that according to scenario 3 "LH", which determines the upper limits of the defined range, the active population is witnessing a positive rate of increase for most of the countries until 2014, after which date the rates become negative.

Table II. Active population in 2020 Comparison with 1990 in 12 West European countries according to two median scenarios

Country	Variation in active population (%)* 2020–1990		Variation in active population (absolute numbers)		Predicted annual migration**	
	Scen.2	Scen.3	Scen.2	Scen.3	Scen.2	Scen.3
Austria	17,5	27,1	612,374	965,214	40.000	15.000
Belgium	–0,4	23,8	–17,564	945,105	22.000	9.000
France	6,6	24,0	1,663,970	6,006,665	70.000	25.000
Germany	0,9	8,1	341,816	3,111,445	280.000	100.000
Greece	8,5	26,4	355,164	1,099,963	40.000	15.000
Italy	–3,9	16,4	–940,437	3,999,778	100.000	30.000
The Netherlands	11,9	27,9	816,850	1,903,368	50.000	20.000
Norway	16,2	22,1	346,197	470,936	8.000	5.000
Portugal	17,2	25,4	861,518	1,267,881	40.000	15.000
Spain	12,1	32,3	1,894,840	5,057,519	70.000	25.000
Sweden	13,6	13,2	632,421	613,010	40.000	10.000
United Kingdom	4,8	13,1	1,394,664	3,817,949	60.000	20.000

*Calculations based on demographic and activity-rate projections.
**See Cruijsen et al. EUROSTAT, 1991 & EUROSTAT & EFTA, 1993.

3. The demand for national and foreign labour

3.1. DEMOGRAPHIC PROSPECTS

Rather than offering a detailed description of the labour situation in Western European countries over the past 25 years, we should like to identify the most realistic trends of the labour supply and draw general conclusions pertinent to the role and impact of international migration. A first general conclusion comes out of the scenarios presented in section 2. Contrary to a widely held view, these countries will not suffer from a shortage in manpower during this period. Nearly all realistic development hypotheses yield a significant increase in the working population in most countries (bar Germany, Italy, and Belgium). This development should be viewed against the fact that there are homogeneous trends. In other words, the increase in the working population, as well as its pace, does not carry in its wake tensions or discontinuities which may trigger significant movements of people between the countries of this area. The differences between the demographic projections may be highlighted by pointing to the fact that the total population of most of these countries will continue to rise for another ten years before sliding into negative rates. Generally, the final total population will exceed that of the base year and those of the active population projections according to which there will be an increase in the course of the entire period.

We should also bear in mind that 1990, which was chosen as the base year for the different projections, already marked the end of a period of constant and high growth in the size of the active population, stimulated at once by the baby-boom and the changes in women's behaviour in labour force participation.

In essence, this means that never before in the recent history of these countries has the active population been this high, whereas the scenarios selected in fact more or less extended this general trend.

This increase is clearly always higher for all countries in a scenario implying variations in the participation rate parameters than in one which is predicated on the hypothesis of a demographic increase reliant on a resumption of the birth rate and on high migratory flows.

Within the confines of scenarios 3 and 2, the annual net total migration flows for these 12 countries hover between 900,000 and 300,000 migrants (cf. section 2.1). It is the scenario with 300,000 migrants which ensures the strongest growth in the active population. The distribution of these flows among the countries involved takes into account the least favourable situation of Italy and Germany, since they are allocated proportionately higher contingents (cf. Table I). The question that needs to be addressed is whether these hypotheses on the migration flows can still apply to the movements of recent years. After a steep increase in immigration in the early 1990s, we are currently witnessing a decline.

The most recent estimates (Council of Europe, 1998) tend to show a decrease in the net migration balance over the past couple of years in the majority of countries under consideration, except for Sweden, Portugal and Spain which saw an increase.

With the exception of Germany, all these countries remain well within the range delimited by the two projection hypotheses. Naturally, the variations in the migration flows depend on largely political factors and it is very difficult to make accurate forecasts.

Migratory movements are currently not so directly related to the labour market in the host countries as they were before. The expansion of the movements and their greater diversification have led to contrasting situations in different countries (Zlotnik, 1998). Traditional immigration involving permanent workers, which only represents a small percentage of arrivals, has increased in recent years but has tended to stabilise since 1993. It was concentrated in Germany and Austria. In countries with a tradition of immigration, it is difficult to measure the effect which the flows – fed for the most part by family reunion procedures which bring in the families of former immigrants from the countries of the South – have had on the rate of arrivals on the labour market. After a while, and to varying degrees, they probably give a boost to feminisation and bring down the age of the foreign labour force. However, while the potential for legal immigration resulting from family reunion is very high, the multiplier effect is far from being fully operational since countries impose various restrictions to limit its impact. The very considerable growth in the number of asylum-seekers since 1985 undoubtedly accounts for the bulk of the increase in the number of young foreign arrivals in all the countries. In

making comparisons, however, it must be remembered that countries' definitions of types of migration data recording procedures vary and can bias comparisons. Attempts are being made to harmonise international migration statistics.

Since 1992, the movement has significantly declined in Germany, then in Austria, the Netherlands, and Sweden. The rate of recognition has gone down drastically too, from an average of 20% in 1988 to 5% (Eurostat, 1994a). Applicants who are refused refugee status make up the bulk of the illegal aliens. Moreover, asylum-seekers are coming from an increasingly wide range of countries, but an examination of eligibility and recognition practices makes it clear that every host country has very explicit national preferences. The range of professional qualifications offered by the asylum-seekers is very wide and, in a massive population shift triggered by a disaster, it will reflect the composition of the labour force in the regions of origin. On the other hand, in the case of more regular flows, the profile of asylum-seekers is to some extent shaped by opportunities available in the community of fellow-countrymen already settled in the host country, as well as by the networks for illegal job recruitment and the selection criteria applied by the host country.

These various channels, such as family reunification procedures, the rate of acceptance of asylum seekers and ethnic migrant return schemes, enable host countries to maintain partial control over migratory movements and make some sort of selection from the unlimited international supply, despite the European Union's efforts to harmonise migration policies. Nevertheless, the control remains fragile and fragmentary. It becomes much less effective when the intensification of internal conflict in the countries of departure increases the number of asylum seekers, when the incentives for illegal immigration become stronger or when the children of former immigrant waves start to establish families by recruiting spouses in large numbers from their countries of origin. These phenomena influence in various ways the level of qualifications of the foreign workers arriving on the labour market in the host country. In general, there has been a noticeable increase in the level of professional qualifications held by "regular" immigrant workers who are recruited beforehand and are in possession of work contracts. However, this trend is counteracted by the low level of vocational training of the spouses of immigrants who arrive through family regroupment or through the recruitment of spouses in the country of origin and who then enter the labour market.

Nevertheless, since 1996 there has been a new trend characterised by the creation in several countries of temporary labour migration programmes and by a considerably increase in the migration of highly skilled workers (Sopemi, 1997). These arrivals are part of a greater integration of foreign labour force movements into the European labour market.

3.2. RECENT STRUCTURAL CHANGES

A first observation is that the increase in the active population will be accompanied by a dramatic change of its profile. The activity rates of under-25-year-olds will collapse in almost every country, albeit more gently in Mediterranean countries. The over-55-year-olds' activity rates, which went into rapid decline largely triggered by planned job-cuts in troubled sectors, mainly by early-retirement schemes, seem to have bottomed out. Conversely, the drop in male workers was more than offset by a strong increase in female participation rates. The active population projections presented in section 2 take into account these profiles for each country. One may well wonder whether the contraction in labour supply from young people, the feminisation of the active population, and the ageing of this active population in the years following 2005 will create tensions on the labour markets. Will it be difficult to get young people of working age into work, and will the pace of integration of human capital within the labour factor be slowed down?

The theoretical and empirical approaches to the role of foreign labour in changes to production processes and labour markets have varied considerably.

In one approach, immigration is thought to have negative effects on the national labour force because of the very high national/foreign labour substitution rate. The assumptions it uses are very restrictive, implying a fixed number of jobs throughout the period in question, total immigrant/national interchangeability for all jobs and consistently lower pay for foreign labour. There has not been any empirical confirmation of the perfect substitution thesis so far (Borjas, 1990; Borjas, 1993).

An opposing theory postulates total separation of national and immigrant labour through total segmentation of the labour market. The primary market, featuring high salaries, good terms, stable employment and rapid promotion possibilities, is reserved for nationals and the foreigners are concentrated in the secondary market in which casual status, unpleasant work and poor pay are the rule. Immigrants constitute one segment of a dual labour market (Piore, 1979). This approach sheds sound but limited light on the machinery regulating the labour market in most of the countries of immigration. The notion of total segmentation into two does not stand up well to labour market changes dictated by the persistence of the employment crisis.

Trends in the structure of jobs in the various professions and the slide towards more highly qualified activities seem very much to depend on the economic cycle and overall rate of job creation. The EU's Labour Force Surveys show that, in times of low growth, the least skilled will find it more and more difficult to find and keep jobs, although when growth improves again, a discrepancy between requirements and availability in terms of qualifications apparently does not constitute an obstacle to job creation. It would be clinging to the past to believe that the current migratory movements are mainly made up of poorly qualified workers. The EU annual reports also highlights the importance of small industrial and services firms in the creation

of employment. In this general trend, immigration is no longer primarily a source of salaried employment for big companies in traditional sectors.

So the division into two distinct types of labour market appears too static, since it is too rigorous in its separation of nationals and first-generation immigrants who in fact constitute a homogeneous supply of labour.[4] It cannot withstand the arrival of new waves of migrants, of different origins and composition, which play a role quite separate from that of the existing foreign labour force, nor the advent of the specific function which the foreign labour force will increasingly be asked to fulfil during the process of structural adjustment of the economy. Many econometric studies also show that substitution processes are less likely to involve new immigrants replacing nationals than new immigrants replacing longer-standing immigrants (Tapinos and de Rugy, 1994).

A comparison of the changes in the sectoral breakdown between indigenous labour and that of foreign origin shows that the concentration in traditional industries is becoming less marked. In any case, this concentration of first generation immigrants reflected widely differing factors in the various western economies. For example, in France the highest proportion of foreign workers occurred in the construction and public works sector, whereas in Belgium it was in the extraction and processing of non-energy-generating minerals and in Germany in the metal processing industry (Sopemi, 1995,1996 ...).

If both perfect substitution and total compartmentalisation are to be excluded, it would be as well to insist on the dynamics of the place occupied by foreign workers, be they well-settled first-generation immigrants or the second-generation youngsters who have been coming onto the labour market over the past few years. The current demand for labour, national or foreign, reflects a move towards greater flexibility, which has taken practical shape in the generalisation of contracting-out, temporary work, personal services, outside management of an increasingly large percentage of company workforces and an increase in the number of self-employed workers (Garson, 1991). In many countries of immigration, this growth of the informal, and to some extent underground, economy is apparently the cause of, or at least a major factor in, the growth of illegal immigration.

Even though the economic crisis and changes in employment patterns have brought an end to the traditional division of the labour market, segmentation may still occur through certain types of work becoming stigmatised and rejected by indigenous workers. A number of studies report an ethnic stratification process in the labour market. However, these studies are based on work carried out in the United States and attempts to apply them to a European context may not be valid. For example, the movement of manpower towards the service sector has probably made the concentration of foreign labour in certain occupations more "visible" but there were probably greater concentrations in the traditional industrial sectors. Moreover, this could be a short-term phenomenon, with the longer-term trend being for the immigrant workforce to be spread across a relatively wide range of activities.

At the same time, these pro-foreign labour factors also partly depend on how vulnerable the immigrant workers are to structural changes in the production process. There are some sectors in which foreign workers are more vulnerable than nationals and others where they are less vulnerable. A detailed sector analysis would classify the sectors of activity into four categories involving:

an increase in both national and foreign employment;
an increase in national employment with a decrease in foreign employment;
a decrease in employment for both nationals and foreigners;
a decrease in national employment with an increase in foreign employment.

A generalisation of this sectoral modification process for all the west European countries of immigration is out of the question because the national economic realities are so diversified and the nomenclature has not been adequately rationalised. Without claiming to draw conclusions which hold good for all the countries, a Belgian research project along these lines reveals some of the determinants which have to be taken into consideration. This study is based on the correlation between gross capital formation in each sector of activity and the volume of value added and between trends in employment and in national and foreign unemployment (Feld and Biren, 1994) and it enables us to classify expanding and declining sectors of activity and measure the variations in the national labour and foreign labour factors for each. It highlights the importance of the type of investment (rationalisation or expansion) in any explanation of the intensity of the use of the various categories of labour. The effect of investment and the growth rate of production in these sectors differs according to whether they greatly attract or greatly repel national labour. Various parameters influencing the breakdown between national labour and foreign labour – type of technical progress, foreign labour concentration rate in the various sectors, degree of openness to international competition etc. are also important.

It would be dangerous to predict changes in the use of the foreign labour force (old or new waves of immigration) in the light of forecasts of sectoral changes in each country. Secondly, reinforcing this, the economic structures of the countries of immigration are very diverse. Trends in the various sectors of activity depend on their comparative advantage, inter-sectoral flows, historical influences and so on. International dynamics of the economies may be working towards their convergence, but there is no possibility of identifying a universal approach to the demand for immigrant labour. The determinants of foreign worker recruitment are specific to each country and need to be analysed for each sectoral labour market in the light of local constraints.

3.3. MOBILITY AND FLEXIBILITY OF NATIONAL AND IMMIGRANT LABOUR

To some extent, immigrant labour, as a category, has anticipated the various forms of flexibility in the labour force as a whole. The changes which affect its situation

apparently reflect important changes in the market and its more fragile situation heralded the recent process of labour market deregulation. For decades, one of the basic functions of the flow of labour migrants workers has been to improve the productive system's flexibility and boost the adjustment potential by means of greater geographical and professional mobility of labour. Is this still the function of foreign labour and how is this role shared between the first generation immigrants, who are already older, the second-generation youngsters and the flows of new migrants?

Two paths of analysis yield information on the level of rigidity/flexibility of the labour market.

3.3. *Coexistence of vacant jobs and unemployment*

Studies of migratory movements regularly raise the issue of the arrival of large numbers of (sometimes illegal) foreign workers at the very time when unemployment rates are very high. The phenomenon can be partly explained if it is included in the examination of trends in cases of structural unemployment. One of the manifestations of a rigid labour market (the causes and remedies of which are beyond the scope of this paper) is the simultaneous growth of labour shortages and surpluses which are not absorbed over a long period. This imbalance can be defined in terms of the "Beveridge curve," whose co-ordinates are unemployment rates and the "normal" rate of job offers, which showed very strong growth in the leading countries of the European Union, in contrast to other developed parts of the world, in 1973–1991 and has since stabilised at a high level (OECD, 1994, p. 72), (9% in the European Countries and 2,5% in Japan). We need to know whether the very large gap between vacancies and underemployment will persist and, if it does, whether it will be able to go on sustaining a heavy demand for fresh foreign labour, or whether, in contrast, the imbalance will provoke adjustments in terms of relative pay levels and official moves to reduce social security protection and amend labour legislation.

The 'non-employed' rate also constitutes an essential indicator regarding additional sources of manpower and thus the need to have recourse to immigration. Over a long period these rates tended to increase for men in EU Member States, and "in view of the traditionally strong links between this group and the labour market, one may presume that structural factors, such as a decrease in demand for unskilled workers, may have triggered this development" (OECD, 1994a, p. 35). Generally, we can observe that for all of the EU states, the "employment rate" stood at 60% in 1996, which was less than what it had been twenty years previously, whereas it regressed as compared with the recent peak in 1991 of 63% (European Commission, 1997, Employment in Europe – 1996, p. 7.) The question remains whether this volatility of workers "on the margins" will be translated into a strong demand for new foreign manpower, or, whether, on the contrary, these adjustments will be made through variations in the relative wage levels and interventions aimed at relieving social protection mechanisms and labour legislations.

The differences in the unemployment rates of indigenous and foreign workers, which in certain countries are more than 100%, are caused by a variety of factors whose relative importance cannot be easily ascertained (Stalker, 1994). First, there are objective factors such as levels of training and structural problems associated with the relatively high number of non-national employees in sectors which have lost large numbers of jobs over the last twenty years. However, the extent to which foreign workers suffer discrimination in host countries' labour markets should not be underestimated. Such discrimination takes a variety of forms and affects the recruitment, promotion and dismissal/redundancy processes (Werner, 1994).

3.3.2. *Mobility and rotation of the labour force*

Over and above purely quantitative aspect, it is usual to highlight the contribution in terms of quality which comes from migrant workers' greater willingness than nationals to move about. The need for the labour force to adapt to the internationalisation of markets and the spread of new technology is greater now than it was before. However, the role of immigration in this process is hard to define and even harder to measure. We can start by stressing that the age and sex structure of previous waves of migrants has quite naturally converged towards that of the host population and that the ageing and feminisation of the foreign labour force reduce its professional and geographical mobility – but will that mobility reappear with the new arrivals, the people involved in family reunification, the asylum-seekers and the illegal aliens? The nature of the problem may have changed over the past few years in that the major structural changes to the productive apparatus involving large-scale inter-sectoral transfers of labour have come to an end.

As far as we know, there are no general estimates of immigrant worker mobility with figures which can be compared for each country. The only available estimates, from the Labour Force Surveys are for intersectoral mobility in the labour force as a whole and there is very little breakdown (NACE 1 with 11 major activity groups in industry and services). These show an average intersectoral mobility rate of 5%, with the lowest figures in Greece and Ireland (2% and 1.5%) and the highest in the United Kingdom and France (6%). The measurement of intersectoral worker movement is not a suitable indicator of the adjustment potential of the labour force, because it underestimates moves between jobs. Developments in the economic situation (specialisation and more advanced qualifications) has probably also reduced workers' potential for changing sectors. However, a more satisfactory approach is to measure the intrasectoral rotation rate (i.e. job changes in the same sector), which is 17% for the European Community as a whole, with considerable variation within it. Spain (28%), Denmark and the United Kingdom have the highest proportions of employees who were in different jobs the previous year. At the other end of the scale, the lowest rotation rate was under 13% (Greece and Italy), with 15% in Belgium, Germany and Luxembourg. So, to some extent, the countries where intersectoral mobility is low seemed to make up for it

with greater mobility within sectors. Furthermore, even taking account of sectoral job changes, the variations in the overall rate of labour rotation between member states are still considerable (European Commission, 1994, p. 101). It seems clear that this process involves a higher proportion of immigrant than of national workers.

To appreciate the importance of the process over the coming years, it should also be seen as part of a historical trend. One or two studies give calculations of the sectoral changes in employment over several decades. The use of a turbulence indicator (corresponding to half the sum of the variations in absolute terms of each sector's share of employment) yields results which, for practically all the countries, correct the impression that structural changes have been speeding up over the past few years. It suggests that the turbulence typical of intersectoral job shifts in the 1980s has dwindled or remained stable, overall, in relation to the 1970s.

In all countries, except for the United Kingdom, for which data are available, the dispersal of change in employment within the sectors declined in the 1980s in comparison with the 1970s (OCDE, 1994, p. 17.).

Continuing this analysis, let us remember that companies have other ways of managing the adjustment of their human resources. They can make more intensive use of internal market procedures to offset the rigidity of the external market and they can externalise part of their output by contracting out. To find out where migrant workers fit in here, we need to analyse recruitment, promotion and any discrimination procedures in the first case and the phenomena of job insecurity in the second. The main function of immigration in this context thus becomes flexibility rather than mobility.

3.4. CHANGES IN EMPLOYMENT AND NEW PROSPECTS FOR LABOUR IMMIGRATION

Two main areas can be identified that shed light on the prospects for immigrant labour: (1) the introduction of new technology; and (2) the effects of internationalisation of markets.

3.4.1. *New technologies and qualifications*

An initial observation needs to be made here. Before the possibility of a shortage of qualified labour can even be examined, it must be noted that, contrary to the fears frequently entertained, the probability of a labour shortage is insignificant for most immigration countries. To be convinced of this it suffices on the one hand to compare the foreseeable trends in the size of the work force which are evident in the diverse scenarios brought together in diagram 6 (growth in the working population is predicted under nearly all the hypotheses) and on the other hand to retain the "realistic" hypotheses of productivity gains in work. Even under the least favourable scenarios, productivity gains more than compensate for the contraction in the working population. Thus if one extrapolates the trend observed

during the course of the decade 1980 to 1990, the average percentages for variation in work productivity for the following countries are arrived at: Germany: 1.7%; Spain: 2.8%; France: 2.4%; Italy: 1.9% (Productivity gain adjusted according to the number of hours worked in the business sector) (Englander and Gurney, 1995).

Moreover, the question arises whether the future demand for work will be determined principally by shortages in highly qualified labour. New technologies generate major changes in the way labour is used, but it is dangerous to attempt precise sectoral projections of the ranges of qualifications involved. Needs depend on the speed with which advancing technology is spread to the various sectors, but also on the efficiency of training and retraining systems and on pay structures.

In the 1950s and the1960s the immigration manpower flows were largely made up of unskilled workers. But the idea of distinguishing between skilled and unskilled on the basis of nationality is losing its relevance. Although traditional countries of immigration, such as the USA and Canada, are seeing the level of qualification of their immigrants decline, the opposite seems to be the case in Europe. Surveys show that, for example, the average asylum-seeker has a fairly high level of education and flows of migrants from urban areas in the South are partly made up of managers and people from the professions who have been hit by structural adjustment policies. There is probably a tendency to underestimate the level of qualification of migrant workers because they accepted downgrading when they took their first job. It is possible to produce a balance of the profits and losses caused by the introduction of new technologies, although the methods of evaluation differ considerably depending on whether the analysis is at the micro-economic, sectoral or regional or macro-economic levels. However, it is clear that the result will be a general process involving the acquisition of new qualifications and the downgrading of existing ones, to be specified in the light of an evaluation of job-content in the companies. New technology will certainly increase the number of jobs occupied by the highly qualified, but it could well have a de-skilling effect in some areas and may generate occupational restructuring in both industry and services, thereby inflating the category of semi-skilled and intermediate-level workers. It is the pay levels and the terms offered, above all, which will determine the balance of supply and demand in these new categories of employment.

3.4.2. *The internationalisation of the economy*

The drive to make businesses more competitive and the increasing internationalisation of trade could affect the intensity of migratory movements in various ways. First of all, some firms have adopted redeployment strategies to match the delocation of production. Investments in countries where wages are low and social legislation less strict have made it possible to reduce production costs while maintaining market share. It is very difficult to measure the true effect of relocation on migratory movements, but it has probably not put a brake on emigration from the developing countries. Indeed it would be wise to avoid a bilateral, symme-

trical approach to the two phenomena. The determinants of the choice to site some production units in particular countries are not the same as those behind the migratory flows. The multilateralisation of flows of capital and labour is such that most delocation investments do not benefit the labour-exporting countries.

Second, in declining sectors, marginal firms battling with competition and loss of productivity can only keep their head above water if they hire cheap, non-organised labour. Illegal aliens are the answer for these firms, which do not have the resources to modernise their equipment and, in cases of this kind, immigrant labour is a factor of production which is vital to maintain the jobs of national workers in declining sectors and regions.

Third, with the recent changes in production, processes can now be broken down into independent segments which no longer need to be located in the same production unit. In this case, it is a question of investing in the relocation not of whole units, but of phases, which are part of the production process but can be set up independently in other countries. The computerisation and development of telecommunications mean that multinationals can shift packages of service activities to countries with low wages and an abundant supply of highly skilled labour. As a result, highly qualified staff in some developing countries can move onto the internal markets of big firms without being part of a brain drain. It is not possible to estimate how far this recent phenomenon of uncoupling service activities and the possibility of shifting them overseas will affect the demand for immigrants who are highly qualified or have internationalised, standardised intermediate qualifications.

In conclusion, there is no need to fear a shortage in labour supply in most Western European countries between now and the year 2020. According to the most plausible hypotheses, there will be a general increase or stabilisation of the active population as compared with the early 1990s. According to the scenarios mentioned, the total labour force supply will be affected more by variations in the labour force participation rates as well as by selected migratory flow hypotheses. As far as labour demand is concerned, it is important to emphasise that it is very difficult to predict sectoral labour changes and to imagine the implications of high labour flexibility on the demand for foreign manpower. One should also look at the role played by migration movements in terms of the globalisation of the economy and the emergence of new technologies (Reich, 1991).

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Appendix

1. The two scenarios based on projections made by Eurostat are taken from the detailed data appearing in: Cruijsen et al, "*Background Papers on Fertility, Mortality and International Migration under Two Long Term Population Scenarios for the European Community*"; Eurostat, International Conference on Human Resources in Europe at the Dawn of the 21st Century, Luxemburg 27–29 November, 1991; and Eurostat and EFTA, *Two Long Term Population Scenarios for the European Free Trade Association*, Luxemburg, December, 1993.

   As far as *fertility* is concerned, the total fertility rate in 2020 is according to the high and low hypotheses: 1.8 and 1.3 for Germany, 1.9 and 1.4 for Austria, 2.0 and 1.5 for Belgium, 1.9 and 1.4 for Spain, 2.2 and 1.6 for France, 2.1 and 1.6 for Greece, 1.8 and 1.3 for Italy, 2.0 and 1.5 for Norway, 2.0 and 1.5 for the Netherlands, 2.0 and 1.5 for Portugal, 2.2 and 1.7 for the United Kingdom and 2.2 and 1.7 for Sweden.

   As far as *mortality* is concerned, projections of life expectancy give *as an average for all countries* a high variable e_0 in 2020 of 78 years for men which represents a 5.4 year increase over 1990 and 83 years for women, representing an increase of 4.1 years. In the low hypothesis, the male e_0 will stabilise in the year 2000 at 73.2 years and the female e_0 at 79.6 years.

   As regards *international migration*, the extrapolations of net migrations for each country are based on factors bearing on the labour market, the presence of immigrant communities, existing restrictions, legislation, control policies, the current distribution of asylum seekers, the extent of family reunification, etc ...

   The distribution of migrants in the 12 member States of the European Union plus those of the EFTA for a total of 900,000 immigrants annually (high hypothesis) and for 300,000 immigrants (low hypothesis) is as follows: Germany: 280,000/100,000, Austria: 40,000/15,000, Belgium: 22,000/9,000, Spain: 70,000/25,000, France: 70,000/25,000, Greece: 40,000/15,000, Italy: 100,000/30,000, Norway: 4,800/5000, Netherlands: 50,000/20,000, Portugal: 40,000/15,000, United Kingdom: 60,000/20,000 and Sweden: 40,000/10,000.
2. The scenarios analysed on the basis of work done for the Council of Europe appear in Prinz, C. and Lutz, W., "*Alternative Demographic Scenarios for 20 Large Member States of the Council of Europe, 1990–2050*". In Cliquet R. ed., *The Future of Europe's Population*, Council of Europe, Demographic Study no. 26, Strasbourg, 1993. The hypotheses based on three different assumptions (low, medium and high) are brought together on page 86. *Fertility*: Total Fertility Rate will thus reach 1.7, 1.3 and 2.1 in 2015. *Mortality*: e_0 for men and women will reach 83.5/89, 77/83 and 90/95 respectively according to the different assumptions. *International migrations*: 1 million, 0.5 million and zero immigrants annually.

   The distribution of migrants is different from that of Eurostat in that it takes into account the size of population of the country and the number of immigrants already resident. Total migration is thus divided as follows: Germany: 29.7%, Austria: 2.2%, Belgium: 2.2%, Spain: 5.7%, France: 15.0%, Greece: 2.6%, Italy: 13.6%, Norway: 1.1%, Netherlands: 4.4%, Portugal: 3.1%, United Kingdom: 11.6% and Sweden: 2.8%.

   The data processed was taken from Lutz and Prinz IIASA Laxenburg, Austria.
3. The scenarios for the working population are based on the demographic scenarios of Eurostat (see 1) and the scenarios for the rate of participation in the workforce produced for Eurostat by Hofmann H., "*Long Term Labour Force Scenarios for the European Union*", Ifo Institute for Economic Research, Munich, April 1995. Calculation methods and the hypotheses for high and low variants are outlined in Chapter 7, pp. 68–113.

Notes

[1] The last UN revised 1996 population forecast takes into account the extent of international migration towards Western Europe, makes a downward adjustment in the total fertility rate for most of the Eastern European countries, the member States of the ex-Soviet Union and the former Yugoslavia, and reduces the life expectancy for several Eastern European countries. As regards Western Europe, no significant adjustments have been made.

[2] These two institutions present different migration flow projections in terms of both the socio-economic and political development hypotheses and the method in which these flows are divided among the host countries. As far as the hypotheses of the European Council are concerned, the distribution of the total migration flows among these countries is based on a distribution key under which 50 per cent of the migration' aggregate' is allocated to the proportion of the country's population over the total population of all the countries; 25 per cent to the proportion of the population born abroad, and 25 per cent to the net migration over the last decade. Conversely, Eurostat's "low" scenario takes into account the adoption of stricter entrance criteria for the migration of manpower and for family reunion procedures as well as a decrease in the number of asylum seekers. The "high" hypothesis predicts entries at near-constant levels with a substantial reduction in the flows directed towards Germany (for the repartition among the countries, see Appendix 1 and app. 2, (Lutz) Tables 4, 5, p. 87 and Eurostat, Table B.6, p. 25 and below, Table 2.

[3] The scenarios for the labour force participation rates were established for Eurostat by H. Hofmann "Long Term Labour Force Scenarios for the European Union", IFO Institute for Economic Research Munich, April 1995. The calculation methods and hypotheses for the "high" and 'low" variants are discussed in chapter 7, pp. 68–113.

[4] We must stress the links between the segmentation of the labour market and international migration. This approach, which is almost exclusively based on demand factors, provides a reasonably good picture of the situation in the countries of immigration in the 1950s and 1960s and of the recruitment procedures. Today, the theories based on the analysis of networks, and those focusing on the features of "ethnic enclaves" ensuring from research conducted in the United States (Portes, 1995) contribute towards the study of the position of foreign manpower in the job markets in Western European countries.

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