

**EXPERT GROUP MEETING ON POLICY RESPONSES TO  
POPULATION AGEING AND POPULATION DECLINE**

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**POLICY RESPONSES TO POPULATION AGEING  
AND POPULATION DECLINE IN FRANCE \***

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## A. INTRODUCTION

In most developed countries, the decline in fertility and the increase in longevity has raised three concerns for the future: the decrease in the supply of labor, the socioeconomic implications of population aging, and the long term prospect of population decline and demise.

The population debate has a particular relevance in the case of France, where the early decline in fertility has prompted a deep and on going concern, which goes back to the last decades of the 19<sup>th</sup> century, and led to the implementation of population policies, favoring immigration and natality. The debate regained strength from the late sixties on, when fertility started to decline as in most western European countries, though, the current and projected fertility levels remains above the average level of the other member states of the European Union.

Over this long span, however, the way the population debate was formulated changed in a significant way. From a philosophical debate on the future of the French nation and a political concern in relation with Germany, to the socioeconomic implications of demographic aging and in particular the endangering of the Welfare state. Indeed, in as much as economic variables are related to the size, the rate of growth and age distribution of the population, the projected changes in these parameters might impact economic welfare. The concern is legitimate, but in order to set what is at stake, we need to assess the nature, the extent and the timing of the issues stemming from the projected demographic trends and to consider in a comparative way, the relevance and efficiency of the policies responses available in order to meet the desired targets, whether population policies or other instruments of intervention.

First, considering the demographic parameters involved, to preclude the demise of population and to insure a stationary population is an unquestionable end for any society, and in that respect fertility is an inescapable means for that given target. Immigration, except for settlement countries is not an end per se, it might be a means in order to respond to the needs of the labor market to get a more balanced age structure or to slow down the decrease of the population. The age structure itself is a constraint, which can be altered through policy, only to a limited extent.

Secondly, there is an interrelation between the type of issues involved, their timing, the appropriate policies measures and their efficiency. For that purpose it is appropriate to envisage, as a working device, three time horizons and the specific reference systems, that is the set of variables to be considered relevant for a given issue at given point in time in the future.

On the medium run, the next ten years or so, the labor market is the main focus of concern. The reference system comprises here the set of supply and demand variables that determine the employment equilibrium. The impact of fertility and mortality changes is for that purpose at this time horizon very limited. Conversely, international migration could play a decisive role, as well as other socioeconomic variables.

For the long run, - from 2020 to the population projections horizon 2040-2050- structural imbalances of the age distributions are things to worry about. Now the equilibrium of the social security system depends not only on demographic trends and structure but on a number of variables, social, economic and institutional that might as well strengthen or dampen the demographic impact.

In the very long run, beyond the next fifty years, the concern is total population decline. The relevant framework of analysis for that concern is population dynamics and there is no other meaningful option than an increase in fertility in order to sustain a stationary population. Indeed the 2050 horizon is acceptable but arbitrary. From the base year of the projection, it represents a

time span of roughly two generations. It may be seen as being too long, since behavior may change from one generation to the other, conversely. this time space is too short for the full effect of population dynamics to work through, assuming stable fertility.

Sorting the issues according to different deadlines is necessary in order to relate them to the relevant variables, however as policy changes need time to produce a significant effect, the timing of the issues and the policy responses differ, choices have to be made at an early stage.

The UN report on replacement migration focuses on the prospects of a negative growth rate of the population, a decrease in the supply of labor and an increase in the burden put on the population of working age by the increase of the population retired from the labor force. This exercise shows indeed the arithmetical impact of population prospects, which is precisely and solely what the exercise is about, but this is only one dimension of the issue and it remains to demonstrate in which cases, under which conditions and for which time horizon, population changes can be considered as a relevant and determinant factor.

The following sections of the paper deal first with the assumptions of the projection and the appropriate age grouping (B), then with the three major issues raised by the decline in the growth rate and the aging of the population: the labor market adjustment, the social security system equilibrium, and the prospect of a declining population( C). A final section considers specifically the replacement migration issue (D).

## B. THE FUTURE OF FRENCH POPULATION. UN PROJECTIONS AND NATIONAL PROJECTIONS

At this time, a presentation of future trends of the French population is constrained by the absence of recent projections by INSEE. The statistical office, pending on the exploitation of the 1999 census, has not yet updated its projections that date back to the early 1990ies.

### 1. *Fertility, mortality and migration assumptions.*

The latest available population projections produced by INSEE are based on the 1990 census and the previous intercensal trends. (Dinh 1994 and 1995) They cover the 1990-2050 period. They assume one pattern for mortality, one for international migration and three levels of fertility (high,2.1,"central" 1.8, low 1.5) How do they compare with the latest UN projections?( Tables 1 and 2) The UN 1998 medium variant upon which the replacement migration report is based, is close to the INSEE "central" projection, except for international migration.

The medium/central fertility assumptions are nearly the same. Both assume a slight increase in the fertility level, with minor differences in the time path. For INSEE, fertility is supposed to stabilize at 1.8 from 2005 on, whereas the UN assumes a stabilization at 1.96 from 2015-2020 on, which amounts on the whole to a TFR of 1.9. The patterns of mortality are quite similar and in both cases there is only one mortality assumption, which is regrettable, taking into account the impact of increasing longevity on the number and proportion of older people.

The international migration assumption is, in both cases, somehow ad hoc. INSEE assumes a 50 000 net immigration per year over the entire projection period, a mere extrapolation of the balance inferred from the comparison between the 1982 and 1990 censuses. The UN assume a

525 000 net immigration from 1995 to 2020, that is 21000 per year and none after 2020. Unfortunately the preliminary results of the 1999 census which show a zero net migration over the 1990-1999 period, indeed a highly surprising and questionable outcome considering the level of entries during this period, are not of a great help in order to argue for a better choice. The INSEE labor force projections based on total population projections and covering the 1995-2040 period have added a variant of net migration that could be induced by an increased labor demand (158 000 per year over the 2007-2025 period), a level close to the observed net migration during the years of high growth and migration. (129 000 per year between 1963 and 1974) (Brondel and al 1996).

**TABLE 1: Population projections for France (2050). Assumptions.\***

*Projections*

<i>INSEE, 1992</i>	<i>Low</i>	<i>Central</i>	<i>High</i>
Total fertility rate (per woman)	1.5	1.8	2.1
Life expectancy (years):			
Males	77.9	77.9	77.9
Females	86.4	86.4	86.4
Net migration per year (thousands)	50	50	50
<i>UN, 1998</i>	<i>Low</i>	<i>Medium</i>	<i>High</i>
Total fertility rate (per woman)	1.56	1.96	2.36
Life expectancy (years):			
Males	78.9	78.9	78.9
Females	86.0	86.0	86.0
Net migration per years (thousands) <sup>a</sup>			

Sources: INSEE: Dinh (1994 and 1995)

UN: *World Population Prospects. The 1998 revision*, United Nations, New York (1998)

<sup>a</sup> Net migration declines from 30 000 per year in 1995-2000 to 0 in 2020 and after.

\* Values are those of the end point of projections (2050)

**TABLE 2: : Population projections for France: total population and age distribution.**

	<i>Population in 2050</i>	<i>Per cent 20 years or younger</i>	<i>Per cent 20-59 years</i>	<i>Per cent 60 or older</i>	<i>Per cent 65 or older</i>
<i>INSEE, 1992</i>					
Central projection	65 098 000	20.7	45.6	33.7	17.2
High projection	73 602 000	24.3	45.8	29.8	15.2
Low projection	56 804 000	16.7	44.8	38.7	19.7
Central projection without migrants	59 633 470	19.8	44.9	35.3	18.3
Central projection, with constant mortality	58 044 640	22.8	49.9	27.3	11
<i>UN, 1998</i>					
Medium variant	59 883 000			31.4	25.5
High projection	67 413 000			27.9	22.7
Low projection	58 020 000			36.4	29.6

*Sources:* INSEE: Dinh, 1994 & 1995)

UN: United Nations, *World Population Prospects*, 1998 (New York)

The sensitivity of the INSEE projection to the assumptions is given in the Table 2. As a matter of fact INSEE has also run the central projection assuming either constant mortality or no migration. Table 3 shows the respective impact of fertility, mortality and migration assumptions on the total population and the age structure at the end point of the projection. Fertility has the strongest impact on the level of the population, mortality on the aging indices; migration, that is the assumed level of net immigration plus the natural increase of immigrants, slows down the aging process to a limited extent.

It should be stressed that this brief comparative exercise between the two sets of projection has no other purpose than to help explain some differences in the results, but cannot be considered in any way as an argument strengthening the predictive value of the choices made for the projection of the future levels and trends. Indeed the logic of the projection and the methodology are the same. In both cases, the value of the parameters are based on past and current trends, independently of any theory on the determinants of fertility, mortality and international migration and exclude by construction any possibility of reversal in trends; notwithstanding the fact that comparisons between expected and observed trends in contemporary population history, show great discrepancies, and in particular cycles in fertility, when dealing with periods that stretch over half a century. The record for population projections, considered reasonably good over the span of one generation, is rather poor for the long run, though this is its main purpose. Working with the best available calculations does not preclude to consider these *cum grano salis*.

## 2. *The population indicators*

Among the targets already mentioned, the age grouping relevant for assessing the implications of the projections on the supply of labor and the potential support ratio, in relation with the time span of the projection, needs some qualification. The UN follows the usual 0-15, 15-64, 65 and over age grouping. For France this cluster does not appear very relevant, taking into account the shortening of the length of the working life. At one end, with more years of schooling and

increasing difficulties for young people to find a job, the average age at entry in the labor force has increased by 2.5 years from 1969 to 1993 (Brondel et al 1996); at the other end, the reduction of the legal age for retirement down to 60 years and the reluctance of employers to hire older persons, had led to a decrease in the average age of retirement by 3.5 years, from 62 years to 58.5 years, between 1968 and 1995 (Blanchet et Marioni, 1996). A later age at entry in the labor force coupled with an earlier retirement age makes the age bracket 20-60, instead of 15-65, more appropriate for the working age population and the 60 and over for the retired persons. Clearly, whatever the index, there are not much differences in the projected trends of the potential support ratio, but there is a significant difference in the levels and thus when it comes to absolute numbers required to keep the ratio constant at its initial level the differences are significant.

It remains that these are demographic ratios that compare age groups, whereas the indicators have to be related to a given concern. The relevant ratio for the social security system is the ratio of retired persons to employed persons. For macro economic purposes, one should consider the ratio of all persons out of the labor force (young and old, inactive and unemployed), to employed persons. Depending on assumptions on female labor force participation rates and even more on unemployment rates, there may be significant differences between the “demographic” and the “economic” ratios. Indeed in France, the employment rate (employed population compared to population of working ages) is well below and the unemployment rate above the level observed in the other more advanced countries of the European Union.

Besides and more importantly, the baseline ratios reflecting the demographic history of a very specific period, characterized by the upturn and the down turn of fertility, the improvement of life expectancy, a strong immigration component and finally an exceptional population growth in French history, cannot therefore be used as the long run steady-state ratios. A more meaningful reference would be the stationary population. Thus according to the United Nations the 15-64/65 plus ratio in France is 4.36 to 1 in 2000 and this is the target for 2050. According to Blanchet, the ratio of employed to elderly inactive was 2.7 to 1 in 1990; on the basis of a stationary population this ratio would have been 1.7 to 1 (Blanchet, 1992). Reference to a stationary population is all the more interesting to consider that stable population theory, shows that, with fertility below replacement level, and a constant number of immigrants with a constant age structure, the total population ultimately becomes stationary.

Also, with the lengthening of the retirement period, the improvement of health and living conditions of the elderly, a distinction between those aged 60 to 70 or so and those over these ages becomes important. The former relatively more well off, in good health, having more free time, are holding a key position in the intergenerational links, bearing responsibility for their older parents and at the same time helping raising their grand children; the latter, whatever their economic conditions, are often physically dependant and isolated, a significant proportion of them is left with less or no living children and grand children; a reduction in biological kinship due to the decline in fertility, even though the new patterns of divorce and remarriage somehow compensate.

## C. THE IMPACT OF DEMOGRAPHICS CHANGES ON THE LABOR MARKET AND THE SOCIAL SECURITY SYSTEM

### 1. *Demographic projections and the labor market*

The impact on the labor market is the first concern of population projections. The population of working age (20-59 years) continues to increase by 150 000 per year up to 2005. But from then on, the baby bust cohorts will start reaching the working age (fertility declined since 1964 births from 1974), while, and this effect is much stronger, the baby boom cohorts will be reaching the age of retirement. Thus, the working age population, after reaching a peak in 2005 (32.85 millions as against 31.5 millions in 1995), will decline steadily, down to 29.7 millions in 2050. As it has been the case in the previous decades, the demographic component will dominate over the changes in participation rates. Between 1968 and 1995, the average participation rate has remained nearly stable, (a one point change, from 54.4% to 55.4%) as a result of the compensating effect of declining rates for young and older persons and increasing rates for adult women (Brondel et al., 1996). For the future, the central labor force projection assumes in the main a prolongation of past tendencies in participation rates, and demographic projections will shape labor force trends, but with a significant change trends and levels: a much slower growth in a first phase followed by a decrease in the population of working age and on the whole a much smaller variation than in the pre 1990 period.

The projected decrease of the rate of growth and the level of the working age population has prompted a debate on a possible labor shortage, indeed a strong departure from the current concern about the high level of unemployment. However, we are a long way from changes in the numbers and proportion of the population of working ages and employment. The equilibrium of the labor market results from labor supply and labor demand conditions which involve a set of determinants that range well beyond the demographic variables and are related to a limited extent to these variables (the cost of labor, entrepreneurs anticipations, productivity, changes in the production process and induced changes in the structure skills, the global demand etc). Moreover the impact of demographic changes on the determinants of labor demand remains elusive.

To infer a labor shortage from the predictable changes in the population of working age is totally unwarranted. Indeed, considering the past, an accounting decomposition of the way changes in the population of working ages translates into changes in employment, participation rates and unemployment, shows a great diversity in the adjustment processes. In France between 1975 and 1985, a 12.2% variation in the population of working ages has been associated with a slight increase in employment (0.8 points), a strong increase in unemployment (7.0 points) and a decrease in activity rates (3.9 points); during the 1985-1996 period for a 6.2 % decrease of the population of working ages, the equivalent amounts are 3 points for employment, 3 points for unemployment and a negligible change in participation rates. The same decomposition for other European countries shows a wide range of adjustment processes. It is clear that the increase in the population of working ages can end up in an increase of employment as well as unemployment and the same is true in case of a decrease of the population of working ages. (Tapinos, 1996)

Now, assuming that the projected decrease in the population of working ages will induce labor shortage, if that happens, the order of magnitude of the required increase in the labor force to adjust the labor market is within reach of manageable changes in the supply of labor

determinants, among which immigration could be one possibility. In the extreme case where the adjustment would rely only on immigration, in order to stabilize the active population after 2006, net immigration per year would have to increase from the assumed constant level of 50000 to approximately 100000 in 2010 (and should increase from then on) (Brondel et al 1996). The spectrum of global labor shortage is unwarranted. In fact, barring the unlikely combination of very low fertility, high mortality, low immigration and constant labor force participation rates according practically all the EU countries will have in 2020 the same-sized total population and labor force as now (Feld, 2000)

## 2. *Demographic projections and the social security system*

Undoubtedly, in the current concern in France about future population trends, the implications of aging on the pension system is at the heart of the debate. Indeed, France is not only one of the European countries where the pay as you go scheme predominates, but beyond the arguments on the relative merits of pay as you go and funded systems, which is not to be discussed here, the pay as you go system is viewed as a fundamental element of intergenerational solidarity and social cohesion. Indeed the implementation of the social security, the extension in coverage to all categories of the population and the increases in pensions have contributed to a significant improvement of the economic conditions of the retirees whose income compares favorably with that of young active, though with a stronger share of capital income.

The demographic stylized facts are well known. Taking into account the decrease of fertility and the progress in longevity and, more specific to the French case, the shortening of the working life span, as already mentioned, all things being equal population projections show a reduction by two of the old age dependency ratio at the horizon of the projection (2050). There is no way to escape from a fundamental reform of the system and some steps have been already taken for that purpose (in 1993), by increasing the number of years of works required to get a full pension from 37.5 to 40 years and indexing pensions on prices rather than on wages. But there is still a long way to go. The question and the ensuing heated debate is about the policy mix. What is more feasible, more efficient and more desirable ?

Considering first the financial aspect. With a projected division by two (or more) of the 20-59/60 years and over ratio at the end year of the projection, in a system with defined contributions, the benefits would be divided by two and in a system of defined benefits, the contributions should be multiplied by two, which means that the return would be divided by two.

Assuming a 2.1 fertility (instead of 1.8), would increase the number of active population by 2.2 millions by 2040. For migration to compensate for the decline in the old age dependency ratio, net migration should be, at each point in time roughly three times the number of persons reaching retirement. This will be discussed more appropriately in the next section.

What can we expect from changes in labor force participation? Assuming a convergence of women's aged 30 to 49 participation rates with those of men (that is 90% instead of 87.5%) would increase the active population by 900 000 persons by the year 2020, a surplus that would remain constant from then on until 2040.

Increasing the age of retirement by five years over the 2000-2020 period, will in the stable state (approximately 2020) increase the active population by three millions persons (Blanchet and Marioni, 1996). This has the strongest impact on old age dependency ratio, the projected increase of the ratio resulting mainly from the increase of the number of retired persons and only to a much lesser extent from the decrease of the active population. Indeed postponing the age of



retirement increases the active population and decreases the retired population by an equivalent amount. Though the progress in longevity gives a rationale in favor of an decrease in the retirement age, it is strongly opposed by trade unions. Roughly speaking a one year postponement of the age of retirement is equivalent to a one year contributions..

Finally, the most powerful adjustment could come from productivity. A 3% productivity growth per year would totally compensate for the increase of the support ratio, assuming that all progress would be allocated to retired persons..(Blanchet in Tapinos 1992 )

There is indeed a wide range of possible adjustments. Assuming all factors constant except for one does not make sense, the solution is evidently in a policy mix. However the possible adjustments differ not only by their specific difficulties in implementation ( for instance the strong reluctance to a later age of retirement), but also by their impact on intergenerational equity, in as much as they tend to shift the burden between generations. In that respect the pay as you go system raises a specific intergenerational distribution problem. Defining the conditions of the cross section accounting equilibrium between contributions and benefits is one thing, assessing the impact of demographic trends on the equity of the system for contributors and recipients is an other. For that we need a longitudinal perspective and some measure of intra and intergenerational equity (for instance for each generation the ratio of contributions to benefits or between generations the equivalence between contributions and the equivalence of benefits). Thus, beyond accounting exercises, what is most feasible and what is most desirable is a political choice according to the social values of the society and the vision about social cohesion and intergenerational equity. The preferred choice is itself related to the age distribution and might reflect the interests of the groups with more electoral weight. Indeed if the average age of the labor force increase with aging by a few years, the increase in longevity increase the number and proportion of elderly and brings a radical change in the average age of the electorate. In France, from 1988 to 1995 the average age of the electors increased from 45.1 to 46.6 years, the increase will be much more pronounced at the 2050 horizon.

### 3. *Fertility below replacement and declining population.*

According to the INSEE projections (which include a 50000 net immigration per year), the total population will continue to increase up to 2020 in any case. After that and at the horizon of the projection the trend will depend mainly on the fertility assumption. With fertility below replacement, in the most extreme case, a TFR of 1.5 and no immigration, the population would start declining between 2010 and 2015, immigration would postpone the turning point by ten years or so. Assuming a TFR of 1.8 (and net migration), the population continues to grow till 2040.

The prospect of a declining population and its demise, though far remote, is the most challenging aspect of population policies, increase in fertility being the only option. It is indeed a legitimate and desirable objective for a nation, independently of any considerations on the socioeconomic implications of population prospects. Is it feasible in the case of France? On the one hand, the intensity and the tempo of completed fertility across generations does not suggest a catching up process for the younger generations, on the other hand the difference between the current levels and the replacement level is not considerable and might be amenable to policies. However in a situation of controlled fertility, when observed fertility comes close to desired fertility the rationale of a pro natalist population policy is at stake. One could argue that

individuals preferences do not put much weight on the future of the society or that their choices reflect their ignorance of the long run implications at the aggregate level of their own behavior, or that the future of a nation being a public good the demand for children is sub optimal. Policies aiming at an alleviation of the private costs of child raising, have shown some efficiency at the margin, more is required in order to induce a significant behavioral change. This raises issues well beyond the limited scope of this paper.

#### D. REPLACEMENT MIGRATION

We focus more specifically in this last section on replacement migration as a means to reach the three targets stated initially.

Recourse to immigration has the advantage of producing an immediate and relatively large impact on the labor force owing to the characteristics of the new arrivals, who are younger and more mobile. In addition, fertility rates among female immigrants tend to be high, which contributes to population growth, albeit to a limited degree. At the same time there are a number of practical and political constraints in formulating a migration policy aimed at achieving demographic change. <sup>1</sup>We first consider the dynamics of the required levels of immigration in order to meet these targets in particular a stable support ratio, then the feasibility of migration policy as a response to demographic changes and the constraints of the social process of integration of immigrants in the society. Is a policy that relies solely on migration to achieve demographic adjustment feasible? Is it desirable? There are three kinds of limitations that question the soundness of the approach. They refer to immigration policies, population dynamics and social dynamics.

##### *1. Replacement migration and population dynamics*

The simulations that attracted the most attention, at least in the media, involving a constant old-age dependency ratio until 2050, imply a very large volume of arrivals and departures and fluctuations in migration.(Table 3) These translate into an exceptional increase in total population and in the proportion of immigrants. The level of annual net migration needed to hold the old age dependency ratio constant is huge and disproportionate to the data on record. .

Given the age structure and dynamics of immigrant populations, the number and proportion of foreign-born persons and their descendants would reach disproportionately high levels, compared to the current ones, by the scenario's horizon date of 2050. In 1990 the recorded proportion of foreign-born persons was 10.4% in France, At the scenario horizon, on the other hand, the proportion of immigrants who arrived in 1995 and their descendants would be 68.3% of the total population in France (United Nations, 2000).

In addition, an unchanged dependency ratio over time presupposes huge fluctuations in migration flows (arrivals and departures) but also in net immigration, given age structures and population dynamics (Blanchet, 1988). This point is disregarded in the United Nations study, which assumes continuous inward migration with no outflows.

**TABLE 3 : Replacement migration for France, by scenario**

Scenario	I	II	III	IV	V	
1995	Medium Variant	Medium variant with zero migration	Constant population	Constant group 15-64	Constant ratio 15-64/65 years or older	
Net number of migrants, 1995-2050 ( <i>in thousands</i> )	525	0	1 473	5 459	93 794	
Potential support ratio in 1995, and in 2050 ( <i>number persons aged 15-64 per person aged 65 or older</i> )	4.36	2.26	2.26	2.33	2.49	4.36
Average annual net number of migrants between 2000 and 2050, per million inhabitants in 2000	110	0	500	1 854	30 430	
Per cent of post-1995 migrants and their descendants in total population in 2050	0.9	0	2.9	11.6	68.3	
Total population in 1995 and in 2050, and growth rates:						
- <i>thousands</i>	58 020	59 883	59 357	61 121	67 130	187 193
- <i>average annual growth rate 1995-2050 (per cent)</i>	0.06	0.04	0.09	0.27	2.13	

Source: United Nations, *Replacement migration*, Population division, New York, 2000

## 2. Migration policies and social dynamics

The implicit, but critical, assumption of the scenario is that immigration or rather said net immigration is a control variable. It could be argued that the supply of emigrants worldwide exceeding the demand for immigrants, the countries willing to accept a level of immigration that meets the replacement targets will have no difficulty. These arguments need to be qualified.

Is the control of the volume and age structure of migration inflows and outflows feasible? Migration policies could make entry more dependent on age requirements, which are already explicitly or implicitly present. However, there are still many factors that limit, or complicate, the ability to control and select migration flows: the agreements on free movement of persons, the persistence of illegal immigration, humanitarian grounds, and other constraints like admission for reasons of family reunification. The acceptance of refugee cannot, by definition, be governed by demographic and economic criteria. Similarly, the selectivity applied to close relatives and other family members has its limits. And if immigration targets emphasize age or fertility patterns, this may be seen as a form of discrimination and hence a political issue. In the last analysis, all will depend on the philosophy underlying each country's migration policy and on its proper characteristics. Besides, monitoring immigration for the labour market needs, implies a distribution of immigrants by skills, a much harder goal to achieve if the projected labour requirements deal with highly qualified workers, and not as it was the case in the past where most immigrants were unskilled.

Whatever the efficiency of migration policies on the number and characteristics of immigrants, they have virtually no effect on return migration; hence the difficulty of controlling the volume

and characteristics of net migration. Even in the case of countries that favor settlement, the returns are far from negligible and their determinants are not amenable to policy as evidenced by the attempts to implement return policies. One way around this difficulty would be to introduce programs for admitting temporary workers in order to increase labor supply in periods of rapid growth in the elderly population or decline in the population of working age. But experience has shown that such programs are difficult to implement. Although most countries have legislation for the admission of temporary foreign workers<sup>ii</sup> it has been found that a proportion of the immigrants admitted on this basis settle permanently in the host country. This they do either legally, by applying for a change of status or having their permits regularly renewed, or illegally. Furthermore, other than in cases where the authorized stay is very short, some countries' temporary employment programs offer the worker's dependants and close relatives the right to reside in the host country.

There is still some uncertainty about whether policy targets are actually attained. The means available to monitor the trend of net migration differ across countries. The measurement of entries in France is far from accurate, the measurement of exits is non-existent and the data on stocks cannot, for the present, be of great help for that purpose. The lag necessary to estimate net migration and in any case the absence of linkage between individual data on entries and exits precludes any form of fine tuning migration policy.

Beyond the population dynamics and policy management issues there is the fundamental question of social dynamics. The history of immigration in France, as elsewhere shows that immigrants have a better chance of integrating into the host society if the native population is experiencing a natural increase. Fertility and immigration are, to a large extent, complementary, not substitutable.

To conclude, the goal of migration policy may be to ensure sustainability of the nation, to adjust labour supply to demand by volume and by structure, or to bring pay-as-you go pension systems into financial equilibrium. There is also the humanitarian approach in the acceptance of a certain number of immigrants regardless of political or economic considerations. Immigration can certainly help to prevent population decline for a time. It has only a marginal impact on the cited imbalances in age structure. Immigration is clearly not the solution to population aging. It can even be said that the simulations made to date demonstrate the impossibility of a migration solution, and the analysis of migration processes reinforces this assessment.

The equilibrium of social welfare systems depends on a set of institutional, demographic and institutional parameters (age of accession to the active labour force, participation rates and unemployment rates, contribution rates and benefit levels, economic growth rates, productivity growth rates, etc). Given the predicted drastic change in the old age dependency ratio, it is quite impossible to count on just one variable to achieve the necessary adjustment and treat all the others as constants. But although replacement migration cannot be the answer to the problem, there is still the matter of immigration's possible contribution, *inter alia*, to the objective of labor market adjustment and balancing of the population's age structure, and population decline.

## E. CONCLUSION

The demographic regime of France, as in most developed countries, has changed drastically in the last decades. Most analyses shows that these fundamental changes are of a permanent nature and in particular the prospects of a reversal in fertility trends and the return to a demographic growth logic are totally unwarranted.

The pattern and level of fertility reflects fundamental behavioral changes and it appears irrelevant to consider the conditions resulting from high population growth as the baseline and the target for the future.

The challenge posed by demographic prospects calls for new types of adjustments. Indeed, as it has been shown by sociologist as well as by economists, a stationary population makes necessary an acceleration of changes of the production system, while at the same time that it tends naturally to reinforce rigidities. in particular professional and social mobility

(This paper draws upon a previous note on replacement migration prepared for the OECD working party on immigration. I would like to thank Jean Pierre Garson for his comments .)

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<sup>i</sup> A number of these difficulties were outlined in *Migration: The Demographic Aspects* (OECD, 1991).

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<sup>ii</sup> See the special chapter on temporary employment of foreigners in selected OECD countries in *Trends in International Migration*, OECD, 1998),