

Henry J. Aaron

Longer life spans: boon or burden?

‘Aging angst’ has become a booming industry among scholars. For example, the ethicist Leon Kass and others argue that, on a personal level, increasing longevity may deprive life of its savor and undermine the quest to achieve. Kass states, “If you push those [mortality] limits back, if those limits become out of sight, we are not inclined to build cathedrals or write the B Minor Mass, or write Shakespeare’s sonnets and things of that sort.”¹ Kass never says how much of an increase in longevity is too much, only that if science were able to slow aging, it would put humankind on a slippery

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slope to immortality, with all its seductive and corrosive effects.

Meanwhile, on a societal level, economists like Laurence Kotlikoff and Scott Burns worry that the growing percentage of the elderly in the population portends economic calamity:

Let your mind wander toward the future. Move, slowly, to the year 2030 What do you see? You see a country [the United States] whose collective population is older than that in Florida today. You see a country where walkers outnumber strollers. You see a country with twice as many retirees, but only 15 percent more workers to support them. You see a country with large numbers of impoverished elderly citizens languishing in understaffed, overcrowded, substandard nursing homes. You see a government in desperate trouble. It’s raising taxes sky high, drastically cutting retirement and health benefits, slashing defense, education, and other critical spending, and borrowing far be-

1 Transcript of interview of Leon Kass by Morton Kondracke, <<http://www.sagecrossroads.net/Default.aspx?tabid=60>>. Parts of this essay draw on chapter 2 of Henry J. Aaron and Robert D. Reischauer, *Countdown to Reform: The Great Social Security Debate* (New York: Century Foundation Press, 2001). The views expressed here are my own and do not necessarily reflect those of the trustees, officers, or staff of The Brookings Institution.

yond its capacity to repay. It's also printing tons of money to 'meet' its bills. You see major tax evasion, high and rising rates of inflation, a growing underground economy, a rapidly depreciating currency, and more people exiting than entering the country. They are leaving because they're sure things will get still worse.

What is going on here?

The prospect of living long lives, with physical and mental capacities intact, has long occupied the human imagination. To be sure, the ability to slow or prevent the onset of serious illnesses and even aging may create risks. But the harm that may result if something is done to excess does not require forgoing the good that results from doing the same thing in moderation. George Will illustrates this in his case for therapeutic cloning:

Life . . . is lived on a slippery slope: taxation could become confiscation; police could become gestapos. But the benefits from taxation and police make us willing to wager that our judgment can stop slides down dangerous slopes.²

Warnings that a growing elderly population threatens national well-being are of a different character, but are also odd. Population aging can be delayed if birth rates remain high and the population continues to expand. Until population stabilizes, increasing longevity can coexist with a stable, low fraction of the population that is elderly. Of course, unlimited population growth creates problems of its own. It evokes specters of 'standing room only,' natural resource exhaustion, environmental degradation, and – at least for poor nations – inescapable poverty. Of course, population growth must end. When it does, increased

2 George Will, "Column," *The Washington Post*, August 4, 2005.

longevity means an older population. Keynes had only half the story: in the long run we will, indeed, all be dead, but with rising longevity we will be old first.

Despite a widespread desire to prolong life, the human species for millennia made no progress toward fulfilling it. Even tiny increases in longevity sustained over the numberless generations of human existence would have resulted in life spans far greater than any now observed. Instead, until the modern economic era, few infants lived to experience what now would be called old age.

Nearly all of the current extension of life spans is a by-product of rising incomes – the result of the Industrial Revolution and the science that produced it. Before the Industrial Revolution, the elderly formed a small fraction of the population because people died young and birth rates were high.³ In no European nation did as much as 5 percent of the population reach age 65 until the middle of the nineteenth century; in none did 10 percent of the population reach age 65 until after 1930. Now, projections indicate that by the year 2050 more than 20 percent of the population will exceed age 65 in most developed nations, and in several the proportion will approach or exceed 30 percent.⁴

Visions of the United States as a nation of doddering codgers notwithstanding, the U.S. population is projected to

3 Paradoxically, famine, which reduces life expectancy, could increase the proportion of the population that is elderly because it also causes birth rates to fall. For analogous reasons so could emigration of the young.

4 U.N. projections indicate that more than 35 percent of the population in Japan and Italy will be over age 65. According to U.N. projections, 20.9 percent of the population in the United States will be over age 65, the lowest proportion among developed nations.

remain among the youngest in the developed world because of its relatively high birth and immigration rates. Although the proportion of the U.S. population over age 65 will rise from 12.3 percent in 2005 to 20.6 percent in 2050, the labor force will grow, not shrink, by 29 percent over that period. In sharp contrast, the proportion of the Japanese population over age 65 is already 19.7 percent and is projected to rise to 35.9 percent by 2050. The Organization for Economic Cooperation and Development projects that the Japanese labor force will shrink by more than one-third between 2005 and 2050.⁵

So, if one embraces a dismal vision of the demographic future in the United States, then one must tremble at the truly unspeakable prospects confronting France, Germany, Japan, and Italy. In fact, it's hard to figure out where Americans, who according to Kotlikoff and Burns will be fleeing their wreck of a nation, would actually go. Those who see population aging as a source of collective calamity need to explain why the achievement of sustained economic advance and the deferral of death and of physical and mental decline – all age-old goals of human striving – is a global calamity.

To be sure, extended life expectancy will pose a variety of challenges. In all developed nations, public budgets bear more of the cost of care and support for the elderly than for children. Population aging will therefore tend to push up tax rates. Increased longevity could also cre-

5 Thai Than Dang, Pablo Antolin, and Howard Oxley, "Fiscal Implications of Ageing: Projections of Age-Related Spending," Organization for Economic Cooperation and Development, Economics Department Papers No. 305, September 19, 2001. The Japanese labor force is projected to decline on average by 0.9 percentage points annually from 2000 to 2050.

ate serious social and economic challenges if the years of extended life are ones of mental and physical infirmity; but prospective medical advances promise treatments and, possibly, cures for conditions that produce physical and mental decline. For the most part, the increase in life expectancy made possible by rising incomes, improved public health, and medical advances is a monumental achievement. In the United States, population aging, like the post-World War II baby boom, will doubtless require some quite significant economic and social adjustments, but the adjustments are straightforward and require no more than honest political leadership.

I shall begin this survey by recalling what growing old meant to previous generations in the United States and juxtapose a realistic image of what becoming old will mean for our children and grandchildren. I shall then outline the genuine economic problems that increasing longevity and population aging will raise and the steps that will be necessary to deal with them.

A scrim of forgetfulness shields us from the rather ugly reality of growing old in the America of just a few generations past. Let us draw back that curtain to examine what growing old meant for the generations born in 1860, 1890, and 1930.⁶

The 1860 cohort was born in a nation that still treated slavery as a constitutional right. A quarter of those born in 1860 died before turning age 20, half before reaching age 65. Living conditions and public sanitation were appalling by today's standards: few houses had indoor plumbing, and few cities had municipal water and sewer systems. Sur-

6 Aaron and Reischauer, *Countdown to Reform*.

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gery was uncommon and dangerous because surgical technique was primitive and anesthesia was dangerous. Inoculations were uncommon. Childhood diseases winnowed the young, and pneumonia was known as the 'widow's friend.'

By current standards, the 1860 cohort was a nation of educational dropouts, although the United States led the world in mass education. Out of every hundred students who started primary school, seventy finished, twelve completed high school, and three graduated from college. Economic growth was rapid but uneven. The U.S. economy underwent thirteen economic contractions between 1885 and 1925; many were catastrophic by modern standards. Output fell 7 percent following the 1893 panic, 8 percent during the 1907–1908 depression, and 6 percent on the eve of World War I. Since World War II, output has never fallen more than 3.7 percent in any recession.

Women gave birth to an average of more than five children. The backbreaking job of caring for children, husbands, brothers, sisters, and parents in a world without washing machines, vacuum cleaners, refrigerators, or dishwashers was borne, typically by women, until death and lightened only as family members died or moved away. Once married, few white women worked outside the home. Those who worked for pay almost invariably performed menial tasks. Many women, especially African American women, were domestics.

Old age was not a passage to a 'new mode of living,' but a continuation of what life had been when one was young. Three-quarters of men born in 1860 and still alive at age 65 continued to work for pay until death, disability, or economic catastrophe intervened. Such a catastrophe – the Great Depression – did

intervene when the 1860 cohort was 69-years-old. By 1932, a quarter of the work force was unemployed. The elderly were more likely than the young to lose their jobs and less likely to find new ones. Protracted unemployment, bank failures, plunging stock prices, and collapsing real-estate values destroyed the savings of those in the middle and working classes who had scrimped and saved for retirement. Private charities were overwhelmed, and public charity dried up as state and municipal tax collections plummeted. Only a few Civil War veterans and their widows received small pensions; otherwise, private pensions were rare. The first Social Security check was not paid until the 1860 cohort reached age 80, and few were eligible for benefits. For the one-third of the 1860 cohort who survived to their sixty-ninth birthdays, the final years were generally grim.

America's 1890 cohort also lived through boom and bust. World War I ended a recession. With peace came another recession; unemployment reached 12 percent. The 1920s brought boom, except on the farm. The year 1929 ushered in twelve years that blighted what should have been this cohort's prime earning years. Too old to fight in World War II, the men of the 1890 cohort worked to support their sons at the front. Women left home for the paid labor force, freed from traditional jobs as secretaries, teachers, social workers, and nurses, to become machinists and assembly-line operatives.

Like its forebears, the 1890 cohort suffered high rates of infant mortality. Although this cohort benefited from steady, if undramatic, improvements in health and education, more than one-third of 20-year-old women and two-fifths of 20-year-old men did not

live to see their sixty-fifth birthdays. Eighty percent of unmarried elderly women and half of unmarried elderly men had been widowed. Four-fifths of this cohort finished primary school, one-fourth graduated from high school, but only one in twenty earned a college degree.

When this cohort reached age 65 in the mid-1950s, fewer than half had health insurance. Coverage was often uncertain because insurers could raise premiums sharply or refuse to renew coverage of those whose health had begun to deteriorate. Because health expenses of the elderly, even when adjusted for inflation, were less than one-tenth of what they are today, medical outlays were a threat only for the minority who became seriously ill. But in one of the most striking social changes of the late twentieth century, a spell in a nursing home became common. By the late 1970s, roughly a quarter of the 1890 cohort survivors were residing in nursing homes.

Congress passed the Social Security Act of 1935, subsequently increasing benefits and extending coverage in 1939 and again in 1950. Because of these liberalizations, members of the 1890 cohort received benefits far greater than the earmarked payroll taxes they and their employers had paid. Still, benefits were modest – only about 32 percent of taxable earnings of full-time covered workers. And since roughly half of U.S. jobs were not covered until the 1950 legislation broadened coverage, many members of the 1890 cohort did not receive benefits at all. Furthermore, private pensions covered only about a quarter of members of the 1890 cohort. Even workers who were covered typically received meager benefits because most had not worked long enough under these plans to have earned meaningful benefits. With insufficient income to retire, two-

thirds of surviving men from the 1890 cohort were still working at age 65, nearly half at age 70, and 30 percent at age 75. More than one-third had incomes below official poverty thresholds.

The 2.6 million American children born in 1930 enjoyed advantages unavailable to previous generations. Nearly all finished primary school. Seven in ten graduated from high school. Partly because of the G.I. Bill for Korean War veterans, one man in five and one woman in nine graduated from college. Women no longer automatically withdrew from the labor force after marriage; those who did often reentered when still young. Just over one-third worked outside the home when they were age 30, but three-fifths did at age 50, and two-fifths still worked for pay at age 60.

If the educational achievements of the 1930 cohort were striking, the economic advances were breathtaking. Between the end of World War II and the mid-1970s, output per person more than doubled. At the start of their working lives, members of the 1930 cohort earned hourly wages three times higher than members of the 1890 cohort had earned in their first jobs. By the time the 1930 cohort turned age 65, their average earnings had risen by another one-third. Post-World War II recessions, though numerous, were shallow compared with the economic paroxysms of earlier eras. Furthermore, unemployment compensation, also created by the Social Security Act of 1935, cushioned the shock for those who did lose jobs – for up to six months in normal times and even longer during recessions.

Higher incomes, medical advances, and improved working conditions combined to boost life expectancy for the 1930 cohort. Two-thirds of men and over

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three-quarters of women born in 1930 lived to celebrate their sixty-fifth birthdays. Four-fifths of 65-year-old men and three-fifths of 65-year-old women still lived with a spouse.

As they approached retirement age in the mid-1990s, members of the 1930 cohort had options and resources few of their parents had enjoyed. Most had assets that provided substantial financial security. Social Security benefits, averaging \$8,500 a year for individuals and \$12,000 for couples, were fully protected against erosion by inflation. One-third of the 1930 cohort received private pensions, although the amounts were modest – a median of less than \$7,000 a year. Further, more than four in five members of the 1930 cohort owned their own homes at retirement. Most had benefited from the postwar real-estate boom that tripled the real value of owner-occupied housing between 1950 and 1995. The 1930 cohort also had better protection against medical costs than ever before. Medicare, enacted in 1965, provided basic health insurance coverage for the elderly and the disabled while eight in ten also had supplementary coverage.

Increasingly workers retired years before they died. One-third of men in the 1930 cohort stopped working before age 62, two-thirds before age 65. Average living standards approximated those of younger adults. Averages, however, concealed large disparities: only 4.3 percent of elderly couples were poor in 1996, compared to 18 percent of elderly single men, 20 percent of elderly single women, and 36 percent of elderly single African American women. Whatever the future holds for the final years of the 1930 cohort, its circumstances represent a revolutionary improvement over the experiences of their predecessors.

America's 1960 cohort was better educated than any of its forebears. Only one in eight dropped out of high school. Half attended college and nearly one-fourth earned a bachelor's degree. The fraction of the 1960 cohort with postbaccalaureate education matched the share of the 1860 cohort who had completed high school. But not all advanced at the same pace. African Americans were only two-thirds as likely as whites to earn a college degree, and barely half of Hispanics completed high school.

Even if the earnings of men with little education grew more slowly than their parents' pay had, the 1960 cohort earned more on their first jobs than their parents had three decades earlier. The jobs filled by members of the 1960 cohort also required less brawn and more brain than had jobs in the past. Three-fifths of men and 90 percent of women in the 1960 cohort worked in white-collar or service-sector jobs. Still, roughly one-quarter of men and a small but growing fraction of women worked as craftsmen, mechanics, miners, machine operators, laborers, truck drivers, or in other physically strenuous jobs that become increasingly difficult to perform as one ages. Women were better educated, worked more hours, stayed in the labor force with fewer interruptions, and earned much more than women had previously. As a result, more will be entitled to their own private pensions and to Social Security based on their earnings rather than their husbands'.

Members of the 1960 cohort have told pollsters that they hope to retire earlier than have past generations. Unfortunately, they have done little to prepare economically for that event. By 2000, only 31 percent of those born between 1954 and 1964 had nonhousing assets worth more than \$100,000, and 49 percent had accumulated less than \$50,000,

a sum that would support an annuity of less than \$4,000 a year. In their failure to save, the 1960 cohort differ little from their forebears, who began to save, if at all, only in their forties and fifties. Members of the 1960 cohort may find it even harder to save when they reach those ages, though, because many married late and deferred childbearing. As a result, many will face tuition bills and other costs of childrearing until late in their lives.

On the bright side, more members of the 1960 cohort will have more sizeable pensions than previous generations. The declining fraction of employees with pensions tied to previous earnings, so-called defined-benefit plans, will find them more secure than in the past because the Employee Retirement Income Security Act of 1974 set vesting rules and the Pension Benefit Guaranty Corporation guarantees all or much of promised pensions. On the other hand, the massive shift to pensions whose value depends on the market price of stocks and other assets, so-called defined-contribution plans, means that the pensions of the 1960 cohort will face the risk of losing value just when they are needed. If the pensions are not converted into annuities, these risks will persist even after benefits are being paid. More than previous cohorts, members of the 1960 cohort will also confront the possibility that they will outlive their assets. One-fifth of men who reach age 65 are projected to be alive at age 90, and half of women alive at age 65 are expected to live past their eighty-seventh birthdays.

If members of the 1960 cohort retire when they say they will, those who reach retirement age will spend an average of roughly one-third of their adult lives in retirement. But retirement patterns may change as rising budgetary costs force

cutbacks in publicly financed pension and health benefits. Out-of-pocket medical expenditures may discourage older people from leaving primary jobs as soon as they now do or from withdrawing from the labor force completely.

Undeterred by the demonstrated incapacity of even the brightest people to anticipate future conditions or events, many claim to see clearly into the distant future. David Cutler, a Harvard professor and dean, once spoke disparagingly of “spreadsheet policy analysis,” the extraordinary disposition of some analysts to take seriously the mindless extrapolation of unreliable assumptions decades or even centuries into the future. What should be clear to all who try to anticipate the implications of population aging for today’s and tomorrow’s newborns is that only a few things are clear.

One, the proportion of the population that is elderly will increase. This trend is almost certain because the large cohorts of baby boomers who will start reaching age 65 in 2008 are already alive. Almost as certain is that tomorrow’s elderly, like today’s, will be mostly women. Of those over age 65, 58 percent are female; of those over age 85, 69 percent are female. Female life expectancy exceeds male life expectancy by about five years. As women are also typically younger than their husbands, women are more likely to outlive their husbands and can anticipate about ten years of widowhood.⁷ It is also likely that life expectancy will con-

7 The Social Security Administration estimates that among couples in which the husband is 65 and the wife is 63, 54 percent of women and 45 percent of men will outlive their spouses by a year or more (the remainder will die in the same year). Women will outlive their husbands by an average of 10.84 years; widowers will out-

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tinue to increase, though by how much remains highly uncertain.⁸ However, a drop in longevity, caused by widespread obesity or a global pandemic that science is unable to control, is not out of the question.

In any event, the physical and mental condition of the elderly during these added years counts more than the mere number of years added to the human life span.⁹ A nation swarming with doddering seniors incapable of working or even of caring for themselves would face nasty challenges. On the other hand, a nation replete with mentally and physically active elders who might even delay retirement a few years would enjoy an extraordinary economic and social opportunity. The speed and character of advances in medical knowledge give reason for optimism, if not for confidence, that increased longevity will lengthen life, not prolong dying. Understanding and controlling the processes that underlie Alzheimer's disease and other forms of senile dementia and arthritis are within the reach of medical science.

live their wives by an average of 9.75 years. Personal communication from Stephen Goss, chief actuary of the Social Security Administration.

8 James Vaupel thinks that today's newborns will typically live into the next century. Other demographers simply extrapolate trends of the more or less recent past and predict that life expectancy will continue to increase one or two years with each passing decade. Jay Olshansky and various colleagues worry that obesity, pandemics, or other events will reverse the increase in life expectancy.

9 Alexander M. Capron, "Ethical Aspects of Major Increases in Life Span and Life Expectancy," and Margaret Battin, "Comments," in Henry J. Aaron and William B. Schwartz, *Coping with Methuselah: The Impact of Molecular Biology on Medicine and Society* (Washington, D.C.: Brookings Institution Press, 2004), 198–234, 235–246.

Subject to these uncertainties, the nation of 2050 is quite likely to be richer and better educated than its forebears, even if the rate at which longevity increases slows. Growth of per capita income will continue as the fruits of information technology, such as data processing that abets advances in molecular biology, continue to spread.¹⁰ According to estimates by Kevin Murphy and Robert Topel, the welfare gain from increased longevity between 1970 and 2000 was worth about as much as all economic growth over that period.¹¹ Factors other than advances in health care contributed to this increase, of course. But improvements in the treatment of heart attacks and reductions in the number of low-birth weight infants yielded benefits worth about six and five times the added cost of medical care respectively.¹² And eliminating half the deaths from heart disease or cancer would produce benefits greater than annual GDP to current and future Americans. Moreover, these estimates make no specific allowance for enhancements in the quality of life that would result from better medical care.

10 J. Bradford DeLong, Claudia Goldin, and Lawrence F. Katz, "Sustaining U.S. Economic Growth," in *Agenda for the Nation*, ed. Henry J. Aaron, James Lindsay, and Pietro Nivola (Washington, D.C.: Brookings Institution Press, 2003), 17–60.

11 Kevin M. Murphy and Robert H. Topel place the gain from increased longevity at \$3.2 trillion a year. GDP rose from just over \$1 trillion in 1970 to just over \$9 trillion in 2000. See Kevin M. Murphy and Robert H. Topel, "The Value of Health and Longevity," The National Bureau of Economic Research, Working Paper 11405, June 2005.

12 David M. Cutler and Mark C. McClellan, "Is Technological Change in Medicine Worth It?" *Health Affairs* 20 (5) (September/October 2001): 11–29.

It is possible that future advances may not bring benefits as large as those of past innovations. The twenty-first century has a tough act to follow: the twentieth century saw massive reductions in infant and childhood mortality, the introduction of artificial joints and CT and MRI scans, and the virtual elimination of broad classes of infectious diseases. But this century has opened auspiciously with the sequencing of the human genome, an event that may reveal the fundamental processes of particular illnesses and of biological aging and senescence and heralds the possibility of individualized medicine, where treatments are tailored to the specific biological characteristics of each person. Even if the twenty-first century does not live up to the more overheated expectations of some observers, there is good reason to hope that Alzheimer's disease, diabetes, and some forms of cancer will become curable or even preventable. These improvements will be costly, however. In fact, they are likely to be so expensive that they will force extremely difficult and divisive political choices and economic tradeoffs. But technical advance will be a cruel tease if few can afford it.

Total spending on the products made possible by scientific revolutions typically increases, even as the prices of these products fall. The automobile, the airplane, television, and the computer reduced the price of moving a person or a ton of merchandise a mile, of hearing an opera or seeing a drama, and of carrying out an arithmetic computation. At the same time, they raised total spending on these activities because they raised the standards of quality, thus increasing the quantities that people demanded. No one bewailed the growth in the share of income devoted to transportation, enter-

tainment, or computation, however. Instead, as other, less satisfying forms of consumption gave way to the new technologies, people celebrated the improvement in living standards.

So also demand for medical treatments has dramatically increased as medical advances have improved the chances for beneficial outcomes while reducing the price of achieving these outcomes. Largely because of such advances, total U.S. spending on health care multiplied more than ninefold and tripled as a share of GDP between 1960 and 2003. There is every reason to expect future medical advances to add to age-adjusted, per capita spending on health care. Population aging will amplify this growth, but advances in medical technology are likely to remain the principal force driving up health-care spending.¹³

If health-care spending were to continue growing at the same rate as in the past half century, about 2.5 percentage points a year faster than the growth of per capita income, the fraction of income devoted to health care would reach 33.6 percent in 2030 and 36.1 percent in 2040. Increases in health-care spending would claim half of income growth by 2022 and all of it by 2051. If Medicare and Medicaid spending were to rise at the same rate, outlays on these two programs alone would rise from 4.2 percent of GDP in 2005 to 11.5 percent by 2030, and 16.1 percent by 2040.¹⁴ For

13 Per capita health-care spending rises until patients are in their eighties and then it actually falls.

14 Henry J. Aaron and Jack Meyer, "Health," in *Restoring Fiscal Sanity: The Long-term Challenge*, ed. Alice Rivlin and Isabel Sawhill (Washington, D.C.: Brookings Institution Press, 2005). These projections are taken from the Congressional Budget Office.

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purposes of comparison, all income and payroll taxes combined will comprise 16 percent of GDP in 2006.

These projections suggest that taxes, premiums, and cost sharing will have to increase and that coverage will have to be restricted. A more difficult problem arises from the fact that most health care is consumed during episodes of illness when total spending is so high that any adequate insurance plan will cover all, or nearly all, costs at the margin. In this situation, patients have economic incentives to seek, and conventionally reimbursed providers have every incentive to assure that patients receive, all care however high the cost or low the benefit.

Health-care rationing curbs such high-cost, low-benefit care for well-insured patients. Most people and all politicians recoil now at the prospect of health-care rationing. This reaction is misplaced because such rationing would improve welfare by redirecting resources from uses that produce benefits smaller than cost and make them available for services that produce benefits greater than cost. Whether the nation can ration health care accurately and fairly, though, is far from certain, but trends in health care indicate that a national debate about health-care rationing is inescapable.¹⁵

Even with higher cost sharing and well-designed rationing, Americans – and citizens of all other advanced nations – are going to end up paying far more than they now do for health care. Population aging will intensify this trend.

15 Henry J. Aaron, William B. Schwartz, and Melissa Cox, *Can We Say No: The Challenge of Rationing Health Care* (Washington, D.C.: Brookings Institution Press, 2005).

Even if maturity brings certain compensations and opportunities,¹⁶ no one welcomes the loss of physical and mental capacities associated with aging. But the problems that aging individuals face is not the cause of ‘aging angst.’ Rather, it stems from a sense that a large increase in the fraction of people who are ‘old’ will make life much less attractive for the young. The fear is that the elderly will be economically inactive and otherwise unproductive, that they will not have saved enough during their economically active years to provide for themselves during their inactive years, and thus, that they will impose crushing tax burdens on the declining fraction of the population who are economically active.

It is certainly possible for nations to bring calamity on themselves through mismanaged policies, as the histories of Argentina throughout the twentieth century, most of Africa after the end of colonial rule, and the Russian empire under communism clearly attest. But we can manage the problems of population aging easily. To do so, American policymakers need to keep a few basic facts in mind. First, apart from borrowing or lending from foreigners, all national consumption comes from currently produced goods and services. How that consumption is divided between the economically active and inactive depends on the relative size of these two groups and their relative living standards. Second, consumption by the economically inactive can be financed either by their own past savings or by current taxes on the economically active. Third, past savings are responsible for today’s capital

16 George E. Vaillant, *Aging Well: Surprising Guideposts to a Happier Life from the Landmark Harvard Study of Adult Development* (Boston: Little, Brown, 2002).

stock, which influences today's productive capacity. Finally, past savings also can be used to support today's elderly.

The lesson of these simple economic relations is straightforward. Americans can prepare now to meet the macroeconomic 'challenge' of aging by insisting on public policies to promote high national saving. That will add to tomorrow's productive capacity. High saving would also reduce borrowing from abroad, which generates debts to foreigners that tomorrow's active workers will have to either repay or pay debt service.

Yet recent economic policy has moved resolutely in the direction of encouraging consumption with permanent tax cuts. Recent discussions of pension reform have also lacked explicit proposals to encourage future generations of workers to delay retirement, which would reduce pension claims. By extending drug coverage to the elderly and disabled, Congress has further committed the nation to providing a needed benefit but failed to pay for it, thereby increasing borrowing and deepening the future fiscal challenges of population aging. Measured over the next seventy-five years, the Medicare Modernization Act will also add to federal borrowing an amount nearly twice the projected shortfall in Social Security. Thus, current policy has aggravated, rather than ameliorated, the fiscal problems of population aging.

The first step in dealing with the 'aging problem' is to avoid public policies that enlarge it.

The second step is to recognize that the U.S. 'aging problem' is among the smallest in the developed world.

The third step is to recognize that although population aging will present some fiscal challenges, it is the by-

product of a monumentally beneficial achievement – increased longevity – and an inevitability – declining birth rates.

Longer life spans will doubtless create some problems. But as the old saying goes: Consider the alternative.

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