



As America Ages

An Initiative of the A. Alfred Taubman Center for Public Policy and American Institutions at Brown University



An Aging America: Growth is Inevitable, Change *isn't* Optional

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The mission of the As America Ages Initiative is to foster cross-sector collaboration to address the challenges and opportunities created by an aging society. To this end, the Initiative strives to:

- accurately describe how an aging population affects America
- produce analysis and research that informs policymaking towards aging
- inspire the next generation of thought leaders to find creative solutions and opportunities for an aging America



INTRODUCTION

America's getting older and we're not ready. While the increasing energy and vitality of our aging population is a success, immediate actions are now required to sustain this victory. Now is an historic opportunity to fully address the impact of our aging population. Between increasing longevity and the aging Baby Boomer generation, by mid-century, the number of Americans aged 65 and older will increase by over 200 percent from roughly 40 million people today (13 percent of the total U.S. population) to 86.7 million by 2050 (20 percent of the population).¹ Debilitating diseases continue to plague our aging population. Health care and Social Security expenses will grow exponentially over the coming years creating unsustainable demand. The U.S. needs to redesign social programs that currently leave the many depending on the few. These threats apparent, we need to act now to reconfigure such programs. We recommend immediate steps in three areas to address these challenges:

- *Financial Prudence*
- *Investments*
- *Transforming Attitudes*

Americans are living longer, healthier, and more productive lives due to improvements in the public and private sectors. While increased longevity and better livelihood are rightly encouraged, absent is the assurance that these improvements will remain sustainable. This is because established fiscal and social policies do not protect Americans against their own gains. The current financial crisis on Wall Street has had a devastating effect on Main Street. Yet, the recent market collapse pales in comparison to the price an aging society will cost Americans over the next 50 years. With public and private efforts at all levels of governance, we can put steps in place to impede this looming disaster.

There are manageable first steps to addressing the national aging crisis, which give us unprecedented opportunities for public and private sector collaboration. These actions can be thought of as priming the pump for strategic plans of ongoing management on the issues. Personally and collectively, we are all re-

sponsible for taking steps to combat the aging crisis.

FINANCIAL PRUDENCE

The economic consequences of our growing elderly population are headed towards a financial meltdown. Social Security, Medicare, and Medicaid spending has dramatically increased since the programs' inception. By 2017, Social Security's trust fund will face a cash deficit (see Figure 1.2). Medicare's hospital insurance trust funds began facing cash deficits in 2007. By 2030, Social Security alone will run an annual cash deficit of at least \$666 billion. To finance Medicare, Medicaid, and Social Security by 2040, every household will have to incur twice their current Social Security tax rate.²

Individuals and the government need to spend less and save more to avoid this impending financial crisis. We need to make changes immediately in order to buy time as we develop effective long-term solutions. Some changes

that can be made are immediate-impact solutions that will begin right away to reduce payouts and increase income/contributions to Social Security and Medicare. The impact of other actions that can be taken will develop over a longer period with the goal of helping America segue to necessary long-term solutions—yet to be devised—and the dramatic changes these may entail. Immediate-impact proposals:

- *Raise the age of entitlement.* To reduce Social Security and Medicare expenditures right away, we must increase the age of eligibility for both entitlement programs.
- *Tax all income for Social Security and Medicare.* To increase the income of the Social Security and Medicare programs immediately, we must eliminate the income cap on payroll taxes for these programs.

Buying Time

The main purpose for these recommendations is to buy America time—a few decades at most—while the U.S. designs and then implements long-term solutions to keep social programs solvent and affordable for the

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long haul. The normal retirement age, the first year a worker can receive a full Social Security benefit, is 65 years for those born before 1960, and 67 years for those born in 1960 or later.³ For Medicare, eligibility begins at age 65. As Americans live longer and the retirement age remains the same, the federal government must

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pay out benefits for more years for each retiree (on average), placing unsustainable financial demands on the system (see Figure 1.3). By raising the age of entitlement (both the normal retirement age and the early eligibility age), Social Security will be more sustainable. Workers should be capable of working a few more years, as Americans in their 60s have seen their health improve along with increases in longevity.⁴

Moreover, raising ages of eligibility should not be a one-time adjustment. With rising

longevity, the normal retirement age should be continually reset as a relative percentage point along the life expectancy line.⁵ Such a policy shift will be fair (as long as special arrangements are made for workers with poor health) and will help protect Social Security, Medicare, and Medicaid in the short-term.⁶

Taxes Are Going Up

In addition to the reduction in promised benefits guaranteed by increasing the age of eligibility for Social Security and Medicare, the government can increase contributions to Social Security by increasing payroll taxes. In 2008, the taxable maximum for Social Security wages is \$102,000. This means that workers earning more than \$102,000 per year only pay taxes on the first \$102,000 they earn.⁷ The payroll taxable maximum for Medicare taxes was eliminated in 1993. Removing the taxable maximum cap for Social Security would itself balance the Social Security system in 75 years, according to estimates.⁸ Because of Social Security's progressive benefits formula, this change would not increase benefit payouts on the higher-earners affected.⁹

While the proposals above would have an immediate impact on the Social Security and Medicare systems, they are by no means long-term solutions. Prudent steps can be taken to ensure long-term fiscal solvency of social programs for the citizens who depend on them:

- *Mandatory Universal Pension System.* Creating mandatory savings accounts will increase retirement income levels for all workers.
- *Index new Social Security benefits to prices.* By indexing Social Security benefits to prices, rather than wages, Social Security payouts will steadily decrease over time.

Pensions For All

The creation of a mandatory universal pension system (MUPS), in addition to Social Security and private pension benefits, would increase the amount of income for workers during retirement. Half of American workers have access to some kind of pension plan through their workplace, and fewer than 40 percent of those workers chose to participate.¹⁰ MUPS come at little cost to government and effectively bolster worker savings and retirement income in the long-term. If working adults place 3 percent of their wages into mandatory retirement savings accounts as a supplement to their Social Security benefits, they will make up for inevitable declines in the amount of Social Security received. Projections show that by 2040 Social Security will cover only one-quarter of a worker's earnings during his or her retirement, much lower than today's retirees who draw 40 percent of their earnings.¹¹ Person-

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al Pension savings would replace 14.5 percent of wages for men and 13.3 percent for women. Likewise, one-worker couples would replace 14.5 percent of earnings, while dual-worker couples would replace 13.9 percent. Extra savings in personal pension systems will increase retirement income replacement back to nearly 40 percent.¹² However, mandating personal retirement ac-



counts must be carefully designed and implemented. The federal government should contribute to personal accounts on behalf of low-income workers who would otherwise be unable to contribute to their accounts.

Another mechanism for decreasing future Social Security costs is to index new benefits to prices rather than wages. Currently, the National Average Wage Index (NAWI) determines initial benefits for new retirees. NAWI is based on the average wage earned for all workers. Historically, the wage index has grown faster than prices (see Figure 1.4 and Figure 1.5). This index is projected to increase by nearly 4 percent each year for the next decade.¹³

However, forecasts show the Consumer Price Index (CPI) to increase below 3 percent each year up to 2015, in-

creasing by half the amount of wages.¹⁴ If instead new benefits were indexed to the CPI, there could be a reduction of almost 30 percent in Social Security outlays by the year 2050 (see Figure 1.6 and Figure 1.7).¹⁵ This reduction would put Social Security on a path to solvency and would ensure that all future retirees receive benefits, adjusted for inflation, as received by new retirees today.

While many of the reform suggestions are bitter medicine, leading experts on aging have concluded that financial prudence is the only way to avoid the dire economic consequences facing our nation in the immediate future.¹⁶ Today's young workers, who will live longer than generations before them, must accept that their benefits should start kicking in five to ten years later than has been the norm, and plan accordingly.¹⁷ Americans of all ages need to plan to live longer than their parents and grandparents and make longevity work financially. All Americans need to accept that they will receive less, but that they can make up for that by the use of mandatory personal retirement accounts. In advocating for financial prudence, we advocate for all Americans, young and old. It would be immoral to squander future generations' resources and leave an unsound economy in our wake.

INVESTMENTS

Over the next forty years, the number of individuals aged 65 and older will almost double, from 13 to 21 percent of the U.S. population. As members of this group grow older, they will place different needs on society than were seen in years past. In particular, they will require greater medical attention.¹⁸ Unfortunately, these requirements come at a time when Medicare and Medicaid threaten to become insolvent and health insurance premiums are outpacing inflation.¹⁹ According to one study, health care spending will rise from

15.2 percent to 19 percent of GDP by 2015 under a business-as-usual scenario.²⁰ To meet the needs of an aging America, long-

term, efficiency-driven investments in health care are essential. We propose the following:

- *Increase federal budget spending on medical research to 3% of the nation's overall health bill.* Increasing the research budget of the National Institutes of Health (NIH) allows scholars to continue working to find treatments for costly diseases. Alzheimer's research funding, with the goal of developing a cure, should be a high priority.
- *Provide universal health care.* Investing in national health insurance would yield substantial economic and social benefits in the long run.
- *Education on leading a healthy lifestyle.* Investing in programs that promote healthy lifestyles will prevent or delay age-related diseases and conditions, which will in turn help tame skyrocketing health care costs. Targeting obesity is of primary importance.

Biomedical Research Investments

Ranked only behind cancer and heart disease, Alzheimer's expenses are estimated to cost the United States a staggering \$148 billion dollars annually.²¹ The disease affects one in ten people over the age of 65 and nearly half of people age 85 and over.²² Furthermore,



Alzheimer's-related Medicare spending is projected to double from \$91 billion in 2005 to an unsustainable \$189 billion by 2015. Studies published in *Nature*²³ and the *New England Journal of Medicine*²⁴ show the progress made toward a greater understanding of the disease and provide hope for a cure. Yet, the organizations conducting research have seen NIH funding fall 13 percent since 2004. The NIH supports 28 percent of all biomedical research conducted in the U.S. and is the single largest not-for-profit biomedical research funding entity in the country.²⁵ The average grant provided by the NIH has dropped roughly \$27,000 over the past 5 years to \$408,000.²⁶ Many laboratories have seen their NIH research grants decrease significantly, limiting their abilities to research. In some cases grants to promising labs, which had been renewed annually, have disappeared altogether.²⁷ Leveraging the immense talent of American research institutions has been successful in the past, and can once again lend solutions if the necessary resources are made available. As of 2007, the NIH had financially supported 114 American winners of the Nobel Prize through its intramural and external support programs.²⁸ Increasing support for the NIH will help keep the United States the epicenter of biomedical discovery and provide essential funds for the development of disease treatment.

Universal Health Care

The United States spends 15.2 percent of its GDP or \$2 trillion on health care, far more than any other industrialized country, yet this expenditure does not translate into superior health performance; Great Britain and France fare much better in life expectancy and have lower infant mortality rates.²⁹ Nor does the U.S. surpass other advanced countries in its quality of care, as has been found in a recent study published in *Health Affairs*.³⁰ The U.S. is the only industrialized country that does not provide universal health care in some form. Over 47 million individuals in the U.S. are un-

coverage.³² Others, absent early medical intervention, may contract diseases, the treatment for which costs substantially more than preventative care under a universal health care coverage would cost. Most likely, these costs will be incurred by Medicare once they reach 65 years of age.³³

On top of that, the unnecessary use of emergency rooms by the uninsured results in uncompensated care costs of over \$30 billion.³⁴

Failure to reform health care will engender unsustainable costs without producing commensurate outcomes.³⁵ On economic grounds alone, universal coverage in the U.S. is imperative. Routine screenings and early

diagnoses would lower the occurrence of many costly diseases, thereby reducing Medicare spending.³⁶ A healthier population would result in a more productive and mobile workforce.³⁷ American companies would gain competitiveness in a globalized economy, absent the need to sponsor employees' health insurance.³⁸

Funds to institute national health insurance in the United States exist. Yet effective management of available funds and political have precluded the creation of a national health insurance system. The American public already bears the expense of the uninsured, through provider "cost-shifting" (i.e. higher premiums). In fact, the uninsured working poor themselves help finance the health care system through taxation.³⁹ The initial costs of switching to a public insurance system could

be offset by administrative simplification, computerized physician order entry and electronic billing systems among other measures.⁴⁰ Even skeptics agree that national health care coverage could save up to \$286

billion annually by doing away with paperwork and bureaucracy.⁴¹ According to the National Coalition on Health Care's estimates, a single-payer system would be less expensive than the status quo, let alone more salutary to the public (see Table 2.1, scenario 4).⁴² The Declaration of Independence entitles all Ameri-

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insured.³¹ This puts tremendous strain on our society and economy. For individuals in the 55-64 age range, who are at a greater risk of experiencing major health problems, lacking health insurance may have dramatic consequences. More than 13,000 people in this age range die each year, mainly due to the lack of health



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cans to “life, liberty and the pursuit of happiness;” does that promise not extend to basic health care?⁴³

Healthy Lifestyles

By the year 2015, three-quarters of Americans will be overweight or obese.⁴⁴ In the U.S., obesity is most prevalent among men aged 65 to 74 and among women aged 55 to 64 years. Moreover, the tendency to be overweight or obese increases with age.⁴⁵ The U.S. Department of Health and Human Services estimates that the burden of overweight and obese adults borne by the health care system ranges from \$69 billion to \$117 billion per year.⁴⁶ As demonstrated by numerous studies, not only do costs for individual care and health costs for businesses increase when workers are obese and physically inactive, but workers’ productivity is lower and their absenteeism increases.⁴⁷ Moreover, obesity is a risk factor for many chronic conditions and contributes greatly to higher rates of disability and ensuing loss of independence among the elderly.⁴⁸

Therefore, we strongly advocate that the federal government promote healthy lifestyles by reforming federal farm programs so that fruits and vegetables rather than corn are subsidized. We urge a more rigorous implementation of the existing U.S. Department of Agriculture regulations that prohibit serving foods of minimal nutritional value during mealtimes in school food service areas, launching national campaigns for eating more fruits and vegetables, raising awareness about the importance of exercise, banning highly deleterious trans fats, and levying taxes on junk foods.⁴⁹ The two latter policy measures are controversial; however, they are effective tools available to the government to affect consumer choices. A hike in taxes on tobacco in Massachusetts and Connecticut led to a reduction of cigarettes smoked in those states.⁵⁰ A tax on junk foods in combination with a national campaign encouraging healthier lifestyles will most likely decrease the consumption of the least nutritional foods.⁵¹ The money

and more robust aging. A healthy population is paramount to the economy and the country. When in good health, people may remain active and productive much longer and may enjoy fully their “golden years.”

TRANSFORMING ATTITUDES

Cynicism Towards Aging

Central to solving the challenges facing our aging population is also a need to transform Americans’ cultural attitudes and general cynicism toward aging. Discrimination against the elderly is prevalent; older persons are disproportionately portrayed as a drain on the economy, with their increasing need for health and support services. Instead of viewing old age in terms of disability, decline, and disease, people need to recognize the value that the elderly contribute to society, both economic and social. Steps to change the cynicism toward aging include:

- *Enforce the Age Discrimination in Employment Act (ADEA).* The Equal Employment Opportunity Commission needs to implement the ADEA more rigorously to avoid ageism and eliminate age barriers in the workplace.
- *Implement human rights conventions to ensure fundamental freedoms of the elderly.* It is estimated that as many as 1.2 million older adults in America are physically abused or neglected each year.⁵² We need to stop such widespread abuse by implementing human rights conventions to protect the elderly.
- *Promote understanding of aging through public education.* Policy makers should advocate public education efforts, using mass media and educators, to highlight the past and present contributions of older persons.

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levied should be used to subsidize healthier produce in order to make it more affordable for the poor. It is in our best interest that the government promote healthy lifestyles for all, because that will allow for healthier

With public education and legislative measures, society’s cynicism towards aging can be corrected. Contributions to society by the elderly will be recognized and older persons will have greater opportunities to remain productive later in life and fuel continual growth in the economy. This continual growth will help fund the nation’s entitlement programs, health



care system, and pension programs. There is a moral aspect to the challenge of aging and health care.⁴³

Indifference Towards Retirement Planning

Despite increasing longevity and escalating health and long-term care costs, Americans are woefully unprepared for post-retirement expenditures. Retirement savings are at a historic low and more than 75 million Americans lack employer-based retirement plans (see Figure 3.1).⁵³ The Employee Benefits Research Institute concluded in a recent study that fewer than 40 percent of baby boomers would have adequate retirement income even if they increased savings by 5 percent per year.⁵⁴ Americans need to change their indifference towards retirement planning and start taking ownership of their fiscal future. Steps to encourage this attitude transformation include:

- *Educate workers on retirement saving needs and opportunities.* Employees should understand that retirement planning involves more than just paying into Social Security. We need public education efforts to improve public knowledge and utilization of available retirement savings vehicles.
- *Increase tax incentives to encourage a greater savings rate.* Individual Retirement Accounts (IRAs) offer tax advantages. However, less than 13 million Americans use such retirement savings vehicles.⁵⁵ Increasing the tax incentives (e.g. making contributions fully tax-deductible, and earnings and distributions tax-free) will encourage greater use of IRAs to accumulate retirement savings.

With public education efforts and increased tax incentives, Americans will have greater incentives to shake off their current indifference towards retirement planning. Furthermore, they will be encouraged to employ lifelong strategies to build adequate savings for their retirement.

AGING: A PERSONAL AND COLLECTIVE RESPONSIBILITY

Only one percent of humankind's history has been characterized as having life expectancies 18 years old or greater. In fact, over the past 1000 years, the life expectancy has jumped from 25 to 76

years. The world's population has always been geographically, culturally, ethnically, and spiritually diverse. Increasingly, these rich global populations are becoming diverse in age, and the United States is no exception. These great shifts have enriched lives by producing relationships that would have never occurred in years past. While these interactions bring great opportunities for new discourse and relationships, they also present the significant difficulties outlined above.

This paper outlines some of the ways the United States can address these looming challenges responsibly and effectively. Financial prudence—in the form

of raising the age of entitlement, removing the income cap on payroll taxes, creating mandatory savings accounts and indexing entitlement benefits to prices—is necessary for America to avoid an impending financial meltdown. Targeted investment in medical research, universal health care, and healthy lifestyle programs will make our nation's health care expenditures more manageable. Changing the general indifference towards retirement planning and outward cynicism towards aging will ensure that Americans prepare for and remain productive during their later years. We recognize that our recommendations can only go so far. What the U.S. really needs is a re-conceptualization

of how aging in America should operate. This would involve a newly defined set of expectations about the roles of individuals and the role of the government.

The baby-boomer generation is comprised of those citizens who were born between 1946 and 1964. Some of the eldest members of this massive generation, those born in 1946, began collecting Social Security this year (having reached the early eligibility age of 62). The time is now to begin addressing the aging crisis—a more mature audience is waiting with bated breath.

There is
a moral
aspect
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care.



- ¹Federal Interagency Forum on Aging-Related Statistics, "Older Americans 2008: Key Indicators of Well-Being," March 2008, Washington, DC: U.S. Government Printing Office.
- ³Dychtwald, Kenneth. 1999. *Age Power: How the 21st Century Will Be Ruled By The New Old*. New York: Tarcher/Putnam, 175.
- ⁴Burtless, Gary. "Increasing the Eligibility Age for Social Security Pensions," Brookings Institute: October 16, 2008, <http://www.brookings.edu/testimony/1998/0715saving_burtless.aspx>.
- ⁵Ibid.
- ⁶Dychtwald, 95.
- ⁷Burtless, Gary. "Increasing the Eligibility Age for Social Security Pensions."
- ⁸Urban Institute, 2008. "Raising the Taxable Maximum," <http://www.urban.org/retirement_policy/sstaxableminimum.cfm>.
- ⁹Ibid.
- ¹⁰Ibid.
- ¹¹<http://www.ebri.org/pdf/briefspdf/EBRI_IB_11-20074.pdf> Accessed on November 19, 2008
- ¹²<http://www.epi.org/content.cfm/webfeatures_snapshots_20050209> Accessed on November 13, 2008.
- ¹³Carasso, Adam and Jonathan B. Forman. "Tax Considerations in a Mandatory Universal Pension System." Paper Presented at Re-Envisioning Retirement in the 21st Century, Society of Actuaries Conference, May 3-4, 2006.
- ¹⁴<<http://www.ssa.gov/OACT/TR/TRassum.html>> Accessed on November 19, 2008.
- ¹⁵<http://www.seattle.gov/financedepartment/cpi/pdfs/US_CPI_Forecast_--_Annual.pdf> Accessed on November 19, 2008.
- ¹⁶Peterson, Peter. 2004. *Running on Empty: How the Democratic and Republic Parties Are Bankrupting Our Future and What Americans Can Do About It?* New York: Farrar, Straus and Giroux, 200.
- ¹⁷Peterson; Dychtwald.
- ¹⁸Dychtwald.
- ¹⁹"Accounting for Sources of Projected Growth in Federal Spending on Medicare and Medicaid," Economic and Budget Issue Brief, CBO, May 28, 2008, <<http://www.cbo.gov/ftpdocs/93xx/doc9316/HealthCostGrowth.shtml>>.
- ²⁰The Henry J. Kaiser Family Foundation "Health Care and the 2008 Election," October 2008 Report #7828 <<http://www.kff.org>> Accessed on November 16, 2008.
- ²¹Thorpe, K.E. "Impacts of Health Care Reform: Projections of Costs and Savings," Report Prepared for the National Coalition on Health Care, 2005 <http://www.nhc.org/materials/studies/Thorpe%20booklet.pdf> Accessed on November 19, 2008.
- ²²"Alzheimer's Disease Prevalence Rates Rise to More than Five Million in the United States," Alzheimer's Association, March 20, 2007 <http://www.ncpa.org/sub/dpd/index.php?Article_ID=14331>.
- ²³Hingley A., "Alzheimer's Few Clues on the Mystery of Memory" May 1998 <http://www.fda.gov/FDAC/features/1998/398_alz.html>.
- ²⁴Goate A. et al., "Segregation of a missense mutation in the amyloid precursor protein gene with familial Alzheimer's disease," *Nature* 349, 704 - 706 (21 February 1991); doi:10.1038/349704a0.
- ²⁵Mayeux, J. and M. Sano, "Treatment of Alzheimer's Disease," *New England Journal of Medicine*, November 25, 1999 Volume 341:1670-1679.
- ²⁶Hamilton M. et al., "Financial Anatomy of Biomedical Research," *Journal of the American Medical Association*, 2005, 294: 1333-1342.
- ²⁷Day T.L., "Medical research facing federal funding crisis," *Medill School News Reports*, March 12, 2008.
- ²⁸Ibid.
- ²⁹Butler R.N. "The Longevity Revolution: The Benefits and Challenges of Living a Long Life," 2008, *Public Affairs*, 105-111.
- ³⁰David Walker, "21st Century Health Care Challenges: Unsustainable Trends Necessitate Reforms to Control Spending and Improve Value," *Citizens' Health Care Working Group*, Salt Lake City, Utah, July 22, 2005, <<http://www.gao.gov/cghome/chcwgo7222005/chcwgo7222005.pdf>>, 11 and 17.
- ³¹Paul Krugman and Robin Wells, "The Healthcare Crisis and What to Do About It?" *The New York Review of Books* 53.5 (March 2006).
- ³²Jonathan Gruber, "Covering the Uninsured in the United States," NBER Working Paper 13758, January 2008, <<http://www.nber.org/papers/w13758>>, 10.
- ³³J. Michael McWilliams, Alan M. Zaslavsky, Ellen Meara and John Z. Ayanian, "Health Insurance Coverage and Mortality Among The Near-Elderly," *Health Affairs* 23.4 (2004), 223. Ibid.
- ³⁴Gruber, 15 and 22.
- ³⁵Kenneth E. Thorpe, "Impacts of Health Care Reform: Projections of Costs and Savings," *National Coalition on Health Care*, 2005, <<http://www.nhc.org/materials/studies/Thorpe%20booklet.pdf>>, 12.
- ³⁶Krugman and Wells.



37Gruber, 23.

38Kao-Ping Chua and Flavio Casoy, "The Case for Universal Health Care," American Medical Student Association, <<http://www.amsa.org/uhc/CaseForUHC.pdf>>, 6; "General Motors reports that every car it makes is \$1,500 more expensive because of health care costs, far more than what Japanese and German automakers have to pay." Associated Press. "GM to slash jobs, close more plants." Available at <<http://www.msnbc.msn.com/id/8129876/from/RL.2/>>, accessed December 2005.

39Thomas Falen, "U.S. Health Care Policy and the Rising Uninsured: An Alternative Solution," Journal of Health and Social Policy 19.4 (2004), 1.

40Jason Furman and Robert E. Rubin, "Universal, Effective and Affordable Health Insurance: An Economic Imperative," The Hamilton Project, The Brookings Institution, 2.

41Marleise Rashford, "A Universal Healthcare System: Is It Right for the United States?" Nursing Forum 42.1 (January-March, 2007), 4; David U. Himmelstein, Steffie Woolhandler, and Sidney M. Wolfe, "Administrative Waste in the U.S. Health Care System in 2003: The Cost to The Nation, The States, and The District of Columbia, With State-Specific Estimates of Potential Savings," International Journal of Health Services 31.4 (2004), 81.

42Thorpe, 13, 16.

43Chua and Casoy, 9.

44Youfa Wang and May A. Beydoun, "The Obesity Epidemic in the United States-Gender, Age, Socioeconomic, Racial/Ethnic, and Geographic Characteristics: A Systematic Review and Meta Regression Analysis," Epidemiologic Reviews, 29.1 (2007): 6-28.

45"Obesity Trends Among US Adults. CDC's Behavioral Risk Factor Surveillance System 1991-2003," <<http://www.obesityinamerica.org/trends.html>>.

46"F as in Fat. How Obesity Policies Are Failing in America," Trust for America's Health, August 2007 <<http://www.healthystates.csg.org/NR/rdonlyres/16BAD6F2-6F6B-4FC9AA3B-2F81A63D374C/o/fasinfat2007.pdf>>, 58.

47Ibid.

48Dawn E. Alley and Victoria W. Chang, "The Changing Relationship of Obesity and Disability, 1988-2004," JAMA 298.27 (2007).

49"Overweight and Obesity: A Vision for the Future," Office of the Surgeon General – HHS, January 11, 2007, <http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_vision.htm>.

50"Cigarette Smoking Before and After an Excise Tax Increase and an Anti-Smoking Campaign – Massachusetts, 1990-1996," MMWR, November 8, 1996, <<http://www.cdc.gov/mmwr/preview/mmwrhtml/00044337.htm>>.

51"F as in Fat. How Obesity Policies Are Failing in America," Trust for America's Health, August 2007 <<http://www.healthystates.csg.org/NR/rdonlyres/16BAD6F2-6F6B-4FC9-AA3B-2F81A63D374C/o/fasinfat2007.pdf>>, 35.

52Butler, Dr. Robert N. "The Longevity Revolution: The Benefits and Challenges of Living a Long Life," New York: PublicAffairs, 2008.

53Iwry, Mark, and David John. "Automatic IRAs: Extending Retirement Saving Opportunities to 75 Million More American Workers." Retirement Security Project.

54Jaffe, J. "Americans' Future Retirement Security Projection Model," Employee Benefit Research Institute.

55Sailer, P.J., & Nutter, S.E. (2000). "Accumulation and distribution of individual retirement arrangements," 2003. Retrieved from <<http://irs.gov/pub/irs-soi/00retire.pdf>>.

