

PRODUCTIVITY IN AN AGING SOCIETY



POLICY BACKGROUNDER

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The MacArthur Foundation Network on an Aging Society brings together scholars who are conducting a broad-based analysis of how to help the nation prepare for the challenges and opportunities posed by an aging society. Research focuses on how major societal institutions, including retirement, housing and labor markets, government and families, will have to change to support the emergence of a productive, equitable aging society. www.agingsocietynetwork.org

Network members

Director: John Rowe
Columbia University
Mailman School of Public Health

Toni Antonucci
Institute for Social Research
University of Michigan

Lisa Berkman
Harvard University
School of Public Health

Axel Boersch-Supan
Director, Munich Center for the
Economics of Aging
Max-Planck-Institute for Social Law
and Social Policy

Laura Carstensen
Stanford University, Center on
Longevity

Linda Fried
Dean, Mailman School of Public
Health, Columbia University

Frank Furstenberg
University of Pennsylvania,
Department of Sociology & Population
Studies Center

Dana P. Goldman
Director, Leonard D. Schaeffer Center
for Health Policy and Economics
University of Southern California

James Jackson
University of Michigan
Institute for Social Research

Martin Kohli
Visiting Scholar, Dept. of Demography
University of California, Berkeley

S. Jay Olshansky
University of Illinois at Chicago
School of Public Health

John Rother
President and CEO
National Coalition on Health Care

For supporting evidence and deeper background on the issues raised in this brief, see the accompanying Network on Aging in Society backgrounder, “Productivity in an Aging Society.”

Policy briefs in this series include:

Supporting Informal Caregiving in an Aging Society

Ensuring Generational Cohesion in an Aging Society

Improving Health Care and Support for Older Americans

Promoting Productivity in an Aging Society

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The Scope and Effects of Informal Caregiving

Intergenerational Cohesion and the Social Compact

Improving Health Care and Support for Older Americans

Productivity in an Aging Society

The Scope and Benefits of Life-Long Learning

During the twentieth century Americans enjoyed an unprecedented increase in life expectancy and overall health thanks to the achievements in science and technology that also propelled the U.S. economy into a position of world leadership in productivity and innovation. Increased life expectancy has also led to the aging of the U.S. population, however. This, in turn, creates both challenges and opportunities that will require a reassessment of our assumptions regarding the timing, duration and character of education, work and retirement.

In “Building Communities That Promote Successful Aging,” the authors write, “The prevailing social images of old age offer two major alternatives: fear of decrepitude, dependency, and relegation to a rocking chair, or at the other extreme, idealized images of limitless recreation time in a retirement community, often segregated from other age groups and the vicissitudes of daily life.”¹ In fact, neither characterization captures the reality of the lives—or of the potential—of America’s older residents.

Older Americans represent an important resource that can add considerable value to the nation either through their continued participation in the labor force or by sharing their wisdom and expertise as volunteers to promote intergenerational betterment. In the workplace, they can ease the stress on an overburdened pension and benefit system while increasing their own wealth and adding to the overall productivity of the U.S. economy. Accomplishing these goals will require changes in policy to remove financial penalties on persons aged 65+ who wish to continue working. As volunteers, they can fulfill important social and economic needs while reaping the very real mental and physical health benefits of social contribution² and social interaction.

Older Americans represent an important resource that can add considerable value to the nation.

These changes involve a re-imagining of our previous assumptions regarding life stages. As John W. Rowe, M.D., a professor at Columbia University’s Mailman School of Public Health and director of the MacArthur Foundation’s Research Network on an Aging Society, states in regard to older Americans of the twenty-first century, “Too little attention is paid to the potential upside (the longevity dividend). This upside includes the availability of previously unimagined older individuals, many fully capable of participating productively in society either through the workforce or via civic engagement.”³

¹ Linda Fried et al., “Building Communities That Promote Successful Aging,” *Western Journal of Medicine*, vol. 167, no. 4, (October 1997), p. 216.

² T. A. Glass et al., “Change in Productive Activity in Late Adulthood,” *Journal of Gerontology and Social Science*, vol. 50B, no. 2 (1995):S65-S76

³ John W. Rowe, “Successful Societal Adaptation to the Aging of America,” *Public Policy and Aging Report*, vol. 21, no 4 (Fall 2011), p. 13.

America's Aging Population

Older Americans possess an unprecedented wealth of human capital. In 1900, life expectancy in the United States was 47 years; by 2006 average life expectancy had reached 77.7 years. This achievement coincides with an equally momentous shift in fertility. Although fertility reached 3.7 births per woman in 1957 at the peak of the Baby Boom, birth rates fell to 1.7 per woman in 1976. Even though fertility slowly increased to 2.1 births per woman by 2010, increased life expectancy together with reduced fertility has led to the aging of the U.S. population.⁴

Population aging is remaking the landscape of the United States. Given current policies regarding retirement, this shift has significant ramifications for the U.S. labor force and for overall productivity. In 1950, only 8 percent of the population was aged 65 and older. By 2010, that share had increased to 13 percent.⁵ Even greater increases are in store in the coming decades.

A Social Security Administration's 2011 report on the Social Security Trust Fund projected life expectancy to reach 82.2 years in 2050, up from 77.7 in 2006.⁶ However, a Technical Panel on Assumptions and Methods (TPAM) appointed by the Social Security Administration reached a different conclusion. They project life expectancy in 2050 to reach 84.5 years. This estimate is close to a widely used and respected projection of Li and Lee.⁷ The 2011 Social Security report also projected a small decline in fertility from 2.1 births per woman in 2010 to 2.0 until 2030, which agreed with TPAM projections.⁸

The U.S. population aged 65 and older is expected to increase from 13 percent in 2010 to more than 20 percent over the next two decades.

According to the TPAM, the U.S. population aged 65 and older is expected to increase from 13 percent in 2010 to more than 20 percent—a remarkable one in five U.S. residents—over the next two decades, before plateauing in the 2030s and 2040s. This increase reflects the arrival of the Baby Boom generation into its 60s and 70s. This bulge in the population will inch forward over the next decades, increasing the percentages of the “oldest old” (those over age 85).

⁴ National Academy of Sciences, “Demographic Trends.” In *Long-Run Macroeconomic Effects of the Aging U.S. Population* (Washington, DC: NAS, forthcoming).

⁵ Ibid.

⁶ Social Security Administration, “Social Security Administration’s 2011 Report of the Board of Trustees on the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds” (Washington, DC: SSA, 2011).

⁷ N. Li and R.D. Lee, “Coherent Mortality Forecasts for a Group of Populations: An Extension of the Lee-Carter Method,” *Demography*, vol. 42, no. 3 (2005): 575-594.

⁸ National Academy of Sciences, “Demographic Trends.”

Increased Health and Reduced Disability

Increased life expectancy tells only part of the story. Americans aged 65 and older are healthier than in previous generations. Although between 1997 and 2008, two-thirds of the elderly had some disability, such as limitations in movement, the disability rate was stable for males and increased gradually (1 percent per year) for females.⁹ Research into disability demonstrates “a significant, progressive reduction in functional impairment” in older Americans from the 1980s into the early 2000s.¹⁰ Further, both moderate and severe disability rates were falling.¹¹ Another indicator of reduced disability is the dramatic reduction in the percentage of older persons residing in nursing homes. On an age-adjusted basis, 5.4 percent of the elderly were in nursing homes in 1985, compared with 4.6 percent in 1995, for an annual decline of 0.7 percent per year.¹²

Reasons for the Reduction in Disability

The increasing use of medical technology, such as joint replacement surgery, cataract surgery, or use of hearing aids, as well as advances in technology, have played a role in reducing disability rates. For example, the majority of those who have had joint replacement surgery report not being disabled, while their counterparts who needed, but did not have, the surgery typically report being disabled.¹³ Estimations are that the increase in joint replacement surgery can explain a half percentage point or more decline in disability.¹⁴

The current elderly population is in general healthier than in the past.

Pharmaceutical use is also important in reducing disability rates. For those with arthritis, for example, use of NSAIDs (nonsteroidal anti-inflammatory drugs), a common arthritis treatment, is a likely contributing factor in falling disability rates in recent years. Likewise, increased use of anti-hypertension medication in the 1970s and 1980s may help to explain the decline in the incidence of strokes in recent decades.¹⁵ Finally, technology has helped to compensate for disabilities and other impairments to daily living. Shopping

⁹ David M. Cutler, “Declining Disability among the Elderly,” *Health Affairs*, vol. 20, no. 1 (Nov./Dec. 2001).

¹⁰ Robert F. Schoeni, Vicki A. Freedman, and Linda G. Martin, “Why is Late-Life Disability Declining?” *Milbank Quarterly*, vol. 86, no. 1 (2008); Vicki A. Freedman et al., “Declines in Late-Life Disability: The Role of Early- and Mid-Life Factors,” *Social Science & Medicine*, vol. 66, no 7 (2008): 1588-1602.

¹¹ National Academy of Sciences, “Health and Disability in the Working-Age and Elderly Population.” In *Long-Run Macroeconomic Effects of the Aging U.S. Population* (Washington, DC: NAS, forthcoming).

¹² Cutler, “Declining Disability among the Elderly,” pp. 13-14.

¹³ *Health Care Financing Review, Medicare and Medicaid Statistical Supplements*, 1992 and 1996.

¹⁴ About 6 percent of the elderly reported having an artificial joint in 1984. If this share doubled with a doubling of replacement surgeries, the increase is about 3 percent. Sixty-two percent of those with artificial joints reported no ADLs or IADLs because of arthritis or orthopedic problems. Of those with disability because of arthritis or orthopedic problems, 37 percent reported that as the sole cause. Thus, an estimate of the impact of the impact of joint replacement surgery on disability is about 0.7 percentage points (3 percent x 62 percent x 37 percent). See also Cutler, “Declining Disability among the Elderly,” p. 18.

¹⁵ Cutler, “Declining Disability among the Elderly,” p. 19.

online, for example, widens access for those with mobility issues and online communication advances expand social circles among other things.

Socioeconomic status (which is a combination of income, job status, and education) is a strong predictor of mortality, health, and disability. In short, the higher the education, the better the health. More-educated persons have up to a 50 percent lower disability rate than do the less educated.¹⁶ The past century's significant increase in educational attainment in the United States has no doubt contributed to the rising health of the population overall. The share of the elderly with some college, for example, more than doubled from the early 1980s to the late 1990s, and white-collar work has also increased.¹⁷ Not only does a more education typically increase income and provide greater access to health insurance and health care and reduce likely exposure to occupational injury, it may also influence lifestyle choices (smoking, exercise) that lead to better health.¹⁸

Yet Younger Groups See Rise in Disability in Certain Cases

Although the elderly have made impressive gains in reducing disability rates, the story is less clear for the “near elderly.” As Dana Goldman and colleagues find, accounting for population change, disability rates for those age 60–69 saw no improvement between 1984 and 1996. Furthermore, for those under age 60, disability rates rose sharply between 1984 and 1996. The sharpest aggregate growth—50 percent—occurred among those aged 30–39 between 1984 and 1996.¹⁹

The past century's significant increase in educational attainment has no doubt contributed to the rising health of the population overall.

Reasons for this increasing disability profile include growing rates of obesity among the younger age groups. In fact, rough estimates show that obesity is a dominant factor in the disability rates for those aged 50–59; disability rose only among the obese in this age group. Among those aged 18–29, obesity accounts for about one-half the rise in disability. Among those aged 30–39, it accounts for about 25 percent of the rise, and among those aged 40–49, obesity accounts for about 10 percent of the rise in disability.²⁰ There is less convincing evidence that more generous disability insurance is at play. Finally, technological advances in medicine, such as neonatal care, that prolong life have also added to the disability ranks.²¹

¹⁶ Y. Stern et al., “Influence of Education and Occupation on the Incidence of Alzheimer's Disease,” *Journal of the American Medical Association* 271, no. 13 (1994): 1004-1010.

¹⁷ U.S. Current Population Survey, March 1980 and March 2000; see also Cutler, “Declining Disability among the Elderly,” p. 20.

¹⁸ National Academy of Sciences, “Saving and Retirement Security.” In *Long-Run Macroeconomic Effects of the Aging U.S. Population* (Washington, DC: NAS, forthcoming).

¹⁹ Darius Lakdawalla, Jayanta Bhattacharya, and Dana Goldman, “Are Young Becoming More Disabled?” *Health Affairs*, vol. 23 (January/February 2004).

²⁰ Ibid.

²¹ N. Marlow et al., “Neurologic and Developmental Disability at Six Years of Age After Extremely Preterm Birth,” *New England Journal of Medicine*, vol. 352, no. 9 (2005): 9-19.

Social Capital and Productivity in an Aging Workforce

The value of older Americans to the economy is often overlooked. As recent economic studies indicate, “human capital is just as important as tangible capital as a driver of economic growth.”²² Older Americans possess such capital through years of on-the-job experience and training and formal and informal education.

Researchers have conducted numerous studies on the composition of the labor force and productivity. Even though results of these studies have varied slightly in methods and groups studied, “the estimates all indicate that the age-composition effect on productivity for the U.S. labor force over the next two decades is very small.”²³ In other words, an aging population is not likely to negatively affect productivity in any profound way. In one large study, for example, researchers found that differences in performance across age groups were relatively small until at least age 65.²⁴ They based their conclusions on a series of studies that measured work-related skills using the General Aptitude Test Battery (GATB) for more than 25,000 workers from 16 to 74 years old. Overall, age accounted for a relatively small percentage of the variance in ability test scores once experience, education, and occupational type were controlled.

An aging population is unlikely to negatively affect productivity in any profound way.

Moreover, a recent study on “capacity for work” among those aged 65–69 finds a great many who are still able to work. In this age group, 53 percent of persons with a high school degree or less are capable of working compared with the 35 percent currently in the labor force.²⁵ For workers aged 65–69 with any college education, the share capable of working was 60 percent compared with an observed participation rate of 38 percent.²⁶ Among younger groups, 22 percent

of men and 35 percent of women age 60–64 were not working but had no impairment that would prevent them from doing so.²⁷ Furthermore, many rush to retire but then, for a variety of reasons, return to the workforce. According to a 2010 study based on a large nationally representative data set of retirees, about one-third will return to work before age 90.²⁸

²² National Academy of Sciences, “Framework and Overview.” In *Long-Run Macroeconomic Effects of the Aging U.S. Population* (Washington, DC: NAS, forthcoming); Barro, Mankiw and Sala-i-Martin conclude that human capital accumulation is roughly comparable in size to physical capital accumulation in the United States. R. J. Barr, N. G. Mankiw, and X. Sala-i-Martin, “Capital Mobility in Neoclassical Models of Growth,” *American Economic Review* 85(1) (1995): 103-115.

²³ B.J. Avolio and D. A. Waldman, “Variations in Cognitive, Perceptual, and Psychomotor Abilities Across the Working Life Span: Examining the Effects of Race, Sex, Experience, Education, and Occupational Type,” *Psychology and Aging*, vol. 9, no. 3 (1994): 430-442.

²⁴ *Ibid.*

²⁵ This study simulated labor participation rates, assuming no Medicare or Social Security, and compared the rates to observed participation rates that were affected by Medicare and Social Security. See David Cutler et al., “Healthy Life Expectancy: Estimates and Implications for Retirement Age Policy.” NBER working paper. (Cambridge, MA: National Bureau of Economic Research, 2011), available at www.nber.org/programs/ag/rrc/NB10-11%20Cutler,%20Meara,%20Richards%20Final,%20REVISED.pdf

²⁶ National Academy of Sciences, “Health and Disability in the Working-Age and Elderly Populations,” In *Long-Run Macroeconomic Effects of the Aging U.S. Population* (Washington, DC: NAS, forthcoming).

²⁷ National Academy of Science, “Labor Force Participation and Retirement.” In *Long-Run Macroeconomic Effects of the Aging U.S. Population* (Washington, DC: National Research Council, forthcoming).

²⁸ D. F. Warner, M.D. Hayward MD, and M.A. Hardy, “The Retirement Life Course in America at the Dawn of the Twenty-First Century,” *Population Research Policy Review*, vol. 29, no. 6 (2010).

Tapping the Strengths of an Aging Population

In addition to contributing to U.S. productivity in the workforce, older Americans possess knowledge and skills that they can use to benefit both the country as a whole and other, individual Americans. As Linda P. Fried, dean of the Mailman School of Public Health at Columbia University and senior vice president of Columbia University Medical Center, and her coauthors write,

This country has many other pressing social needs in addition to its aging society. One is the need to improve the outcomes of children in our society: their literacy, education, and personal well-being...Public schools, providing the education of most of the children in this country, are underfunded and overworked, needing more human capital to serve increasingly needy children while having less available for this important mission. ...In fact, older adults constitute this country's only increasing natural resource—and the least used one.²⁹

The authors describe the benefits older Americans can bring to communities as volunteers, calling for a rethinking of a view of retirement as unproductive leisure and instead as a time for more productive opportunities. Well-designed opportunities to contribute on a large scale could both help older adults maintain health and function and contribute in helping to solve some of the social problems facing society today.³⁰ This rethinking should include workplace policies for older workers to allow them to volunteer.

A study by the Sloan Center on Aging and Work finds that employer policies that allow older workers to reduce their hours on the job encourage volunteering behavior. Specifically, among married couples, if both spouses had access to policies that would allow them to reduce their hours worked, they were more likely to volunteer in subsequent years than their counterparts without such access. Among married couples with greater flexibility, 48 percent volunteered for, on average, 200 hours per year. This compared with 43 percent and 177 hours among those with no workplace flexibility. Workplace policies had no effect on volunteering among single respondents and for couples in which only one spouse could reduce his or her work hours.³¹

John W. Rowe adds, “Older people have much to offer, including their accrued knowledge, stability, unique creative capacities for synthetic problem solving, and increased ability to both manage conflicts and take the perspectives of other age groups into account. As a society, the United States should harness the life-stage-appropriate capabilities and goals of people of all ages, thus enhancing societal benefits and reducing social stratification.”³²

Given the benefits older Americans can bring to communities as volunteers, we must rethink our view of retirement as unproductive leisure and instead as a time for more productive opportunities

²⁹ Fried et al. “Building Communities That Promote Successful Aging,”

³⁰ *Ibid.*, p. 216.

³¹ Sloan Center, “Older Workers’ Transitions.” Key Findings (website) (Boston: Sloan Center on Aging and Work, May 2007). www.bc.edu/research/agingandwork/projects/transitions.html

³² Rowe, “Successful Societal Adaptation to the Aging of America.”

Rethinking Retirement

A first step in tapping into this potential is to rethink retirement in the United States. As Americans live longer, they will spend more time in retirement, at greater cost and overlooked potential. In 1962 Americans could expect to spend 10.6 years in retirement. By 2010 this number has risen to 15 years. Given increasing life expectancy, the time spent in retirement in 2050 is expected to reach 20 years, nearly doubling the time spent in 1950.³³

Fiscally, age at retirement is particularly important in pension systems. When workers retire earlier than the statutory age, pension systems disburse benefits for more years per recipient than was originally intended. This did, in fact, happen during the final decades of the twentieth century, straining both public and private pension funds. A study conducted by OECD published in 2010 found that in 1970, the average effective retirement age was 68.5 for men and 68.0 for women. By the early 2000s, the average effective retirement age had declined to 64.1 and 62.9, respectively. This would reverse course starting in the late 1990s. By 2009, the average effective retirement age was 65.3 for men and 64.8 for women—still significantly below the 1970s retirement ages.³⁴

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Retirement Incentives Mean Many Leave the Workforce Early

The structure of retirement programs has a definite impact on age at retirement. Incentives to retire early include the availability of the Social Security program and the nature of employer-provided, defined-benefit pension plans. Prior to the 1980s, most pension plans were defined-benefit plans in which the benefit at retirement depended on the number of years of an employee's service with the employer and earnings, and typically those in the last years of employment. After vesting, the benefits under typical employer-provided defined-benefit plans did not increase enough to offset an additional year's work. Thus, the structure of these plans encouraged workers to retire by imposing a large implicit tax on continuing to work.³⁵ The effect of this incentive is evident in the sharp rise in early retirement in the 1980s.

³³ National Academy of Sciences, "Demographic Trends."

³⁴ Organization for Economic Cooperation and Development, "Statistics on Average Effective Age and Official Age of Retirement in OECD Countries" (Paris: OECD, 2010), available at http://www.oecd.org/document/47/0,3746,en_2649_33927_39371887_1_1_1_1,00.html; data charts (in Excel) are available at www.oecd.org/dataoecd/3/1/39371913.xls.

³⁵ G.S. Goda, J.B. Shoven, and S.N. Slaven, "Implicit Taxes on work from Social Security and Medicare." In *Tax Policy and the Economy*, vol. 25, edited by J. Brown (Chicago: University of Chicago Press, 2011).

Yet another incentive to retire early is the health benefits that some employers extend to their retirees. Individuals who are eligible for such benefits can retire before age 65 with group health coverage. Nyce and colleagues find that retiree health coverage has a strong effect on retirement.³⁶

By raising the statutory retirement age at which workers can receive full Social Security and Medicare benefits, workers will also increase the overall productivity of the economy.

As noted, the early retirement trend began to reverse in the late 1990s, due in part to the rise of defined-contribution plans, such as 401(k) plans and other personal accounts, such as IRAs, which were quickly adopted by private-sector employers beginning in the early 1980s.³⁷ These plans have none of the early retirement incentives inherent in defined-benefit plans. Additional work leads to additional funds, encouraging older

workers to remain in the labor force.³⁸ However, defined benefit plans with strong early retirement incentives are still common among federal, state, and local employers.

Today, in part because of the financial crash, which devastated stock portfolios, older workers are continuing to work. In the 55–64 age group, the overall increase in the workforce is propelled primarily by women. For those 65 and over, increases are evident among both women and men. This upturn seems likely to continue, at least in the near future, as people work additional years to replenish their retirement accounts and hang on to employment-based health coverage.³⁹

Benefits of Raising the Retirement Age

Working longer provides several important financial benefits to older workers, including allowing them to increase their private savings while reducing the number of years they will have to depend on those savings. By raising the statutory retirement age at which workers can receive full Social Security and Medicare benefits, workers will also increase the overall productivity of the economy and add funds to pay for Social Security and health care.⁴⁰

Raising the retirement age—as well as encouraging continued participation in the labor force beyond retirement age—would also extend the productivity of the many well-educated and skilled workers of the Baby Boom generation at a time when the number of incoming, college-educated workers is

³⁶ S. Nyce et al., “Does Retiree Health Insurance Encourage Early Retirement?” NBER Working Paper 17703. (Cambridge, MA: National Bureau of Economic Research, 2011).

³⁷ L. Kalikoff and D. A. Wise, “Employee Retirement and a Firm’s Pension Plan.” In *Research Findings in the Economics of Aging*, edited by D.A. Wise (pp. 279-334) (Chicago: University of Chicago Press, 2010). See also J. H. Stock and D.A. Wise, “Pensions, The Option Value of Work, and Retirement,” *Econometrica*, vol. 58, no. 5 (1990): 1151-1180; J. H. Stock and D. A. Wise, “The Pension Inducement to Retire: An Option Value Analysis.” In *Issues in the Economics of Aging*, edited by David Wise (Chicago: University of Chicago Press, 1990).

³⁸ Ibid.

³⁹ C. Copeland, “Labor-Force Participation Rates of the Population Age 55 and Older: What Did the Recession Do to the Trends?” *Employee Benefit Research Institute Notes*, vol. 32, no. 2 (2011): 8-16.

⁴⁰ National Academy of Science, ““Labor Force Participation and Retirement.””

likely to fall short of demand. Analyses suggest that the U.S. will fall short by up to 3 million of the needed 20 to 22 million new college degree holders.⁴¹

Finally, continued participation in the workforce is beneficial to older persons themselves in regard to their mental and physical health. A 2006 study using a large, nationally representative sample of retirees found that complete retirement led to a 5-16 percent increase in difficulties associated with mobility and daily activities, a 5-6 percent increase in illness, and 6-9 percent decline in mental health, over an average post-retirement period of six years. The reductions in health and mental health were associated with declines in physical activity and social interactions. Those who were married and had robust social supports saw smaller declines. Continuing to work part-time also enhanced health and well-being.⁴²

Likewise, a study by RAND and the University of Michigan found that men and women in countries where people work longer do better on a test of cognitive skills involving memory than those in countries where early retirement is the norm. “Retirement has a strong effect on cognition,” says Susan Rohwedder, associate director of the RAND Center for the Study of Aging and coauthor of the paper. “People who continue to work retain their cognitive ability longer.”⁴³

A 2006 study of retirees found that complete retirement led to a 5-16 percent increase in difficulties associated with mobility and daily activities, a 5-6 percent increase in illness, and 6-9 percent decline in mental health.

The Old Do Not Displace the Young in the Workforce

The incentive to retire can also come from the widespread, but erroneous, belief that older workers must leave the labor force to open up more job opportunities for the young. This view is known as the “lump of labor” or “boxed economy” fallacy. The implication is that economies are boxed and that the box cannot be enlarged. Economies are not boxed, however.

James Banks and colleagues tested the lump of labor assumption by looking at a set of policies in Great Britain that created incentives to encourage early retirement.⁴⁴ They find, contrary to common assumptions, the higher the labor force participation of the old, the more employment of the young,

⁴¹ Anthony Carnevale, N. Smith, and J. Strohl, “Help Wanted: Projections of Jobs and Education Requirements through 2018” (Washington, DC: Georgetown University Center on Education and the Workforce, 2010); and J. Manyika et al., *An Economy that Works: Job Creation and America’s Future* (Washington, DC: McKinsey Global Institute, 2011).

⁴² Dave Dhaval et al., “The Effects of Retirement on Physical and Mental Health Outcomes” (Cambridge, MA: National Bureau of Economic Research, March 2006).

⁴³ Susan Rohwedder and Robert J. Willis, “Mental Retirement” *Journal of Economic Perspectives*, 24(1):119-38, 2010.

⁴⁴ James Banks, Richard Blundell, Antoine Bozio, Carl Emmerson, “Releasing Jobs for the Young? Early Retirement and Youth Unemployment in the United Kingdom.” In *Social Security Programs and Retirement around the World: The Relationship to Youth Employment*, edited by Jonathan Gruber and David A. Wise (Chicago: University of Chicago Press, 2010). What makes this experiment so convincing is its design. The authors took advantage of a policy change to conduct a “natural experiment.” A natural experiment is akin to a drug trial with its control group that ensures that nothing else in the environment other than the drug is affecting the result. In a natural experiment, researchers compare two groups in the same population before and after a policy is implemented that will affect, in this case, employment. This design allows researchers to pinpoint the singular effect of a policy change on two different groups of people, in this case, younger and older workers.

even after controlling for the business cycle. In particular, the authors examined a British pension incentive, the Job Release Scheme (JRS), designed to encourage older workers to retire and “make room” for younger workers. Yet although older workers did retire in higher numbers, youth unemployment actually rose. As the authors say, “It is impossible to attribute any success to the JRS in reducing youth unemployment.” The authors extended the time frame of potential impact from 1968 to 2005 and found that still no sign of a connection between older and younger employees’ workforce participation.

Several studies find no evidence that reducing the employment of older persons provides more job opportunities for younger persons.

Further, using several different assessment methods, all of which yielded consistent results, the International Social Security Project found no evidence that reducing the employment of older persons provides more job opportunities for younger persons.⁴⁵ Indeed, the weight of evidence suggests just the opposite: that increasing the employment of older persons leads to more job opportunities for younger persons.⁴⁶

Remaining in the Workforce Can Be Fiscally Smart

Encouraging workers to remain in the workforce longer can be fiscally smart. A 2006 Urban Institute national study found that if all workers were to delay retirement by just one year, the federal government would raise \$180 billion in additional tax revenue in 2045 (measured in 2006 dollars).⁴⁷ Not only would it help the federal government’s bottom line, but it would also help the bottom line of individuals. “The emphatic conclusion of recent research into retirement policy and labor markets is that working another two or three years would have a surprisingly powerful impact on the retirement living standards of millions of boomers and on the economy – including increased household savings, higher tax collections, and a reduction of the fiscal strain on Social Security and Medicare.”⁴⁸

Raising the *early* retirement age to 65 when normal retirement age under Social Security reaches 67 (or 68) could also help certain groups of workers, such as low wage earners and men and women with less robust health. Doing so also would have little impact on Social Security trust fund solvency, given that benefit adjustments would be actuarially neutral, on average. “Actuarially fair” or “neutral” in the current Social Security benefit structure refers to the actuarial reduction factors, and the delayed retirement credits. Social Security offers the “full” benefit, computed with the primary insurance amount (PIA) formula for workers who start to receive their benefit at the “normal retirement age” (NRA), which is currently age 66 and will rise gradually to 67 between 2017 and 2022 (by 2 months per year) for workers reaching age 62 in those years.

⁴⁵ See, e.g., Jonathon Gruber, K.S. Milligan, and D. A. Wise, “Introduction and Summary.” In *Social Security Programs and Retirement Programs around the World*.

⁴⁶ P. B. Levine and O.S. Mitchell, “The Baby Boom’s Legacy: Relative Wages in the Twenty-First Century,” *American Economic Review*, vol. 78, no. 2 (1988): 66-69.

⁴⁷ Barbara A. Butrica et al., “Working for a Good Retirement” (Washington, DC: Urban Institute, May 2006).

⁴⁸ Steve Lohr, “For a Good Retirement, Find Work. Good Luck,” *New York Times*, June 22, 2008.

The monthly benefits of a worker who chooses to start receiving benefits before the normal retirement age are permanently reduced in such a way that is intended to have no significant effect, on average, on the expected lifetime value of benefits. The reduction is at the rate of 6 2/3 percent per year for the first three years of early retirement, and at the rate of 5 percent per year for the next two years of early retirement. Thus, with the NRA now at age 66, a worker who starts receiving their benefit at 63 receives 80 percent of the PIA for life. A worker who starts benefits at age 62 receives 75 percent of PIA over his or her lifetime. For workers who delay the start of benefits until after the normal retirement age receive a benefit that is increased at the rate of 8 percent over PIA for each full year they delay, up to age 70. Thus, a worker who now waits until 70 gets 132 percent of PIA for life.

Actuarially, these adjustments are intended to be fair only on average. But personal characteristics that affect a person's life expectancy can make the reductions more or less "fair." For those who expect to live longer than average, such as women or very healthy men, the reduction factors are punitive over the long term. For those with lower-than-average life expectancy, such as men and unhealthy women or low earners, earlier retirement actually tends to increase their expected lifetime benefit. Currently, however, there is only one set of factors, for simplicity's sake, as desired by Congress. They do not account for individual life expectancies.⁴⁹

We must create a new incentive to continue working by eliminating the implicit tax rates incurred when older persons continue to work past age 65.

Further because of population-wide increases in life expectancy since 1940, it may be appropriate to raise not only the NRA, but also the early retirement age. Whatever extent the early retirement age of 62 affected low earners retiring before the year 2000, when the NRA was 65, it would be equivalent to raising the early retirement age from 62 to 64 as the NRA is raised from 65 to 67.

We must create a new incentive to continue working by eliminating the implicit tax rates incurred when older persons continue to work past age 65. For example, although younger workers are still accruing Social Security benefits as a result of paying Social Security and Medicare payroll tax (a 15.3 percent tax, half of which is paid by the employee and half paid by the employer), older workers often get no additional benefit if they have already worked the 35 years that count toward Social Security benefits.⁵⁰

Older workers whose employers provide employer-sponsored health plans may pay an even larger implicit tax. Even though these workers are eligible for Medicare, Medicare steps aside and requires the employer to cover the employee—a policy known as "Medicare as a second payer." Not only do older workers essentially lose out on Medicare coverage while they are still employed, but in many cases older workers must contribute part of the cost of their coverage under the employer-sponsored health plan.⁵¹

⁴⁹ For more information, see the President's Fiscal Commission (Simpson Bowles) provision on retirement age (esp. the December 1, 2010, letter). This provision included a hardship exemption that allowed long-career low earners to retain the current retirement ages. <http://www.ssa.gov/OACT/>. For a more general background on the prospects for future cost and reasons, see Stephan Goss, "The Future Financial Status of the Social Security Program," *Social Security Bulletin*, vol. 70, no. 3, (2010).

⁵⁰ Goda et al., *Implicit Taxes on Work from Social Security and Medicare*.

⁵¹ National Academy of Science, "Labor Force Participation and Retirement."

In addition, restoring Medicare as the primary insurance policy would lower employers' health insurance costs, and thus the costs of employing older workers. The cost of doing so can easily average 20-30 percent to employers.⁵² With Medicare as the primary insurance policy, employers would have lower health insurance costs, and thus lower employment costs. It would also lower the costs for insuring the remaining workforce, all of which increases the ability of employers to hire and retain workers. Therefore, although Medicare costs would increase slightly, the costs would be offset by greater economic contribution among workers over 65.⁵³

Older Workers Who Cannot Continue to Work

Although there are good arguments for raising the retirement age, not all workers are physically able to continue working past even the age of 61. Data from the Health and Retirement Study show that roughly one-fourth of workers aged 60–61 reports a health condition that limits their ability to work. Raising the early retirement age would delay eligibility for benefits and might create incentives for these individuals to seek disability insurance rather than waiting to claim retirement.⁵⁴ Unlike Social Security, which pays lower benefits to persons who claim it before the statutory retirement age, disability insurance benefits are not affected by age, which could lead to a financial incentive for workers who have not reached a new retirement age to seek disability insurance benefits instead. The evidence is mixed, however, that current policies are contributing to the rising disability rolls, particularly among the young.⁵⁵

The disability program could be used to make up the salary difference between a prior level of earnings or some agreed on target amount. This would encourage more people who can continue to work in some capacity to do so.

Some of these workers who are unable to continue in their current job could possibly continue working a less taxing job. Yet currently, eligibility rules for disability benefits mandate that a worker be unable to do *any* productive activity. To encourage those who can still work in some capacity—at a lower-stress job or a less physically taxing job, for example—the disability rules might be relaxed to permit people to work part-time or in other gainful employment. The disability program could be used to make up the salary difference between a prior level of earnings or some agreed on target amount. This would encourage more people who can continue to work in some capacity to do so and to continue to engage in a socially productive role.

⁵² Ibid. Medicare as the primary insurance policy was changed under Reagan administration to trim deficits. There were few objections at the time because there were so few workers over age 65 who were affected. That is no longer the case today, but the on-budget cost of restoring the old policy is now higher.

⁵³ Gopi Shah Goda, John B. Shoven, and Sita Nataraj Slavov, "A Tax on Work for the Elderly: Medicare as a Secondary Payer." NBER working paper (Cambridge, MA: National Bureau of Economic Research, August 2007).

⁵⁴ Government Accountability Office, *Social Security Reform: Raising the Retirement Ages Would Have Implications for Older Workers and SSA Disability Rolls*. GAO-11-125. (Washington, DC: GAO, 2010), available: www.gao.gov/new.items/d11125.pdf

⁵⁵ Lakdawalla et al., "Are Young Becoming More Disabled?"

Productivity Beyond the Workforce

Expand Volunteering among Elderly

Volunteer work by older Americans provides benefits to the U.S. economy and to civil society as well as benefits to the volunteers. In “Building Communities That Promote Successful Aging,” researchers Linda P. Fried, Marc Freedman, Thomas E. Engres, and Barbara Wasik write that while many older adults have a great deal of time available to them, they are “in the main, marginalized from productivity... even though being able to make a contribution has been described as an essential element of ‘successful aging.’”⁵⁶

To best make a meaningful contribution, the researchers discuss the need for well-structured volunteer work that involves significant time commitments (15 to 20 hours a week) and that provides a stipend to offset the costs that the volunteers incur in the course of their work. The researchers looked, in particular, at work done with young children by older adult volunteers in Baltimore, Maryland, public schools as part of an Experience Corps program. As they write:

The visibility of new, mature human capital supporting the well-being and learning of children in schools—through nurturing and enriching roles that do not displace paid workers but support their effectiveness—could offer an image for a positive, successful aging and a new, synergistic intergenerational social contract of the future. This contract is one in which the older generation are looked to, after retirement, to leave their legacy through strengthening the abilities of the younger generation. Such cultural generativity is developmentally appropriate for those who have completed their own child-rearing responsibilities.⁵⁷

In addition to benefiting the subjects of the volunteer work, older adult volunteers benefit from participating in the volunteer work themselves, including the social, physical, and cognitive activity of the volunteers. An evaluation of the program in Baltimore, in which the volunteers were age 60–86 and largely African American found that four to eight months after participating, the volunteers had improved physical activity, strength, social connections, and cognitive activity. The early results point to the potential for the Experience Corps to improve health for an aging population while simultaneously improving educational outcomes for children.⁵⁸

In addition to benefiting the subjects of the volunteer work, older adult volunteers benefit from participating in the volunteer work themselves, including the social, physical, and cognitive activity of the volunteers

⁵⁶ Fried et al. “Building Communities That Promote Successful Aging.”

⁵⁷ J. Kotre, *Outliving the Self* (Dearborn, MI: Norton Press, 1996).

⁵⁸ Linda Fried et al., “A Social Model for Health Promotion for an Aging Population: Initial Evidence on the Experience Corps Model,” *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, vol. 81, no. 1 (March 2004). See also, T.E. Seeman et al., “Behavioral and Psychosocial Predictors of Physical Performance: MacArthur Studies of Successful Aging,” *Journal of Gerontology*, vol. 50A (1995):M177-M183

Lifelong Education and Skill Development

Given our longer lives, and the constantly changing demands of the workforce, why do we continue to frontload education at the beginning of lives? Instead, why not weave education throughout all life stages?

As John Rowe writes,

U.S. society needs to adopt a life-course perspective that urges redistribution of life's activities (e.g., education, work, retirement, childrearing, leisure, etc.) across the individual life span. The approach must consider the impact of a change in one activity at a given stage of life on the activities in other fields and at other life stages, as well as identify opportunities for creating new roles and responsibilities for older adults in an aging society that lead to win-wins for all generations.... Education thus needs to be redefined as a lifelong experience.⁵⁹

Returning to school, now common among younger adults, is still relatively rare among older individuals. Yet, making space for education among the near-old and the old is no less critical than keeping young people in school. Special attention should be paid to the roles of universities, schools, and colleges—especially community colleges—as valuable resources in an aging society.⁶⁰ See our accompanying policy brief and background on “The Scope and Benefits of Life-Long Learning” for more details.

Greater Role for Part-Time Work and Gradual Retirement

Opportunities for part-time work provide other options for older Americans who wish to continue to participate in the workforce in some capacity. Currently, older workers are more likely than younger workers to work part-time (often by preference). Recent analyses of longitudinal data from the Health and Retirement Study (HRS) suggest that gradual or “phased-in” retirement may now be the norm in the United States.

A broad range of employment arrangements allow an older employee to continue working at a reduced workload, and slowly transition from full-time work to full-time retirement. Phased retirement may include a gradual reduction in hours (or days) of work leading up to retirement and then after retirement, continued work on a part-time schedule for those who wish to remain employed. Part-time, seasonal and temporary work or job-sharing are all work arrangements that can be a form of phased retirement. In addition, some national chains and corporations with multiple locations offer returning or near-retirees the option of working in different locales at different times of the year, which accommodates the “snowbird” phenomenon of moving to warmer climates for half the year.

The pharmacy chain CVS, for example, offers pharmacy and other store employees the opportunity to work in different locations at different times of the year. This allows CVS to maintain a precious body of institutional knowledge and has built a deep esprit d'corps among their employees. Fidelity,

⁵⁹ Rowe, “Successful Societal Adaptation to the Aging of America,” pp. 12-13.

⁶⁰ *Ibid.*, p. 15.

inc., has reached out to retirees to staff their 401(k) call centers, offering them a variety of part-time opportunities that fit their needs. The company, in fact, found that the use of older workers in their customer service centers was a good business decision. In surveys and other feedback, Fidelity's customers frequently asked for with representatives with a firsthand understanding of the issues facing an individual deciding whether to retire.⁶¹

According to the HRS study, 60 percent of both men and women who had left full-time employment after age 50 by 2008 had moved to a "bridge" job, more than half of which were part-time.⁶² Some of the shift was to self-employment. Approximately 10 percent of HRS respondents who had been working for an employer shifted to self-employment as a bridge and about 25 percent of self-employed respondents took an employer-based job before eventually retiring. Those who tend to move to bridge jobs prior to retiring fully are those who are healthier, have a college degree, and have portable health insurance or a defined benefit pension.⁶³ However, many of the bridge jobs are at lower pay than the prior full-time jobs.⁶⁴

Employers are increasingly considering phased retirement options, particularly in fields that have a current or projected shortage of workers.⁶⁵ According to a 2008 study by Hewitt, nearly 60 percent of U.S. firms expect to develop a phased retirement option in the next five years.⁶⁶

One drawback is the effect of continued work on pension benefits or Social Security. Pensions, for example, are often determined on the highest salary in the most recent years prior to retirement. If those years are part-time work, it can affect one's overall pension amounts. Union workers' pensions often mandate that workers must work a certain number of hours per year in pension calculations. Part-time hours might not be credited toward the total amount. However, legislative changes have sought to ease restrictions on receiving pension benefits. Employers also may restrict health care coverage to part-time workers. Likewise, in some cases, Social Security could be affected. Workers who are not yet at full retirement age and who phase-in retirement from a high-paying job (particularly if the phase-in span is lengthy) could wind up with a lower Social Security check. Not all workers are affected by this, but it is a consideration for some. Clearly, more work on these issues is warranted. A congressional research report finds that 41 percent of men and 35 percent of women aged 55-64 who reported receiving pension income in 2005 were employed in 2007.⁶⁷

⁶¹ Sloan Center, "Talent Management and the Prism of Age." Executive Case Summary series (Boston: Sloan Center on Aging and Work, March 2010).

⁶² J. Quinn et al., "Early Retirement: The Dawn of a New Era?" TIAA-CREF Policy Brief. (New York: TIAA-CREF, 2011), available at www.tiaa-cref.org/institute/research/brief/pb_earlyretirement0711.html.

⁶³ Sloan Center, "The Importance of Bridge Jobs." Key Findings. (website). (Boston: Sloan Center on Aging and Work, October 2012).

⁶⁴ National Academy of Science, "Labor Force Participation and Retirement."

⁶⁵ Watson Wyatt Worldwide, "Phased Retirement: Aligning Employer Programs with Worker Preferences" (Washington, DC: Watson Wyatt Worldwide, 2004); Y. Chen, and J. C. Scott, "Phased Retirement: Who Opt's for It and Toward What End?" *European Papers on the New Welfare*, vol. 6 (2006): 16-28; P. Purcell, *Older Workers: Employment and Retirement Trends*. (Washington, DC: Congressional Research Service, 2009), available at www.aging.senate.gov/crs/pension34.pdf

⁶⁶ As cited in "Five Issues to Consider Before Taking Phased Retirement," Bankrate.com. Available at <http://www.bankrate.com/finance/retirement/5-factors-about-phased-retirement-packages-1.aspx#ixzz1wSEgTutY>

⁶⁷ Purcell, *Older Workers*.

Conclusion

Older Americans are an important resource. Their continued employment enhances national productivity through their years of experience. Their volunteer contributions build and sustain community. Far too often, however, older workers are retiring early even as we live longer. Incentives, such as Social Security reforms, workplace policies, and options for phased-in retirement, are needed to keep older employees in the workforce. Also needed are more creative options—such as reforming the disability program—to ensure that those who cannot work any longer are able to retire with security and without financial penalty. Finally, we must also build stronger volunteer opportunities for older Americans, including employment-based policies that allow the nation to take advantage of this rich resource.