

Global Aging: Achieving Its Potential



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Foreword

by

The Honorable Walter F. Mondale

Aging is one of life's inescapable truths. Throughout history, we have sought ways to extend life. Some, like the ancient Egyptians, created pathways to the spiritual world. Others, like the Spanish explorer Ponce de Leon, searched for the mythical "fountain of youth" and other sources of immortality.

In the twentieth century, a revolution occurred in the quest for longevity. Advances in technology, medicine, and nutrition made dramatically increased longevity a reality for millions across the globe. In the United States alone, life expectancy increased roughly thirty years between 1900 and 2000. In just the last ten years, the number of people at least 100 years old in the United States has doubled.

That's good news. It reflects the successes that government and industry have enjoyed in solving many of the problems that plagued civilization since the dawn of time.

Yet, as with progress in any field, our new-found longevity raises questions that must be addressed. How do we care for growing numbers of older people? How do we provide reasonable economic security throughout longer retirements? How do we provide opportunities for growing numbers of older people to participate in the workforce, if they choose to do so?

These and other issues pose a significant challenge. To address this challenge, nations must assess their unique demographic circumstances and make policy choices that reflect their culture, society, and values. In some nations, immediate policy changes may be required. In other nations, like the United States, the demographic challenges are less severe.

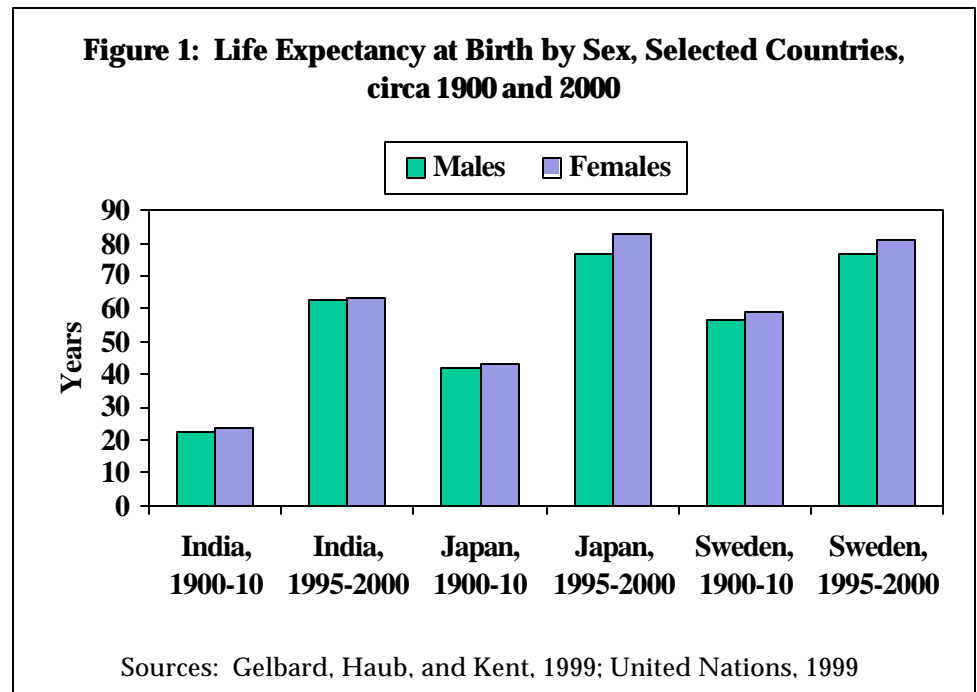
This report provides policymakers with an important tool for assessing the aging challenge and for making balanced policy responses. It focuses on an aging population as a resource, not a burden, and suggests positive strategies to make the most out of this resource in ways that benefit the individual and society as a whole.

I applaud AARP for suggesting creative opportunities to enact positive policies in aging societies. Too often, aging issues are used as an excuse to promote a particular agenda, such as the privatization of important social protection programs. As shown in this report, however, valuable programs like Social Security and Medicare are sustainable in the long term, provided that we understand the challenges and take reasonable measures to address them.

I want to thank AARP for its continued leadership on aging issues. This report makes a valuable contribution to the discussion on global aging. I highly recommend it to anyone interested in seeking creative ways to meet the challenges—and multiply the blessings—of our longer lifespans.

Global Aging: Achieving Its Potential

The age-old yearning for a long life is a reality for growing numbers of men and women around the world. In the United States, life expectancy increased by almost 30 years over the past century. This enormous increase in expected lifetime is not unique to the United States (Figure 1). Nor is it only those in the developed world who are living longer. Many of the least developed countries of the world have experienced marked improvements in life expectancy in recent years.



Yet our good fortune to be the beneficiaries of a long life expectancy is taken for granted. It is even viewed as a looming crisis that could break the bank of government finances. Is increased life expectancy a demographer's dream or an economist's nightmare?

There is no simple or single answer. It depends on how we respond now and in the future. Adjustment to population aging will prove a greater challenge in some countries—especially those with rapid aging—than others. But it is a challenge we should welcome. We have the opportunity to reshape our economies and our social structures to ensure that these extra years of life are enjoyed by broad segments of our populations and are used in a productive manner for society. The sooner that all institutions—governments, enterprises, social organizations, and families—as well as individuals take on this challenge, the greater the probability of success.

This paper examines the challenges and opportunities posed by global population aging. Although it relies heavily on examples from the United States, where appropriate or available, data from other countries, especially in more developed regions of the world, are highlighted. At the end of the paper, a variety of strategies are suggested that can help societies at varying levels of development adjust to population aging.

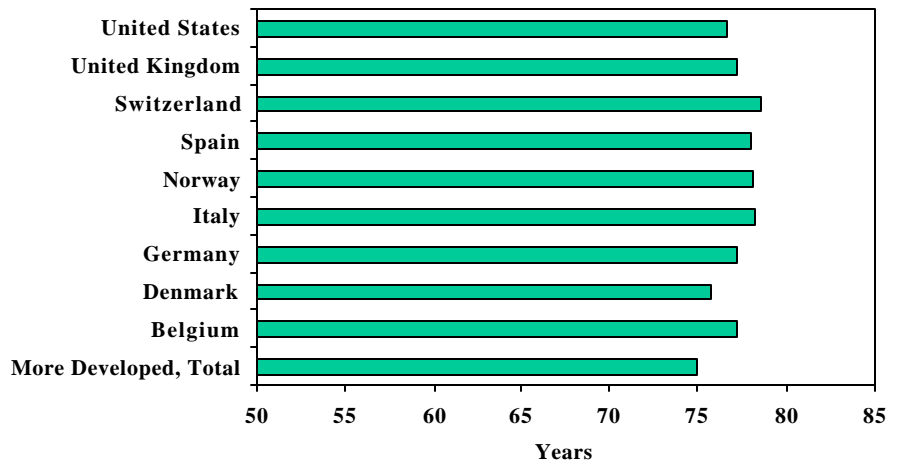
A DEMOGRAPHER'S DREAM?

In most of the developed countries of the world, people can expect to live well into their seventies (Figure 2), and many developing countries are catching up fast. New developments in medicine, technological advances, and greater knowledge about healthy life styles promise further improvements.

Not only are people living longer, they have more years of healthy life. Indicative of this trend, disability rates are declining among the older population in the United States, Japan, and a number of countries in Europe. The number of years spent without disability in Organization for Economic Cooperation and Development (OECD) countries now accounts for 45 to 80 percent of remaining life expectancy at age 65 (Jacobzone, 1999). In the United States, the percentage of chronically disabled individuals fell in age-standardized terms from 26.2 percent to 19.7 percent of Medicare beneficiaries aged 65 and older between 1982 and 1999 (Manton and Gu, 2001). In other countries, such as Australia, Germany and the United Kingdom, disability rates have also been falling at older ages (Jacobzone, 1999; Waidmann and Manton, 1998).

According to Federal Interagency Forum on Aging Related Statistics (2000) calculations for 1982 to 1994, had disability rates in the United States not dropped, population aging would have

Figure 2. Life Expectancy at Birth, Both Sexes, Selected Developed Countries, 2000*



* For the period 1995-2000

Source: United Nations, 1999

caused the chronically disabled population to grow by an estimated 1.5 million instead of the 600,000 by which it actually increased. Moreover, technological advances, such as optical character recognition to assist those with impaired eye sight, are making it possible for persons with disabilities, even severe disabilities, to live independent and productive lives.

Thirty years ago, a birth explosion threatened world resources. Since then, fertility rates have declined in most countries. In many countries, fertility has fallen below the replacement rate of 2.1 children per woman, which is the level required to keep a population from declining over time. As of 1998, 61 countries had fertility rates below the population replacement rate. Those countries account for 44 percent of the world's population. Much of Europe is likely to experience population decline.

Never before have birth rates fallen so low, for so long, in so many places around the world. They are expected to stay low due to the decline in infant and child mortality, the rising costs of rearing children, and improvements in the status of and economic opportunities for women.

While population aging has raised concerns about its effects on the rate of economic growth, there are many advantages of slowing population growth. Congestion and pollution will be lessened. As a result, such problems as global warming, the depletion of the earth's protective ozone layer, damage to crops and other plant life due to pollution, and the extinction of plant and animal species due to the loss of their habitat may be reduced. The strain on world nonrenewable resources will be diminished. The demand for social services for the young, such as providing them

education and health care, will be reduced, and competition on the part of youthful job entrants for positions will be eased.

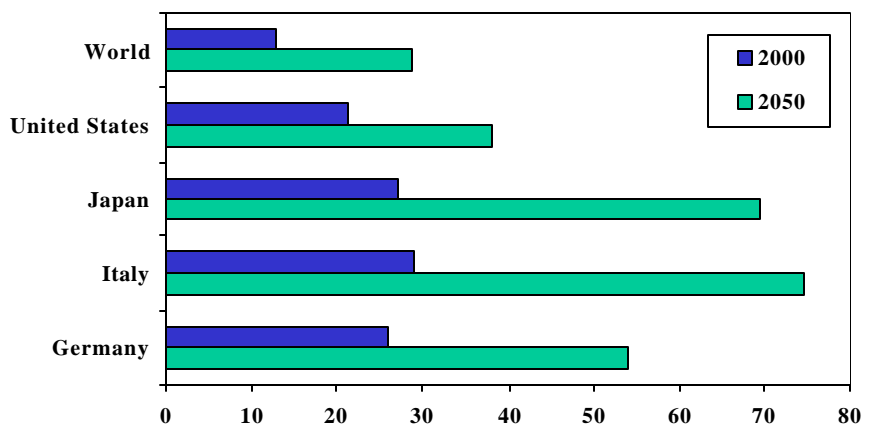
With declining fertility, average family size is shrinking, and families can spend more time and money per child on the education of their children. The World Bank (1994) points to an explosion in productivity and wage growth in East Asia, where fertility has fallen rapidly, a decline that may be due, in part, to larger investments in education. Better schooled children are ultimately more productive workers.

AN ECONOMIST'S NIGHTMARE?

The world is getting older. One need only look at the change in the proportion of the population that is generally considered "old," say 60 or 65 and above. By this criterion, virtually every country of the world is aging. In the more developed regions of the world, the population aged 65 and above rose from 8 percent to 14 percent of total population between 1950 and 2000. It is projected to rise to 26 percent by 2050 (United Nations, 1999).

A similar measure of aging is the aged dependency or support ratio, often defined as the ratio of people aged 65 and older relative to those of working age, e.g., 20 to 64. For the world as a whole, this ratio is projected to more than double between 2000 and 2050, increasing from 12.8 to 28.9 per 100 (Figure 3). In the more

Figure 3: Aged Dependency Ratios*, World Total and Selected Countries, 2000 and 2050



*Number of persons 65+ per 100 persons 20-64

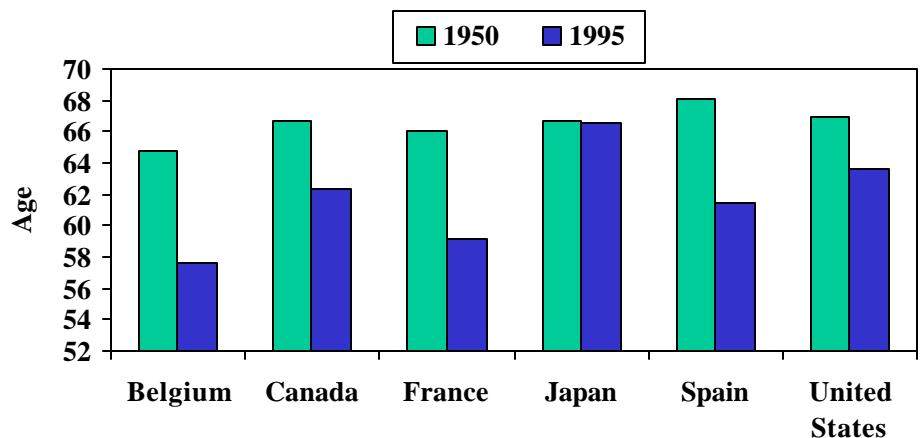
Source: U.S. Bureau of the Census. International Data Base

developed regions, however, that ratio already stands at 23.8 per 100 and is also projected to more than double to 49.4 by 2050. Aging in the less developed world is even more rapid, with the old-age dependency ratio nearly tripling from 9.7 to 26 per 100 between 2000 and 2050 (U.S. Bureau of the Census, 2000).

While the world is getting older,

the aging of the population is only a part of the increase in the ratio of nonworkers to workers in some countries. In many industrialized countries over the past 50 years, the relatively large decline in retirement age (Figure 4) has been a more important factor. A less important but contributing factor has been postponement of entry into the labor force by young persons due to longer years of

Figure 4: Estimated Average Age of Retirement by Older Male Workers, Selected Countries, 1950 and 1995



Source: Organization for Economic Cooperation and Development, 1998

education and high youth unemployment.

The number of children also affects the demographic burden on workers. When children are added to the dependency ratio, dependency is greater but its growth is smaller because the population of children is projected to grow more slowly. In the United States, the total dependency ratio, which includes both young and old “dependents,” does rise over the next several decades, but at no time does it exceed the level for 1965 (Figure 5).

costs of supporting retirees (Rogers, Toder, and Jones, 2000).

The dependency ratio is an easily understood measure of how populations change over time, but it also gives the impression that all persons above a certain age are dependents and all adults below that age, supporters. Nothing could be further from the truth. In the United States in recent years, for example, about 4 million persons aged 65 and older have been in the labor force, working either full or part time. In addition, over 30 million men and women between the ages of

Many are prime-age adults.

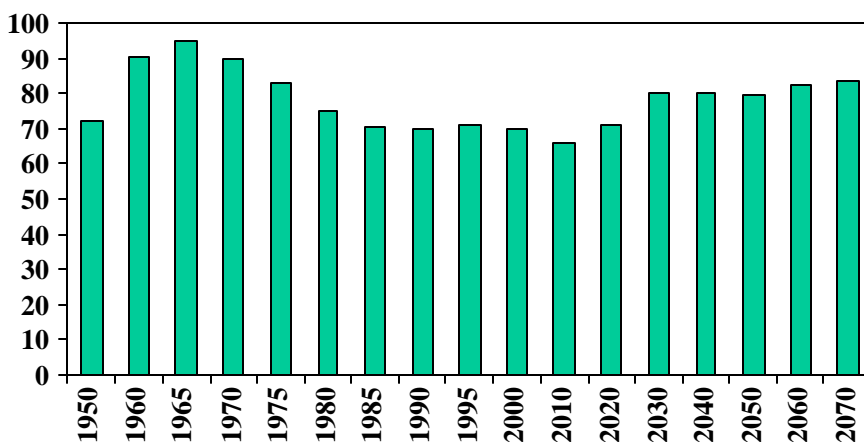
POPULATION AGING’S IMPACT ON THE ECONOMY

Whatever the ratio or age cutoff used to describe population aging, it cannot obscure the likelihood that aging will affect the economy. Much of the literature on aging populations focuses on aging’s economic effects and concludes that soaring demands on pension, health care, and long-term care will place an unsustainable burden on national coffers. Some observers argue that age cohort “warfare” will ensue, with the young refusing to pay the high taxes required to support the old.

Population aging does slow the growth rate of the labor force, and in some countries the labor force is projected to shrink. The changes in labor markets, reducing the number of working taxpayers, may strain government budgets as well as the financing of social security benefits and delivery of health care. All else equal, population aging may require a rising tax burden to meet rising costs of benefits and services to the older population. It may reduce the savings rate, as retirees spend down their savings. Asked “Can we afford to grow old?,” many writers, analysts, and policymakers answer an unequivocal “No.”

True, government spending in the developed world is projected to

Figure 5: Total Support Ratios*, United States, 1950 to 2070



*Sum of the number of persons under age 20 and the number 65 and over per 100 persons ages 20-64

Source: Board of Trustees, 2001

This point should be kept in mind: While older dependents are more costly than younger ones, the U.S. did survive higher dependency ratios in the not-so-distant past. In the future, the lower costs of supporting the young, whose share of the population is projected to drop, will partially offset the higher

20 and 64 have been out of the labor force, raising children, going to school, retired at young ages, or sick or disabled. Adjusting dependency ratios to include older workers as supporters and younger nonworkers as dependents paints a more accurate picture of the age of the so-called “dependents” in society:

rise sharply in coming decades as populations age. In the United States, federal government spending on older persons, through Social Security, Medicare and Medicaid, is projected to increase from 7.5 percent of GDP in 2000 to 12.4 percent in 2030 and 13.3 percent in 2060 (Elmendorf and Sheiner, 2000). As a percent of GDP, Social Security expenditures increase by about 50 percent, while Medicaid and Medicare expenditures for older persons nearly double. Under recent “best estimate” projections, the Social Security Old-Age and Survivors Insurance and Disability Insurance (OASDI) trust funds will be exhausted in 2038. Does this mean an aging crisis is in the offing?

AVOIDING A CRISIS

While government costs will rise as more people live to advanced ages, an aging “crisis” is by no means inevitable. The demographic changes that affect the dependency ratio are only one factor in the ability of the economy to support an aging population. Equally, if not more, important is the growth in the level of income per capita. A country’s ability to support a nonworking population of any age is affected not only by the number of workers but also by its income. Economic growth, however, also raises some government expenditures. For instance, with more rapid growth, social security benefits, which are

based on wages, will also be higher. But even taking this into account, economic growth eases the burden of social security financing by raising the tax base relative to the level of benefits.

Population aging most likely will slow the growth rate of per capita income. This slowdown will probably occur because there will be more older nonworkers per worker. It will also raise government expenditures and taxes needed to support those nonworkers. Aging alone, however, will not be the only contributor to rising expenditures for nonworkers.

For example, the more rapidly increasing spending on health care for the aged, when compared to Social Security, demonstrates that the total increase in spending on the elderly in the United States is due to more than an increase in the size of the older population. It is partly due to societal decisions that led to rising health expenditures per older person, which may reflect in part a willingness as we grow wealthier to spend relatively more of our income on our health. The rising costs for health care are also due to advances in medical technology, as well as to the growing availability of services and medical inflation in excess of general inflation, factors that increase the cost of care for younger age groups as well.

Concern also has arisen about the negative impact of aging on savings. Some experts caution, however, that looking only at the

aged paints a distorted picture of overall savings and dissavings, at least in the United States. A decline in the share of young nonsavers over the next 40 years, coupled with an increase in the share of high-saving middle-aged persons, may actually push aggregate saving upward (Rogers, Toder, and Jones, 2000), despite an increase in older dissavers.

Moreover, older persons will not necessarily spend down their assets at the rate expected under the primary economic theory of savings, the life cycle hypothesis (Haider et al., 2000). Fears that all retirees will divest themselves of their savings at about the same time are unwarranted, in part because of the possible importance of bequests. Retirees may also want to maintain a reserve as a precaution against outliving their resources.

Population aging is not likely to cause a fall in the standard of living. One study found that population aging would reduce the annual growth rate of per capita income by less than two-tenths of a percentage point (Cutler, et al., 1990). Other studies have shown greater reductions in the growth rate, but there is little convincing evidence that actual levels will decline. Productivity growth is the key.

Even with population aging, the real standard of living is projected to be considerably higher in the future. The National Academy on an Aging Society observes that the aged population of the United States has actually doubled since

1960 and living standards have still risen, “in good part [because of] general economic growth” (Friedland and Summer, 1999). Indeed, a study by OECD indicates that even with annual growth rates well below recent historical trends, living standards could be at least 80 percent higher in the United States, Japan, and the European Union in 2050 than in 2000 (Turner et al., 1998).

With this increased wealth, taxpayers individually and countries collectively would be able to afford the retirement of large cohorts. But even lower productivity growth rates than projected by OECD could, especially if coupled with changes in retirement programs, retirement age, and health care systems, make the retirement of even large cohorts affordable.

Moreover, we should also keep in mind that the “resource pie” is not fixed, as some scenarios of the future might have us believe. As long as economic growth continues, societies can still spend more on their growing older population and more on young persons as well. Thus, when placed in the proper perspective of productivity growth, the potential social and economic problems associated with population aging are not nearly as ominous as would appear when only examining changes in the ratio of the older population to the working age population.

WORKERS AND EMPLOYERS RESPOND TO POPULATION AGING

While the speed of aging differs considerably across countries, and some economies will need to adjust soon to a declining number of workers, populations are not aging overnight. Economies can cope with population aging.

Especially in the developed world, the modern free market economy is flexible and can adjust to large changes in population age structure, just as the United States did when the huge baby boom generation populated schools and then entered the labor market. That population boom was far larger and more sustained than had been predicted (Teitelbaum, 2000). With planning, the U.S. should be able to cope as the boomers—whose numbers are well known—move into retirement. The same should be true of other developed countries with aged populations.

However, population aging will require labor market changes. Workers and employers can make adjustments that will enhance the ability of labor markets to cope with population aging.

Longer life expectancy and improved health and vitality at older ages result in longer years in which people are able to work. This, combined with an increase in “knowledge” jobs that require intellectual rather than physical vigor and higher levels of educational attainment, makes work both more feasible and more attractive to older workers. Workers will be more likely to want to continue working at older

ages.

While most Americans may be physically and mentally capable of working until age 70 or beyond, only a minority currently remain in the labor force after 65. Yet, 80 percent of boomers report that they expect to work at least part time in retirement (AARP, 1998). Other public opinion polls show similar expectations among boomers as well as other age groups (Yakoboski and Dickemper, 1997). According to one, “most workers see their ‘retirement’ not as a time for leisure and travel, but as an opportunity to do fulfilling work” (John J. Heldrich Center, 2000).

In the United States, the trend toward ever earlier retirement that characterized much of the post-World War II years appears to have come to an end. Since the mid-1980s, participation rates for older Americans have been inching upward. Rates are still well below what they were in the immediate post-war years, suggesting that there is room for considerable increases in labor force participation at older ages.

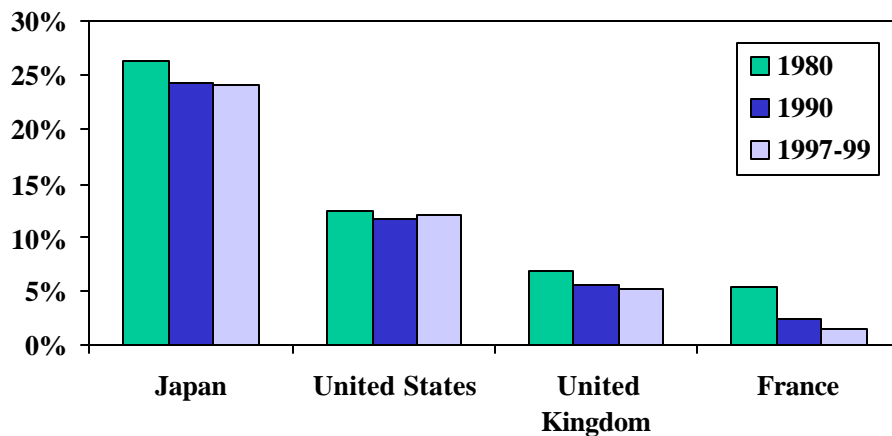
As workers reach retirement age, many factors—ill health, job loss, a difficult supervisor—may temper enthusiasm for continued employment. Still, it seems likely that greater interest in working longer will characterize the boomers. It also seems reasonable to assume some continued increase in labor force participation at older ages, especially if current labor shortages are aggravated by a

slowing growth rate of the labor force. Most developed countries have very low labor force participation rates at upper ages, but in Japan, the labor force participation rate for persons 65 and older in 1999 was over 23 percent, nearly double what it was in the United States. This figure was about 4.5 times what it was in the United Kingdom and 15 times what it was in France (Figure 6).

population? Simulations done for the European Commission (EC) led to the conclusion that the economic impact of population aging could be “almost entirely” eliminated by raising the total labor force participation rate in the countries of the EC by 10 percentage points (from 65 percent to 75 percent) over the next 50 years (McMorrow and Roeger, 1999 as cited in England, 2000). While this might seem like

2016 instead of 2027 would eliminate 5 percent of the long-term Social Security deficit projected as of 1998. If the full benefit age were also increased to 68 by raising it by one month every two years, about 18 percent of the deficit would be eliminated. A rise to 70, coupled with a more rapid implementation of the current increase, would eliminate 22 percent of the deficit (Social Security Advisory Board, 1998).

Figure 6: Labor Force Participation Rates of Persons Aged 65+, Selected Countries, 1980, 1990, and 1997-99



Source: Government of Japan, 1999; International Labour Office, 1999; U.S. Bureau of Labor Statistics, 2000

Is it unreasonable to expect further increases in participation rates, especially if public and private sector policies encourage them? Would delayed retirement have a significant impact on the projected costs of supporting an aged population?

If People Work Longer

What impact would delayed retirement have on the projected costs of supporting an aged

an unreasonably steep increase, the annual rise would be modest. Moreover, a participation rate of 75 percent would still be below the actual labor force participation rate for persons ages 16 to 64 in the United States.

The U.S. Social Security Administration’s Office of the Chief Actuary has estimated that accelerating the increase in the age of eligibility for full Social Security benefits, which is rising to 67, so that it is fully in effect by

The Bureau of Labor Statistics projects that only 14 percent of the population aged 65 and older will be in the labor force in 2025 (the latest year for which projections are available [Fullerton, 1999b]), a figure that we think underestimates the likely participation. Too many signs point to greater interest in and need for older persons to remain at work longer. Indeed, the actual 2000 labor force participation rate of 12.8 percent for persons 65 and older was almost identical to BLS’s projection for 2008: 12.9 percent (Fullerton, 1999a).

Using the Regional Economic Models, Inc. and Macroeconomic Advisers, LLC econometric models,¹ we simulated the impact through 2029 (the latest year in the Macroeconomic Advisers model) of a number of potential increases in the labor force participation rate of older persons on such outcomes as the personal savings rate, real disposable income, the number of Social Security beneficiaries, Social Security benefits, and the Social Security trust funds. The scenario discussed here assumes a return

to a level of labor force participation comparable to what it was for the 65-plus population in 1950.

While no one can know with any certainty what will happen over the next three decades, a return to the 1950 labor force participation rate for the 65-plus population seems possible, especially in the face of declining physical demands in jobs, slowing labor force growth, rising age of eligibility for Social Security benefits, and the increasing education and better health of this age group. That level could be reached by an annual increase in the participation rate for this age group of less than one half of a percentage point.

Under this scenario, the steady increase in the labor force participation rate of older persons yields a total of nearly 18 million labor force participants by 2029 (vs. 4.2 million in 2000) and a labor force participation rate of 26.7 percent, as in 1950. Assuming no other changes, the labor force itself would be some 5 percent larger in 2029 than it would otherwise.

The impact on the economy and the Social Security system from this increased participation depends to a considerable extent on when Social Security benefits would be paid. At present, workers in the United States have relatively little incentive to postpone receipt of Social Security benefits after age of eligibility for full Social Security benefits. By 2008, however, workers who do

delay receipt of Social Security will receive a more actuarially fair benefit increase.

If the projected additional labor force participants aged 65 and older were to postpone receipt of benefits, they would, of course, be subtracted from the “dependent” population and added to the supporters. When this happens, the number of Social Security beneficiaries would fall by 6 percent. Social Security expenditures for benefits would be about 21 percent less than otherwise. Personal savings and real disposable income would rise by more than 4 percent; GDP would be 9 percent higher in 2029.

Consequently, by 2029, the Old-Age and Survivors Insurance and Disability Insurance (OASDI) Trust Funds would be about 21 percent larger than they would be without this increase in workers delaying. At more than 41 percent of GDP, the trust funds would be more than 9 percentage points above baseline.

Other Adjustments

Countries may respond to population aging and shrinking labor forces in a number of ways. In countries in Europe with high unemployment rates, such as France, the effect of population aging on the ratio of workers to beneficiaries could be partially offset by a decline in unemployment, with employers hiring more of those currently unemployed. These countries are not concerned currently about

worker shortages but about workers who cannot find jobs.

In countries such as Ireland and Italy, the effect of population aging will likely be offset to some extent over the next few decades by increases in female labor force participation. Younger females in birth cohorts with high labor force participation rates will replace older females with lower rates. In other words, there will be more actual workers in the population of working age, due to lower unemployment rates and higher female labor force participation rates.

In some countries, such as the United States, immigration reduces the effects of population aging. Continued immigration over the next 50 years may help ensure that the United States and its labor force, in contrast to many European countries, will continue to grow (United Nations, 2000).

Faced with a slowing growth of the labor force, older workers will be more in demand. During the boom economy of the late 1990s in the U.S., a number of labor market adjustments occurred as a response to labor market shortages. Some of those changes may also occur in the twenty-first century as a response to labor market shortages resulting from population aging. Workers may work longer hours. This increase could occur as a result of full-time workers working more hours and part-time workers changing to full time. People who have been out of the labor force may be drawn into the labor force due to higher

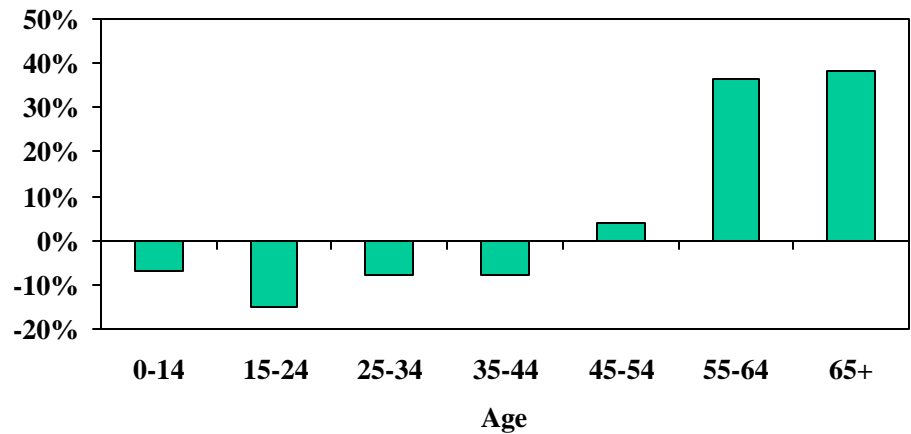
wages.

In the developed world as a whole, the population pool from which workers will be drawn will be largely older (Figure 7). Employers may be induced by the short supply of younger workers to develop policies to make continued work more attractive to older workers. Employers seeking to attract older workers may offer alternative work options, such as working at home, and variable schedules. Private sector policies such as phased retirement, flexible work schedules, job redesign, and attractive part-time work options may become very important in encouraging workers to postpone retirement voluntarily.

Some of the adjustment to an aging population may come through greater investment by employers. If there is a shortage of workers, employers may respond by investing more in the human capital of their workers and the physical capital of their businesses. One study suggests that slower labor force growth induces more rapid technological change as a response to the relative scarcity of labor (Cutler et al., 1990). According to this study, the reduction in labor force growth projected in the United States from 1990 to 2030 may raise productivity growth enough due to increased investments per worker to offset fully the consequences of an increased old-age dependency ratio.

An increase in the education level of the work force will naturally

Figure 7: Percent Change in Number of Persons in Age Group, Developed Countries, 2000-2020



Source: U.S. Census Bureau, International Data Base, 2000

occur as younger, better educated cohorts replace older cohorts with less education. The increase in experience associated with an older workforce should also raise the average productivity per worker. Nonetheless, governments, employers, and workers themselves will have to invest in training and retraining to ensure that workers of all ages have the skills needed to remain productive in a changing economy.

OLDER PERSONS AS A RESOURCE, NOT A BURDEN

Much of the discussion about population aging has a heavy focus on older persons as dependents or burdens. Yet the term “dependent” is often inappropriate. Many older persons, especially in Japan and the United States, continue in the paid labor force.

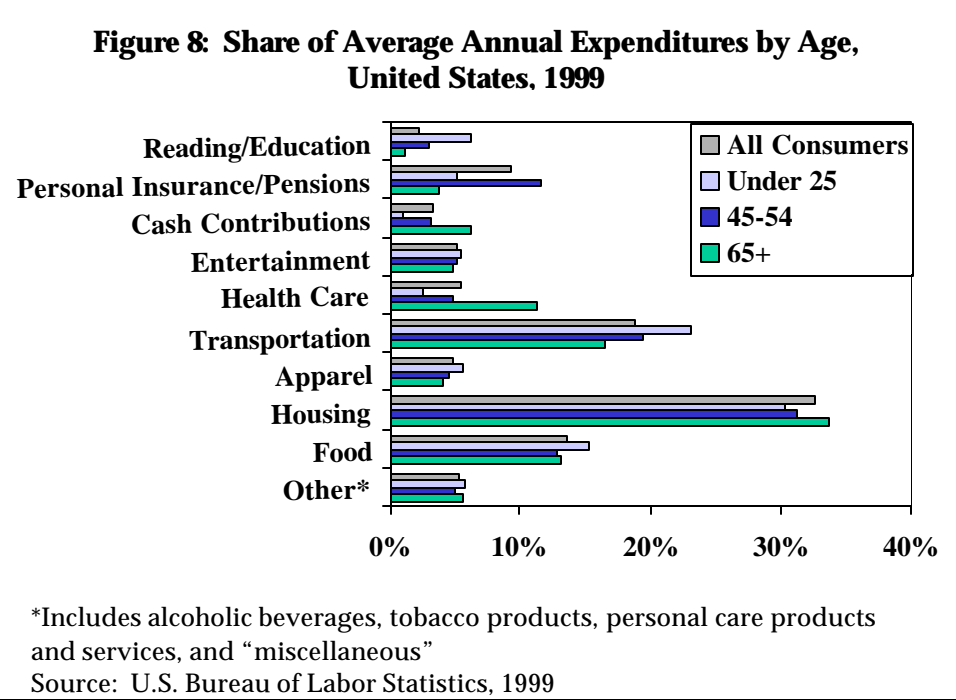
Often overlooked are the many positive contributions made by older men and women who are not in the paid labor force, contributions that will become even more common given the increased vitality of the older population. Many retirees who are not counted as working in official labor force statistics are in fact doing unpaid labor as volunteers in hospitals, museums, churches and other nonprofit organizations. Older persons are also active in civic affairs, such as political campaigns.

Many others not counted in official labor force statistics are engaged in unpaid family work such as caring for grandchildren, assisting sick relatives, or providing informal long-term care to family members. In the United States, nearly four million grandchildren are living in grandparent-maintained families; in many of these families, no parent is present (Bryson and Casper, 1999), and the

grandparents have primary responsibility for the upbringing of these children.

The role of grandparent as caregivers is a common and critical one in the less developed world, where such care frequently frees the parents, often mothers, to enter the workforce. And who can dispute the enormous contribution that grandparents are making in AIDS-afflicted Africa? Grandparents not only provide hands-on care to their sons and daughters who have contracted the disease, but are often the surviving carers of children whose parents have died of it.

A recent study of civic involvement by AARP (1997) reveals that some forms of volunteer work and civic involvement are as common at advanced ages—70 and older—as at younger ages. An earlier survey by the Commonwealth Fund in the United States reported that “more than 70 percent of all Americans age 55 and over . . . are actively contributing to society, their families and communities—working, volunteering, caring for sick or disabled spouses, friends, and neighbors, as well as their own children and grandchildren” (Commonwealth Fund, 1992). Another study reports that nearly 6 out of 10 retirees interviewed in 1999 had volunteered or done community service work in the past year (Civic Ventures, 1999). Clearly, these older persons are continuing to be productive in ways that are vital to the well-



being of their communities and families.

While there appear to be few recent efforts to place a dollar value on volunteer work, the Commonwealth Fund (1992) estimated that the volunteer efforts of these older Americans were the equivalent of 1.1 million full-time workers, and their caregiving alone, the equivalent of 7.1 million full-time workers. The Fund also noted that one in five Americans aged 55 and older contributed “a sizable part of their children’s or grandchildren’s household income” but that only one in 20 received a sizable part of their own income from children or grandchildren.

OLDER PERSONS AS CONSUMERS

Older persons are consumers very much like other age groups. Their

incomes and expenditures may be lower than those of other adults, but what they spend their money on is, for the most part, comparable (Figure 8). They devote a greater share of their income to health care and less to pensions and insurance, but differences for other expenditures are less pronounced. Judging from the percentage spent on “cash contributions,” older consumers tend to be more charitable.

Older people also buy goods and services that result in job creation. The vast expansion of the leisure industry—including travel—has been fueled in part by a healthy older population with money and time to spend it in. Similarly, the growth of the health care industry has been stimulated in part by an aging population with growing health care needs.

THE HEALTH AND LONG-TERM CARE CHALLENGES OF AN AGING POPULATION

The most vexing problems likely to result from aging populations are those associated with providing and paying for health care and long-term care. For that reason, those issues warrant special attention. Ensuring the delivery of appropriate services to maximize the health and functional independence of older persons is a major challenge. In the United States, public programs that play a large role in financing the health and long-term care of the older persons—Medicare and Medicaid—will be under particular pressure.

After Demographics: The Rest of the Story

Demographic change is certainly important when it comes to health and long-term care costs, but demographics alone do not determine future health status and needs of an aging population. Other dynamic factors that are important include the epidemiology of diseases, how health and long-term care services are delivered, public policies, and private sector activities. Each of these factors has the potential to moderate the financial impact of an aging society on public health and long-term care programs.

Epidemiology

On average, the greatest use and cost of health and long-term care services are associated with advanced age. Important exceptions to this pattern, however, illustrate that factors other than the increase in the number of older persons contribute to higher costs. For example, of the 12 million people in the United States who need some kind of long-term care, nearly half are under age 65, including children (Feder, Komisar, and Niefeld, 2000). Within various age groups of Medicare beneficiaries, the health status of and cost of care for individuals vary tremendously; in fact, spending is concentrated in the last years of an individual's life, regardless of age.

Studies have demonstrated that the biological effects of aging are “extremely variable from person to person” (International Longevity Center, 1999). Increasingly, there are 80-, 90-, and 100-year-olds who defy generalizations about loss of physical function and mental capacity. A better understanding of why they do can perhaps lead to overall improvements in the functioning for others.

There is little debate among older persons or policy experts about the value in finding ways to reduce dependence and the need for care. Reductions can occur by promoting healthy aging, giving greater priority to prevention, and reducing the debilitating effects of chronic illness. Lifestyle changes as simple as regular aerobic exercise have many

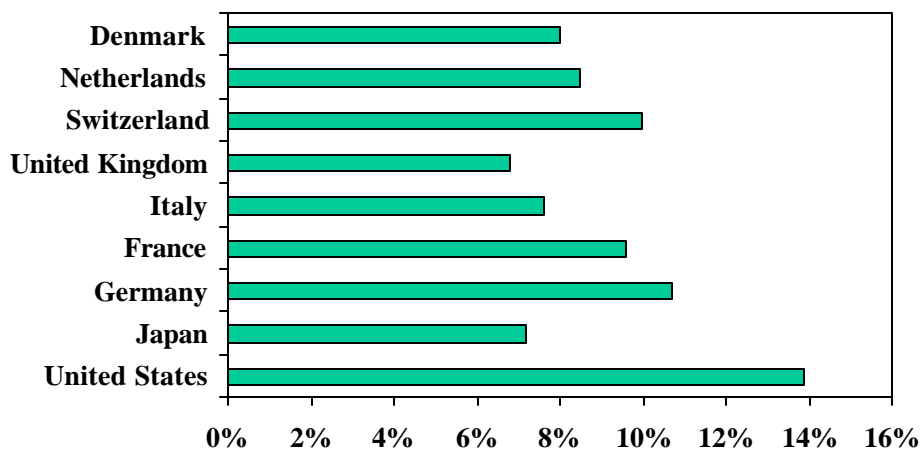
cardiovascular benefits (Maron, 2000). Appropriate and timely management of chronic conditions is essential. Wider acceptance of rehabilitation services for the chronically ill and assistive technologies help people cope with disability.

In addition, biomedical research may unlock the secrets of age-related impairment, such as arthritis, vision loss, hip fracture, and cognitive decline. Interventions unknown only a few years ago are already dramatically altering the course of medical conditions and the ability of older persons to lead fulfilling, continuously productive lives. With increased numbers of older persons, it will become financially more attractive for medical researchers to focus on the problems of aging and seek new drugs and therapies to deal with those diseases.

Service Delivery

Changes in how care is provided to older men and women also affect cost trends. Past examples include the shift to the outpatient setting for many procedures for which patients previously were hospitalized, the introduction of new techniques such as laparoscopy, the ability to deliver post-acute care services in the home setting, and adoption of utilization review techniques pioneered by managed care.

Figure 9: Total Health Care Expenditures as a Percent of GDP, Selected Countries, 1997



Source: World Health Organization, 2000

Increasingly, long-term care services are provided in people's homes and other non-nursing home settings. This trend for people who otherwise would have required or sought nursing home care is particularly important as a potential moderator of the economic impact of the demographic and disability trends previously discussed (Jacobzone, 1999; Jacobzone et al., 1998).

A key issue for any health or long-term care system is to ensure that resources are being used to support the efficient delivery of effective services. For example, the United States spends substantially more per capita on health care than other OECD countries (Figure 9). While the U.S. has one of the most technologically advanced systems in the world and one that is generally considered of high quality, its shortcomings are

significant: One in six Americans is without health care coverage, and services are not available to millions who need them.

Although most older persons have Medicare coverage, large out-of-pocket costs are a burden to many older people and their families due to critical gaps in Medicare coverage, such as outpatient prescription drugs. In fact, the U.S. health care system ranks 37th out of 191 countries based on overall performance, according to the World Health Organization (2000). Understanding how other nations are dealing with common issues could benefit the United States in its efforts to better use valuable resources for improving the health status and quality of life of its citizens.

THE GOVERNMENT RESPONSE TO POPULATION AGING

Just as workers and employers can adjust to population aging, so can governments.

Population aging is a long-anticipated societal change that lends itself to advance planning.

Public Policy and Retirement Income

The adjustment in the United States will be easier than in other countries because the projected change is less rapid than in some countries, because the U.S. is projected to have a relatively young population, and because the total population is projected to continue growing. It will be more difficult in some developing countries because their aging is occurring very rapidly and in a much shorter period of time than was the case in developed countries (See box). It will also be more difficult in some developed countries such as Italy and Japan because their projected populations will be, and in some cases already are, relatively old.

The problem of aging as it strains social security systems is to a large extent not an inevitable outcome of demographics but reflects decisions that societies and individuals have made concerning the age of retirement. Work disincentives that may have been appropriate in an earlier period still persist in some social security systems, causing workers to retire at younger ages than they otherwise would. Part of the adjustment to population aging will likely be that workers retire at older ages.

One of the great success stories of

the twentieth century involved the ability of older persons to retire with a reasonably secure source of income. This has, however, helped create a “retirement culture” (Treas, 2000) that may not be easy to change.

A number of countries have already raised the social security retirement age. In the United States, the age of eligibility for full retired worker benefits is slowly being raised from age 65 to 67. Several analysts have calculated that if the U.S. were to keep the ratio of life expectancy at retirement to working life expectancy at the level it was when the first Social Security checks were paid, American workers would be retiring at 70 or 71 today (Chen, 1987; Social Security Advisory Board, 1998).

Many countries have labor market policies that discourage work by older workers. In some countries, mandatory retirement ages are legal and common in practice. Social security programs contain work disincentives, making early retirement financially attractive and working after normal retirement age financially unattractive.

Age discrimination in employment is not illegal in many countries. Elsewhere, laws against age discrimination may not be adequately enforced. Instituting policies that remove barriers to work on the part of older workers and that discourage age discrimination is an approach toward dealing with problems caused by an aging population.

Just as public policy in many

countries played a key role in fostering the trend toward early retirement, public policy can be instrumental in prolonging the worklife. Tax penalties for working in retirement can give way to policies that reward continued employment. Eliminating age discrimination in employment will be critical.

Public Policy in the Health Care Field

In comparing across countries, the finding that total health expenditures are not associated with the size of the elderly population has led to suggestions that countries with older populations will not necessarily experience an explosion in health care expenditures. As concluded by OECD, “there is nothing

Population Aging—Not Just a Developed World Issue

Most of the focus in this paper is on the more developed countries of the world, where aging is most pronounced. But the less developed world—Africa, Latin America and the Caribbean, Asia (excluding Japan), and Melanesia, Micronesia, and Polynesia—is aging rapidly. China’s 65-plus population, now 7 percent of the total population, is projected to rise to 13 percent by 2025 and to 23 percent by 2050. Other Asian countries have experienced less dramatic fertility declines than China but are nonetheless aging rapidly as well. Nearly 5 percent of Indians are 65 or older, a figure that is projected to rise to 8 percent in 2025 and 15 percent in 2050. Even in countries where the share of the aged population increases less markedly, the numerical increase will be sizable. The aged in Uganda are projected to account for little more than 5 percent of the population in 2050, up from about 2 percent today. Yet the number of persons aged 65 and older may rise to 3.3 million, a nearly sevenfold increase over 2000 (United Nations, 1999, medium variant projections). Nearly 80 percent of the world’s older population will live in what are now less developed nations in 2050, compared to just under 60 percent today. The number of persons who are very old and more likely to need assistance with the tasks of daily living is also on the rise in these countries.

Population aging is occurring more rapidly in much of the developing world than in the developed world. It took France 140 years for the proportion of the population aged 60 and over to double from 9 to 18 percent; it will take Venezuela just 22 years (World Bank, 1994). The speed with which many countries of the developing world are aging suggests that the challenges of aging may prove much more difficult to deal with in some of those countries than in more developed ones. As economist Yung-Ping Chen (2000) has put it, the developed countries got rich before they got old; the less developed countries are getting old before they have a chance to get rich. Lacking comprehensive formal income-support and health care systems for their growing populations, these countries rely heavily on the informal network, mainly the family, to provide for the aged. Urbanization, migration, and emigration are placing strains on informal care systems as the need for those systems expands. Economic development may eliminate the very jobs, in both the formal and informal sectors, that enable older persons in the developing world to contribute to their own and their family’s well-being.

The fact that many developing countries are for the most part still young, with problems attendant on dealing with young populations, such as education and job provision, may lull politicians into thinking that the challenge of an aging society is something that can be put off, perhaps for decades.

inevitable about the effects of population ageing . . . policy can make a difference” (Organization for Economic Cooperation and Development, 2000).

A recent example is the U.S. legislation in 1997 that, in an effort to reach a unified budget surplus by 2002, reduced the rate of growth in Medicare spending primarily through reduced payments to health care providers. As a result, total Medicare spending actually decreased slightly in nominal terms from \$213.6 billion in 1998 to \$212.0 billion in 1999. The impact of this reduction on Medicare beneficiaries is the subject of on-going attention.

Public policies—and their absence—can also contribute to higher health care spending and adverse health outcomes. Actions by the U.S. Food and Drug Administration to speed up the approval of new drugs so that they would be available sooner also accelerates the entry of higher priced drugs to the market (thereby contributing to higher drug spending) and, in some cases, has led to higher rates of serious side effects in patients who use them. In other countries such as South Africa, where prescription medicines account for roughly one-third of health care spending, a major factor is that physicians are allowed to dispense pharmaceuticals from their offices.

In sum, while population aging raises serious questions about how society will pay for health

care and long-term care, these challenges are not insurmountable. In part, the solution will occur because the growing older population will also provide financial incentives for the development of new drugs, treatments, and institutions to deal with their problems.

AN UNCERTAIN FUTURE

After considering the evidence as to what projections indicate for the future, there is the matter of the projections themselves. Policymakers need projections to alert them to potential problems and assist them in their planning, but it is important to keep in mind that projections are largely educated guesses.

Projections depend on assumptions—fertility, mortality, economic growth, and labor force participation, among others. Everyone who will be 80 in 2050 is alive today, so barring a sharp and unexpected rise in mortality, we can be fairly certain about estimates of the number of very old in the population in mid-century. Predicting the number of babies who are not yet born is less certain.

Even over the short-run, projections can vary substantially. Take, for example, recent projections for the U.S. Social Security Old-Age and Survivors Insurance and Disability Insurance Trust Funds. In 1997, the trust funds were projected to become insolvent in 2029, while in

2001, the projected date of insolvency was 2038 (Board of Trustees, 1997-2001).

Over a span of just four years, the projected date of insolvency was pushed back by almost a decade. Similarly, the Congressional Budget Office, which provides budget projections for the U.S. Congress, reported that the long-term budget outlook “improved dramatically” from 1996 to 2000. The improvement was due in part to faster projected growth in productivity. Numerous other examples of short-run projections that proved wildly off could be provided.

Over the long-run, it is even more difficult to envisage what might happen. Even a modest change in just one assumption can result in very different estimates. Uncertainties, unknowns, and the complexities of systems and institutions make it very difficult to figure out what a future 50 years hence might look like. Philosopher Harry R. Moody (1996) perhaps said it best when he contended that detailed quantitative forecasts deserved to be taken as seriously as weather forecasts for Christmas four years in the future. The point, perhaps, is not to dispense with projections but to appreciate that they are not predictions but tools to help policymakers and others understand what the future might look like, given many unknowns, and assess the potential impact of various public policies.

EMBRACING THE CHALLENGE

Clearly, the impacts of population aging and the outcomes for an aging population can be altered through public policy. Armed with this knowledge, the challenge confronting the United States and other countries is how to make the best use of policy to shape the future quality of life for aging societies. Embedded in this imperative is a social obligation for countries to continue addressing the health and long-term care needs of individuals throughout their lifespan. Available resources will also need to be used more equitably and effectively to promote the delivery of cost-effective care and services to older persons in the places where they actually live.

Fortunately, the aging of populations has been anticipated for quite some time, giving societies the chance to start making adjustments. Taking action sooner minimizes the burden faced by stakeholders in any given year.

Countries can cope and indeed thrive with population aging. There is no inherent reason why an older world cannot be a better world. Nor is there a sound reason for drastically scaling back the very programs, such as publicly funded retirement programs, that have made old age in the more developed world more secure. While tax rates to support government programs for the elderly may increase and the growth rate of per capita income

may slow, these changes are likely to be made in the context of a considerably higher standard of living made possible by productivity growth.

Still, we cannot ignore the fact that although aging is a positive development, aging populations do require both fiscal and policy adjustments, and some of those adjustments may prove easier in some countries than others. Countries with more generous public pension systems face greater challenges in dealing with the fiscal consequences of population aging. There is a need for policymakers in the public and private sectors to act soon to moderate the adjustments that will be required. Dealing with an aging society should include:

Labor Force Strategies

- Structuring social security schemes so they do not encourage early retirement;
- Discouraging employers from including work disincentives in their pension plans;
- Eliminating work disincentives at the workplace and creating more job opportunities for older workers;
- Eliminating mandatory retirement;
- Enacting legislation banning age discrimination in employment and training;
- Better monitoring and

enforcement of existing legislation banning age discrimination in employment;

- Encouraging job adaptations and redesign as well as flexible and alternative labor arrangements, such as phased retirement, flex-time, flex-place, telecommuting, and good part-time jobs, that might hold particular appeal to older workers;
- Encouraging the breakdown of rigid compartmentalism between work, education, and leisure.

Investment, Education, and Training Strategies

- Continued productivity improvement through capital investment, education, job training, and retraining;
- Expanding life-long learning opportunities.

Health Status and Health Care Strategies

- Developing policies and programs that promote healthy lifestyles across the lifespan;
- Investing in research, public education, and technological development aimed at improving health status and increasing disability-free life expectancy;
- Developing and promoting cost-effective approaches to

providing health and long-term care services across the lifespan.

Lifestyle Strategies

- Increasing opportunities for and encouraging older persons to engage in volunteer work and community service;
- Supporting informal caregiving on the part of older persons;
- Supporting the development and expansion of living arrangements that prevent or postpone institutionalization;
- Recognizing and rewarding volunteer and caregiving activities.

CONCLUSION

The advances in life expectancy over the past century represent a remarkable success story. However, it is a story that requires rethinking what old age is, when it begins, and what it involves. This already appears to be happening in the United States, where baby boomers seem poised to push old age even further back and to continue to revise and redefine the later years. Is this likely to be solely a U.S. phenomenon?

Men and women in the more developed countries around the world are also reaching old age in better health, better educated, more experienced, and more

technologically adept than their parents and grandparents. There is no reason to assume that patterns of behavior that might have been appropriate for or acceptable to parents and grandparents will be suitable for coming generations of older persons, especially those who will not be retiring for another 30 or 40 years.

By then, the world, and the people in it, will look very different from how they look today, although we can hardly imagine the ways in which that will be the case. Who, except a few technology wizards in the world's computer labs—if they—had any idea of the impact the Internet would have on the lives of ordinary people around the globe? The interests, needs, and expectations of future older workers and retirees will also differ greatly from those of recent cohorts of workers and retirees, thus adding to the uncertainty about what the future might look like. About all we can say about the future with much assurance is that the present isn't a very good guide to it.

Nonetheless, we do know that the number of old—and very old—is increasing dramatically, and that policymakers will be faced with making decisions about the best way to meet the income, health, and long-term care needs of this growing population. Some of the challenges facing policymakers may prove more daunting than others, but they are by no means insurmountable. They are manageable if policies are

implemented to keep the economy growing, produce more useful roles for older persons, and contain escalating health care costs. Having to meet these challenges is a reality our grandparents could only have dreamed of. Longer life expectancy—What could be better?

Endnote

¹AARP is a licensed user of both the Regional Economic Models, Inc. (REMI), and Macroeconomic Advisers, LLC (MA).

Using REMI, we calculated the increase in the labor force participation rate of persons 65 to 70 under four different scenarios, one of which is discussed above. Having estimated that increase, we then subtracted these additional workers from the pool of Social Security beneficiaries. Because we assumed that those who are working are not receiving retirement benefits but still contributing to Social Security, three adjustments were necessary for the econometric simulation: (1) an increase in labor force, (2) a decrease in the number of beneficiaries and hence in Social Security benefits, and (3) additions to Social Security tax revenues originating from the additions to the labor force.

The macroeconomic effects of these changes were simulated by the second model, the WUMM, a Washington University Macro Model, which is a quarterly econometric system of roughly 350 equations and 140 exogenous (policy) variables. The model

explains entries from all major tables of the National Income and Product Accounts (NIPA), and provides details on labor and financial markets. The model has an income/expenditure structure in which short-term and long-term fluctuations are caused by changes in aggregate demand.

A distinguishing characteristic of the WUMM model is that the equilibrium properties of all key behavioral equations are derived from the neoclassical paradigm, imparting to the model both monetarist and supply-side characteristics in the long run. The model entails equilibrium in six sectors of the economy: aggregate demand; financial markets; productivity and employment; wages and prices; income determination; and foreign economic activity.

For more information on these simulations, contact S. Verma, AARP Public Policy Institute, 601 E Street, NW, Washington, DC 20049.

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