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# Social Structures

## Demographic Changes and the Well-Being of Older Persons

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## CHAPTER 3

## Immigration and an Aging America: Downward Spiral or Virtuous Circle? (Commentary)

Charles Hirschman\*

Demographic change is often interpreted as an impending crisis. The current headline is the downward slide to a “graying America,” where senior citizens outnumber children and there is an accompanying loss of savings and innovation (Peterson, 1999). Only a few decades ago, the demographic crisis was the “Population Bomb,” which included the high fertility era of the baby boom in the United States. In the early decades of the 20th century, the demographic problem was sinking fertility in Europe and North America that was thought to forecast the demise of Western civilization.

These sensationalist extrapolations and interpretations are rarely promoted by demographers. Students of demography are taught that trends rarely last forever and that all societies have feedback loops—that is, cultural and economic institutions that moderate the impact of demographic pressures. Over history, there are many examples of social change in response to demographic and ecological pressures, including changes in patterns of age at marriage, celibacy, long-distance migration, and patterns of inheritance and intergenerational obligations

\*This chapter was written while the author was a Bixby Visiting Scholar at the Population

## THE DEMOGRAPHIC SOURCES OF AGING

(Davis, 1963; Wilson & Airey, 1999; Wrigley, 1969). Demographic trends do have consequences, and the adjustments are generally unwelcome and sometimes painful. But the claim that “demography is destiny” overstates the relationship and assumes that societies are unable to adapt and change in response to demographic pressures.

The study of societal adjustments to demographic change is complicated because the pressures and strains are often mediated through social and political institutions, as are the responses. For example, an increase in population numbers (in a society or a group) may lead to diminished welfare, but only if resources are fixed and there is no technological change or shift in political power. In an ingenious analysis, Samuel Preston (1984) showed that the “birth dearth” following the end of the baby boom in the 1970s and 1980s was associated with a decline in the welfare of American children, whereas the rising numbers of elderly were able to enhance their status through government redistribution of resources.

The situation in the 21st century is likely to be different. The fraction of the American population aged 65 years and older increased significantly, from 9.3% in 1960 to 12.4% in 2000. This is, however, a very small shift relative to what lies ahead. By 2050, the fraction of the population aged 65 and older is projected to rise to 20% (He, Sengupta, Velkoff, & DeBarros, 2005, p. 13). An even greater change is predicted in Europe, where the elderly will soon be about one-third of most national populations. Changes of this magnitude are certain to create social and economic pressures for the society as a whole, as well as tremendous pressures for changes in the roles of the elderly.

In this chapter, I review the potential relationships between population aging and immigration—the other demographic tidal wave affecting American society. Some observers assume that these demographic waves will be additive and exacerbate the changes that would occur if only aging or only immigration were the major demographic change on the horizon. There is also another possibility, namely, that immigration and population aging may be complementary forces and each will work to offset, at least in part, the pressures created by the other.

This review begins with a short demographic primer on the origins of population aging, followed by a review of the arguments and evidence presented by Treas and Batalova (chapter 1, this volume). Then, I consider the demographic pressures created by population aging on economic transfers and the health care system and how immigration might affect these processes.

Most nondemographers assume that population aging is the result of declines in mortality. The expectation is that the decline of death rates leads to increased longevity, which results in an increasing share of the population at older ages. This seems intuitively plausible; however, the demographic metabolism is complicated by combined processes of fertility and mortality and the age pattern of mortality (Coale, 1964, 1972).

At any point in time, the age structure—the proportions of the population at each age—is the product of fertility and mortality in preceding decades. This discussion assumes a closed population without in- or out-migration. Births enter the population at age 0 and advance up the age structure with the passage of chronological time. The population at any age, say  $x$ , at time  $t$  is the difference between the number of births  $x$  years earlier and the cumulative number of deaths experienced by the cohort from  $t - x$  to  $t$ .

In most populations, the proportion at the oldest ages—the peak of a population pyramid—is generally the smallest and represents persons who have survived from birth to old age. Because lower mortality rates lead to more persons surviving to older ages, it is tempting to interpret reductions in mortality over time (or differences between two populations, more generally), leading to increases in the fractions at older ages. However, the impact of mortality on the age structure is diffuse because deaths are distributed by age. If mortality is reduced at age  $x$ , the result is more persons at each age above  $x$ . Reductions in infant mortality and at the youngest ages (which has been the largest component of 20th-century mortality decline) actually lead to a more youthful age structure.

In formal demographic models and simulations, Coale (1972) and other mathematical demographers have shown that variations in age structure (over time and between populations) are dominated by changes in fertility, with only modest effects attributable to mortality change. This is because births are concentrated at age 0, whereas deaths are distributed at all ages. The American baby boom, which lasted from the late 1940s to the mid-1960s, dramatically increased the proportions at younger ages. Over the second half of the 20th century, the arrival and subsequent maturity of the baby boom generation accentuated waves of economic demand, crowded schools and labor markets, women's participation in the labor market, and massive changes in family structure (Easterlin, 1978). Very low levels of fertility are the primary reason for

the much older age structures in Europe relative the United States. The projected aging of China and many other developing countries in the coming decades is primarily a product of their recent declines in fertility.

Because fertility is already at very low levels in the United States and other industrial countries, mortality changes will probably have somewhat greater impact on age structure in the coming years. Mortality rates are already very low at younger ages, and significant further reductions will be more difficult to achieve. There is still considerable room, however, for major reductions in mortality rates at middle and older ages through improvements in treatment, diagnosis, and prevention of chronic conditions and diseases. Reductions in mortality at older ages will gradually increase the proportion of elderly in the population.

### THE SITUATION OF OLDER IMMIGRANTS

Judith Treas and Jeanne Batalova (chapter 1, this volume) present a much-needed overview of the situation of older immigrants, with a focus on what is likely to happen in the coming decades. They describe the current and future size and composition of the elderly immigrant population. Treas and Batalova also address some broader issues, including the likely impact of immigration on strains created by population aging. As I read their study, the message is that the effects of population aging and immigration are largely additive, with the immigrant elderly adding to the societal burdens created by population aging. In the final section of this chapter, I attempt to make the alternative case, namely, that immigration and aging are complementary forces, with immigrants helping American society adjust to the costs of population aging.

With an increasing flow of immigrants over the last three decades of the 20th century, immigrants and their children (often referred to as first- and second-generation immigrants) comprised about one in five Americans at the turn of the 21st century. Unless there is some major change in immigration law, the “post-1965 immigration wave” is likely to continue for the foreseeable future (Massey, 1999). Immigration creates its own dynamic of expansion through social networks. Current immigrants can sponsor and assist newcomers who tend to be related to (or from the same communities as) those who are already here. Moreover, immigrant niches in certain industries and occupations generate demand for additional workers.

### The Age Composition of Immigrants and the Immigrant Share of the Elderly

Treas and Batalova predict more older immigrants, both in absolute and relative terms. They cite Census Bureau projections, which show the foreign-born elderly rising from about 10% of the total elderly (aged 65 years and above) in 2000 to about 20% in 2050. They conclude that this figure is likely to be even higher because of the undercount of Hispanics (most of whom are foreign born) and the presumption that Census Bureau estimates of future immigration are likely to be too low. Their argument is that increasing numbers of immigrants, most of whom are young, will eventually lead to more elderly immigrants with the passage of time. Treas and Batalova are certainly correct in terms of the absolute number of elderly immigrants. And as the fraction of the total population of immigrants rises, there is likely to be higher fractions of immigrants in all age groups, including the elderly, but the projection of 20% seems too high, in my judgment.

The age structures of the foreign born and the native born have been moving in opposite directions in recent decades (He, 2002). The native-born population has been getting older because of the decline in fertility and the advancement of the large baby boom cohorts into late middle age. On the other hand, the foreign-born population has become increasingly younger with the resumption of large scale immigration in the last few decades of the 20th century. At the onset of the post-1965 wave of immigration, about one-third of the foreign-born population was over age 65—about triple the proportion of elderly among the native-born population. The foreign-born seniors were the survivors of the massive numbers of immigrants who arrived from southern and eastern Europe during the early decades of the 20th century.

From 1970 to 2000, the numbers of immigrants (the foreign born) tripled, from 10 million to over 30 million, and the foreign-born share of the American population more than doubled, from 4.7% to 11.1% (Gibson & Jung, 2006). During this period, the age structure of the foreign born became much more youthful—even younger than the native-born population. The ranks of the foreign-born elderly were depleted by the gradual disappearance (through death) of early 20th-century immigrants and almost all new immigrants were in the working ages. As Treas and Batalova note, “international migration is a young person’s game,” and fewer than 15% of new immigrants are over 50.

The Census Bureau projection that the percentage of foreign-born elderly will rise to 20% by 2050 (cited by Treas & Batalova) can be

questioned on several counts. Even with the high immigration of recent decades, the foreign-born share of the American population in the middle working ages in 2000 is only about 12% to 13% (Gibson & Jung, 2006, p. 39; Hobbs & Stoops, 2002). Simple projections of "aging in place" do not approach the predicted 20% foreign born among the elderly in the coming decades. Moreover, the numbers of native-born elderly will increase dramatically in the coming decades as the large baby boom cohorts will move into the ranks of the elderly.

The assumption of continued high immigration to the United States for the foreseeable future does not necessarily imply an increase in the proportion of foreign-born elderly. The number of elderly immigrants has been fairly modest. Assumptions about the eventual aging of younger immigrants must be adjusted for some level of emigration among older or retired immigrants. The United States does not maintain official records of emigration, but Census Bureau estimates show that anywhere from 10% to 30% of the foreign-born population leave the country every decade (Ahmed & Robinson, 1994). Unless there are dramatic surprises that cannot be foreseen, the foreign-born population will remain a much younger population than the native born. The numbers of the foreign born will definitely increase, and they will increasingly resemble the national origins of the younger foreign born—disproportionately Latino and Asian—but their share of the total elderly seems unlikely to rise much above 15%—which would be about one-half of what it was in 1970.

### **Might Immigration Offset Population Aging?**

Treas and Batalova acknowledge that the combination of young immigrants and higher fertility (relative to the native born) will make the total U.S. population younger, but they caution that "Rejuvenating effects on the population age structure are short-lived, however, because young immigrants eventually grow old in their host society. As a way out of the generational imbalance created by the perfect storm of sub-replacement fertility and lengthening life expectancies, international migration fails, in part because it would require much higher levels of immigration than most countries comfortably contemplate."

Treas and Batalova underestimate the impact of immigration on slowing population aging. The effects of immigration on the age structure are short lived only if the age composition of immigrants changes or if immigration decreases. Neither seems likely at present. The impact of the baby boom of the 1950s and 1960s on 21st-century aging is only partially due to the size of the baby boom cohorts; primarily, it is because

the baby boom was followed by much smaller birth cohorts in the 1970s and 1980s.

The Census Bureau has estimated the old age dependency ratio (population over age 65 as a percentage of the population aged 15–65) for each decade from 2000 to 2100 under four scenarios: zero, low, middle, and high immigration (Hollmann, Mulder, & Kallan, 2000). The middle series projects immigration to remain at approximately its current absolute level, about 1 million net immigrants. The old age dependency ratio would rise from about 20 in 2000 to 40 in 2050 if immigration were zero, and it would still rise to 36, 34, and 30 if immigration continues at low, middle, or high levels. As other researchers have shown (Coale, 1986; Espenshade, 1994), immigration cannot reverse the impact of population aging, but the projected effects on the future age structure are not trivial.

There is almost always some nativist response to rising levels of immigration, and the discussion of the United Nations report on "replacement level immigration" (the level of immigration necessary to offset population decline) did spark fears of too much immigration (United Nations, 2000; also see Bermingham, 2001). There was a strong backlash against immigrants from Eastern and Southern Europe in the early 20th century that led to immigration restrictions in the 1920s (Higham, 1988). There were continued voices against immigration in the late 20th century, but none reduced the influx of immigrants. As more immigrants and their children become voters and the American economy becomes more dependent on immigrant workers, the prospect of drastic immigration controls seems less likely, although it is possible.

### **THE DEMOGRAPHIC CHALLENGE OF AGING**

Because population aging is a new phenomenon with few historical precedents, anticipating the nature of future social change is necessarily a fairly speculative enterprise. I am fairly skeptical of the prediction of catastrophic outcomes that some have projected, but there will be social adjustments at the family, community, and societal levels. Many of these are already evident. There will be many more three- and four-generation families. Overall, extended families and kinship networks will be smaller than in the past, especially in terms of lateral kin, but children will have more grandparents and great grandparents, as well as great uncles and great aunts, than past generations did. There may be more economic demands to support aging relatives, but each person will have fewer siblings to share any bequests than in earlier times.

Employers and community organizations, including churches and civic clubs, may have fewer younger workers and families with young children, but they will have more persons approaching or above the normal retirement years. With more elderly, there are likely to be more claims on social services, and there may be imbalances between available resources and needs of older populations. Indeed, many small communities that have experienced out-migration have long encountered such problems. On the other hand, the availability of more elderly persons in good health who possess a strong work ethic and civic responsibility may create new opportunities for businesses and voluntary organizations.

Because many families and communities will not be able to cope with the economic and social demands of population aging, the expectation is that government, especially the federal government, will have to assume greater responsibilities to redistribute resources to the dependent elderly. The mechanism for such programs—the intergenerational compact—has been part of all human societies.

The family, in addition to its reproductive and economic roles, is an institution that is well organized for the transfer of food and other resources (including care) from adults in the prime working ages to dependent children and older persons. These transfers are motivated by affection, but also by interdependence and reciprocity. Adults generally feel an obligation to support older family members who cared for them at an earlier stage of life. In most traditional societies, one of the primary motivations to have children is as an “investment” for old age security.

Because the loss of a single working age family member can wipe out the support for children and the elderly, most communities and societies have designed “backup” means to support families in need. The first line of defense is the extended family system, which might include customs for widows and widowers to marry other relatives. Most traditional societies also have programs of social insurance that pay one-time or continuous benefits to families who experience a death. These social cooperatives sometimes collect small regular taxes from all members, whereas others depend on contributions when the need arises.

The “welfare state,” which redistributes funds from taxes to programs for children and the dependent elderly, is very similar to the social insurance customs and practices of traditional communities. In principle, modern programs of intergenerational transfers are more efficient and less costly than community-based programs because the risks are shared by a larger pool of persons. However, large programs may face additional challenges because of the loss of legitimacy and support for intergenerational transfers that are inherent in extended families and

in face-to-face communities. Bureaucratic programs can also be more expensive because of the complexity and infrastructure of welfare organizations.

Population aging creates a challenge to current and future societies because it is likely to raise the costs of the intergenerational compact. Is it possible that some of these costs might be met by immigrants?

### Old Age Pensions

Most national systems of old age pensions were designed as extensions of the intergenerational compact. In some ways, old age pensions are similar to public education, except the benefits flow up rather than down the generational ladder. The provision of schooling for an individual child would be beyond the reach of most parents (the costs of private schooling approximates the actual price of education), but a fairly modest tax from all workers (or all property owners) generally covers the cost of public education for all children.

Whereas educational taxes can be considered as an investment for the collective future, or perhaps a repayment for one’s own education, old age pensions are a form of social insurance. Insurance covers the uncertainty of death. Because individuals cannot foresee their own longevity, almost everyone benefits from a collective pooling of resources to cover the unknown needs for economic support after retirement. Some individuals may “lose” in the sense that they do not live long enough to collect their share, but they have also gained because they lose only the amount paid in taxes, which is much less than what they would (or should) have saved for their individual retirement.

Because almost all state-sponsored old age pensions are “pay as you go” systems (not individual savings accounts), they have one other major cost-savings, namely youthful age structures. Until recently, all industrial societies had three, four, or more workers paying retirement taxes for each retiree receiving benefits. Under such circumstances, fairly modest per-capita taxes on workers were sufficient to support relatively generous pensions to retirees. With the expected shift of age structure in the United States in the first half of the 21st century, Social Security taxes (or general revenues) will have to be raised considerably to provide for the higher ratio of retirees to workers. The other alternative is to cut benefits directly or indirectly by raising the age of eligibility. Neither of these options are popular ones.

Official projections of the long-term future of Social Security in the United States rely on assumptions that probably underestimate future improvements in longevity and future declines in fertility (Lee, 2000; Lee

& Tuljapurkar, 1997). Fertility is projected to remain at current levels, just below the replacement level, which is far higher than in almost every other industrial country. Mortality projections assume that recent trends in increased longevity will slow down. More realistic assumptions suggest that payroll taxes will have to double from the current level of about 12% of wages (Lee & Tuljapurkar, 1997, p. 77).

Immigration does not solve the Social Security problem, as noted earlier, because population aging cannot be stopped under any reasonable immigration scenario. But immigration does slow population aging, especially if immigration is assumed to continue or even increase. A recent report to the Social Security Advisory Board recommended that assumptions about future immigration be converted from absolute numbers to a rate (based on the U.S. population), which would effectively increase the assumed positive benefit of immigration on the solvency of the Social Security system (Technical Panel on Assumptions and Methods, 2003). With an intergenerational accounting framework, Lee and Miller (1998, 2000) have shown that immigrants (and their descendants) contribute more in taxes than they receive in benefits. Just as the age structure of immigrant households makes them disproportionately the beneficiaries of public education, the relative youth of immigrants also means they are less likely to be beneficiaries of Social Security and Medicare (and Medicaid for the institutionalized elderly). Immigrants also help to relieve the per-capita fiscal burden of native born for the national debt, national security, and public goods, which are major federal expenditures that are only loosely tied to population size.

### Health Care

Population aging will also add pressures on the health care system. Recent evidence shows that more recent cohorts of the elderly are healthier than earlier generations and experience lower rates of disability (Crimmins, 2004; Manton & Gu, 2001; Wolf, Hunt, & Knickman, 2005). Nonetheless, older persons have higher rates of chronic conditions than do younger persons. As the fraction of the elderly rises, there will be more funds spent on doctors, nurses, home health aides, and all other medical professionals, as well as on hospitals, nursing homes, and pharmaceuticals. In general, most health care costs are not paid directly by consumers, but by transfer payments from taxes and insurance costs. For the elderly, most health care costs are paid by Medicare and Medicaid. Current tax revenues for health care, similar to those supporting Social

Because most immigrants are more likely to be younger workers (who pay general taxes and payroll Medicare taxes) than older Medicare recipients, immigrants provide some additional resources to support the health care system for the elderly. But there are two additional reasons why more immigrants might lower pressures on the health care system. Immigrants provide a significant share of workers for the health care system, and immigrant families are somewhat less likely to rely on institutional support for elderly family members.

Many immigrants work in the health care system at all levels—as physicians, nurses, lab workers, and biomedical researchers. The increased supply of highly skilled immigrants has eased shortages for health care personnel, especially in areas (inner cities) and institutions that are considered less desirable by native-born workers. Moreover, immigrants often work in many of the less skilled positions in the health care industry as attendants in nursing homes and as home health aides. These positions are generally poorly paid and involve many personal services for elderly patients that family members are reluctant to perform. The health care industry is one of the sectors of the economy that cannot be imported or outsourced. Unless there is some new source of domestic workers, immigrants are likely to be an important resource for an increasingly aging society.

Minorities and immigrants, in general, have a strong sense of obligation to care for their aging parents, and elderly immigrants are more likely to reside with their adult children than the native-born elderly (Ishii-Kuntz, 1997; Kamo & Zhou, 1994). These cultural patterns might reduce, at least to a small extent, the very large economic burden of the institutionalized elderly that are supported by Medicare and Medicaid.

### CONCLUSIONS

Almost all 21st-century societies will soon, if they have not already, begin to experience the social and political strains of population aging. There are strong cultural norms of respect and support for the elderly in most societies, and most industrial societies have made political commitments to provide pensions and health care for the elderly. These commitments were easier to invoke in earlier times where there were relatively few elderly. As the elderly double (or even triple) their relative share of the population (from less than 10% to 20% or more), there will be higher per-capita economic and social costs borne by the working population.

Immigration does add to the absolute numbers of dependent elderly, and the immigrant elderly are different from the native born. The majority of the immigrant elderly are likely to be considered minorities (Asian, Latino) in the American context. And recent immigrants are less likely to speak English, less well educated, and have lower incomes than the native-born elderly. With less access to public benefits, the immigrant elderly might be considered to be a burden to immigrant families who are struggling to make it in America, as well as to the larger society that must reckon with the costs of an increasing proportion of elderly.

This interpretation—which sees the additive effects of population aging and immigration creating a downward spiral—might be premature. First, the negative expectations of population aging may be exaggerated, and second, immigration may counteract some of the pressures created by population aging. Perhaps the “virtuous circle” interpretation in the title of this chapter may also be an exaggeration, but it calls attention to complementarities that are frequently overlooked.

The transition to an older population may have some positive outcomes. The presence of a relatively well-educated, prosperous, and healthy retired population could be an important societal resource (He et al., 2005). Many elderly, especially the oldest old, may be relatively inactive, whereas other elderly may be more interested in leisure pursuits than volunteer service. However, even if only a relatively small fraction of the active retired persons in their 60s and 70s could be persuaded to help in schools, community organizations, and charitable programs, they could make an important difference. The rising labor force participation of women has depleted the ranks of volunteers in many communities and created a huge demand for after school programs for children. The growing numbers of elderly in society will increase economic pressures on Social Security and medical services, but it has also created a new opportunity and resource for societies with the wisdom to appreciate the potential of “elder power.”

During the transition to an older society, immigration provides some relief that mitigates (although does not eliminate) the pressures of population aging. The majority of immigrants come during their active working years, and they generally have a very strong work ethic and traditional family values. Immigrants help to shore up the ratio of workers to retired persons in the short run. If immigration continues at a constant rate (increasing absolutely) and immigrants have higher fertility than native families, the impact on the age structure will continue. Moreover, a considerable fraction of immigrants will leave the country and may not collect Social Security; this is most likely for undocumented immigrants.

The occupational roles of immigrants are also a resource for an increasingly elderly society. Many immigrants work in health care occupations at all levels, including nurses and health aides that care for the elderly in nursing homes and in private homes. Immigrants often work in sectors that native-born workers shun because of low wages, low status, and few benefits. Caring for the infirm and disabled elderly is not a job that very many Americans desire. Immigrants help to fill this need.

The social and economic implications of demographic projections rely on uncertain assumptions, including that demographic trends will continue and behavioral patterns that characterized the past will not change. My guess is that both population aging and immigration will continue, but that their impact will be both complementary and more benign than currently anticipated.

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