

Individual & Social Strategies to Mitigate the Risks & Expand Opportunities of an Aging America

Julie M. Zissimopoulos, Dana P. Goldman, S. Jay Olshansky, John Rother & John W. Rowe

Abstract: Increasing life expectancy offers the potential benefit of additional years of productivity and engagement to both individuals and society as a whole. However, it also carries substantial risks. For many, advanced age brings increased disease and disability (including cognitive impairment), financial insecurity, and social isolation. These risks are greatest for those with the least education and financial resources. An aging society must cope with increasing demands for high-quality geriatric care, mounting stresses on social insurance programs (such as Social Security and Medicare in the United States), and the increasing danger that the growing gap between the haves and have-nots will threaten societal cohesion. These risks can be mitigated or aggravated by the lifestyle and savings behavior of individuals, families, employers, and the government. We present policy options in the areas of education, work and retirement, financial security, health care, and social cohesion that can promote the benefits and reduce the risks of longer life.

JULIE M. ZISSIMOPOULOS is an Assistant Professor at the Sol Price School of Public Policy at the University of Southern California.

DANA P. GOLDMAN is Professor of Public Policy, Pharmacy, and Economics at the University of Southern California.

S. JAY OLSHANSKY is Professor of Epidemiology at the School of Public Health at the University of Illinois at Chicago.

JOHN ROTHER is President and CEO of the National Coalition on Health Care.

JOHN W. ROWE, a Fellow of the American Academy since 2005, is Professor at the Columbia University Mailman School of Public Health.

(*See endnotes for complete contributor biographies.)

The aging of America presents both opportunities and risks. The opportunities, which are often neglected,¹ relate principally to the availability of large numbers of generally fit, experienced older persons who can make valuable economic and social contributions to society.² Although increasing attention is being paid to the risks of an aging society and ways to protect against them, the United States has yet to actively adapt to either the risks or the opportunities. The focus of this essay is to illuminate the changing nature of both.

For individuals, the risks of a longer life include becoming ill or disabled and needing extensive acute and long-term care. The latter is particularly important, as long-term care can deplete the patient's financial resources, leaving him or her dependent on public support. Other individual risks include isolation and disengagement: increasing numbers of older persons are living alone, with fraying connec-

tions to families. U.S. families themselves are undergoing major changes in structure and function that impede their capacity to serve as a safety net for elderly members.

Societal challenges and individual risks are clearly linked. For instance, society is ill-prepared to meet the surging demand for high-quality geriatric care. The shortfalls are not only in funding but in developing and maintaining a qualified health-care workforce. Likewise, society has been slow to adapt to the need for “aging friendly” environments that are safe and affordable and provide transportation and housing appropriate for older residents. As the United States faces the challenge of covering the medical expenses of a growing number of insured aging individuals, some of the costs are being transferred to healthier insured populations in the form of higher out-of-pocket costs. Similarly, delays or reductions in Social Security retirement benefits, imposed to protect the solvency of the trust fund, place more pressure on the elderly and their families. Finally, ensuring societal cohesion – encouraging an equitable society and limiting disparities and tensions between groups – is a societal challenge on a grand scale.

Public and private strategies to mitigate the individual and societal risks of aging must consider several fundamental issues. First, longer and healthier lives extend the length of time that many people can engage productively in society. For others, however, innovations in medical science designed to prolong life can also prolong periods of disability, which can limit ability to work and increase medical expenses. Among those aged seventy and older, rates of functional impairment have declined since the early 1980s, although more recently the trend has flattened.³ Obesity may be contributing to declining rates of physical function, though lower rates of

smoking and greater educational gains may have beneficial effects. The decision to leave the labor force is not solely driven by poor health but also by the intrinsic financial incentives (or disincentives) in public and private pension systems. Those who are able and who choose to work longer have more time to accumulate private savings and maximize public benefits.

Second, gains in life expectancy have not been distributed equally across society. Education is closely tied to the “longevity dividend”⁴: life-expectancy disparities by education are astonishingly large.⁵ In 2008, white males with sixteen or more years of education lived 14.2 years longer than black men with less than twelve years of education. The same gap for women was 10.3 years. And these disparities between the educational extremes continue to widen: in 1990, the gap in life expectancy between the most and least educated white females was 1.9 years; in 2014, it was 10.4 years.

Finally, the current environment in the United States is not conducive to disease-prevention efforts, even though evidence suggests more proactive risk-factor prevention would yield high returns.⁶ With average tenure in health plans sometimes as low as four years – and with the government financing care after age 65 – employers and health plans clearly underinvest in disease prevention. Thus, a much stronger effort is needed to prevent disease before it occurs.

Both individuals and institutions share the responsibility to protect the elderly against the dual risks of physical frailty and outliving their resources. In general, however, the strength of the forces that mitigate risk is eroding just as the risks themselves are growing.

Social Security benefits, pensions, and private savings are the main economic resources that support living expenses in retirement. This “three-legged stool,” how-

ever, generally only supports high-income households,⁷ with lower-income households often missing one or more of these sources of support. Although social programs such as Social Security and Medicare may substitute for private savings, Social Security alone will only provide enough resources to keep a household marginally above the poverty line. Thus, for many households, savings and private pensions – possibly augmented by support from other family members – are necessary to provide for adequate retirement consumption. U.S. savings rates, however, have declined during the last thirty years.⁸ Even if individuals designate private savings for retirement, unexpected life events can have profound effects on economic security later in life.⁹ Job loss, the loss of a spouse through death or divorce, or ill health can disrupt savings plans and leave individuals permanently worse-off, unable to regain their economic and noneconomic positions. The consequences of these shocks can also affect families and households and be transmitted intergenerationally when children have access to limited economic resources and social support.

Health shocks are often unexpected and sometimes unavoidable. However, individuals may take actions over their lifetimes to delay or avert declining health. Preventive health behaviors such as maintaining a healthy diet, exercising regularly, and avoiding harmful activities such as smoking can support long-term health. Changes in lifestyle (smoking, exercise) and treatment of risk factors (high blood pressure, high cholesterol) have decreased the incidence of some diseases of old age, including stroke and, more recently, heart attack and some forms of cancer. In addition, volunteering may offer substantial health promotion and disease prevention benefits, as discussed by Dawn Carr, Linda Fried, and John Rowe in their contribution to this volume, “Productivity and Engage-

ment in an Aging America: The Role of Volunteerism.”¹⁰

Although some risky health behaviors (such as smoking) have declined over time, others (such as poor diet and minimal exercise) have increased, leading to rising obesity rates. Between 1970 and 2000, the prevalence of overweight children and adolescents tripled, and obesity in adults doubled, affecting 33 percent of the population.¹¹ Evidence is accumulating that suggests that this steady, decades-long increase may be abating, as the rise in obesity and overweight rates appears to have flattened during the past decade.¹² However, this may mean that some populations are reaching a saturation point in obesity levels. Research also points to evidence that although being overweight is less damaging to older persons than to the young, the consequences of the decades-long rise in obesity will be felt for many years to come.¹³

Individual efforts at self-protection against health-related problems (and their attendant financial stresses) are important. But they are often not enough to mitigate the risks associated with longevity, and families and other institutions are needed to protect against financial insecurity and the consequences of physical frailty.

The American family has long served as a vital safety net for older persons. Among older Americans who report needing at least some help with activities of daily living (ADLs, or simple activities such as feeding, dressing, and grooming oneself) or instrumental activities of daily living (IADLs, or more complex skills such as managing finances and transportation), almost one-half receive help from a family member.¹⁴ Caregiving from family members is even more prevalent and intensive in response to cognitive diseases such as dementia and Alzheimer’s disease, which typically strike at older ages. We have estimated in our past research that Alzheimer’s disease results in

Julie M.
Zissimopoulos,
Dana P.
Goldman,
S. Jay Olshansky,
John Rother &
John W. Rowe

almost \$30,000 worth of unpaid caregiving annually. If family members were unavailable to provide this care – which ranges from running errands and accompanying older family members to the doctor to bathing, toileting, and administering medications – on an unpaid basis, the additional cost would be more than the total Medicaid spending for these individuals.¹⁵

Family support is central to ameliorating the risks of aging. As described more fully in the essay by Frank Furstenberg, Caroline Sten Hartnett, Martin Kohli, and Julie Zissimopoulos in their contribution to this volume, “The Future of Intergenerational Relations in Aging Societies,” the primary type of support provided by the younger to the older generation in advanced economies is caregiving.¹⁶ Financial assistance is more likely to flow from the older generation to children and grandchildren. Current and ongoing changes in the structure and function of the family may disrupt these intergenerational transfers of financial and nonfinancial resources, thus compromising the family’s collective ability to hedge against risks.

Decreases and other changes in marriage and childbearing diminish the likelihood of either children or spouses supplying care to a disabled older adult. Rates of marriage have declined and marriage has become a less central and stable institution. Childbearing, robust one half-century ago, has slowed. A larger number of couples in which both spouses work has required women and men to develop more complex routines of managing work and family roles. Adding to this burden, greater investment by parents is required today in childrearing and parental support: societal expectations of more higher education, as well as the difficulties young adults face in entering the workforce, have extended the period of young adults’ dependency on parents. The rise in the number of seniors adds potential capacity to assist younger

generations, but at the same time, it creates greater obligations for the support and care of elderly family members when they become frail and incapacitated.

In sum, an aging society has clearly created more risk for the individual just as the buffers against these risks have begun to erode. This makes it all the more imperative that effective, well-designed public programs are created to help.

Social insurance programs in the United States (both means-tested and not) play an important role in protecting individuals against financial insecurity. The leading social insurance programs are the Social Security retirement program (OASI: the Old-Age and Survivors Insurance Trust Fund), the Social Security Disability Insurance program (DI), Unemployment Insurance, Workers’ Compensation, and Medicare. Social insurance programs are intended to insure individuals against the risks of unemployment, disability, and old-age financial insecurity and inability to work. Because of their large scale, they have a greater impact on poverty than means-tested programs such as Temporary Assistance for Needy Families.

The OASI program has the greatest impact on poverty among the elderly. Without counting OASI, the poverty rate among older Americans was 55 percent in 2004. However, the poverty rate falls to nearly zero with OASI benefits. The Disability Insurance program reduces rates of poverty among the disabled to nearly zero as well.¹⁷ Work by the MacArthur Foundation Research Network on an Aging Society finds that public expenditures on Americans aged sixty-five and older are projected to rise from \$1.2 trillion in 2010 to \$4.4 trillion in 2050. Public expenditures on the elderly and disabled, while extremely effective in ensuring financial security at older ages, are not without drawbacks. Some studies posit that means-tested aid programs dis-

courage saving, although the empirical evidence on this is mixed.¹⁸ The evidence on the effect of OASI on saving is also mixed.

Social insurance programs do not only exist to buffer individuals from risk and assist them when they are in need; they are also a reflection of society's values and of the greater social and political context. We are entering an era in which people are expected to take increased personal responsibility for their health and financial situations. This is driven in part by the view that our social insurance system has become unaffordable (driven largely by our aging population), which has in turn cost young people their sense of financial security. A successful aging society in the United States will require that each age group develop a sense of shared sacrifice and benefit. It will also require policies that promote economic growth and job opportunities for all ages. Finally, it will need a social insurance system that reflects shifting risks and changes to the traditional buffers against them. In their essay "Resetting Social Security" in this issue of *Dædalus*, S. Jay Olshansky, Dana Goldman, and John Rowe also discuss in detail possible approaches to modifications in eligibility and timing of Social Security benefits.¹⁹

The U.S. government faces the combined challenge of the future financial shortfall of the Social Security trust fund and rising medical expenses of Medicare and Medicaid beneficiaries. The growth in health care costs has for many years far exceeded the growth of gross domestic product (GDP). Some good news may be on the horizon, however: since 2010, real per capita health care spending has grown at an estimated annual rate of just 1.3 percent.²⁰ The causes of the slowdown are not yet fully understood. Health care prices – not just use – are lower, implying that the slowdown may be due to something more than the recent recession. The Affordable Care Act's Medicare reforms, which reduce

Medicare payments to private insurers and medical providers, may also be a contributing factor. This trend however, may be temporary and population aging will drive up costs in the future. Moreover, the retirement of baby-boomers, combined with declining fertility rates producing fewer workers, has dampened economic growth. Without new sources of government revenue, slower growth reduces the amount of revenue available for the social insurance programs the elderly have come to rely on. What role should individuals, families, society, and government play in mitigating the risks that old age brings? The choices made today and in the future will redefine U.S. society going forward.

The growing momentum of the fundamental restructuring of private pensions in the last two decades – from traditional defined-benefit plans to defined-contribution plans such as 401(k) plans – is a critical factor in the aging of the United States.²¹ Defined-benefit pensions are usually based on age, final salary, and job tenure; they generally provide a monthly income once the employee is eligible for full benefits and retires. About 60 percent of the pension wealth of the oldest baby-boomers resides in defined-benefit pension plans.²² On the other hand, defined-contribution pension values are not directly tied to age and tenure, and they increase at rates that depend on market return and whether and to what extent the employer decides to match contributions. The growing prevalence of defined-contribution plans will increase workers' opportunities to supplement Social Security income but shifts investment risk from the business sector to the household.

The rising number of defined-contribution plans that pay in lump-sum distributions rather than annuities also places the responsibility for financial decisions more squarely in an individual's hands. This too

Julie M.
Zissimopoulos,
Dana P.
Goldman,
S. Jay Olshansky,
John Rother &
John W. Rowe

applies to the increasingly common practice of paying lump sums from defined-benefit plans. Older individuals must decide whether to spend the payout immediately or whether to roll it over and save it. If they decide to save it, they must determine how to invest it and at what rate they should spend it in retirement in order to not outlive their savings. In addition, the greater prevalence of defined-contribution pension plans with more retirement assets held in stocks have made retirement plans subject to changes in the stock market, as the recent recession has underscored.

The movement from defined-benefit to defined-contribution plans is one example of how individuals are being asked to manage their own finances and retirement assets. The shift to a “personal-responsibility” retirement model will only be successful if financial literacy rises. Financial instruments are becoming more complex, and some individuals may be ill-equipped to make complex investment decisions. The fact that many elderly do not choose the best Medicare Part D (drug benefit) plan is just one example of this deficit.²³ Financial literacy is highest among the most educated, but the rate of college completion is flattening, so financially under-literate populations will likely rise if this trend continues.²⁴

Other buffers protecting financial security in retirement are also eroding. Employers today are less likely to offer their workers retiree health insurance benefits. According to the Employee Benefit Research Institute (EBRI), in 2010, 17.7 percent of workers were employed in establishments that offered health coverage to early retirees, down from 28.9 percent in 1997.²⁵ Those that continue to offer retiree health benefits have made changes in the benefits they offer, including raising premiums, tightening eligibility, and reducing benefits.

Just as with financial models in retirement, there has been a shift in health care

toward a personal-responsibility model. For example, many individuals now have “consumer-directed health plans” that carry high deductibles and encourage individuals to control their use of health care services. Medicare beneficiaries must now choose from a large menu of insurance choices when signing up for prescription drug coverage through Medicare Part D. Choosing an optimal health insurance plan, however, requires an understanding of insurance terms that many people are unfamiliar with²⁶ and an understanding of how different benefit designs affect out-of-pocket spending.²⁷ Many older adults do not understand the unique design of Part D plans, a knowledge deficit that exposes them to a coverage gap.²⁸ This gap may have long-term health consequences when, as research shows, beneficiaries with chronic disease must forgo their medications as a result.²⁹

Despite these challenges, feasible policy options can lower the overall risk to both individuals and society and increase the likelihood that the United States will remain cohesive, productive, secure, and equitable as it emerges from this demographic transformation. Based on the information presented in this essay and in the other essays in this volume, the MacArthur Foundation Research Network on an Aging Society offers the following five recommendations as a way forward.

1) Enhance life-long learning and increase the likelihood that older workers can function effectively in the labor force:

- Offer incentives for reinvesting in skill development, especially for blue-collar workers.
- Encourage work site–based educational and training programs.
- Provide resources that support alternative ways to update skills; encourage

lifelong learning beyond the classroom. An example is the Mozilla/MacArthur Foundation Badges for Lifelong Learning Program, an emerging model of peer-to-peer learning that creates credentials for informal learning that is not currently captured by traditional credentials (such as college degrees).

2) Ensure that older persons are productively engaged in society, either through paid work or volunteering:

- Create incentives for employers to offer more flexible employment models that fit the needs of older workers.
- Create incentives for volunteering.
- Increase funding for federal senior volunteer programs.
- Consider the benefits and the costs of establishing Medicare as the primary payer for health benefits of older workers who are eligible for the program.

3) Encourage individual and societal financial security:

- Change 401(k) participation from voluntary opt-in to a default option of participation and a voluntary opt-out, and require savings rates of 6 percent.
- Offer paid leave for family caregiving.
- Ensure that Social Security continues to provide individuals and families with financial security while shoring up trust fund solvency through benefit reform.

4) Provide high-quality health care to all:

- Strengthen geriatric training and increase requirements for demonstrated competence in geriatric care for all levels of health care providers.
- Provide financial incentives such as loan forgiveness and scholarships for individuals training in geriatric care.
- Channel resources through Medicare to providers (nurses, physicians, and

others) with additional training and demonstrated competence in geriatrics. This must include the diagnosis and management of common disorders of late life, including delirium, dementia, falls, incontinence, polypharmacy (use of more than four medications, which raises the possibility of harmful interactions), and frailty; as well as diseases especially common in older persons, such as diabetes, cardiovascular disease, and arthritis.

- Establish training programs tailored to specific caregiver situations.
- Launch caregiver support programs as a place to discuss challenges in a confidential setting.
- Expand the National Family Caregiver Support Program to help reimburse costs of caregiving and provide funding for caregivers to be temporarily relieved of their duties, allowing them to maintain their responsibilities for an extended time.

5) Build a culture of shared sacrifice and benefit across the generations:

- Promote generationally cohesive communities by encouraging individuals from different generations to interact productively together, reducing intergenerational tensions.
- Establish programs to involve seniors in schools and youth in senior services.
- Avoid exclusive reliance on age-segregated housing and services.
- Emphasize the benefits of social insurance programs across the entire age span.

Taken together, these options provide a general blueprint for the types of policies that should be put in place to increase the likelihood that our country will maintain its resilience in the face of this demographic change.

Julie M. Zissimopoulos, Dana P. Goldman, S. Jay Olshansky, John Rother & John W. Rowe

* Contributor Biographies: JULIE M. ZISSIMOPOULOS is an Assistant Professor at the Sol Price School of Public Policy and the Associate Director of the Schaeffer Center for Health Policy and Economics at the University of Southern California. Her research has been published in such journals as *The Journal of Economic Perspectives*, *Journal of Health Economics*, *Journal of Human Resources*, and *Demography*.

DANA P. GOLDMAN is the Leonard D. Schaeffer Chair in Health Policy at the University of Southern California. He is also the Director of the Schaeffer Center for Health Policy and Economics. He serves as a health policy adviser to the Congressional Budget Office, and his research has appeared in the *New England Journal of Medicine*, *JAMA: The Journal of the American Medical Association*, *Demography*, *Journal of the American Statistical Association*, and *Health Affairs*.

S. JAY OLSHANSKY is Professor of Epidemiology at the School of Public Health, Division of Epidemiology and Biostatistics at the University of Illinois at Chicago. He has published articles in such journals as *The New England Journal of Medicine*, *JAMA*, *Science*, *The Scientist*, *Scientific American*, and *Health Affairs*.

JOHN ROTHER is President and CEO of the National Coalition on Health Care. Prior to joining the Coalition, he served as the Executive Vice President for Policy, Strategy, and International Affairs at the AARP. He was also Staff Director and Chief Counsel of the Senate Special Committee on Aging under the direction of Chairman John Heinz (R-PA) and Special Counsel for Labor and Health to Senator Jacob Javits (R-NY).

JOHN W. ROWE, a Fellow of the American Academy since 2005, is Professor at the Columbia University Mailman School of Public Health and Chair of the MacArthur Foundation Research Network on an Aging Society. He is the author of *Successful Aging* (with Robert L. Kahn, 1998) and was the Chair of the Institute of Medicine of the National Academies project the Future Health Care Workforce for Older Americans, which authored the report *Retooling for an Aging America: Building the Health Care Workforce* (2008).

- 1 One exception is John Wallis Rowe and Robert L. Kahn, *Successful Aging* (New York: Dell, 1998).
- 2 David Lowsky, S. Jay Olshansky, Jay Bhattacharya, and Dana P. Goldman, "Heterogeneity in Healthy Aging," *The Journals of Gerontology: Biological Sciences & Medical Sciences* 69 (6) (2014): 640–649.
- 3 Robert Schoeni, Vicki Freedman, and Linda Martin, "Why is Late-Life Disability Declining?" *Milbank Quarterly* 86 (1) (2008): 47–89. Among the working-age population, results are conflicting, in part because of variation in how disability is defined and measured in surveys. See Richard Burkhauser, Andrew Houtenville, and Jennifer Tennant, "Measuring the Population with Disabilities for Policy Analysis" in *Lifecycle Events and Their Consequences: Job Loss, Family Change and Decline in Health*, ed. Kenneth A. Couch, Mary C. Daly, and Julie M. Zissimopoulos (Stanford, Calif.: Stanford University Press, 2013).
- 4 S. Jay Olshansky, Daniel Perry, Richard A. Miller, and Robert N. Butler, "In Pursuit of the Longevity Dividend," *The Scientist* 20 (3) (2006): 28–36.
- 5 S. Jay Olshansky, Toni Antonucci, Lisa Berkman, Robert H. Binstock, Axel Boersch-Supan, John T. Cacioppo, Bruce A. Carnes, Laura L. Carstensen, Linda P. Fried, Dana P. Goldman, James Jackson, Martin Kohli, John Rother, Yuhui Zheng, and John W. Rowe, "Differences in Life Expectancy Due to Race and Educational Differences are Widening, and Many May Not Catch Up," *Health Affairs* 31 (8) (2012): 1803–1813.
- 6 Dana P. Goldman, Yuhui Zheng, Federico Girosi, Pierre-Carl Michaud, S. Jay Olshansky, David Cutler, and John W. Rowe, "The Benefits of Risk Factor Prevention in Americans Aged 51 Years and Older," *American Journal of Public Health* 99 (11) (2009): 2096–2101.
- 7 John Karl Scholz, Ananth Seshadri, and Surachai Khitatrakun, "Are Americans Saving 'Optimally' for Retirement?" *Journal of Political Economy* 114 (4) (2006): 607–643.

- ⁸ U.S. Department of Commerce, “Seasonally Adjusted Annual Rate,” PSAVERT Series (Washington, D.C.: Department of Commerce, 2014).
- ⁹ Kenneth Couch, Mary C. Daly, and Julie M. Zissimopoulos, eds., *Lifecycle Events and Their Consequences: Job Loss, Family Change and Decline in Health* (Stanford, Calif.: Stanford University Press, 2013).
- ¹⁰ Dawn C. Carr, Linda P. Fried, and John W. Rowe, “Productivity and Engagement in an Aging America: The Role of Volunteerism,” *Dædalus* 144 (2) (2015).
- ¹¹ Katherine M. Flegal, Margaret D. Carroll, Cynthia L. Ogden, and Lester R. Curtin, “Prevalence and Trends in Obesity among U.S. Adults, 1999–2008,” *JAMA* 303 (3) (2010): 235–241.
- ¹² Katherine M. Flegal, Margaret D. Carroll, Brian K. Kit, and Cynthia L. Ogden, “Prevalence of Obesity and Trends in the Distribution of Body Mass Index among U.S. Adults, 1999–2010,” *JAMA* 307 (2012): 491–497.
- ¹³ Linda G. Martin, Vicki A. Freedman, Patricia M. Andreski, and Robert F. Schoeni, “Recent Trends in Disability and Related Chronic Conditions among People Ages 50 to 64,” *Health Affairs* 29 (4) (2010): 725–731.
- ¹⁴ These calculations are based on the 2004 survey of the Health and Retirement Study; see University of Michigan Health and Retirement Study (HRS), <http://hrsonline.isr.umich.edu>.
- ¹⁵ Lynn Feinberg, Susan C. Reinhard, Ari Houser, and Rita Coula, *Valuing the Invaluable: 2011 Update – The Growing Contributions and Costs of Family Caregiving* (Washington, D.C.: AARP Public Policy Institute, 2011), 2.
- ¹⁶ Frank F. Furstenberg, Caroline Sten Hartnett, Martin Kohli, and Julie M. Zissimopoulos, “The Future of Intergenerational Relations in Aging Societies,” *Dædalus* 144 (2) (2015).
- ¹⁷ Yonatan Ben-Shalom, Robert A. Moffitt, and John Karl Scholz, “An Assessment of the Effectiveness of Anti-Poverty Programs in the United States,” NBER Working Paper 17042 (Cambridge, Mass.: National Bureau of Economic Research, 2011).
- ¹⁸ See, for example, Erik Hurst and James P. Ziliak, “Do Welfare Asset Limits Affect Household Saving? Evidence from Welfare Reform,” *Journal of Human Resources* 41 (1) (2006): 46–71.
- ¹⁹ S. Jay Olshansky, Dana P. Goldman, and John W. Rowe, “Resetting Social Security,” *Dædalus* 144 (2) (2015).
- ²⁰ Executive Office of the President of the United States, Council of Economic Advisers, *Trends in Health Care Cost Growth and the Role of the Affordable Care Act* (Washington, D.C.: Executive Office of the President of the United States, November 2013), http://www.whitehouse.gov/sites/default/files/docs/healthcostreport_final_noembargo_v2.pdf.
- ²¹ Nicole Maestas and Julie Zissimopoulos, “How Longer Work Lives Ease the Crunch of Population Aging,” *Journal of Economic Perspectives* 24 (1) (2010): 139–160.
- ²² Alan Gustman, Thomas Steinmeier, and Nahid Tabatabai, “What the Stock Market Decline Means for the Financial Security and Retirement of the Near-Retirement Population,” *Journal of Economic Perspectives* 24 (1) (2010): 161–182.
- ²³ Florian Heiss, Adam Leive, Daniel McFadden, and Joachim Winter, “Plan Selection in Medicare Part D: Evidence from Administrative Data,” *Journal of Health Economics* 32 (6) (2013): 1325–1344.
- ²⁴ Organisation of Economic Co-operation and Development, *Education at a Glance, 2011: OECD Indicators* (Paris: OECD Publishing, 2013).
- ²⁵ Paul Fronstin and Nevin Adams, “Employment-Based Retiree Health Benefits: Trends in Access and Coverage, 1997–2010,” *EBRI Issue Brief* (377) (October 2012).
- ²⁶ Silvia Barcellos, Amelie C. Wuppermann, Katherine Grace Carman, Sebastian Bauhoff, Daniel L. McFadden, Arie Kapteyn, Joachim K. Winter, and Dana Goldman, “Preparedness of Amer-

- icans for the Affordable Care Act,” *Proceedings of the National Academy of Sciences* 111 (15) (2014): 5497–5502.
- ²⁷ Heiss et al., “Plan Selection in Medicare Part D.”
- ²⁸ John Hsu, Vicki Fung, Mary Price, Jie Huang, Richard Brand, Rita Hui, Bruce Fireman, and Joseph P. Newhouse, “Medicare Beneficiaries Knowledge of Part D Prescription Drug Program Benefits and Responses to Drug Costs,” *JAMA* 299 (16) (2008): 1929–1936.
- ²⁹ Geoffrey F. Joyce, Julie M. Zissimopoulos, and Dana P. Goldman, “Digesting the Doughnut Hole,” *Journal of Health Economics* 32 (6) (2013): 1345–1355.