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Aging Europe’s Demographic Destiny: Framing the Challenges Ahead

SARAH HARPER

In the latter half of the twentieth century, the more developed countries experienced population aging to a degree unprecedented in demographic history—and in no region was this trend more dramatic than in Europe. In fact, in terms of the proportion of the population aged

Demographic Dilemmas

Sixth in a series

65 and over, the world’s 20 oldest countries today (with the exception of Japan) are all European.

Europe reached a milestone of demographic maturity at the turn of the millennium, with more people aged over 60 than under 15. Asia by that standard will become mature by 2040, and the Americas shortly after.

By 2050, according to United Nations projections, the number of people worldwide aged 60 years and above will have reached 2 billion, surpassing the number of young people in the world and accounting for more than a fifth of the global population. The numbers of those aged 80 and above will show an even more pronounced increase, rising from about 69 million today to 379 million by 2050.

This demographic aging will profoundly affect not just the numbers of old people, but also their relationship with other age cohorts. In the developed countries by 2050 there will be more than twice as many older people (33 percent of the population) as younger (15 percent). And the proportion of “working age” people (15 to 59 years) will have declined from 62 percent to 52 percent.

Again, around the middle of the twenty-first century, it will be Europeans (along with the

Japanese) who will experience more acutely than anyone else this surge of older people dependent on a proportionally smaller workforce.

At the societal level among Europe’s nations, this demographic change will clearly have significant implications for labor supply, family and household structures, demands on health and welfare services, patterns of saving and consumption, provision of housing and transportation, leisure and community behavior, and social interaction and networks.

Indeed, as European governments and policy makers have awakened to the implications of aging populations, what might be called the “demographic burden hypothesis” has spread.

National health services, and even economies, are predicted to collapse across Europe under the strain of health care and pension demands. Traditional families, it is suggested, will no longer be available to compensate for failing public provision. Other observers see aging as a challenge for the West alone, bearing little relevance for less-developed and transitional countries. They assume immigration from a young South can compensate for Europe’s aging population.

The reality, however, is far more complex—and it is highly susceptible to policy changes. Many widely held assumptions about the implications of aging in Europe are myths, supported by rhetoric rather than hard data. In fact, the vast majority of the continent’s health services and economies will not collapse because of population aging. Research consistently reveals that families remain available to support and care for older relatives, though the type of care and support may well change.

Moreover, the regions of the world most vulnerable to population aging, in part because of the trend’s rapidity, are those of the developing South,

SARAH HARPER is a professor of gerontology at Oxford University and director of the Oxford Institute of Aging. Her books include *Aging Societies: Myths, Challenges, and Opportunities* (Hodder Arnold, 2006).

and not the already aged European nations. This means, however, that European countries likely will not be able to compensate for their lack of young skills through immigration from the South, as the so-called demographic transition (marked by falling fertility and mortality) races through Asia and Latin America over the coming decades.

Europeans must tackle a number of daunting yet urgent policy issues. For example, pay-as-you-go social security schemes face the challenge of a low or even potentially negative rate of return when workforces cease to grow, since a sustainable rate of return depends on growth in the total wage bill (that is, all the money paid out in taxable wages and salaries). Likewise, pensions based on capital reserves face the effects on asset prices of changes in population age structure.

Even so, it should be recognized that the major concerns—public spending on pensions, unfavorable dependency ratios of workers to nonworkers, increases in health care costs, declining availability of family-based care, and a slowdown in consumption due to an increase in older people and a decrease in younger people—are all dynamics of current cohorts and current behaviors; they are not fixed. As such, these are phenomena that public policies can address and mitigate, given the economic capacity and political will.

RISING DEPENDENCY

It is important to note that the greater longevity is occurring in the context of population aging, which is driven by falling fertility rates as well. Most European countries are now in the late stages of the demographic transition. During this transition, mortality rates fall first, including among infants, enabling the survival of large birth cohorts into adulthood. Fertility rates decline mainly because of economic development, which leads to increased education, greater employment opportunities for women, and family planning. The fertility declines also appear to be a response to falling infant mortality rates themselves.

In any case, population growth levels off during the demographic transition, and the profile of the population ages as late-life mortality rates fall and individuals survive to increasingly older ages.

The changing population structure, whereby falling fertility rates have led to increasing per-

centages of older dependents and declining percentages of economically active workers, has significant implications for providing for the new longevity.

To assess these implications properly, we must move from considering the total number or percentage of older people in European countries, to understanding the proportion of old (and younger) dependents within a population and their relationship to nondependents. Taking this perspective—focusing on the *age-structural transition*—allows us to consider the cohort composition and how this will change over time.

Three broad demographic groupings may be identified: youth dependents aged under 15; working-age population aged 15 to 64; and elderly dependents aged 65 and over. The combination of these within a population will influence that population's productivity growth and economic prospects.

In this light, significant variations among European nations become apparent. In the United

Kingdom today, for example, 60 percent of the population is working age; by 2050, according to UN projections, the percentage will be 55. That is a significant fall. However, it is considerably smaller than the decline—

from 62 percent to 51 percent working-age—that the population of the other 26 members of the European Union is projected to experience over the same period.

Focusing on age structure allows us to follow changes not only in the relationship between providers and dependents—we call this the dependency ratio—but also more specifically between the workforce and the two different groups of dependents. Typically, dependents move from large percentages of young to large percentages of old during the demographic transition.

The ratios that demographers follow are the elderly dependency ratio (EDR), which is the number of persons of working age (15 to 64) per person aged 65 or over; the youth dependency ratio (YDR), or the number of persons aged 15 to 64 per person aged under 15; and the total dependency ratio (TDR), the number of those 15 to 64 in relation to those on both sides of this age range.

The next decade will see a rapid increase in EDRs across the European continent. The elderly dependency ratio for the EU-25 (that is, the ratio

Europe over the next 40 years will change from having four to only two persons of working age for each citizen aged 65 and above.

for the 25 countries that comprised the EU before Romania and Bulgaria joined in 2007) is set to double as the working-age population (15–64 years) decreases by 48 million between now and 2050. Europe over the next 40 years will change from having four to only two persons of working age for each citizen aged 65 and above.

Italy's EDR, for example, will double by 2050 to reach 70 elderly dependents per 100 workers. In contrast, the UK's will increase only slightly, reaching 67:100. By 2050, the EDR will exceed 70:100 in Spain (as it will, incidentally, in Japan), while remaining below 40:100 in Denmark, Iceland, and Luxembourg (as it will in the United States).

THE DEMOGRAPHIC DEFICIT

It is widely believed in Europe that this structural aging of the population will lead to a *demographic deficit*, whereby the population of working-age adults is insufficient to support the increasing proportion of older dependents. This is seen to herald negative consequences both for nations and for the region as a whole.

A series of assumptions behind this view coalesces around two broad themes: Slower population growth leads to declining economic activity, and demographic aging leads to economic burdens because of increased requirements for pensions and health care.

Concerns about diminished economic activity are based on the assumption that declining populations produce declining demand, which has a negative effect on economic growth and employment. However, this assumption is contested by those who point out that in modern, industrial economies, aggregate demand depends on aggregate incomes rather than on the number of people; and that in open, globalized economies, the extent of markets does not depend on the number of domestic consumers.

The view that demographic aging leads to economic burdens is based on both increased demand for pensions and health care and reduced capacity to fund them. In terms of increased demand, it is projected that, for the EU-25, age-related public spending—such as for pensions, health care, and services for older adults—will rise as a percentage of GDP by 3 to 4 percentage points between 2004 and 2050, representing a 10 percent increase in public spending. The increase will be particularly pronounced between 2020 and 2040. However, it is recognized that public spending will to an extent be protected by a general move within the

EU to transfer more responsibilities from governments and companies to individuals.

The other side of the presumed demographic burden is the potentially reduced capacity of Europe's aging populations to finance pensions and long-term health and social care. This capacity is seen to depend both on the growth of labor productivity and on the employment rate. Average annual growth in productivity in the EU between 2004 and 2010 was 2.4 percent. It is projected to fall to 1.2 percent by 2030, due to the reduction in the working-age population.

LOOKING FOR ANSWERS

While the impact of population aging and the associated "demographic deficit" remain contested, most governments across Europe now accept that some remedial measures will be needed. These measures involve two approaches.

One is to alter the population's age composition by encouraging changes in fertility and immigration rates to increase the proportion of young people. The other is to increase the population's productivity by encouraging higher labor-force participation rates and extending working lives by altering entry and exit ages.

The age-structure changes under way in Europe's populations have been propelled by a fall in total fertility rates (TFR)—that is, the number of children per reproductive woman—which must stand at 2.1 to achieve replacement level. Low fertility is now a global phenomenon.

Yet, while research indicates that increasing fertility can have a strong influence on altering elderly dependency ratios, no EU country, with the exception of France, is currently pursuing an active fertility promotion policy.

All countries in Western Europe, again with the exception of France, are now below replacement level. The TFRs for some southern Mediterranean nations, such as Italy and Spain, have fallen below 1.5. (Again, this is a worldwide trend. In Asia, Singapore and South Korea's TFRs have dropped below 1.2.) Some demographers have expressed concern that, due to demographic inertia, a very low fertility rate could become irreversible. Under these circumstances, without significant in-migration, the population in countries like Spain and Italy would decline dramatically.

The impact of migration on the demographic deficit is more complex than simply introducing numbers of young people. Migration has a potentially strong and long-lasting impact on

population growth and structure (depending on the number of migrants) based on their relatively young age structure and their higher fertility. Immigration has the capacity to prevent population decline, maintain the size of the labor force, and slow down structural population aging.

The general consensus is that immigration to Europe will in the short term achieve immediate increases in total fertility rates, population growth, and labor-market contribution. However, immigration is unlikely to send TFRs to full replacement level. And high rates of immigration likely will not prove sustainable.

Indeed, immigration could eventually contribute to a worsening of the demographic deficit, as the total fertility rates of the immigrant population fall and the immigrants and their families age in place. In the meantime, immigration may affect European economies positively, via impacts on innovation, economic growth, employment in general, and cultural diversification, though these effects are more complex and contested.

MAKING ADJUSTMENTS

Given the complexities of trying to alter the demographic composition of their societies, most governments on the continent are looking at alternative policy options, which include increasing the productivity of the population by encouraging higher labor-force participation rates and extending working lives by altering entry and exit ages.

Increasing the economic contribution of older workers is an important measure for governments to consider, given the potentially higher status, in education and health, that successive future cohorts will have. This is particularly the case in countries such as France, Belgium, and the Netherlands, where early retirement rates are high.

Clearly, however, Europe's population aging is taking place within existing institutional structures, including those providing social security and health care. Crucial in this regard will be the capacity of individuals and households to make relevant adjustments, and the capacity of institutions to both make and enable adjustments—for example, to savings behavior, labor supplies, private intergenerational transfers, and investments in human capital.

Also, while the essential structures for tackling demographic challenges may be established in most European countries, these are framed by collective social goals—such as increasing general prosperity, intra- and inter-generational fairness,

and social cohesion—that were developed in the previous century. Some of these goals may need to be adapted for the future.

Thus, as European states attempt to adjust to population aging, a key public policy question is how national collective goals will influence necessary societal adjustments, and how such adjustments will be facilitated or restricted by existing social goals.

More specific is the question of the appropriateness of financial and health care institutions and programs that were designed for the populations of the twentieth century. Some will not sustainably fit the individual life courses and familial and societal structures of the twenty-first century.

The traditional implicit contract between generations, for example, is based on a system of intergenerational reciprocity, whereby adults provide for young dependents who, when they become adults, provide for older dependents. This understanding is maintained in most European countries both at the familial level (with parents providing for young children, and children providing for elderly parents) and at the societal level (with adults in the workforce providing, via public transfers, for both younger and older dependents—in the form of health care and education for the young, and health care and income support for retirees).

The question for a population that is aging because of declines in both fertility and mortality is whether cohorts that are successful (in terms of fertility and mortality reduction) pass the costs of such success onto future cohorts via the traditional intergenerational contract, or bear the costs of their success themselves via an *adapted intergenerational contract*.

This latter contract would require older cohorts to bear the costs of their longer lives through, for example, higher post-retirement contributions to their own welfare and/or a longer working life.

Europe's demographic challenges will also require the integration of public and private intergenerational transfers into future systems that incorporate a better understanding of the often subtle relationship between private and public financial transfers, and between upward transfers (to older generations) and downward transfers (to younger generations).

For example, when my Oxford colleague George Leeson and I undertook a global survey of 44,000 people aged over 40 in 24 countries, we found that public transfers reduce private upward transfers

from adult children to older parents, but they have far less effect on private downward transfers from older parents to adult children and grandchildren.

There must also be consideration of intergenerational fairness in sharing the proceeds of growth between workers and dependents. This sharing may occur, for example, by maintaining a link between pensions and wages, so that pensioners receive some share of a nation's economic growth. It can be implemented by linking pensions to increases in prices, so pensioners do not see absolute living standards fall as a result of inflation. It could be ensured by tying pensions to the capacity of the system, defined by growth in the total wage bill. Or it may be maintained by a system that integrates several indices.

WHO'S RESPONSIBLE?

The challenges facing the nations of Europe will also require new institutional frameworks that support and encourage individual responsibility. It may be argued that population aging will necessitate a division between governments' responsibility to keep populations out of poverty and individuals' responsibility to raise personal standards of living.

These general ideas can be developed in line with specific programs for providing social security and health care. The economists David Bloom and Rodney McKinnon have, for example, questioned the capacity of societies to adequately finance existing social security programs through risk-pooling social insurance contributions, government allocations of tax revenues, and mandated savings for individuals. New arrangements for financing social security may be needed to address the income protection required by aging populations.

The philosopher Kenneth Howse highlights three main challenges that population aging holds for the provision of health and social care, all of them relevant to the policy dilemmas facing European nations.

First, population aging will have a large and independent effect on the total *amount* of illness and disability in the population, and as a result will exert pressure to increase total health care spending. Second, aging will change the *kinds* of health problems that people bring to the system, and thus will exert pressure for a major shift in

the allocation of health care resources and the configuration of services. Third, changing dependency ratios will make it harder for aging societies to provide for the care of their older members.

The nations of Europe are variously prepared to respond to these challenges. In any case, it appears likely that the twentieth-century approach of many aging European societies—relying on migrant workers from a younger, poorer South to prop up their economies—will no longer be a viable option in the coming decades. This is so in part because dramatic declines in fertility in the developing world will reduce the supply of skilled workers.

While substitution of new technologies may reduce the need for labor market growth, many European countries now recognize the need to retain older workers in their workforces—not only to reduce pension burdens, but also to retain valuable skills and experience in the face of an upcoming global skills shortage.

New policy approaches in response to population aging must thus include the development of broad, coherent, multifaceted, and integrated approaches to labor markets, health care, and social security. Such policies should enable and promote longer working lives through lifelong education and skills-updating, as well

as the provision of appropriate working environments for older workers. They should ensure that private family and household transfers are integrated into old-age security systems where possible.

In addition, national policies in Europe should promote well-being and enable healthy, active living to reduce chronic illnesses and health care costs and to support contributory lives for as long as possible. And they should provide access to education across the life course to ensure that all individuals are prepared physically, mentally, socially, and financially to cope with increasing individual responsibility in old age.

Understanding the new reality of aging is vital, both for individuals who need to reassess their life courses in light of new longevity probabilities, and for governments charged with developing appropriate policy frameworks to address the forthcoming demographic changes, challenges, and opportunities. ■

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