POLITICAL DIMENSIONS OF DEMOGRAPHIC CHANGE. AN ADDRESS

Michael S. Teitelbaum*

I approach this evening with some trepidation, since all of us will have our Foresight Hats on, trying to look very far ahead into the future. Just to keep us honest, I thought I should begin by recalling that in Dante's *Inferno*, a special place in the Eighth Circle of Hell is reserved for "Diviners" or "Prognosticators" of the future (Canto XX: Circle Eight, Bolgia 4). Their punishment, for all eternity, is to have their heads permanently pivoted 180 degrees to the rear, so they are forced to walk backwards, unable even to see in front of them. . . .

The title of this conference, "Seismic Shifts: The Economic Impact of Demographic Change," might suggest that economic "earthquakes" lie ahead, but while the metaphor is geological, I do not think it was intended to be *catastrophically* geological. In fact, it is quite appropriate to visualize the demographic trends that we see under way as a kind of "human tectonics":

- Tectonic forces are, as you know, hugely powerful, yet very slow-moving and hence easy to ignore over many decades, yet,
- Tectonic forces embody enormous momentum that cannot be reversed or contained, and
- Tectonic forces *can* produce powerfully destructive events (earthquakes, volcano eruptions, and the like) *if* the circumstances do not allow for their energy to be dissipated in small increments.

Of course, geological time spans centuries, millennia, millions of years. By these standards, demographic change that takes place over decades is

^{*}Program Director, Alfred P. Sloan Foundation.

quite rapid. Yet by the standards of economic change, demographic change is very slow, gradual, even stately.

If we embrace the imagery of demography as human tectonics, demographic trends—if left unattended—*could* produce earthquakes, and such a possibility has given rise to a number of nightmare fantasies. But enough of this geology.

What I propose to do is to highlight some of the fantasies, often political in purpose, and the empirical facts, and then to tell you what political policy responses might emerge from careful analysis of those facts—responses that are politically difficult and perhaps painful, but less alarming and draconian than those that have been widely promoted by the fantasies.

THE FANTASIES

Since my time is very limited, let me briefly list out for you some of the evocative language that has been used to describe recent demographic trends in industrialized countries:

- The birth dearth;
- The white plague (La peste blanche);1
- Fertility free-fall;
- Population implosion;
- Demographic collapse;
- Demographic suicide;
- Demographic invasion;
- Plague demography; and
- Demographic senility.

Or perhaps I could quote President Jacques Chirac in 1984, when he was still Mayor of Paris:

If you look at Europe and then at other continents, the comparison is terrifying. In demographic terms, Europe is vanishing. Twenty or so years from now, our countries will be empty, and no matter what our technological strength, we shall be incapable of putting it to use.²

As M. Chirac was declaiming in this way, Europe held about 705 million persons. Now it has about 730 million. Only three years are left of the twenty-year period during which, according to his informal forecast, European countries were to become "empty."

¹ The eminent French historian Pierre Chaunu used this term to describe contraception and abortion, "the new arsenal against conception and childbirth, infinitely more dangerous than atomic armaments." Quoted in Michael S. Teitelbaum and Jay M. Winter, *The Fear of Population Decline*, New York, Academic Press, 1985, p. 121.

² Interview in *Liberation*, Paris, 30 October 1984.

THE EMPIRICAL FACTS

We can agree, I think, that these issues have produced some wonderfully evocative language and exaggerated political rhetoric. But what are the facts of the matter?

I simplify only a little when I say that there are only three main forces of demographic change: fertility, mortality, and migration. What is striking about the present period in the industrialized world is that all three of these forces are undergoing substantial shifts, and all in directions that maximize their cumulative effects on important rates of demographic change.

- *Fertility:* Fertility rates have declined to low levels, in some places historical lows (but, as you will see, fertility rates are probably not as low as some think).
- *Mortality:* Mortality rates have declined, and hence health and life expectancy in "old age" have improved rapidly (but, as you will see, the concept of "old age" may itself be a moving target).
- *Migration:* High and often increasing rates of international migration from poorer to richer countries have become common (and the rates may be higher than some think).

What is especially notable is the *intersection* of these three trends. The convergence of low fertility rates, rising life expectancy among the elderly, and high immigration leads to rates of demographic transformation in most countries that are essentially unprecedented. I will come back to this point of intersection in a moment. But first let us deal briefly with each of those three tectonic forces of demography: fertility, mortality, and migration.

Fertility

The first force is fertility, and I have said already that fertility rates are low in many industrialized countries, in some places historically so. This is most notably true in Central Europe (especially Germany) and in Southern Europe—especially Italy and Spain, where the annual fertility rates are on the order of 1.2 to 1.3 children per woman, or about 40 percent below the notional "replacement rate" of 2.1 children per woman.

Japanese fertility rates are considerably higher, in the range of 1.5 children per woman. And rates are substantially higher in Northern Europe (France, the United Kingdom, the Nordics) and in North America (especially the United States), in all of which fertility rates are on the order of 1.7 to 2.0, and hence only moderately low, notwithstanding the hype emanating from some political circles. That is one reason that fertility rates may not be as low as some think.

A second reason is that some (not all) of those historically low annual fertility rates may partly be a result of temporary distortions that appear

while women are deferring their childbearing. The annual rates commonly cited in the press are what demographers call "period" rates. They are synthetic rates, designed to summarize a given year's fertility behavior by women of all reproductive ages. When women are deferring childbearing, these annual fertility rates we calculate are distorted downward, even if the "cohorts" or "generations" of women who are doing the deferring ultimately have the same number of children as their mothers and grandmothers did. This kind of distortion is clearly an important factor in Southern European countries such as Italy and Spain (but not in Germany).

"Cohort" rates, in contrast, represent the actual completed family size of a real population of women who are at or near the end of their childbearing years. Such rates are more "real" in the sense that they represent actual completed fertility of women in their thirties or forties, but they tell us rather little about current rates of younger cohorts of women, whose fertility behavior dominates the period rates.

Now, you might think that this distinction between "period" and "cohort" fertility rates would be a subject that only a demographer could love. But not so. Only a few years ago in Paris, the French national demographic research institute (*l'Institut national d'études demographiques*, or INED), which many consider the world's leading demographic research institution, was nearly destroyed in the crossfire of an extraordinary orgy of political and personal vituperation on this issue. It was a classic of attack and counterattack, from both the left and the right, and it was splashed all over the pages of the daily Parisian press.

Is a period rate or a cohort rate the best measure of fertility? Those who chose the "wrong" rate were accused of links to the xenophobes of the National Front of Le Pen, or of ties to the Nazi collaborationist government of Marshal Pétain, or of leftish softheadedness. The Paris paper *L'Express* called it a "war of Christian demographers versus social demographers." Another thundered: "Why Did INED Lie?"

A fair-minded appraisal would be that both period and cohort rates are meaningful and useful, but they each have their distinctive strengths and weaknesses. In particular, period rates give us summary measures of recent fertility but may be distorted by changes in the timing or "tempo" of fertility. This means that we cannot really know how low cohort fertility rates will ultimately prove to be in countries such as Italy, where the average ages of both marriage and first birth are rising.

Does it matter? In the very long run, yes, as several of the conference papers report in detail. We should in no way minimize the challenges that very low fertility rates will present, even over what demographers consider the "medium term," that is, two to three decades. They will require some very unpleasant trade-offs, especially for Pay-As-You-Earn (PAYE) state pension systems, most of which are based on implicit

assumptions of higher fertility and hence are fiscally not sustainable if fertility stays very low.

The politics here are familiar: Understandably, most politicians prefer to avoid taking politically unpopular actions in the short term to address long-term problems that will emerge only after they have left office, and they are especially reluctant to act if the predicted long-term problems are actually rather uncertain.

Mortality

This leads us to the second tectonic force of demography, mortality. No doubt we all have all heard a lot about this over the past few years. We have been told that we are threatened by rapid increases in the "old age dependency ratio" (the number of persons of "working age," typically defined as ages 20 to 64 or sometimes 15 to 64, divided by the number of persons of "old age," typically defined as 65 and over). This ratio actually is declining in nearly every country in the world, perhaps excluding sub-Saharan Africa. The change is the joint product of low fertility rates at the entry end of the age distribution, coupled with declining mortality rates at the departure end of the age distribution.

Who can be in favor of deteriorating levels of something called "old-age dependency"? Neither "old age" nor "dependency" is a very salubrious term, and the two together can cast a real pall. At the level of the individual, the very concept of "old age" is associated with torpor, decadence, senility, and death. Now, I happen to be from Missouri (really!) and therefore must recall Mark Twain's comment on this: "Life would be infinitely happier if we could only be born at the age of 80 and gradually approach 18."

Yet the real difficulties of old age have produced other fantasies: first, a dubious conceptual leap from the common psychological and cardio-vascular weaknesses of some elderly individuals right up to the alleged "senility and sclerosis" of entire human societies. Consider, if you will, how two very prominent Frenchmen, Robert Debre and Alfred Sauvy, sought in 1946 to explain the fall of France before the Germans:

The terrible failure of 1940, more moral than material, must be linked to this dangerous sclerosis. We saw all too often, during the occupation, old men leaning wearily towards the servile solution, at the time that the young were taking part in the national impulse towards independence and liberty. This crucial effect of our senility, is it not a grave warning?³

³ Debre, R. and A. Sauvy, *Des Francais pour la France: Le problème de la population.* Paris. Gallinard, 1946, p. 58.

(Most war historians would not agree with this explanation of German military success.)

Sauvy, perhaps the most eminent French demographer of the post-war period, went even further, characterizing a population with an older age composition as economically and intellectually stagnant, with the following memorable image: "old men, living in old houses, ruminating about old ideas."

A second and double-barreled fantasy is embodied in our very definition of the demographic indicator "old age dependency ratio." The truth is that it no longer really refers to "dependency" nor, honestly, to "old age." The measure is defined by arbitrary age boundaries that were established during the Great Depression of the 1930s. The upper age boundary was set at 65-plus, largely for purposes of Social Security eligibility and later for statistical reporting. Yet since the 1930s, life expectancy and health status (vigor, productivity) at age 65 have improved dramatically. None of us would think of ignoring inflation since 1936 in measures of prices, wages, and the like. We always distinguish between nominal and real currencies and adjust for shifting exchange rates, and we have even modified the meaning of "full employment" and "productivity growth potential." Yet we persist with an age boundary for the onset of "old age" that has been constant and unadjusted for three-quarters of a century.

How might we explain this? Let me quote Mark Twain again: "I was gratified," he wrote, "to be able to answer promptly, and I did. I said I didn't know." Like Twain, I do not know. Is it because we value continuity of our statistical series above their validity? Might the inertia be explained by political opposition to the possibility of increases in retirement age? It is a real puzzle, and an increasingly dangerous one. For our persistence with the fantasy that in 2001 (or 2050) the onset of "old age" and "dependency" is at age 65 puts us in danger of misleading . . . ourselves!

Migration

So much for the first two tectonic forces of demography, low fertility and declining mortality. What about the third force, migration, and especially international migration?

If you think measurement of the true rate of fertility is difficult, take a look at our measurements of international migration. The data are based either on estimates of "stocks" of foreign-born persons recorded every decade in a census, or of "flows" derived as by-products of weak administrative data collected by government agencies such as the U.S. Immigration and Naturalization Service or the British Home Office. And, as you probably know, it now appears that the U.S. Census Bureau has been *under*estimating the magnitude of net immigration for the past decade—or at least that is the current guess as to why the actual Census

enumeration for 2000 came out 3 million to 4 million *higher* than the Bureau had been expecting.

I do not have time to discuss the complexities of international migration per se, but I do want to touch briefly on a third realm of fantasy—that immigration can be a substitute for what demographers call "natural increase" (that is, the difference between births and deaths). Last year, the United Nations Population Division published a technical report entitled "Replacement Migration: Is It a Solution to Declining and Ageing Populations?" The report developed some hypothetical scenarios to the year 2050, asking the following questions. How many net immigrants would be required in certain countries:

- To prevent a decline in total population size?
- To hold constant the number aged 15 to 64?4
- To hold constant the "old age dependency ratio"?

This interesting exercise in alternative scenarios was immediately, and rather wildly, misinterpreted by the press (especially in Europe), by politicians and advocacy groups, and even by academics with strong opinions but perhaps weaker knowledge of demography. For example, some European newspapers reported with bold headlines that the UN was "recommending" that European governments admit hundreds of millions of immigrants. A leader of the so-called "World Systems" school of social theory, Immanuel Wallerstein, immediately concluded that the UN report showed that "The wealthy countries must choose between allowing the standard of living of their retired-age persons (an evergrowing percentage of the whole) to go down considerably OR permitting what will probably seem at first an incredibly high number of annual immigrants from the poor countries."

One might be tempted to say to the journalists and to Mr. Wallerstein: "When in doubt, read the report." Because this is *not* what the UN experts said. To the contrary, the actual report concluded that adjustments to demographic trends "will require objective, thorough and comprehensive reassessments of many established economic, social and political policies and programmes." Moreover, it concluded further that in countries with very low fertility rates, any effort to halt demographic aging via immigration policy would require numbers of immigrants that are likely to be "out of reach because of the extraordinarily large numbers of migrants that would be required" (p. 4).

For example, the UN scenario configured to hold constant the ratio of

⁴ Note that the UN uses 15 to 64 instead of 20 to 64 as "working age," since its data include many developing countries. United Nations, "Replacement Migration," 2000.

⁵ Immanuel Wallerstein, "Replacement Migration," Comment No. 32, Jan. 15, 2000. Fernand Braudel Center, Binghamton University, http://fbc.binghamton.edu/commentr.htm.

15-64/65+ showed that Germany would have to admit 188 million immigrants by 2050, or 3.4 million per year. These numbers might be compared with the year 2000 population of Germany, which was estimated at 82 million. Under this hypothetical scenario, the 2050 population of Germany would reach some 300 million, of which 80 percent would be immigrants and their descendants.

Such numbers are not atypical under this scenario. In all of the low-fertility countries, the populations in 2050 would be far larger than those of 2000, and immigrants and their offspring would comprise between three-quarters and seven-eighths of the 2050 total (Tables IV.4 and IV.7).

- Italy would have to admit 120 million, versus its 2000 population of 57 million. By 2050, 79 percent of the population of Italy would consist of immigrants and their offspring.
- The European Union as a whole would have to admit 700 million immigrants (versus the 2000 EU population of about 375 million), and the admitted immigrants and their offspring would comprise some 75 percent of the projected 2050 population.
- Japan would have to admit about 553 million immigrants over the half-century (versus the 2000 Japanese population of 127 million), and the immigrants and their offspring would constitute about 87 percent of the projected 2050 population.
- The United States would have to admit 593 million immigrants under this scenario (versus an estimated 2000 population of about 281 million), and these immigrants and their offspring would comprise about 73 percent of the projected U.S. population in 2050.

The UN experts' conclusion that such developments might be "out of reach" is based on their judgment that such a demographic evolution would be *politically unacceptable* to the German or Italian or Japanese or American populations.

This leads me to say a word about the odd American politics of immigration. It is a politics unlike that of any other public policy issue. On what other subject could one find agreement between organizations that defend the rights of Mexican-Americans and the notorious exploiters of Mexican-Americans' rights among owners and operators of California fruit and vegetable agriculture? Or between the Cato Institute, on the far right/libertarian wing of the Republican party, and the leading garment workers' union UNITE, far to the progressive/liberal/left of the Democratic party?

Where might one find some environmental groups working together with groups seeking to eliminate government income transfers and other benefits to legal immigrants? What kind of subject would attract the likes of Microsoft, the Service Employees International Union, the American

Jewish Committee, and the American-Arab Anti-Discrimination Committee to join and finance the same lobbying organization?

When I try to explain to my European friends, who are active opponents of right-wing anti-immigrant groups in Europe, that the most visible proponents of *unlimited* immigration actually come from the American right (the libertarian wing, such as the Cato Institute and *The Wall Street Journal* editorial writers), they frankly do not believe me.

A PARADOX OF PERCEPTIONS

This leads me finally to point to a critical "paradox of perceptions" about immigration, one that sharply divides many of us at this conference from the rest of the population of the country (or indeed of the world). Of course I must oversimplify, but to a first-order approximation:

- Those of us who look at immigration through the prism of economics and the labor force often view immigrants as both substitutes and complements for domestic workers and economic actors. In this view, immigrants can be analyzed as factors of production, as packets of human resources, of labor, of skills, of capital-holders, of prospective taxpayers, or of age characteristics.
- This is not the view of immigration held by broad publics. Instead they see immigrants *not* primarily as "factors of production" that can substitute for or complement domestic factors, but instead as flesh-and-blood human beings who, like all humans, carry with them not only their skill sets and human capital, but their cultures, religions, politics, languages, and values. The Swiss novelist and playwright Max Frisch summed up the European "guestworker" (*gastarbeiter*) programs of the 1960s and 1970s in only a few memorable words: "We sent for workers, and people came."
- From the economic view, it is when fertility is very *low* that increased immigration is advisable, to fill bottlenecks in labor markets and add contributors to intergenerational transfer systems such as Social Security.
- The paradox is that from the public view, it is precisely when fertility rates are very low that immigration becomes *less* acceptable than when fertility is higher.

Why? Here I return, as promised, to the *intersection* between trends in fertility, mortality, and migration. When fertility is very low and mortality is declining, the age structure shifts inevitably toward an "older" composition. This leads some to lobby for increased immigration, both as workers and also because immigrants are typically in their twenties and thirties and come from higher-fertility social settings. But the combination of low fertility with high immigration produces a rate of

demographic transformation of the population that can be very rapid, very visible, and politically contentious.

CONCLUDING REMARKS

I want to leave you with the following thoughts as we begin this conference:

- The demographic trends of low fertility and declining mortality are indeed the "tectonics" of human societies. They are fundamentally long-term and very gradual in character (at least by the standards of human lifespans and social science). They have enormous momentum. If they are ignored, they may prove to be seismic as well as tectonic.
- Claims that quick fixes—one or two policy shifts, like privatizing Social Security, raising taxes, or increasing immigration—can deal with such forces are, well . . . fantasies. Instead, any adjustments to these trends must be equally long-term, gradual, and of comparable cumulative power. And, as in all such situations, the earlier the adjustments, the less painful they will be. But such issues are understandably difficult for politicians who must be reelected next year, or two to three years from now. In Henry Adams's book *The Education of Henry Adams*, the eminent great-grandson of President John Adams and grandson of President John Quincy Adams wrote (perhaps from experience) that "Practical politics consists in ignoring facts."
- Realistically, the best way forward is changes in *multiple* policies, with all such changes modest in scale and gradual in nature, yet all operating in the same direction, with cumulative effect. Moreover, these changes need to be informed by a heavy dose of realism. Fertility increases might be encouraged by public policy, but these cannot be bought cheaply, and on past experience only modest rises seem feasible. Immigration numbers might be increased, but caution would suggest that such increases be both modest in size and selective for those most likely to succeed economically and integrate socially. Labor force participation rates can be increased, but in full recognition that there are practical limits. Public pension taxes can be raised and pension benefits can be constrained, but again only modestly. Official pension ages can be increased, and some pension contributions shifted toward "funded" systems, but politically such changes will likely have to be both modest and gradual.
- Finally, to deal with the tectonic forces of demography, a very long-range perspective is critically important. And yet at the same time we need to be brutally honest about our abilities for clear

foresight over the long term. (Mark Twain once defined honesty as "the best of the lost arts.")

Of course, it is true (as Keynes famously said) that "in the long run we are all dead," but it is also true that no one, and certainly no demographer, is capable of accurately forecasting national fertility rates over the long run of 50 to 100 years. Demographers can do long-range forecasting better than most—but still quite badly. If we look back only 50 years from tonight, I can assure you that no demographer in 1951 was anticipating the wild trajectory—upward, downward, upward—that U.S. fertility rates have actually followed since then. (One splendid advantage of doing 50- to 100-year projections is that one can never be proved wrong—except in absentia. . . .)

I do not wish to be misunderstood. If we are to aspire to understand the deep implications of these slow-moving tectonic forces of demography, we need to produce a wide range of alternate long-range projections. Yet I hope we can avoid producing our own fantasies by claiming that any particular 50- to 100-year projection is a credible forecast.

An old Slovenian proverb offers the following judicious advice to speakers: "Speak the truth—but leave immediately after." I propose now to leave the podium, but not before saying that this conference has been designed to understand the facts of demographic and economic change, in the hope they are not ignored by politicians who think they are being "practical." I wish all of you well in doing so.