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**Population Aging, Entitlement Growth,  
and the Economy**

by  
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# **POPULATION AGING, ENTITLEMENT GROWTH, AND THE ECONOMY**

## **Executive Summary**

Demographic aging—the graying of the baby boomers, increasing longevity, and low fertility rates—is changing the age structure of the United States. These trends will cause the population age 65 and older to double and to increase from 12 percent to nearly one-fifth of the U.S. population by 2030. More important, these changes are projected to have a profound and, many experts say, unsustainable impact on the federal budget by causing rapid growth in federal spending for health and retirement benefits for older Americans, especially for Social Security, Medicare, and Medicaid.

Demographic aging may also negatively affect the U.S. economy. Low fertility rates will slow the growth in the labor force; fewer workers will be available to support an aging population. A slower-growing labor force will slow economic growth. If left unchecked, increased deficits and government debt will choke off investment and further stifle growth. Aging will affect the economy indirectly through the budget—offsetting fiscal actions taken to manage increasing debt may themselves have negative economic consequences. Higher income taxes may discourage saving and investment, and spending reductions may injure the most vulnerable at a time when the economy is also lagging.

The effects of demographic aging will also be felt acutely by American families. The slowing of economic growth will mean stagnant wages and slower family income growth. Health costs, which have outstripped economic growth even in prosperous times, will continue to increase faster than family incomes. Families in need may face reduced benefits if programs are cut to address the problems of mounting federal debt.

The policy issues raised by this demographic challenge are manifold and formidable, but the fundamental question is simple: can we afford our aging society? Is our fiscal future as bleak as is often claimed? Are the projections of spending for Social Security, Medicare, and Medicaid realistic, overstated, or perhaps understated? If these programs threaten our economy's future health, is demographic aging the cause, or do other factors drive increased spending in these programs? What can be done to sustain the economic security of our aging population while maintaining a healthy economy?

In this report, we take a long-term perspective on these questions, examining the historical experience with “entitlements” and projecting out to the middle of this century. Looking backward, entitlement spending has actually been remarkably stable as a percentage of gross domestic product (GDP) for the past two decades, with one exception—health care. Social Security is a smaller share of GDP today than it was in Ronald Reagan's first term. By 2016, it will still consume about the same share of the economy as it did when Reagan was first elected president. Eventually, Social Security's costs will rise, but its growth will largely reflect the eligibility of the boomer cohort, which will occur between 2008 and about 2030. When the last boomer has retired, Social Security costs will resume a gradual and manageable growth path. Other nonhealth

entitlements are a smaller share of GDP today than they were 40 years ago, and the Congressional Budget Office (CBO) projects that they will remain so.

It is in health care only where entitlement growth presents serious future challenges. Rapid growth in health care costs is really nothing new, however—overall health care costs, including Medicare and Medicaid, have risen faster than the economy for decades and are projected to do so indefinitely, with Medicare overtaking Social Security as the largest federal program within 20 years. However, contrary to much conventional wisdom, population aging is not the chief cause of this growth. An aging population accounts for only about one-sixth of Medicare’s growth since 1970, and lifetime Medicare costs are about the same whether beneficiaries live to average life expectancy or live to 100. Furthermore, Medicare costs have been contained more effectively throughout the history of the program than have private insurance costs. Likewise, Medicaid costs have not risen because of growth in the number of aged beneficiaries but because of increasing costs per older beneficiary. Overall, the rising cost of health entitlements is driven not by demography, but by the technological advances in the health area—the same factors that drive private sector health spending.

So if health care costs are the chief threat to our economy, and their growth is neither new nor due mainly to aging, what is new and different about today’s fiscal and economic forecast? A key difference is that past spending growth occurred in more economically, fiscally, and politically favorable environments: a workforce with more prime age workers to support dependent populations, a declining defense budget that created a “dividend” for budget expansion elsewhere, smaller budget deficits, and a political environment less hostile to tax increases. Today, we have a workforce that will grow more slowly, a rising dependency ratio, rising budget deficits, a national security budget that is growing rather than declining, and a prevailing antitax ideology.

Although the budgetary environment has changed, we should not lose sight of the beneficial contributions Social Security, Medicare, and Medicaid have made to the economic security of both older and younger Americans. Social insurance and other government transfers have raised the incomes of people age 65 and older from about one-fourth to about two-thirds that of the under-65 population. These programs have become important counterweights to our recent fiscal policies, offsetting increased income inequality. Medicare and Medicaid both have made health care affordable for millions of Americans who otherwise could not obtain it, and Medicare alone has dramatically reduced out-of-pocket costs for older Americans. Improved economic security, greater economic equality, and better health are the all-too-frequently ignored legacy of these and other “entitlement” programs.

Spending entitlements are far better targeted to low- and middle-income populations than the other part of our social welfare system—special tax provisions targeted at specific classes of beneficiaries. These “tax entitlements,” as we shall call them, lose significant amounts of revenue and thus have a deficit impact equivalent to spending entitlement programs. They are like spending entitlements in most important respects. The tax code contains a multitude of such special tax provisions, costing more than half the amount of spending entitlement programs, or more than three times the size of the federal deficit in

2006. Unlike spending programs, these tax entitlements are markedly skewed toward more affluent workers. Although 6 of every 10 dollars of spending entitlements benefit people age 65 and older, 7 of every 8 tax entitlement dollars go to people under age 65.

Both spending and tax entitlements present serious fiscal challenges to the nation. Social Security, Medicare, and Medicaid are projected to grow from 8.7 percent of GDP today to at least 19 percent by 2050, which nearly equals *total* federal spending today. Federal revenues are below their long-run average with still more tax cuts being proposed. Our long-term budgetary challenge is to maintain the integrity of the social insurance programs that provide health and income security for current and future retirees without sustaining economic ruin. Our ability to achieve that goal will depend chiefly on two factors: the growth rate of health care costs and the willingness of the populace to be taxed. However, several other policy solutions will be required as well:

1. Since health care costs are the main problem, a solution begins with a more effective, efficient, and affordable health care system. This means paying more appropriately for services, extending coverage to those without insurance, and improving the quality of medical care that people receive, even when it requires additional investment—in short, making sure we get the best return for the money we spend in the health system.
2. Revenue adequacy is the other key ingredient. Expanding the federal revenue base to fund our domestic and international commitments will mean not only higher tax revenues from existing sources, but a new tax on consumption as well.
3. Making Social Security financially stable and solvent, not only to address our fiscal problems, but to enhance peace of mind for American families. Adjusting benefits, raising revenues, and making other program changes to improve equity should all be on the table. An important goal of reform should be to lengthen work lives.
4. National and personal saving need to increase, not only to finance investment, but also to ensure that people are better prepared for retirement. One step to increasing saving rates is better targeting of tax incentives. Converting deductions and exclusions to refundable credits would shift incentives in the tax code from those who already save enough to those who need help to save enough. But that alone will not be sufficient. A more universal approach is required, such as an “auto-IRA” that would couple automatic payroll deduction with default options and saving incentives such as the “Saver’s Credit” to increase participation.
5. Overall fiscal discipline needs to be restored. This means that new commitments must be paid for and that needed reforms, such as changes to the individual alternative minimum tax, should be deficit neutral.
6. Economic growth alone will not solve our long-term fiscal problem, but it will make the problem more tractable. Longer work lives, increased saving, and

substantial investments in human and physical capital are all necessary ingredients to sustain productivity growth.

The needed policy changes will require leadership, compromise, and bipartisan political action as well as contributions by workers, employers, and government. Concerted action in the near term can ensure that future generations of Americans will continue to enjoy the benefits of a strong, growing economy as well as health and income security, both in their working years and in retirement.

# POPULATION AGING, ENTITLEMENT GROWTH, AND THE ECONOMY

## 1. INTRODUCTION

The aging of the baby boom generation and increasing longevity are transforming the demographic composition of the U.S. population. By 2030, the population age 65 and older will be double that of today's 32 million, and will constitute nearly one-fifth of the nation's population, compared with 12 percent today. These trends will, in the view of many experts, cause federal spending and budget deficits to rise rapidly, driving up federal debt at a rate beyond our capacity to sustain it. In the worst-case scenario, the United States would be like a family living on credit cards and paying off debt with one card while running up spending faster with another, with insufficient income to ever pay down or get control of its debt.

This growing debt, if not checked or reversed, would stifle long-term economic growth. Capital would be used for debt service rather than investment, causing economic growth to slow or even cease. The Congressional Budget Office's (CBO's) projections of gross domestic product (GDP) growth over the next 44 years (out to 2050) average only 2.2 percent per year, compared with 3.4 percent over the 44 years since 1962. To illustrate the significance of the difference, in 50 years the lower growth rate would triple the size of the economy, but the higher rate would quintuple it.

A stagnant economy would also affect the standard of living of American families. As overall economic growth slows, family income growth would be ratcheted down as well. The income stagnation that middle-class families have experienced in recent years would likely become routine, and families would face the additional burdens of reductions in employer-arranged benefits, increased private health insurance premiums, and increased taxes and Medicare premiums intended to offset the effects of rising deficits. It is a commonplace that Americans are not noted savers, and our measured personal saving rate has hit negative numbers. Inadequate personal and national saving will create strains on both family budgets and the federal budget.

Concerns about the affordability of an aging society, and particularly those programs most directly benefiting America's older population—Social Security, Medicare, and Medicaid—have been voiced with increasing frequency. They have moved so-called entitlement spending to the forefront of domestic policy debates once again because of the rapid shift in our fiscal picture from surpluses to deficits and the forecast of worse deficits to come. The president placed this issue on the policy agenda in the 2006 State of the Union address by calling for a new commission that would examine the impact these programs have on the federal budget and the economy:

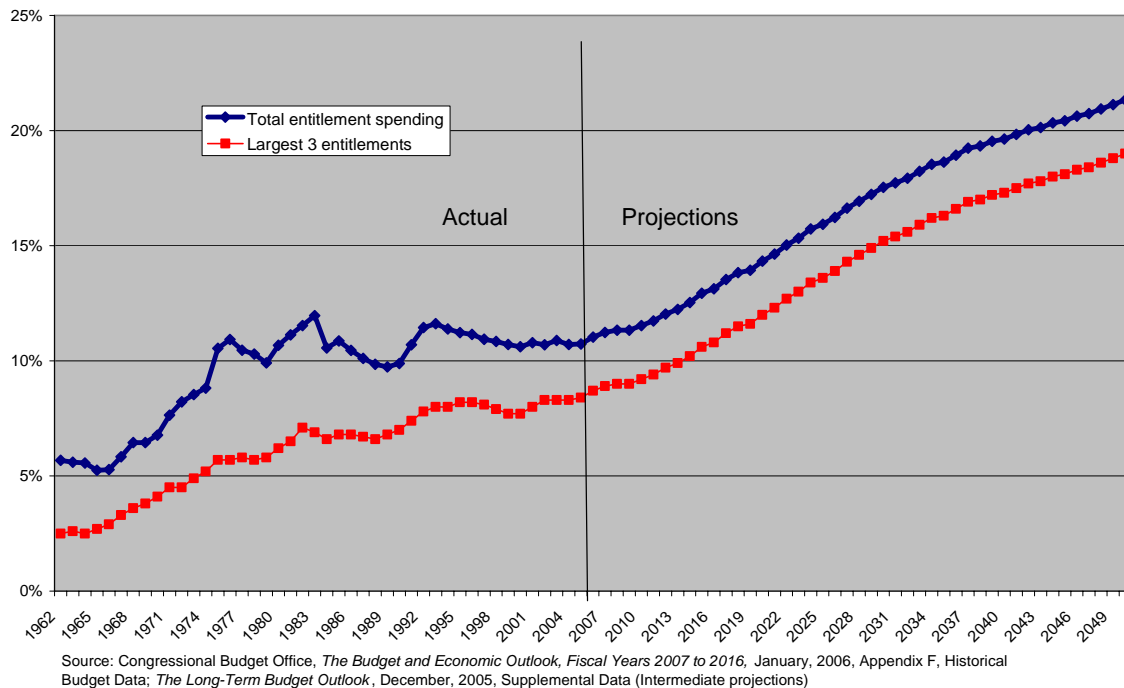
*...the rising cost of entitlements is a problem that is not going away.... I ask you to join me in creating a commission to examine the full impact of baby boom retirements on Social Security, Medicare, and Medicaid. This commission should include members of Congress of both parties*

and offer bipartisan solutions. We need to put aside partisan politics and work together and get this problem solved.<sup>1</sup>

The measure most often used to gauge the size of entitlement spending is its ratio to GDP, the total output of the economy. This measure provides a rough index of the burden of entitlement spending on the overall economy. Figure 1 below shows the ratio of total entitlement spending and the three largest entitlement programs (Social Security, Medicare, and Medicaid) to GDP from 1962 to the present and projected out to 2050.<sup>2</sup>

A fairly steep increase in total entitlement spending as a share of GDP between 1962 and 1982 was followed by a 25-year window of stability, entitlements fluctuating between 10 and 12 percent of GDP. However, the longer-term projection of the “big three” entitlements shows the pattern that has concerned many analysts—the three largest entitlement programs grow from less than 9 percent of GDP today to 19 percent in 2050 in the CBO intermediate spending scenario.<sup>3</sup>

Figure 1. Spending for Total and Largest Three Entitlements as Percent of GDP, 1962-2050



Numerous experts have characterized this growth as “unsustainable.” CBO has provided a succinct definition for sustainability: “[F]or any path of spending and revenues to be

<sup>1</sup> The White House, State of the Union Address, January 31, 2006, retrieved at <http://www.whitehouse.gov/stateoftheunion/2006/>. Accessed December 7, 2006.

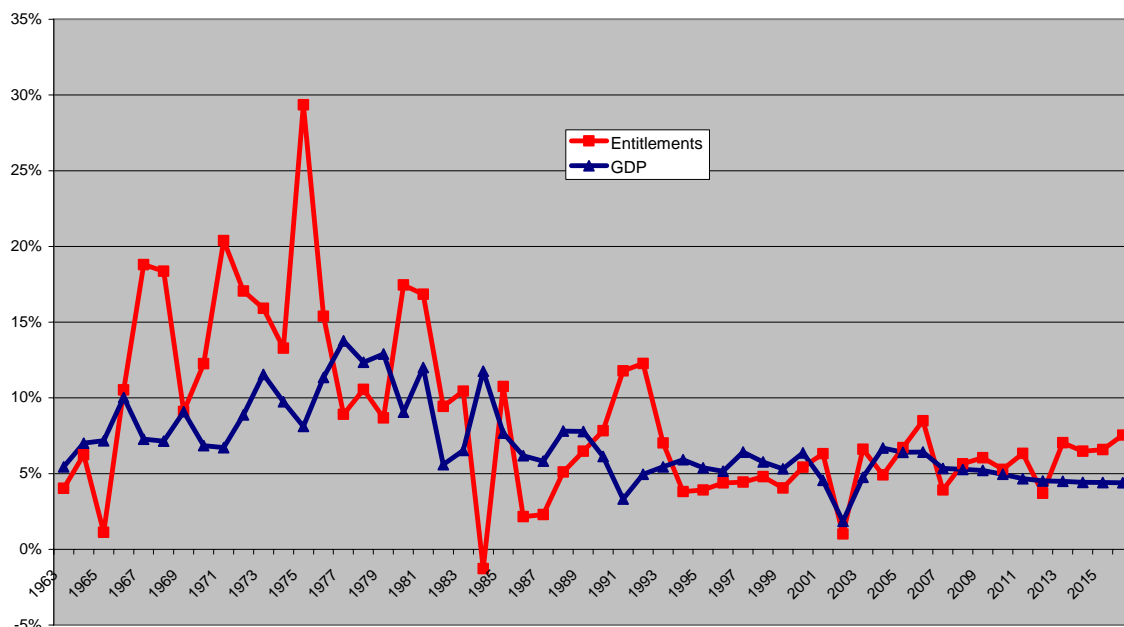
<sup>2</sup> CBO projects spending for Social Security, Medicare, and Medicaid through 2050 based on growth in beneficiary populations as well as other programmatic assumptions. Other entitlements are simply assumed to grow at the same rate as GDP.

<sup>3</sup> In the “low-spending” scenario, the largest three entitlements reach only 13 percent of GDP, and in the high-spending scenario, they reach 29 percent of GDP.

sustainable, the resulting debt must eventually grow no faster than the economy”—that is, debt must represent a constant or declining ratio to GDP.<sup>4</sup>

Although entitlement spending has grown faster than GDP when measured over the past four decades (5 percent vs. 3.5 percent), the difference is entirely attributable to a period of sustained growth in spending from 1967 through 1983 that was spurred by new programs, expansions of existing programs, and three recessions. During that period, entitlement spending increased more than twice as fast as GDP (7 percent vs. 2.8 percent) and doubled as a share of GDP, at a time when two oil shocks, a deep recession, and record-high interest rates were roiling the U.S. economy.

Figure 2. Annual Percent Change in Entitlement Spending and GDP, 1962-2016



Source: Congressional Budget Office, *The Budget and Economic Outlook, Fiscal Years 2007 to 2016*, Washington, DC: U.S. Government Printing Office, January, 2006. Appendix F, Historical Budget Data

Since its high point in 1983, however, entitlement spending has been a picture of stability, growing at virtually the same rate as the economy (3.37 vs. 3.31 percent). It has also shown a slight countercyclical pattern, increasing during every economic recession in the past 30 years (1973–75, 1980–82, and 1990–91), and declining relative to GDP in every economic expansion over the same period (see figure 2). The lines in figure 2 generally move in opposite directions, except for the 1999–2004 period. Compared with the more volatile 1970s, this countercyclical pattern has become more muted in recent

<sup>4</sup> Congressional Budget Office, *Long-Term Budgetary Pressures and Policy Options*, Washington, DC: U.S. Government Printing Office, May 1998, accessed at <http://www.cbo.gov/showdoc.cfm?index=492&sequence=0> on December 7, 2006.

years, but it illustrates that sustained and strong economic growth is still a contributing factor to containing entitlement spending.<sup>5</sup>

The past stability of entitlement spending may be at an end. In the remainder of this report, we will examine (1) the past (44-year) trends in entitlement spending and 44-year projections out to 2050, identifying the factors behind those trends; (2) the beneficial economic effects entitlements have had on their target populations and their distributional effects in comparison with tax expenditures;<sup>6</sup> (3) some factors that may mitigate the effects of entitlements on overall federal spending; and (4) policy changes that might move us toward a solution to our long-run funding dilemma.

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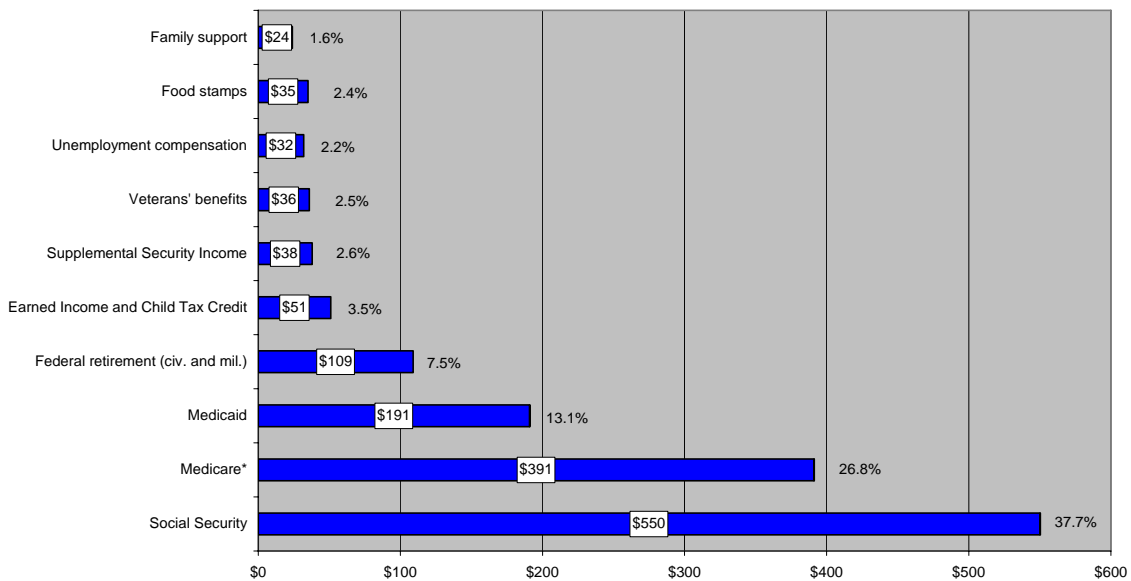
<sup>5</sup> This is a reflection of two reinforcing trends: (1) the rate of growth in entitlements slows during expansions due to slower growth in needy populations; and (2) revenues expand faster than the economy due to graduated tax rates and real income growth, which pushes people's incomes into higher tax brackets.

<sup>6</sup> These are provisions in the tax code that benefit various categories of individuals and corporations.

## 2. WHAT ARE ENTITLEMENTS?

The term “entitlements” is shorthand for a category of benefits defined in the Congressional Budget Reform and Impoundment Control Act of 1974 that are conferred directly by legislation on any person or unit of government that meets the eligibility requirements established by such legislation.<sup>7</sup> In budgetary terms, entitlements are programs that generally carry permanent authorizations and are not subject to annual appropriations, thereby sealing them off from congressional appropriations scrutiny. Rhetorically, however, the term “entitlements” has become a code word to conjure up images of wasteful and extravagant spending on older citizens rather than earned benefits, especially those benefits that are based on contributions such as Social Security, Medicare, unemployment insurance, and federal worker pensions.

**Figure 3. Ten Largest Spending Entitlements in Billions of 2006 Dollars and Each Item as Percent of Top Ten Spending Entitlements, 2006**



Source: Congressional Budget Office, *The Budget and Economic Outlook, Fiscal Years 2007 to 2016*, U.S. Government Printing Office, January, 2006, Appendix F, Historical Budget Data

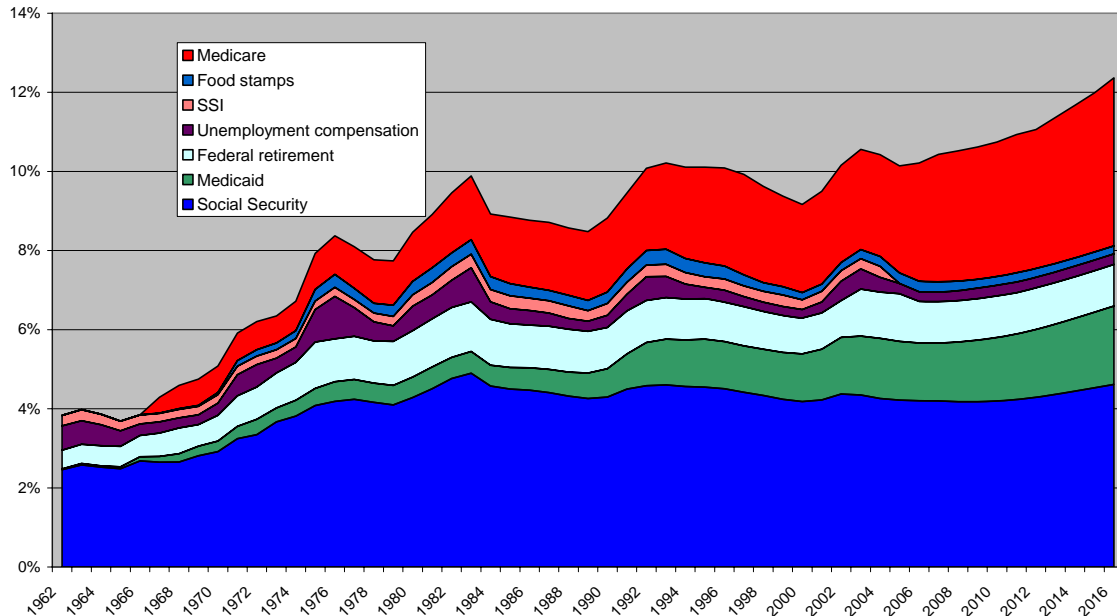
\*Excludes offsetting receipts

Entitlements are often thought of as synonymous with the three largest of those programs—Social Security, Medicare, and Medicaid—because the three compose more than 75 percent of entitlement outlays. But there are actually more than 400 distinct

<sup>7</sup>The Congressional Budget Act defined “entitlement authority” as “authority to make payments (including loans and grants), the budget authority for which is not provided for in advance by appropriations Acts, to any person or government if, under the provisions of the law containing such authority, the United States is obligated to make such payments to persons or governments who meet the requirements established by such law.” (P.L. 93-344, 88 Stat. 297, July 12, 1974).

entitlements.<sup>8</sup> Although most are very small, the largest 10 totaled \$1.457 trillion in 2006, as shown in figure 3 above. Figure 4 shows the growth over time in several of the largest entitlements, which compose more than 90 percent of total entitlement outlays.

**Figure 4. The Seven Largest Federal Entitlement Spending Programs as Percent of GDP, 1962-2016**



Source: Congressional Budget Office, *The Budget and Economic Outlook, Fiscal Years 2007 to 2016*, U.S. Government Printing Office, January, 2006, Appendix F, Historical Budget Data.

In this report we use CBO’s “mandatory spending”<sup>9</sup> budget category to refer to total entitlement spending. This category excludes another item of required spending in the budget—net interest payments. Net interest is not typically considered an entitlement because it is not a benefit program.<sup>10</sup> We follow the CBO practice and do not treat net interest as an entitlement in our analysis.

Some entitlements are “non-means-tested,” meaning there are no income or wealth tests to determine who is eligible for benefits. The “non-means-tested” terminology encompasses social insurance programs, including Social Security, Medicare,

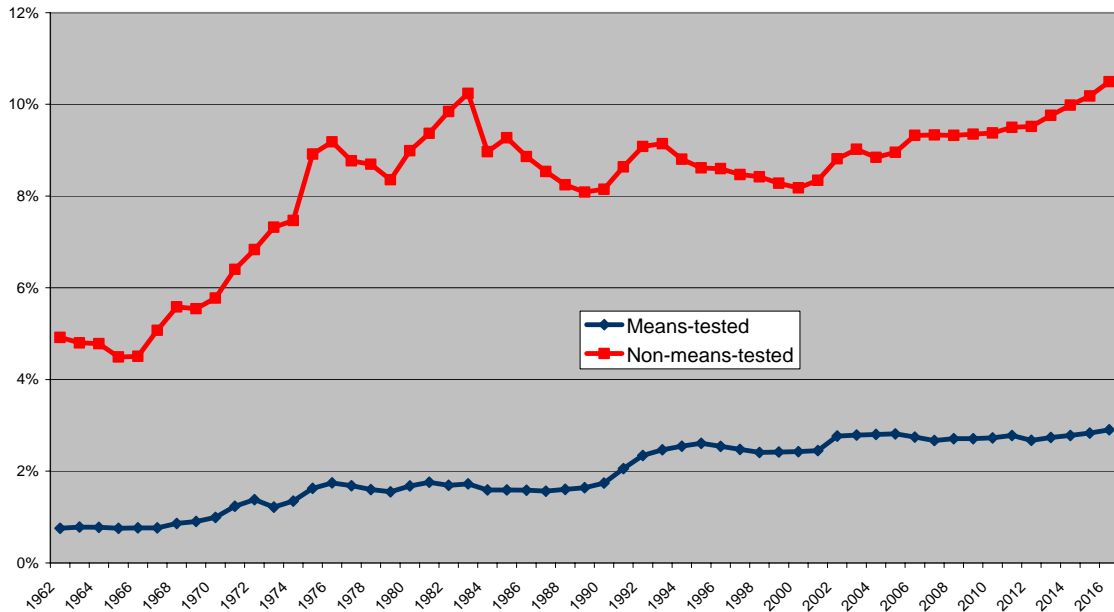
<sup>8</sup> U.S. General Accounting Office, *Budget Policy: Issues in Capping Mandatory Spending*, GAO/AIMD-94-155, Report to the Chairman, Committee on Government Operations, House of Representatives, (Washington, DC: July 18, 1994).

<sup>9</sup> The CBO mandatory spending category is virtually synonymous with total entitlement spending. It includes the largest entitlements—Social Security, Medicare, and Medicaid—and also smaller entitlements such as the payments for black lung benefits and some other payments (e.g., agricultural subsidies) that are not typically thought of when the term “entitlements” is used.

<sup>10</sup> Interest on the debt is a contractual agreement, and not technically an entitlement, but it should be included in any discussion of budget items not *controllable* through the normal congressional appropriations process.

unemployment insurance, and civilian and military retirement programs, which all provide benefits based on work histories rather than need. Other entitlements, such as Supplemental Security Income (SSI), food stamps, or Medicaid, are “means-tested,” which generally means they have either an income or asset test limiting eligibility for the benefits. Non-means tested programs are four to five times as large as means-tested benefits, and the latter grew more gradually over the past 40 years (see figure 5).

Figure 5. Means-Tested and Non-Means-Tested Entitlements as Percent of GDP, 1962-2016



Source: Congressional Budget Office, *The Budget and Economic Outlook, Fiscal Years 2007 to 2016*, U. S. Government Printing Office, January 2006, Appendix F, Historical Budget Data

Besides these programs, spending entitlements also include the outlay portion of the Earned Income and Child Tax Credits. Although these are tax provisions, they result in direct spending because they are “refundable” credits. If a tax filer’s credit exceeds his or her income tax liability, the Internal Revenue Service (IRS) pays a cash refund. The refundable amount is the entitlement outlay.

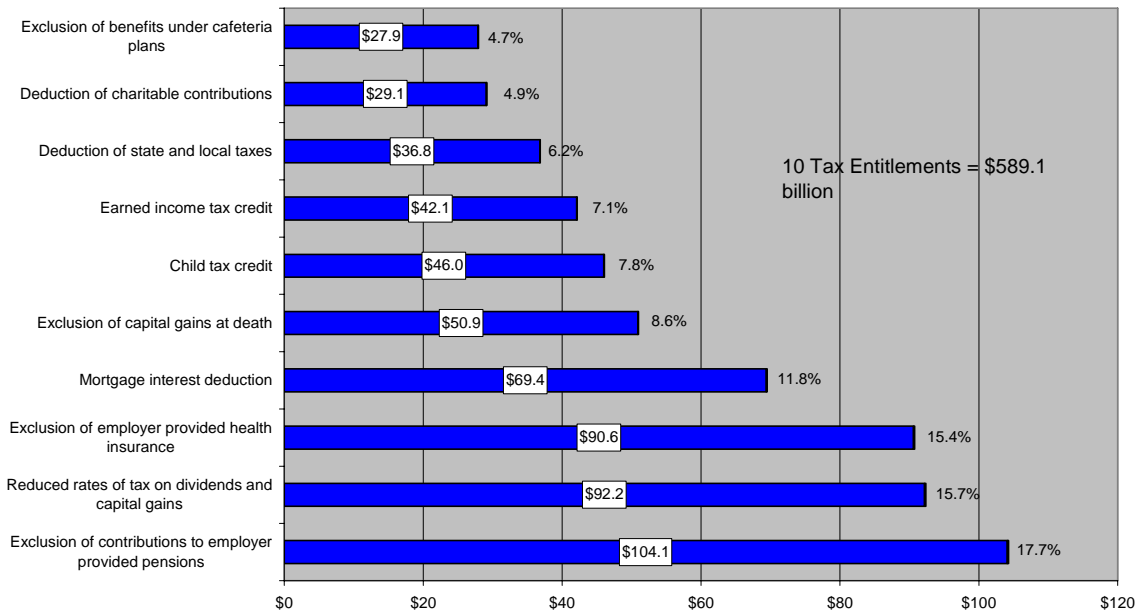
In truth, however, the entire amount of the tax reduction, not just the direct outlay, represents a benefit to the taxpayer, so it is conceptually equivalent to an entitlement. In the language of tax policy, these are commonly known as “tax expenditures,”<sup>11</sup> and they bear a striking resemblance to spending entitlements. Like spending entitlements, they confer direct benefits automatically under the law to those individuals who meet the legal requirements without any advance appropriation,<sup>12</sup> and they have the same effect on the

<sup>11</sup> Tax expenditures are defined in the Congressional Budget Reform and Impoundment Control Act of 1974 as “revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability” (P. L. 93-344, sec. 3(3)).

<sup>12</sup> See Ke Bin Wu, *Reciprocity of Entitlement and Other Safety-Net Program Benefits Among Families in 1995*, Data Digest #21, AARP Public Policy Institute, November 1995.

budget deficit as spending programs do.<sup>13</sup> We refer to them therefore as “tax entitlements.”

**Figure 6. Ten Largest Tax Entitlements in Billions of 2006 Dollars and as Percent of Total Top Ten Tax Entitlements, 2006**

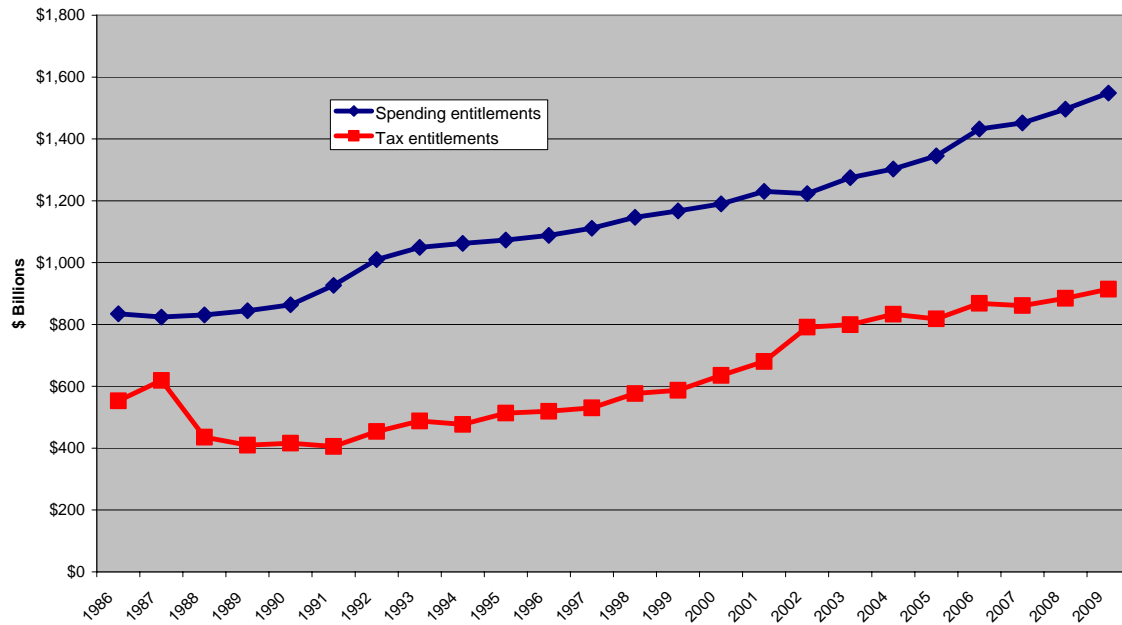


Source: U. S. Congress, Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2006-2010*.

The 10 largest tax entitlements in 2006 are shown in figure 6 above. After the Tax Reform Act of 1986 took effect, tax entitlements increased as a percentage of total spending entitlements from just over 50 percent in 1988 to nearly 60 percent of spending entitlements today (see figure 7).

<sup>13</sup> To quote the Congressional Joint Committee on Taxation, “Special income tax provisions are referred to as tax expenditures because they may be considered to be analogous to direct outlay programs, and the two can be considered as alternative means of accomplishing similar budget policy objectives. Tax expenditures are similar to those direct spending programs that are available as entitlements to those who meet the statutory criteria established for the programs (U.S. Congress, Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2006-2010*, April 25, 2006).

Figure 7. Aggregate Amounts of Spending and Tax Entitlements, 1986-2009 (\$2006)



Sources: Congressional Budget Office, *The Budget and Economic Outlook, Fiscal Years 2007-2016*; Joint Committee on Taxation, *Estimates of Federal Tax Expenditures*, various years.

The total estimated revenue loss from individual tax expenditures was 6.4 percent of GDP in 2006, more than three times the federal budget deficit.<sup>14</sup> Strictly speaking, tax entitlements are not additive. Each one is estimated separately as though all the others are in place. They interact, and the sum of all tax entitlements would not precisely equal the amount of revenue gained if they were all repealed.<sup>15</sup> However, many experts have added them together to provide a rough approximation of their combined effect.

<sup>14</sup> T. Hungerford, *Tax Expenditures: Trends and Critiques*, Congressional Research Service, Report for Congress, September 13, 2006.

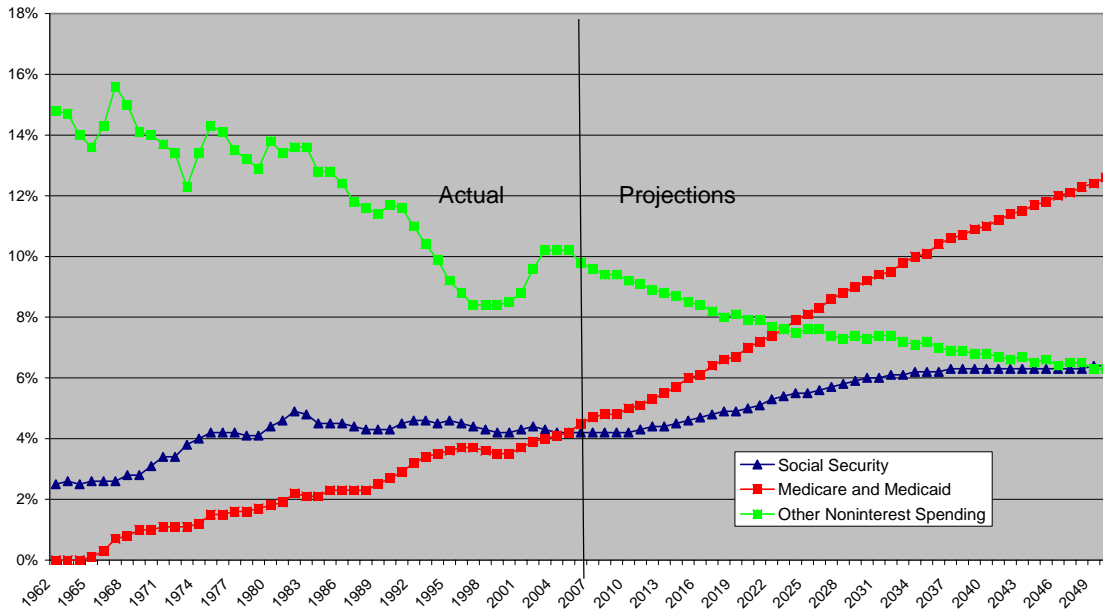
<sup>15</sup> One analyst has estimated the interaction of 12 tax entitlements (including 5 of the 10 in figure 6) by modeling the revenue loss among all 12 simultaneously and comparing that with the sum of the 12 as estimated individually by the Joint Committee on Taxation. He found that the sum of the 12 was 17.5 percent greater than the revenue gain from eliminating all 12 provisions at once. However, two of the largest tax entitlements—the exclusion of employer-provided pension contributions and the exclusion of employer-provided health insurance payments—were not included in that analysis, and might partially compensate for the differential because these two provisions would place some people in higher marginal tax brackets and subject some of them to the alternative minimum tax (AMT). T. Hungerford, *Tax Expenditures: Trends and Critiques*, CRS Report for Congress, September 13, 2006.



### 3. WHAT DRIVES ENTITLEMENT SPENDING?

Demographic aging is not a sufficient explanation for the projected future growth in entitlement spending. If it were, we ought to see similarities in the projected growth of those programs that primarily target older Americans—namely Social Security and Medicare.<sup>16</sup> Instead, we see a very striking difference in the past and future growth patterns of these two social insurance programs, which illustrates that demography as an explanation misses much of the story. Social Security’s growth “bump” from 2010 to 2035 is due almost entirely to the retirement of the boomer cohort, while the steep health spending trajectory is largely due to nondemographic factors, especially medical technology (see figure 8).

**Figure 8. Spending for Largest Three Entitlements and All Other Non-interest Spending as Percent of GDP, 1962-2050**



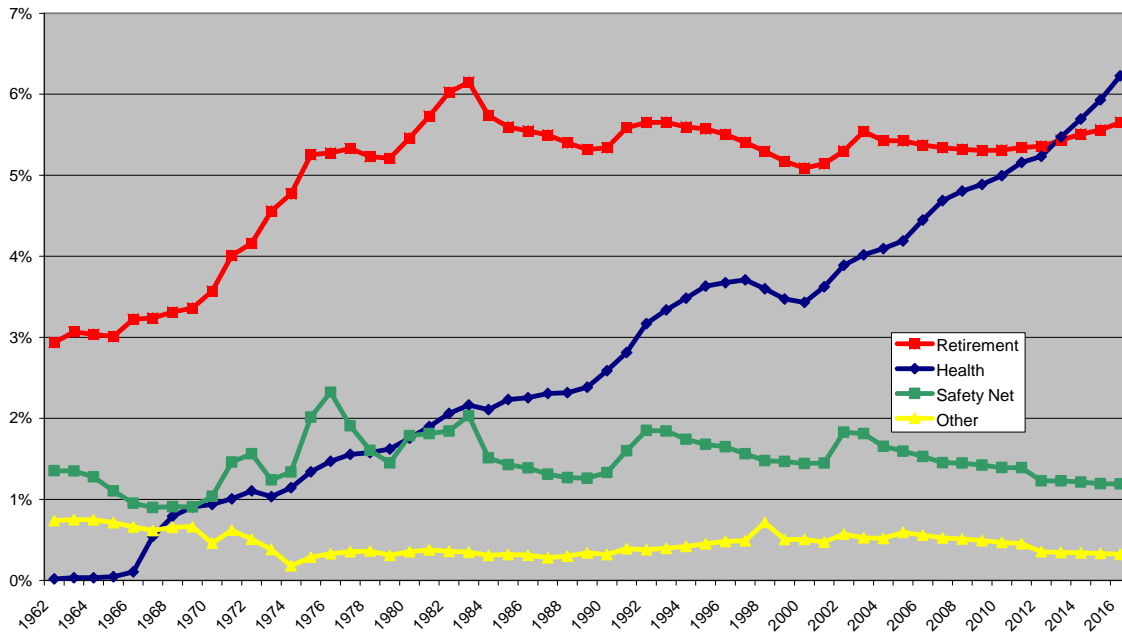
Source: Congressional Budget Office, *The Long-Term Budget Outlook*, December, 2005, Supplemental Data (Intermediate projections)

<sup>16</sup> Both programs have a substantial share of beneficiaries who are under 65 but disabled.

### 3a. Differences in Entitlement Growth Rates

As Figure 9 shows, different types of entitlements have had very different growth histories and will have very different growth futures. *Retirement* programs—Social Security and federal civilian and military pensions—have had a far more stable pattern than federal *health* spending, which is dominated by Medicare and Medicaid.<sup>17</sup> A third “*safety net*” category consists of mostly means-tested programs. This category includes those entitlements—such as SSI, food stamps, and unemployment compensation—that are targeted at individuals who have economic needs. We place all other entitlements into a residual category.

Figure 9. Types of Entitlements as Percent of GDP, 1962-2016



Source: Congressional Budget Office, *The Budget and Economic Outlook, Fiscal Years 2007 to 2016*, Washington, DC: U.S. Government Printing Office, Appendix F, Historical Budget Data

Figure 9 shows the four distinct growth paths these entitlement categories have had since 1962, with change projected through 2016. Health spending is the only category of entitlement spending that has grown without interruption, a virtually unbroken string of increases in health spending over 40 years, with one notable exception in the last three years of the Clinton Administration. Retirement spending peaked at 6.1 percent of GDP in 1983, has since drifted down to 5.5 percent, and is projected to reach only 5.7 percent of GDP in 2016, eight years after the first boomer reaches early eligibility age for Social Security. Safety net spending has fluctuated between 1 and 2 percent of GDP, after peaking in 1976 at 2.3 percent of GDP. It since declined slowly to about 1.5 percent

<sup>17</sup> Medicaid is a federal-state program that pays for health care for certain categories of very-low-income people, as well as being the chief source of spending for long-term care services. It could be regarded as the single largest safety net program, but for analytical purposes we include it with health entitlements.

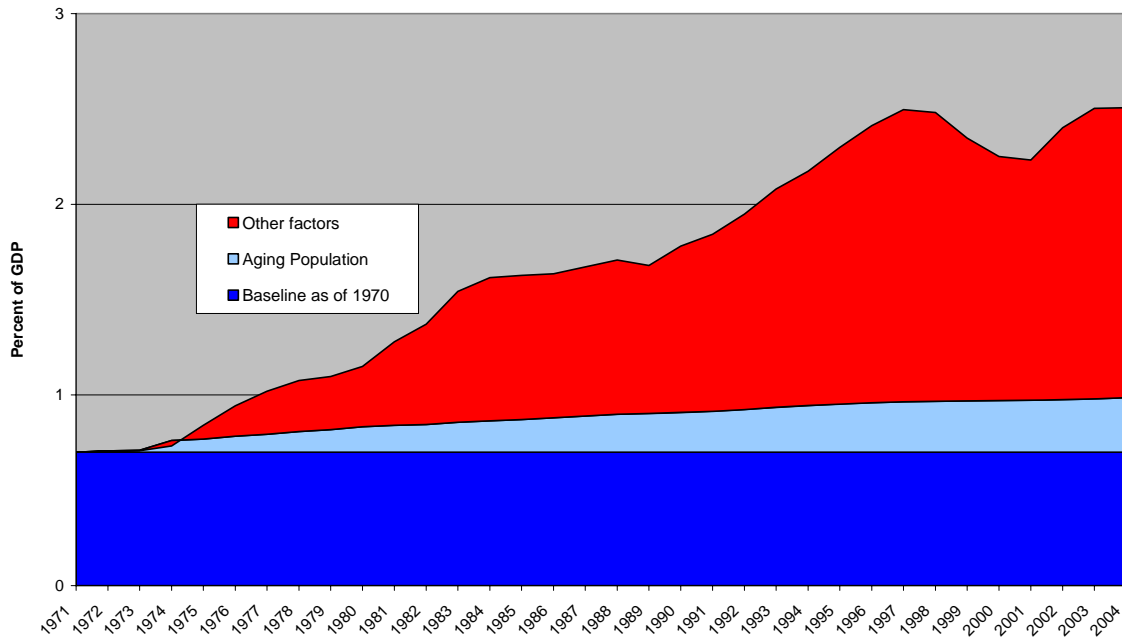
today, and is projected to decline further by 2016. “Other” entitlement spending has never exceeded 1 percent of GDP, and is projected to reach about 0.3 percent in 2016.

CBO projects Social Security, Medicare, and Medicaid separately to 2050 based on size of beneficiary populations and average per capita cost. CBO projects that Social Security will drift upward from about 4 percent to about 6 percent of GDP between 2010 and 2030, then remain virtually flat, whereas the health spending share will continue its rise, reaching roughly double the size of Social Security by 2050 (figure 9).

### 3b. Is Aging the Cause of Increases in Health Entitlements?

If health spending is the primary driver of past and future total entitlement spending, does aging explain that growth?<sup>18</sup> According to estimates from the CBO, Medicare costs have increased in part as a result of population aging but mainly due to other factors. The CBO has estimated that about one-sixth of Medicare's cost growth since 1970 was due to increases in the size of the older population, with the rest attributed to other causes (see figure 10 below).

Figure 10. Sources of Medicare Cost Growth Since 1970



Source: Congressional Budget Office, The Long-Term Budget Outlook, December, 2005, Supplemental Data (Intermediate projections)

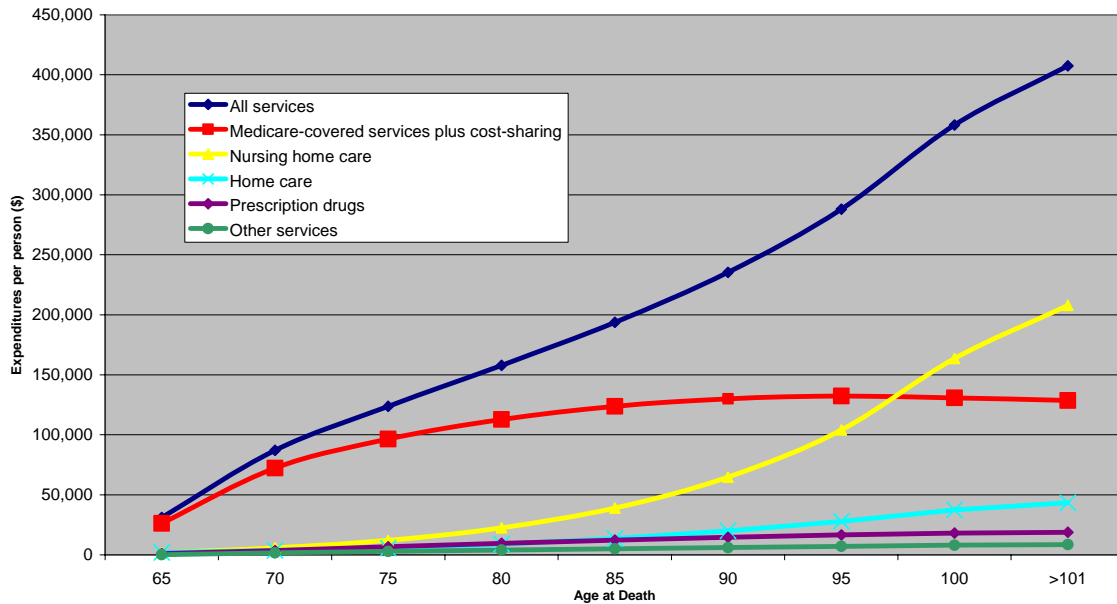
Other studies have demonstrated that lifetime health care costs are not much different for Americans with average life expectancies than for those with much longer lifespans.<sup>19</sup> Elderly persons in better health have longer life expectancies than those in poorer health, but they have similar cumulative health care expenditures until death for those health

<sup>18</sup> Although Medicare is typically thought of as a program for the population age 65 and older, in 2003, about 14.3 percent of enrollees were under age 65, including 13.9 percent who were eligible for Medicare because of a disability and 0.4 percent who were eligible because they have end-stage renal disease (ESRD). ESRD enrollees accounted for 2.7 percent of Medicare spending (an average of \$43,057 per ESRD enrollee), compared to 11.4 percent accounted for by disabled beneficiaries (\$5,419 per enrollee) and 85.6 percent accounted for by beneficiaries age 65 and older (\$6,367 per enrollee).

<sup>19</sup> J. Lubitz et al., "Longevity and Medicare Expenditures," *New England Journal of Medicine* 332, no. 15 (April 13, 1995): 999–1003; B. Spillman and J. Lubitz, "The Effect of Longevity on Spending for Acute and Long-Term Care," *New England Journal of Medicine* 342, no. 19 (May 11, 2000): 1409–15; J. Lubitz et al., "Health, Life Expectancy, and Health Care Spending Among the Elderly," *New England Journal of Medicine* 349, no. 11 (September 11, 2003): 48–55; G. Joyce, E. Keeler, B. Shang, and D. Goldman, "The Lifetime Burden of Chronic Disease Among the Elderly," *Health Affairs*, W5-R16, September 26, 2005 accessed at <http://content.healthaffairs.org/cgi/content/full/hlthaff.w5.r18/DC1> on December 18, 2006.

services that are covered by Medicare<sup>20</sup> (see figure 11). Medicare expenditures will be affected somewhat by the absolute increase in the numbers of the elderly, which will surge between 2010 and 2030 and then rise much more gradually after 2030. Rapid growth in Medicare costs is mainly attributable to other factors.

**Figure 11. Mean Expenditures Per Person for Acute and Long-Term Care From Age 65 Until Death, by Age at Death**



Spillman and Lubitz, "The Effect of Longevity on Spending for Acute and Long-Term Care," *New England Journal of Medicine*, Vol. 342 (19) 1409-15, 2000.

On the other hand, nursing home care costs (which are not for the most part covered by Medicare) and to a smaller extent home care costs climb steeply with advanced age. These costs mainly affect the Medicaid program (see Section 3c below). Even there, however, the total costs are not the result of growth in the elderly population, because the numbers of aged Medicaid beneficiaries has grown little in the past quarter century, but rather to increases in the *per capita* cost of care.

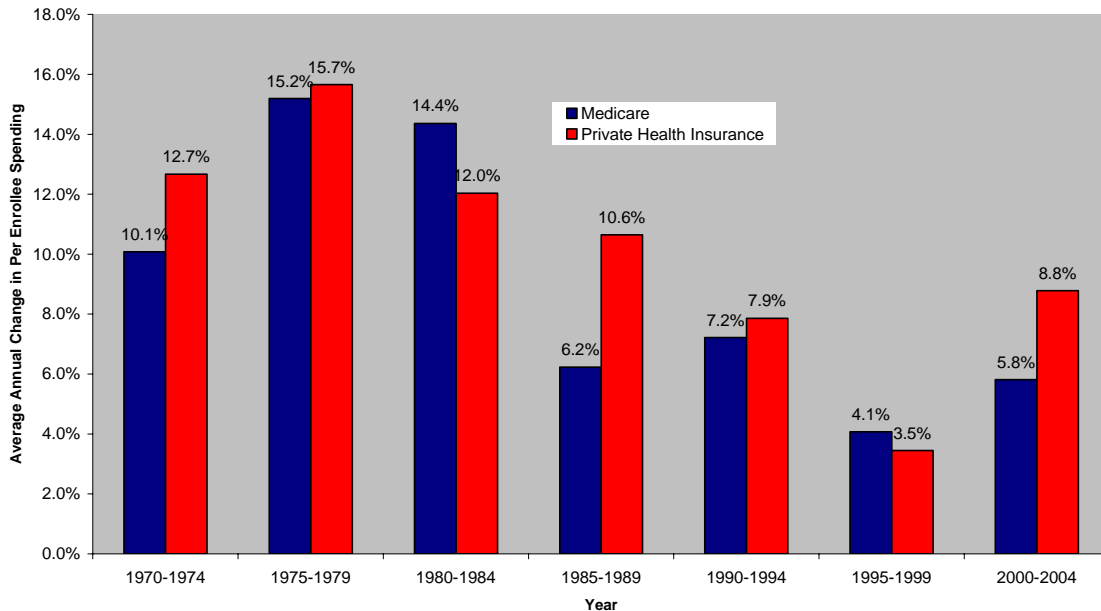
### ***3c. Is the Rise in National Health Spending Due to Health Entitlements?***

Even if Medicare per capita spending growth is not a function of longevity, is our inability to contain national health spending still due to federal health spending? Again, the evidence does not support the conclusion. Although health spending across the board has proven difficult to restrain, Medicare spending overall has been contained more effectively than has private sector health spending for decades. Medicare has actually led the nation in the effort to control health care costs through innovations in reimbursement for hospitals and physicians. These innovations, which have been copied by many private sector insurers, have proven effective, as seen in the differences in the rates of growth of

<sup>20</sup> Lubitz et al., 2003.

public and private health care costs over the past three decades (see figure 12 below).<sup>21</sup> For every five-year period since 1970 except 1980–84 and 1995–99, Medicare spending has increased more slowly than private sector health premiums. If we were to look at individual years, Medicare growth has been slower than private sector growth in 22 of 35 years since 1970—including every year for the past 8 years (data not shown). Given Medicare’s more effective cost containment relative to private sector health care, the burden of proof rests on those who argue that Medicare is driving up national health spending.

**Figure 12. Average Annual Change in Per Enrollee Medicare Spending and Private Health Insurance Premiums (for Common Benefits), 1969-2004**



Note: Annual change is calculated from previous year. Common benefits refers to benefits commonly covered by Medicare and Private Health Insurance. These benefits are hospital services, physician and clinical services, other professional services and durable medical products.  
 Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group, Table 13 at <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/tables.pdf>.

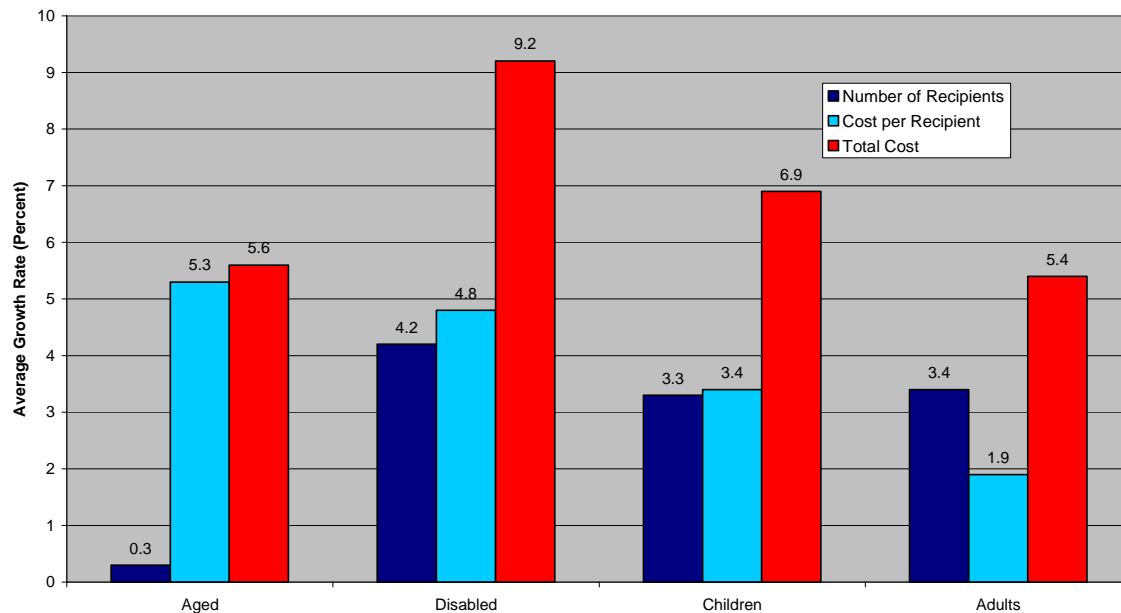
As a federal-state program, Medicaid has much greater spending variation than Medicare because it pays for health care for a variety of low-income persons. About half of Medicaid’s 60 million enrollees are poor children, another one-fourth are either the parents of those children or poor pregnant women, and the remaining fourth are either aged, blind, or disabled. Medicaid covers 20 percent of the U.S. population, considerably more people than Medicare covers.<sup>22</sup> Although Medicaid is often described as America’s health care program for the poor, in reality it covers only about one-third of people whose income is below the poverty level. It also finances about two-thirds of all nursing home stays by the time of a patient’s discharge.

<sup>21</sup> C. Boccuti and M. Moon, “Comparing Medicare and Private Insurers: Growth Rates in Spending Over Three Decades,” *Health Affairs* 22, no. 2 (March–April 2003): 230–7.

<sup>22</sup> Congressional Budget Office, “Medicaid Spending Growth and Options for Controlling Costs,” Statement of Donald B. Marron, acting director, before the Special Committee on Aging, United States Senate, July 13, 2006.

The average growth in costs per Medicaid beneficiary was highest among aged beneficiaries between 1975 and 2002 (5.3 percent per year) (figure 13). Yet because the growth rate in the number of aged beneficiaries was far below that of any other beneficiary group (0.3 percent per year between 1975 and 2002), the growth in the total cost of aged Medicaid beneficiaries was below that of both disabled and child beneficiaries, and only slightly higher than that for adult beneficiaries. Aged beneficiaries accounted for 37 percent of all Medicaid program expenditures in 1975, but by 2002 that share had dipped to 25 percent.<sup>23</sup>

**Figure 13. Average Growth Rates of Medicaid Recipients, Costs per Recipient, and Total Costs by Eligibility Category, Fiscal Years 1975-2002**



Source: Congressional Budget Office, "Medicaid Spending Growth and Options for Controlling Costs, Testimony of Donald B. Marron before the Special Committee on Aging, United States Senate, July 13, 2006.

The consensus among health experts is that a small number of factors account for the bulk of the increases in health spending. The most important of these is technological change, which affects both the public and private health sectors. As the CBO has noted, "In the health care field, unlike in many sectors of the economy, technological advances have generally raised costs rather than lowered them."<sup>24</sup> Another factor is the use or intensity of services, and a third is the sharp increases in the cost of prescription drugs. While they contribute to the growth in the costs of Medicare and Medicaid, these factors also drive up the cost of health care nationally, affecting all payers, both public and private, including individuals, employers, and state and federal governments. That is why health is not only the fastest growing part of the federal budget—it is a rapidly growing share of the economy, reaching one-sixth of GDP in 2004. Medicare and Medicaid merely reflect a health care system whose costs have proven difficult to contain across

<sup>23</sup> Ibid., table 2, p. 8.

<sup>24</sup> Congressional Budget Office, *The Long-Term Budget Outlook*, Washington, DC: U. S. Government Printing Office, December 2005.

the board. Private employers haven't solved the cost containment problem—they have shifted to their workers the costs of providing health insurance coverage, if they offer it at all, and reduce or drop coverage for retired workers.

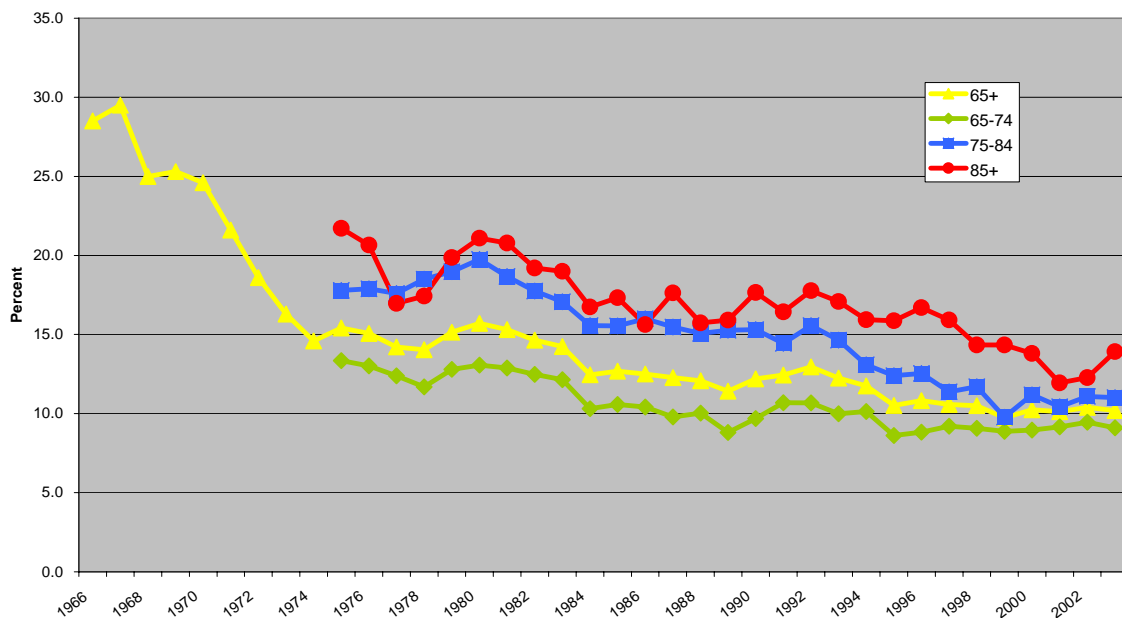
## 4. ECONOMIC AND DISTRIBUTIONAL EFFECTS OF ENTITLEMENTS

Tax entitlements represent an entirely distinct and “hidden” part of our social welfare system.<sup>25</sup> Less visible tax entitlements also have very different distributional effects from spending entitlements. Direct spending entitlement programs have been targeted much more efficiently at lower- and middle-income and vulnerable populations, bringing about dramatic changes in economic and social well-being for Americans of all ages. Tax entitlement benefits have in some cases also brought about dramatic economic changes, such as high rates of homeownership and broad health insurance coverage, but are highly skewed toward the more affluent.

### 4a. Reduced Poverty

Social insurance programs, especially Social Security, have helped bring about a reduction in the elderly poverty rate, from more than 30 percent in the early 1960s to about 10 percent since 1995 (figure 14). Although the official poverty rate among the

Figure 14. Poverty Rates Among Persons Age 65 and Older, By Age, 1975-2003



Source: U. S. Bureau of the Census, *Income, Poverty, and Health Insurance Coverage in the United States: 2004*, P60-229, and previous years' reports.

population ages 65 and older was 10.3 percent in 2003, subtracting Social Security income leaves the poverty rate for this age group at 47.6 percent.<sup>26</sup> Without any

<sup>25</sup> C. Howard, *The Hidden Welfare State: Tax Expenditures and Social Policy in the United States* (Princeton, NJ: Princeton University Press, 1997) and J. Hacker, *The Divided Welfare State: The Battle Over Public and Private Social Benefits in the United States* (Cambridge: Cambridge University Press, 2002).

<sup>26</sup> L. Beedon and K. Wu, *Women Age 65 and Older: Their Sources of Income*, Data Digest #126, AARP Public Policy Institute, 2005. [http://www.aarp.org/research/socialsecurity/benefits/dd126\\_women.html](http://www.aarp.org/research/socialsecurity/benefits/dd126_women.html) accessed December 13, 2006. This static comparison ignores the fact that behavior—for example, length of time in the labor force and perhaps personal saving—would be different if Social Security did not exist.

government cash transfers, including both means- tested and non-means-tested, the poverty rate among older Americans would reach 50 percent.<sup>27</sup>

#### ***4b. Higher Incomes***

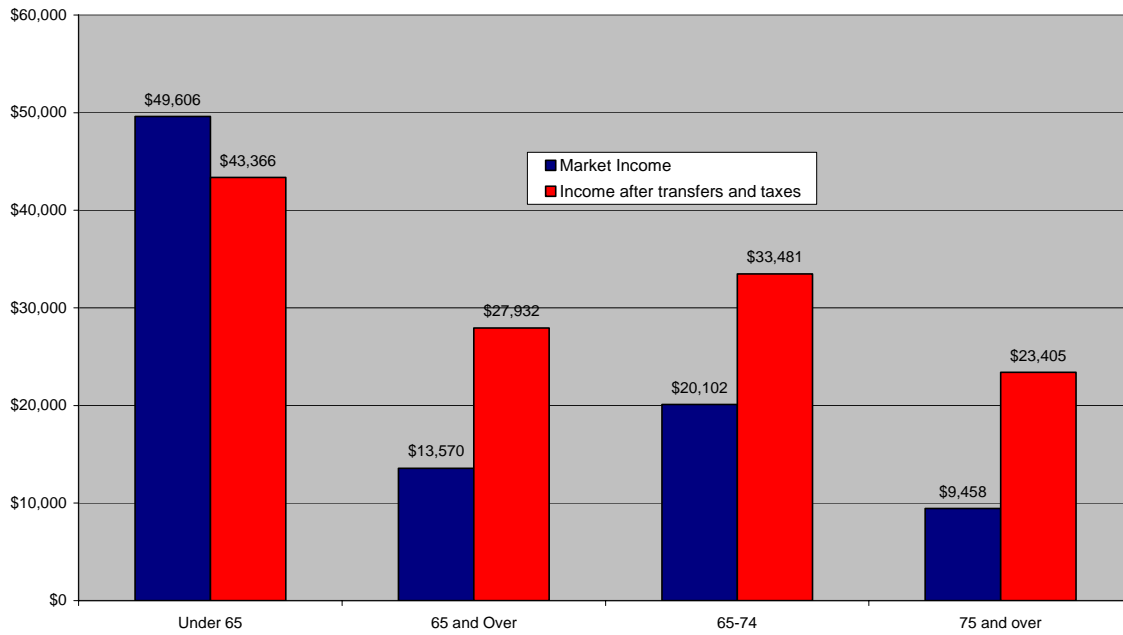
As a result of social insurance programs, the disposable incomes of retirees are higher relative to their market incomes. The Census Bureau has reported that median incomes of people age 65 and older without social insurance cash transfers would have been \$13,570 in 2004, and only \$9,458 for people age 75 and older (barely above the poverty threshold for persons age 65 and older). This compares with median incomes of \$49,606 for people under age 65. Adding in social insurance and other transfers and subtracting taxes, incomes of people 65 and older increased to \$27,932 (\$23,405 for those age 75 and older). This compared with \$43,336 for those under 65. The disparities in income between people under age 65 and those 65 and older were reduced significantly by social insurance transfers. Before the transfers, people age 65 and older had incomes equal to only 27 percent of those under 65, but after transfers the percentage increased to 64 percent (see figure 15).<sup>28</sup>

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<sup>27</sup> U.S. Bureau of the Census, *The Effects of Government Taxes and Transfers on Income and Poverty: 2004*, February 8, 2005. Accessed on December 13, 2006 at <http://www.census.gov/hhes/www/poverty/effect2004/effectofgovtandt2004.pdf>.

<sup>28</sup> Based on the Current Population Survey's pretax, posttransfer income definition and not adjusted for family size. When incomes are adjusted for the lower taxes and smaller household size of older households, income differentials are much smaller. Retirement income among U.S. retirees is, with the exception of Social Security, not indexed for inflation. As a consequence, other income categories decline in real terms over the course of retirement in the United States, while Social Security does not. See T. Hungerford, "Is there an American Way of Aging?: Income Dynamics of the Elderly in the United States and Germany," *Research on Aging* 25, no. 5 (September 2003): 435–55.

Figure 15. Impact of Social Insurance and Other Transfers on Income Levels, 2004

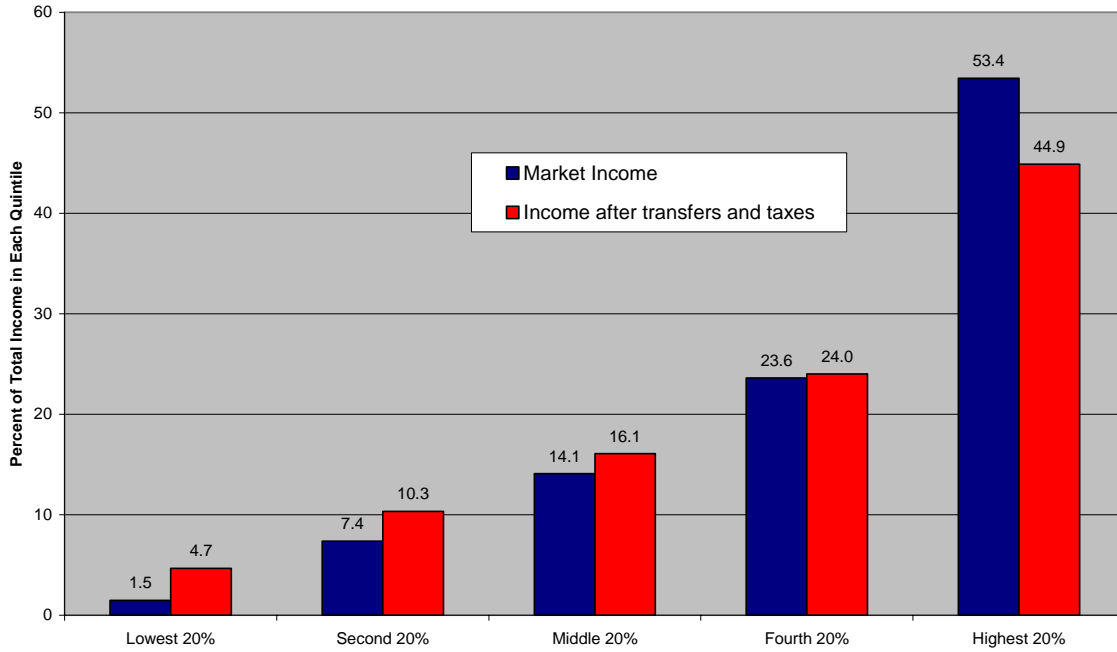


Source: U. S. Bureau of the Census, *The Effects of Government Taxes and Transfers on Income and Poverty: 2004*, February 8, 2005.

#### 4c. Reduced Inequality

Social insurance transfers help bring about greater income equality. As shown in figure 16, the income share of the top 20 percent of the age 65+ income distribution was 53.4 percent in 2004 based on market income alone, but declined to 44.9 percent after government transfers and taxes. At the same time, the income shares of each of the lower income quintiles increased after transfers and taxes.

Figure 16. Impact of Social Insurance and Other Transfers on Income Inequality, 2004



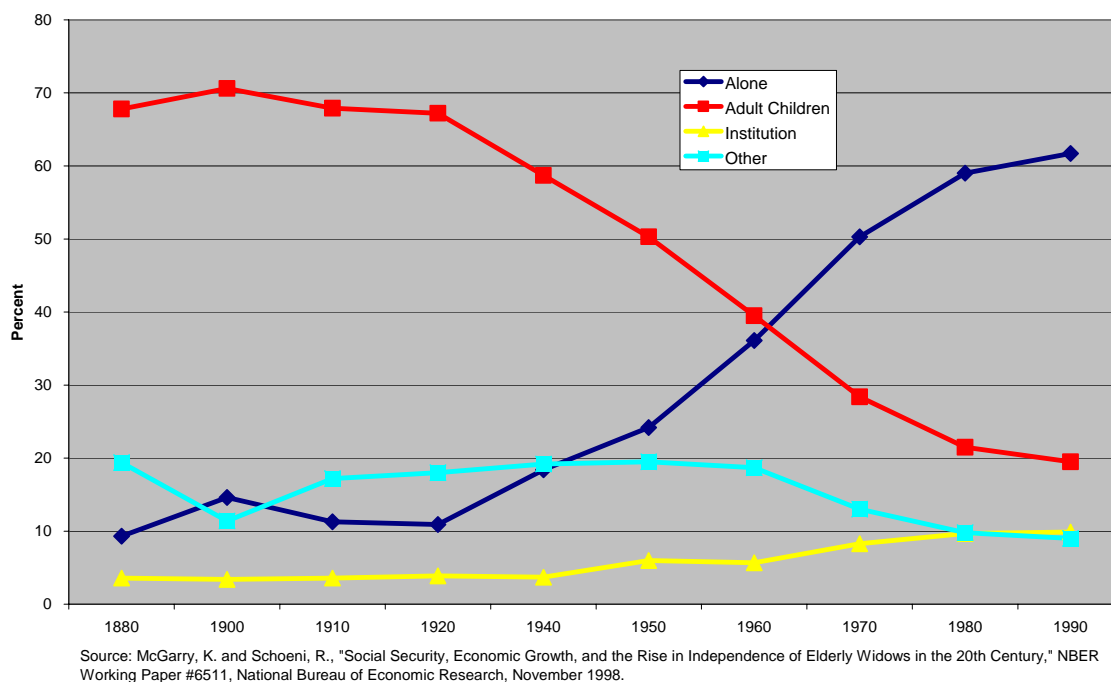
U. S. Bureau of the Census, *The Effects of Government Taxes and Transfers on Income and Poverty: 2004*, February 8, 2005.

#### 4d. Greater Independence

Entitlement programs, in particular Social Security, have also allowed older Americans to live more independently. The share of elderly widows living alone rose from 18 percent in 1940 to 62 percent in 1990, while the share living with adult children declined from 59 percent to 20 percent (figure 17). Income growth, particularly increased Social Security benefits, was the single most important factor causing the change in living arrangements, accounting for nearly two-thirds of the rise in the share of elderly widows living alone.<sup>29</sup>

<sup>29</sup> K. McGarry and R. Schoeni, "Social Security, Economic Growth, and the Rise in Independence of Elderly Widows in the 20<sup>th</sup> Century," National Bureau of Economic Research Working Paper #6511, April 1998.

Figure 17. Percent of Widows Age 65+ with Various Living Arrangements, 1880-1990



#### 4e. Health Insurance Coverage and Affordability

In 1963, only 56 percent of all persons 65 years of age or older had insurance against the costs of hospital care, compared with 75 percent of those ages 35 to 44. By 1970, thanks to Medicare, the proportion of the population age 65 and older with insurance coverage increased to 97 percent. Since then, coverage rates of older Americans have remained at about that level.<sup>30</sup> In 1965, the typical elderly person spent about 19 percent of his or her income on health care. That share fell to about 11 percent in 1968. Since then, it has gradually increased and now exceeds 20 percent of income. But without Medicare, which contributed more than \$5,300 to the health care of seniors, or about 40 percent of the median income of persons age 65 and older, the burden of health care would be much greater for seniors. More likely, they would go without needed care that they simply could not afford. The introduction of Medicare has been estimated to reduce by 40 percent the out-of-pocket costs for the quarter of beneficiaries with the highest out-of-pocket costs.<sup>31</sup>

<sup>30</sup> M. Moon, "Medicare Matters: Building on a Record of Accomplishments," *Health Care Financing Review* 22, no. 1 (Fall 2000): 9–22; AARP Public Policy Institute, *Medicare at 40: Past Accomplishments and Future Challenges*, July 2005. Accessed December 13, 2006 at [http://www.aarp.org/research/press-center/presscurrentnews/medicare\\_at\\_40.html](http://www.aarp.org/research/press-center/presscurrentnews/medicare_at_40.html).

<sup>31</sup> A. Finkelstein and R. McKnight, *What Did Medicare Do (And Was it Worth It?)*, Working Paper #11609, National Bureau of Economic Research, September 2005. Accessed December 13, 2006, at <http://www.nber.org/papers/w11609>.

#### *4f. Distribution of Spending Entitlements by Income*

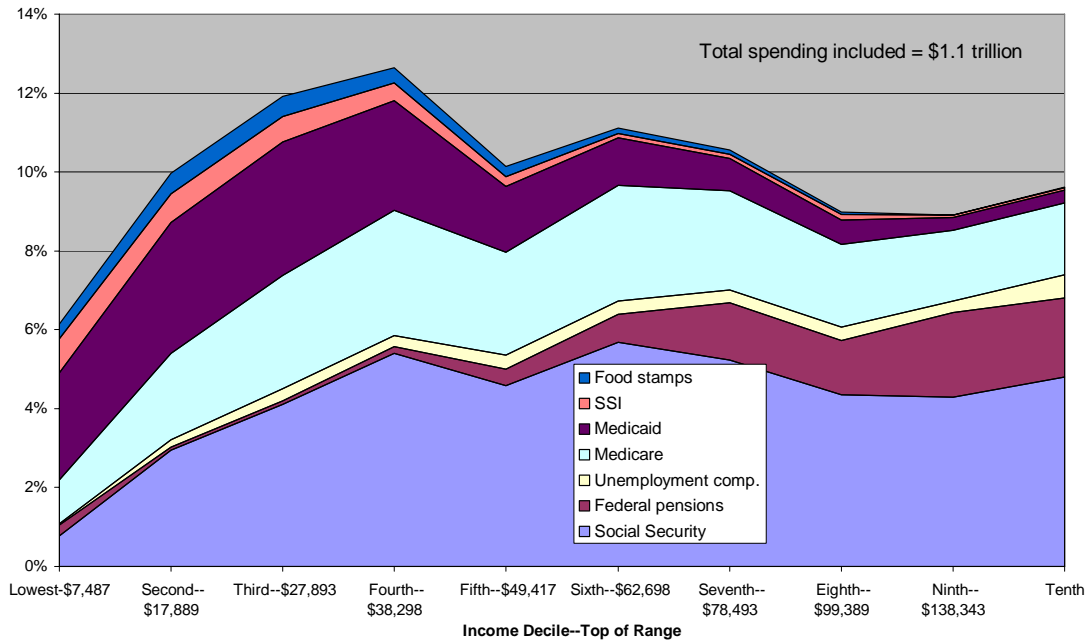
The argument is occasionally heard that spending entitlements should be means-tested, on the grounds that they provide excessive benefits to the affluent. Such arguments are rarely heard about tax benefits. However, we have already seen that Social Security and other spending entitlements reduce inequality. Spending entitlements have contributed to a much reduced poverty rate and a more equal distribution of income; tax entitlements, with certain obvious exceptions like the Earned Income Credit, have not.

Social Security and Medicare are progressive programs, because they redistribute toward lower-income retirees. According to data from the U.S. Current Population Survey, more than 80 percent of Social Security and Medicare benefits are received by people in families with pretransfer incomes below \$20,000. The chart below shows that the seven largest entitlement spending programs (figure 18 encompasses more than three-fourths of all spending entitlement dollars) are fairly evenly distributed by income, with the highest percentage of dollars going to the third and fourth income deciles (tenths).<sup>32</sup>

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<sup>32</sup> The estimates were provided by Chainbridge Software, an economic consulting firm. The income definition used to classify individuals starts with adjusted gross income and adds in tax-exempt interest, the employer share of Medicare and Social Security payroll taxes, workers' compensation, and untaxed Social Security benefits. The cutting points for the 10 deciles, which are for the entire population, are \$7,487 (between first and second deciles), \$17,889, \$27,893, \$38,298, \$49,417, \$62,698, \$78,493, \$99,389, and \$138,343.

**Figure 18. Cumulative Percent Distribution of Selected Major Spending Entitlements, All Ages, By Income Decile, 2006**

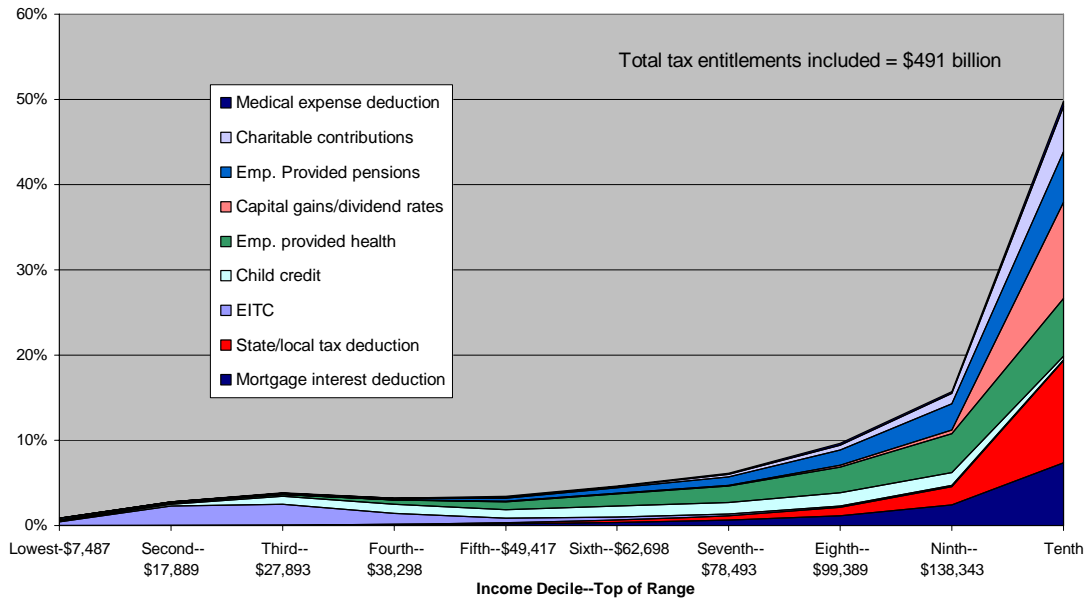


Source: Estimates by Chainbridge Software using their Individual Income Tax Model

#### ***4g. Distribution of Tax Entitlements by Income***

In marked contrast to spending entitlement programs, tax entitlements disproportionately benefit the highest income classes. Figure 19 shows the distribution of nine tax entitlements, including the seven largest, representing more than half of all tax entitlement dollars. Using the same income framework as with spending entitlements, tax entitlements are overwhelmingly concentrated in the top two income deciles, which receive almost two-thirds of all the tax benefits for these nine items.

**Figure 19. Cumulative Percent Distribution of Selected Major Tax Entitlements, All Ages, by Income Decile, 2006**



Source: Estimates by Chainbridge Software using their Individual Income Tax Model

Even those tax entitlements that are fairly widely received, such as the mortgage interest or state and local tax deductions, are highly skewed. Nearly 80 percent of mortgage interest deduction benefits go to the top 20 percent of households. An even larger percentage of state and local tax deductions—nearly 90 percent—goes to households in the top 20 percent.<sup>33</sup>

#### ***4h. Distribution of Entitlements by Age***

Fiscal experts have come to recognize the advantages of looking at government taxes and benefits from a lifetime perspective, rather than that of a single year.<sup>34</sup> Although no data set exists that would allow us to determine the spending and tax entitlement benefits that people receive over their lifetimes, we can examine both types of benefits that people of different ages receive at a given point in time. Comparing benefits at different ages,

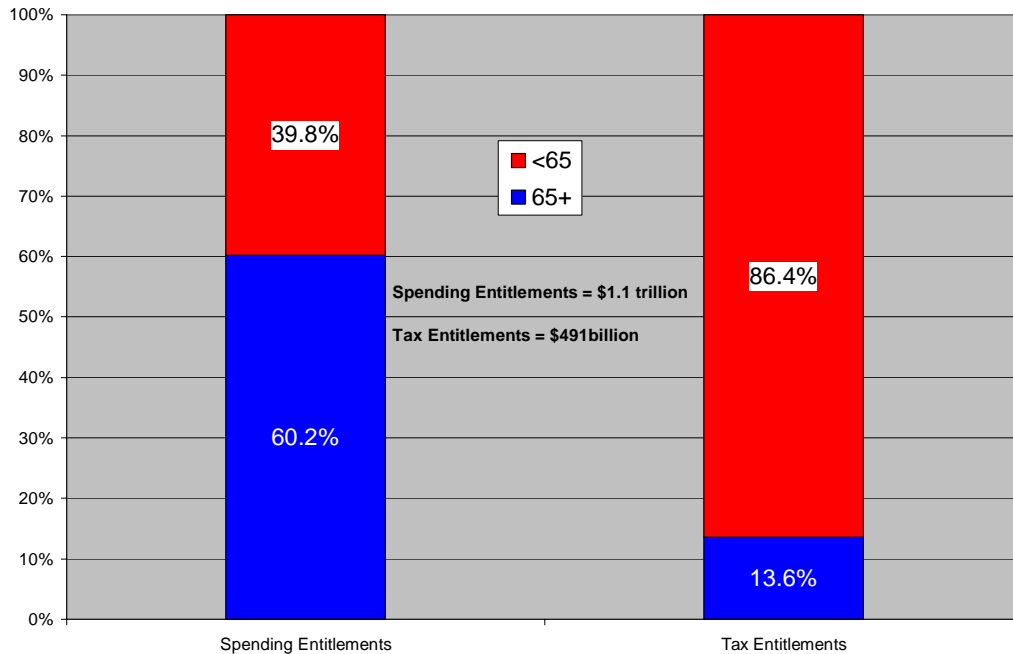
<sup>33</sup> Some experts question whether tax entitlements are really like entitlement spending, arguing that they are not “exceptions” to the “normal” tax code but rather part of lawmakers’ intent, so that the code with all its exceptions should be regarded as the baseline for comparison. That argument would be more persuasive if the special provisions were all part of the original code, but most provisions have not been. Furthermore, because some types of income, such as pension contributions, receive “consumption tax treatment” (taxes deferred until income is consumed), they are explicitly treated differently from the way they would be treated under a pure income tax. This preferential treatment suggests that these provisions are exceptions.

<sup>34</sup> G. Metcalf, “Lifecycle v. Annual Perspectives on the Incidence of a Value-Added Tax,” *Tax Policy and the Economy* Vol. 8 (1994): 45–64; D. Fullerton and D. Rogers, *Who Bears the Lifetime Tax Burden?* (Washington, DC: The Brookings Institution, 1993); A. Reschovsky and H. Chernick, “Measuring Consumption Tax Burden: Revisiting the Annual Income-Lifetime Income Debate,” presented at the 88<sup>th</sup> Annual National Tax Association conference, October 8–10, 1995.

although an imperfect approach, might suggest how benefits are distributed across the life cycle.

Figure 20 compares the age distribution of the seven spending and the nine tax entitlements discussed above. Of all spending entitlements (a total of more than \$1.1 trillion included here), roughly 6 in 10 federal dollars went to the older population, while nearly 7 of 8 federal tax benefit dollars (of nearly \$500 billion included here) went to those under age 65.<sup>35</sup>

**Figure 20. Shares of Spending and Tax Entitlements Received, by Age Group, 2006**



#### ***4i. Joint Distribution of Spending and Tax Entitlements by Age and Income***

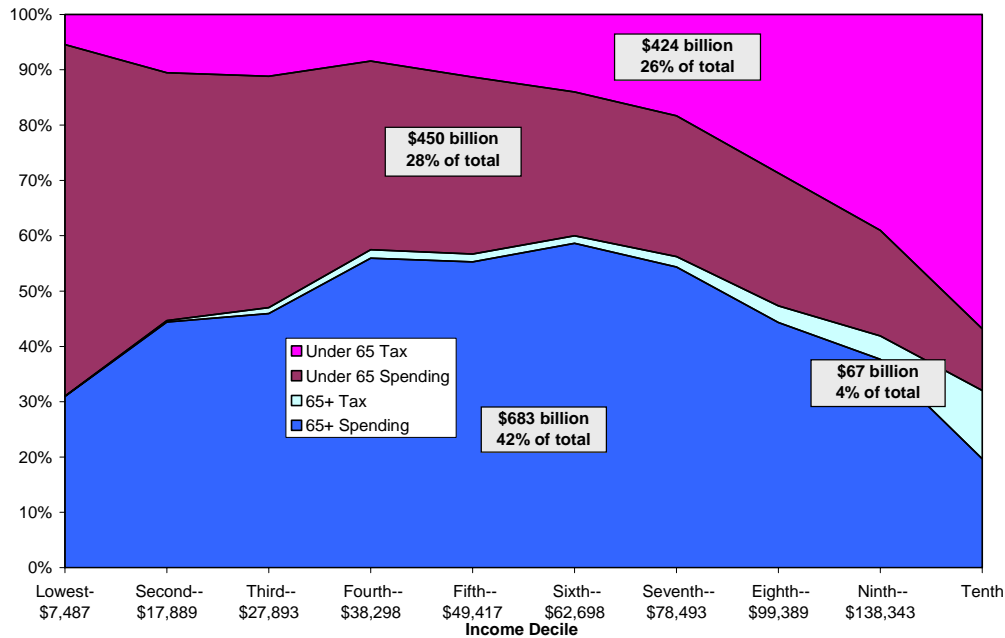
Figure 21 below combines the distribution of both spending and tax entitlements by age and income. Overall, about 54 percent of all entitlement dollars are received by the under age 65 population, represented by the top two areas in figure 21. The 54 percent is divided roughly equally between spending (\$450 billion) and tax (\$424 billion) entitlements. Only 46 percent of all the entitlement benefits represented in figure 21 are received by the age 65 and older population, 42 percent coming from spending and 4 percent from tax entitlements.<sup>36</sup>

<sup>35</sup> In this analysis, we have apportioned Social Security, Medicare, and Medicaid benefits to those under age 65 and those age 65 and older.

<sup>36</sup> It is true that a smaller percentage of the population age 65 and older pays income taxes compared with younger age groups, and therefore have less likelihood of benefiting from tax entitlements. But the reason they do not pay income taxes is that a higher percentage of elderly households have incomes too low to be taxable and therefore are not able to receive tax benefits.

The share of entitlements received by older Americans tends to be more concentrated in the middle of the income distribution. By contrast, the entitlement benefits received by the under-65 age group occur at the two extremes of the income distribution. The low-income extreme is due mainly to means-tested benefits, whereas the high-income extreme is due mainly to tax benefits for the affluent. Although this suggests nothing about the individual lifetime distribution of entitlement benefits, collectively these benefits are spread fairly evenly across the life cycle, not concentrated on those in retirement.

**Figure 21. Shares of Combined Spending and Tax Entitlements Received by 65+ and Under 65 Age Groups, by Income Decile (in thousands of 2006 dollars)**



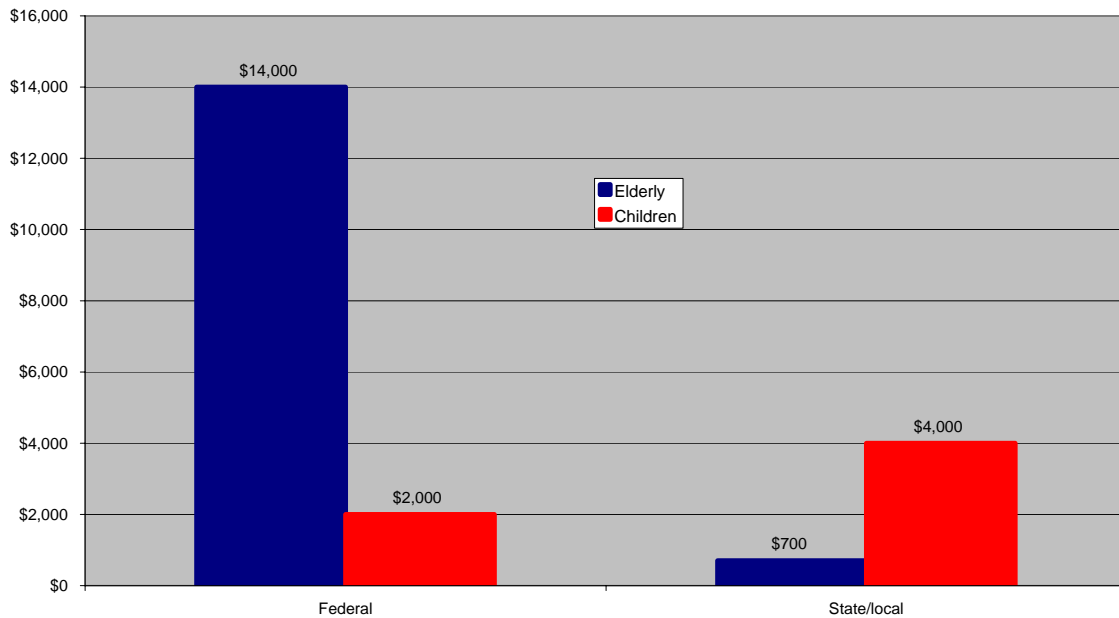
## BOX 1 ENTITLEMENT BENEFITS FOR OLDER AND YOUNGER AMERICANS

The growth in Social Security and Medicare costs has occasionally focused attention on the share of the budget spent on retirees and children. CBO, asked to testify before Congress on this question in 2000, reported that federal spending on people age 65 and over was 34.8 percent of the budget in FY2000 (\$615 billion), compared with 8.4 percent for children under age 18 (\$148 billion). CBO projected spending to rise to 42.8 percent of federal outlays for the elderly by FY2010, compared with only 9.4 percent for children.<sup>37</sup>

According to the Census Bureau’s annual State and Local Government Finances survey, state and local governments spent \$595 billion in 2001–02 on public education, or about 29 percent of total state/local spending.<sup>38</sup> This is fairly close to the \$615 billion, or 35 percent spent of federal dollars, spent by the federal government on older persons in FY2000. These dollar totals do not adjust for the relative numbers of the elderly and children.

A more direct per capita comparison in a 1998 CBO report found that state and local governments spent about \$4,000 on each child in 1995, compared with about \$700 for each elderly person, whereas the federal government spent \$14,000 for each elderly person and \$2,000 per child<sup>39</sup> (figure 22). Total spending per child was roughly 40 percent of the spending per elder. A division of labor of sorts exists between the states and the federal government. States and localities have traditionally provided a basic entitlement for children and young adults—public education—and have not undertaken widespread redistribution, in part because of the ability of state residents to escape state and local taxation by relocating. The federal government, with a broader power to tax as well as greater immunity from a “voting with your feet” reaction to personal taxation, has assumed responsibility for entitlements that provide income support and income redistribution.

**Figure 22. Amounts Spent Per Capita on Aged and Children by Federal Government v. States and Localities, 1995**



Source: Congressional Budget Office, *Long-Term Budgetary Pressures and Policy Option*, May, 1988, Box 1-2.

<sup>37</sup> Congressional Budget Office, “Federal Spending on the Elderly and Children,” 2000. Accessed at <http://www.cbo.gov/showdoc.cfm?index=2300&sequence=0#T1> December 13, 2006.

<sup>38</sup> Census Compendium of State Government Finances for 2002 (issued in October 2005). Accessed at <http://www.census.gov/prod/2005pubs/gc024x5.pdf> December 13, 2006.

<sup>39</sup> Congressional Budget Office, *Long-Term Budgetary Pressures and Policy Options* (May 1998), Box 1-2, accessed at <http://www.cbo.gov/showdoc.cfm?index=492&sequence=0> on December 7, 2006.



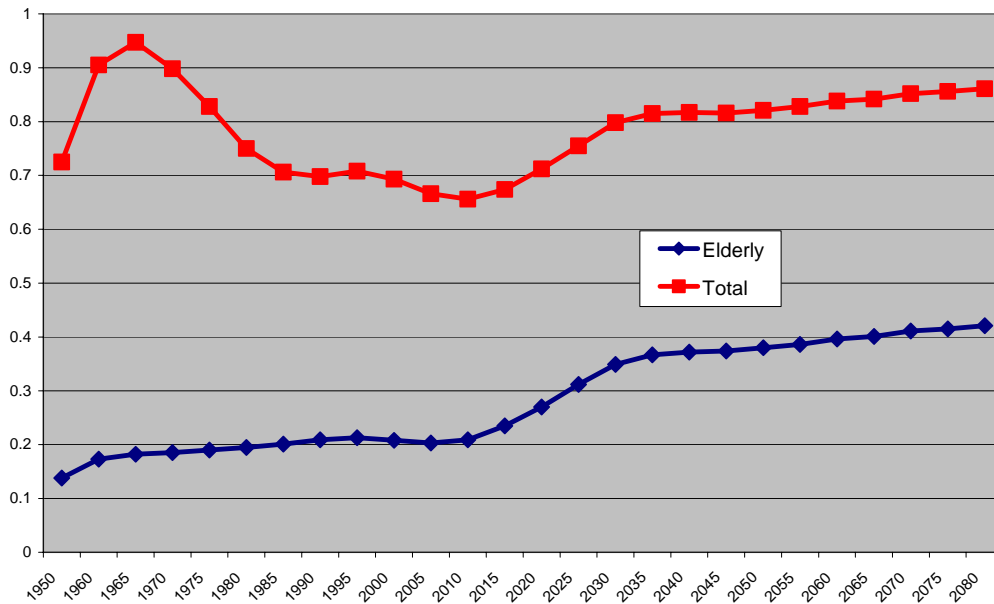
## 5. SOME MITIGATING FACTORS

A number of factors might mitigate adverse long-term budgetary trends. Working longer would have many benefits, both personal and social, including increased ability to save for retirement, reduced number of retirement years to finance, and increased revenues to finance federal programs. Saving more would improve workers' and families' retirement prospects, as traditional pensions become scarcer and prove less reliable. Sustaining rapid growth in worker productivity will contribute to economic growth. Continued slowing of disability and nursing home occupancy rates will lower long-term care costs.

### 5a. Future Dependency Ratios Stay Below Their 1960s Levels

The slow growth in the labor force and rapid growth in the retired population cause the aged dependency ratio—the ratio of elderly persons to working-age persons—to rise from 0.203 in 2005 (or about four workers to every elderly person) to 0.431 in 2080 (or slightly more than two workers to every elderly person) (figure 23).

Figure 23. Aged and Total Dependency Ratios, 1950-2080



Source: 2005 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, Table V.A.2.

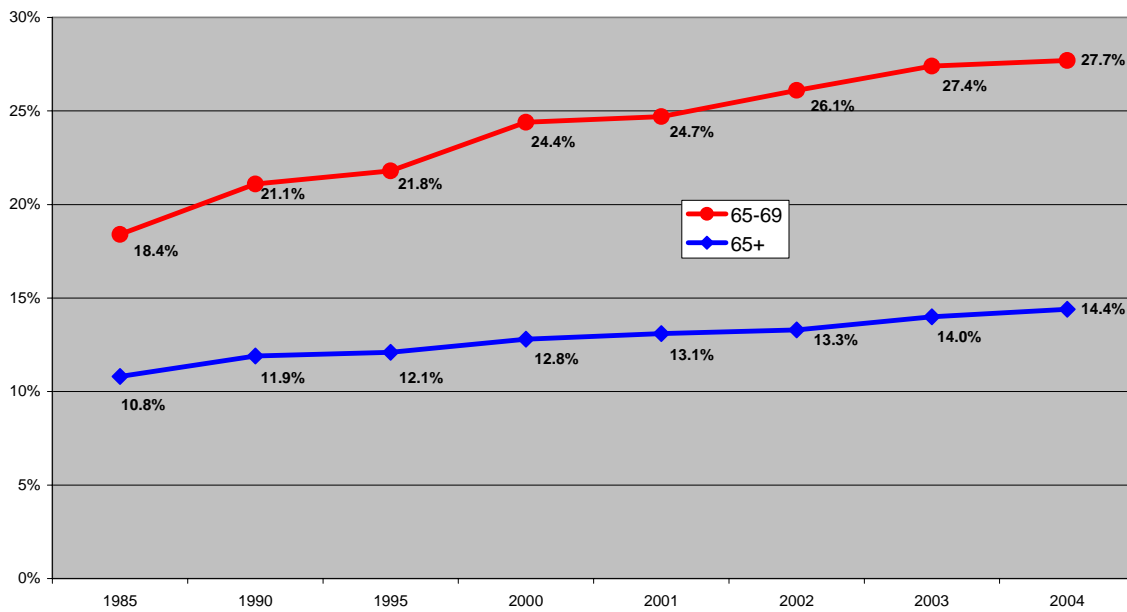
However, a more comprehensive way of looking at the costs to society is the total dependency ratio—the ratio of the retirees *plus* youth to people of working age. The increasing need to spend on the old is partially offset by the shrinking need to provide for the young through schools. The total dependency ratio reached its peak in the mid-1960s, with nearly one worker for each child or elderly person. It fell steadily from the late 1960s through 2005, and it has not yet bottomed out. By 2010 it is expected to bottom out and start rising again, although it will not return to its 1965 peak during the 75-year forecast horizon. Even as late as 2080, the ratio is projected to stand at 0.859—lower than

it was in 1960.<sup>40</sup> As noted earlier, the costs of younger dependents are approximately 40 percent those of older dependents.<sup>41</sup>

### 5b. Lengthening Work Lives

It is often suggested that it will be necessary to raise the Social Security normal retirement age to make Social Security solvent. Yet important shifts have already taken place in labor force participation rates among older workers, and the trends show signs of continuing (see figure 24).

Figure 24. Labor Force Participation Rates of Persons Age 65-69 and Total 65+ Population, 1985-2004



Source: U.S. Bureau of Labor Statistics, *Employment and Earnings*, January 1986, 1991, 1996, 2001-2005.

There has been a perceptible and steady increase over time in the labor force participation of people in their late 50s, 60s, and 70s.<sup>42</sup> Labor force participation rose in the late 1990s, undoubtedly in part to the robust economy, but the trend continued during the 2001 recession and after.

<sup>40</sup> Report of the Board of Trustees of the Old Age and Survivors and Disability Insurance Trusts Funds, 2005, Table V.A.2) accessed at <http://www.ssa.gov/OACT/TR/TR06/tr06.pdf> on December 14, 2006.

<sup>41</sup> Congressional Budget Office, "Federal Spending on the Elderly and Children," 2000. Accessed at <http://www.cbo.gov/showdoc.cfm?index=2300&sequence=0#T1> on December 14, 2006; D. Cutler, J. Poterba, L. Sheiner, and L. Summers, "An Aging Society: Opportunity or Challenge?" *Brookings Papers on Economic Activity* 1 (1990): 1-73.

<sup>42</sup> J. Quinn, *Retirement Patterns and Bridge Jobs in the 1990s*, Issue Brief #206 (Washington, DC: Employee Benefit Research Institute, February 1999).

Previous projections of labor force participation rates for workers age 55 and older<sup>43</sup> may underestimate the increase.<sup>44</sup> Not only has the reversal of the long-term downward trend in labor force participation been sustained since 1985, but 80 percent of boomers report that they expect to work at least part time in retirement.<sup>45</sup> The age at which people can receive full Social Security benefits is increasing to 67, reducing benefits accordingly and encouraging more people to work longer.

Although total Social Security program costs are little affected if people delay Social Security benefit receipt because of actuarial adjustments,<sup>46</sup> working longer and opting for later benefits increase monthly Social Security benefit payments and reduce the number of years workers need to cover with their private savings. For example, the oldest boomers will be eligible to receive only 75 percent of their normal Social Security benefit if they apply at age 62 (70 percent for younger boomers), 100 percent if they wait until age 66, and 132 percent if they wait until age 70.<sup>47</sup> Working longer also gives a worker fewer years of retirement to finance and more time to accumulate additional savings. It also helps the Social Security trust fund by adding payroll tax revenues.

<b>Table 1. How Retirement Age Affects the Total Assets Needed in Retirement (Married Couple at 50<sup>th</sup> Income Percentile)</b>					
Retirement Age	80 Percent of Preretirement After-Tax Income	Annual Social Security Payments <sup>a</sup>	Additional Annual After-Tax Retirement Income (Besides SS) Needed to Achieve 80 Percent of Preretirement Income	Assets Needed at Retirement to Produce That Additional Income Through an Annuity <sup>b</sup>	Personal Assets Needed at Age 62 to Produce That Additional Income at Retirement Age <sup>c</sup>
<b>50th Income Percentile</b>					
62	\$46,848	\$20,088	\$26,760	\$510,757	\$510,757
66	46,848	27,648	19,200	298,380	243,340
70	46,848	38,136	8,712	117,651	51,768

Source: Congressional Budget Office, *Retirement Age and the Need for Saving*, Washington, DC: U.S. Government Printing Office, May 12, 2004

a. Based on SSA's Social Security Quick Calculator accessed at <http://www.ssa.gov/OACT/quickcalc/index.html>

b. Based on federal Thrift Savings Plan annuity cost, accessed at <http://calc.tsp.gov/annuityCalculators/annuity.cfm>

c. Assuming a 10 percent saving rate between age 62 and retirement age.

Table 1 above demonstrates that a working couple at the median income level could, by working until age 70 rather than retiring at age 62, reduce by 90 percent (from \$510,000

<sup>43</sup> H. Fullerton, "Labor Force Projections to 2008: Steady Growth and Changing Composition," *Monthly Labor Review* 122, no. 11 (November 1999): 19–32.

<sup>44</sup> S. Verma and S. Rix, *Retirement Age and Social Security Reform: The Macroeconomic Effects of Working Longer*, Issue Brief #59, AARP Public Policy Institute, 2002.

<sup>45</sup> AARP, *Baby Boomers Envision Their Retirement: An AARP Segmentation Analysis*, Washington, DC: AARP, 1999.

<sup>46</sup> Some cost reduction occurs if people die prior to receiving benefits.

<sup>47</sup> Congressional Budget Office, *Retirement Age and the Need for Saving*, Washington, DC: U.S. Government Printing Office, May 12, 2004.

to \$51,000) the amount of assets they would need *at age 62* to produce a desired replacement rate of 80 percent in retirement. The added years of work nearly double the couple's annual Social Security benefits at age 70 compared to age 62, and reduce by two-thirds the amount of additional income (besides Social Security) needed to achieve an 80 percent replacement rate (assuming they save 10 percent out of wages and earn a 3 percent return after inflation on their accumulated assets).

### ***5c. Declining Disability Rates***

A study of changing disability patterns found that the prevalence of disability among older Americans is declining at an accelerating pace.<sup>48</sup> The percent of people age 65 and older with disabilities declined 1.6 percent per year from 1989 through 1994 and 2.6 percent annually from 1994 through 1999. The population is living longer, but doing so with lower rates of disability in later life, perhaps reducing the costs of chronic health and nursing care (see figure 25).

Singer and Manton<sup>49</sup> have argued that if a 1.5 percent annual decline (comparable to 1989 to 1994 and slower than 1994 through 1999) in chronic disability continued indefinitely, it would substantially bolster the long-term fiscal solvency of *both* the Medicare and Social Security programs. That rate of disability decline has not only continued but has accelerated. However, others have suggested that, despite savings from reductions in the prevalence of disability, the increases in technology-driven costs are still likely to exceed those savings.<sup>50</sup>

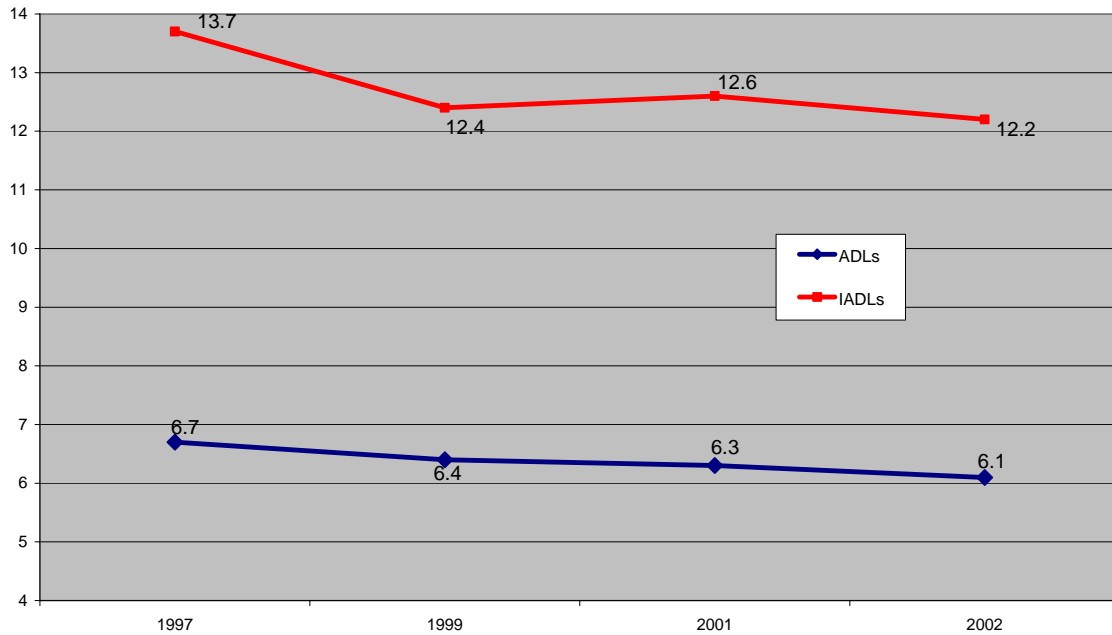
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<sup>48</sup> K. Manton and X. Gu, "Changes in the Prevalence of Chronic Disability in the United States Black and Nonblack Population Above Age 65 from 1982 to 1999," *Proceedings of the National Academy of Sciences*, 98, no. 11 (March 27, 2001): 6354–9.

<sup>49</sup> B. Singer and K. Manton, "The Effects of Health Changes on Projections of Health Service Needs for the Elderly Population of the United States," *Proceedings of the National Academy of Sciences*, 95, no. 26 (December 22, 1998): 15618–22..

<sup>50</sup> D. Cutler, "Declining Disability Among the Elderly," *Health Affairs* 20, no. 6 (November–December 2001): 11–27.

**Figure 25. Percentage of Persons Age 65 and Older Having Any Limitation on Activity or Instrumental Activity of Daily Living 1997-2002**



Source: National Center on Health Statistics, *Health, United States, 2004*, Table 56.

Although they did not estimate impacts on the Medicaid program, Manton and Gu found that the relative decline in nursing home use between 1994 and 1999 was larger (3.5 percent per year) than the decline in disability, suggesting the potential for significant savings in the Medicaid program as well.<sup>51</sup> Nursing home utilization occupancy rates per thousand population have declined by 41 percent between 1973 and 2004 for the 65 and older population.<sup>52</sup> Health improvements have shrunk the long-term care market directly by reducing the base of people who need care, and they have shrunk the market indirectly by increasing the supply of healthy elderly people who can provide care at home.<sup>53</sup>

<sup>51</sup> K. Manton and X. Gu, 2001.

<sup>52</sup> According to data from the National Center for Health Statistics (NCHS) adjusted to the 2000 population by the NCHS and AARP's Public Policy Institute.

<sup>53</sup> D. Lakdawalla and T. Philipson, "The Rise in Old-Age Longevity and the Market for Long-Term Care," *American Economic Review* 92, no. 1 (March 2002): 295–306.



## 6. ARE ENTITLEMENTS SUSTAINABLE FOR THE LONG TERM?

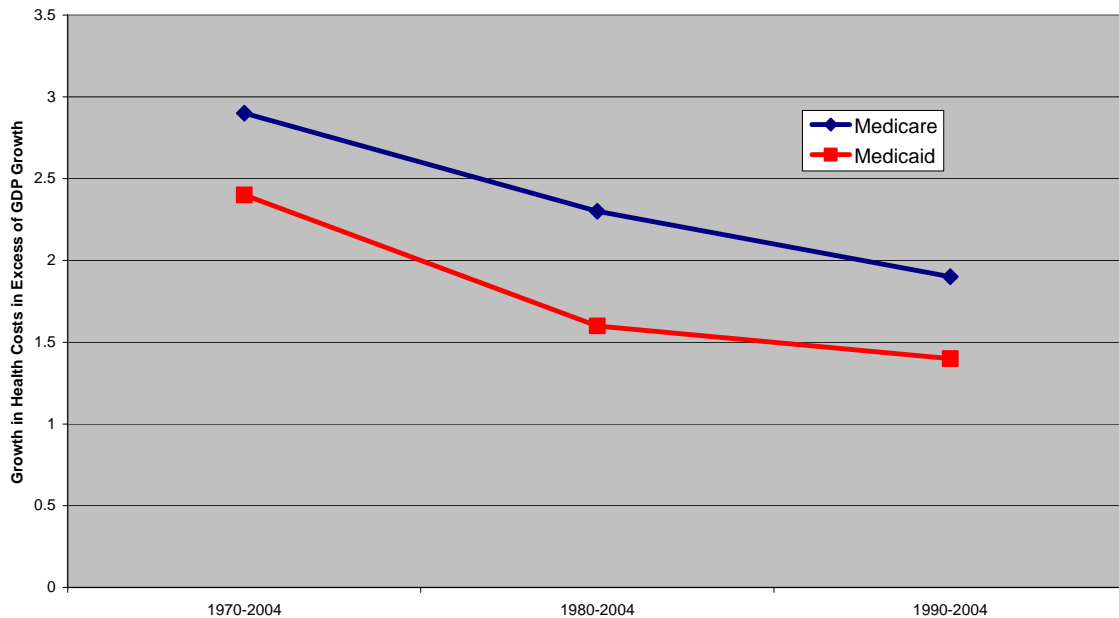
Although demographic changes are not the chief cause of our present and future budgetary problems, in any event they are largely beyond our control. The budget challenges we face are nonetheless real, and the long-term stability of the U.S. economy will depend on future trends in health care costs and our tax revenue base. In our search for solutions, discretionary actions in these as well as other areas can dramatically affect the long-term outlook for the economy.

### 6a. A Plausible Future Scenario

The Congressional Budget Office regularly analyzes the sustainability of federal entitlement spending via several long-term budget scenarios. In its scenarios, the most important spending factor is the rate of growth of health care costs. The most important revenue element is the assumption made regarding congressional action on taxes.

CBO employed a range of assumptions about health care costs, but its intermediate assumption was that Medicare and Medicaid would grow in the future by one percentage point faster than the rate of growth of per capita GDP. This so-called “excess cost growth” declined by about one percentage point for both Medicare and Medicaid since 1970 (see figure 26), and a recent CBO report calculated a rate of excess cost growth of

Figure 26. Medicare and Medicaid Costs Relative to Growth in the Economy  
("Excess Cost Growth") Have Declined For More Recent Periods



Source: Congressional Budget Office, *The Long-Term Budget Outlook*, Washington, DC: U. S. Government Printing Office, December, 2005.

0.9 percent from 1992 to 2003. CBO's intermediate assumption is based on the most recent experience with Medicare and Medicaid costs.<sup>54</sup>

Using the intermediate assumption, CBO projected that Medicare and Medicaid spending would triple from 4.2 percent of GDP in 2005 to 12.6 percent in 2050, and that the three largest entitlements would more than double from 8.4 percent to 19 percent of GDP between 2005 and 2050. Total federal spending would rise by 50 percent, from 20.1 percent to 30 percent of GDP, although primary spending (i.e., spending excluding net interest) would be 25.3 percent. Spending entitlements would rise as a share of federal primary (i.e., noninterest) spending from 45 percent to 75 percent between 2005 and 2050.

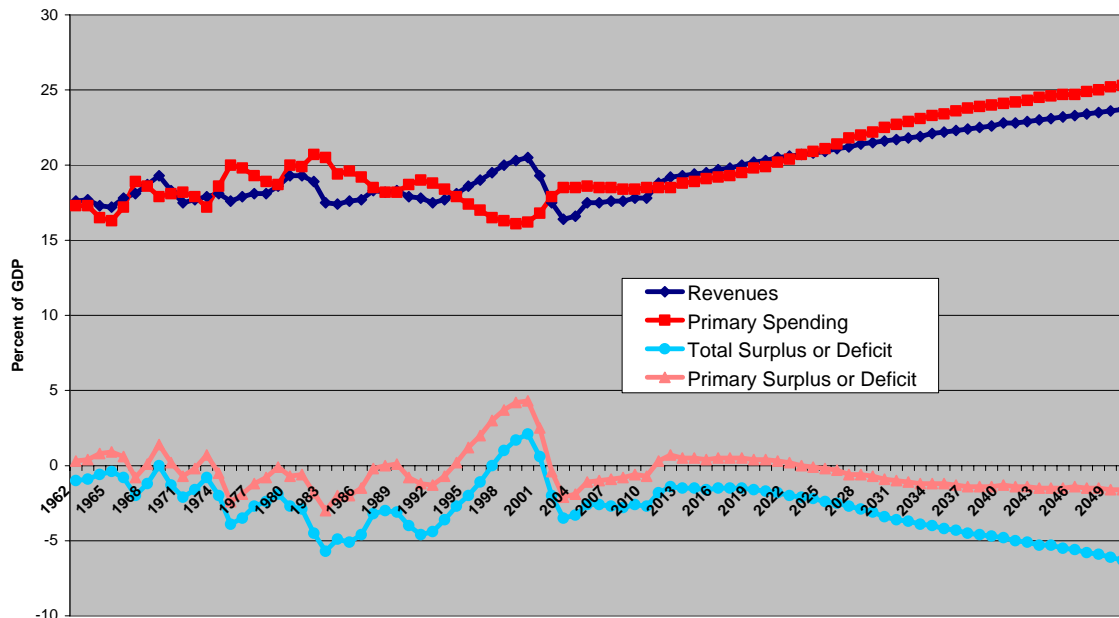
On the revenue side, CBO's future revenue scenarios followed one of two simple rules of thumb: (1) continue current law, or (2) change current law to hold revenues at the same ratio to GDP that they have been for the past 30 years (i.e., about 18.3 percent). The former required no congressional action; the latter required periodic tax *cuts*. If we assumed no congressional action, revenues would grow from their current level to 23.7 percent of GDP in 2050.<sup>55</sup> The "no action" revenue policy coupled with intermediate health spending growth would yield a primary deficit (i.e., the gap between revenues and noninterest, or primary, spending) of 1.6 percent of GDP by 2050. This figure is smaller than the primary deficit in the federal budgets of 2003 and 2004, and only slightly higher than the 2005 deficit. This scenario's revenue, primary spending, and primary and total deficit projections are shown in figure 27.

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<sup>54</sup> Chapin White, *The Slowdown in Medicare Spending Growth*, Congressional Budget Office Working Paper Series 2006–08, July 2006. Accessed at <http://www.cbo.gov/ftpdocs/74xx/doc7453/2006-08.pdf> on December 14, 2006.

<sup>55</sup> That scenario would cause revenues to increase due to real bracket creep and to increases in the number of taxpayers subject to the alternative minimum tax. Although the AMT and real bracket creep reflect the current law baseline, they would entail noticeable tax increases and a shift in policy to a revenue level substantially higher, at 23.7 percent of GDP, than its previous historic high at 20.9 percent.

Figure 27. Federal Revenues, Primary Spending, and Surpluses/Deficits As Percent of GDP Under CBO Long-Term Budget Scenarios, 2006-2050



Source: Congressional Budget Office, *The Long-Term Budget Outlook*, December, 2005.

The above scenario suggests that under plausible assumptions—with health spending restraint comparable to that of the past decade and with a “hands off” revenue policy<sup>56</sup>—we can at least *approach* a solution to our long-term fiscal problem.<sup>57</sup> This scenario still does not achieve sustainability because of accumulated annual deficits over time (notice the bottom light blue line in figure 27). Debt levels would reach 96 percent of GDP by 2050 and continue rising faster than the economy, an unsustainable outcome. Additional fiscal actions would be needed to either moderate the rate of spending growth or further boost federal revenues in order to achieve a sustainable debt-to-GDP ratio. Moreover, this scenario entails a public sector that is nearly 40 percent larger than today’s, and a federal budget composition that has shifted substantially more to spending on entitlements.

Although this CBO scenario already assumes some important actions to lower the fiscal gap—namely that health costs are held to their growth rate of the past decade and that revenues rise substantially—it leaves room for some other important reforms. For example, it does not assume a solvent Social Security program, nor does it assume other potential savings in the health sector, savings in defense, domestic, or homeland security spending, or alternative revenue sources.<sup>58</sup> In the remainder of this section, several policy

<sup>56</sup> Some, perhaps many, would dispute whether this is a plausible assumption, but it has the advantage of requiring no congressional action and, as current law, at least of being consistent with the assumptions made about spending.

<sup>57</sup> It would also assume retention of the individual AMT, which is a high priority for reform. There is general agreement on the need for reform of the AMT, but given the costliness of repeal or reform, it should be accomplished in a revenue-neutral manner, or as near to it as possible.

<sup>58</sup> To be fair, neither does it assume more pessimistic outcomes, such as a renewed acceleration in health spending, long-term care spending, or national emergencies that might make the fiscal situation worse.

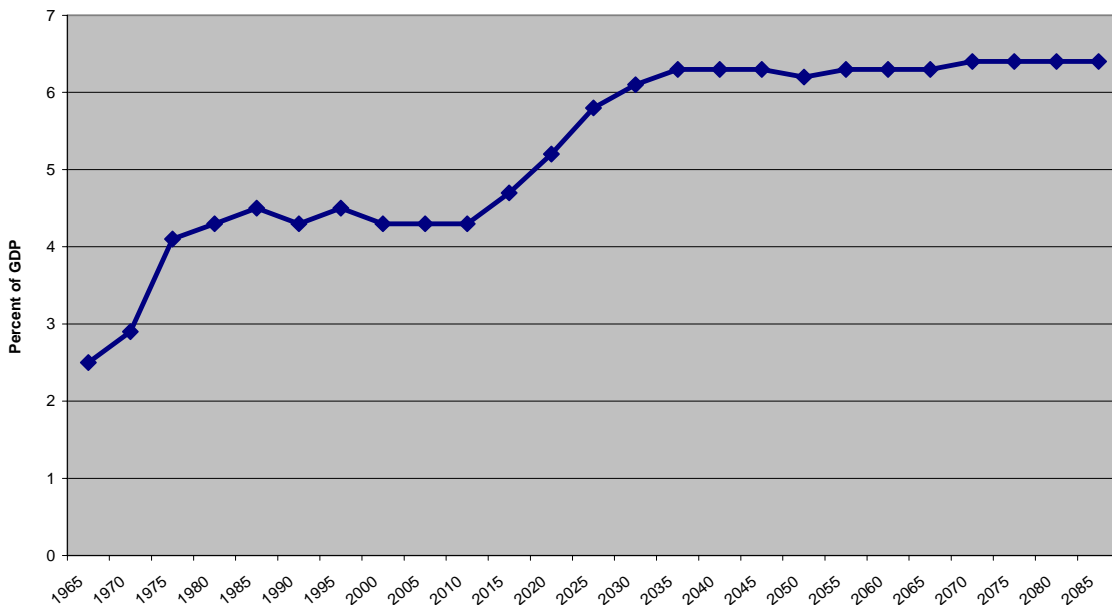
recommendations are proposed that could build on the CBO scenario above and move us closer to a solution to the long-run fiscal dilemma.

**6b. Make Social Security Solvent**

Although Social Security is out of long-term actuarial balance, the reforms needed to bring it back to balance are not radical. The policy options available to strengthen its finances are well known, and their consequences fairly well understood. To put Social Security’s current financial shortfall into perspective, recall that between 1967 and 1983, Social Security nearly doubled as a percent of GDP, from 2.6 percent to 4.9 percent, in 15 years. Contrast that with the projections that Social Security will grow by about the same amount (smaller in percentage terms), from 4.2 percent to 6.6 percent of GDP, over the next 25 years (figure 28).

In the 1967 to 1983 period, when Social Security went through its most rapid growth, FICA taxes that finance the program increased from 7.8 to 10.8 percent of taxable payroll on employers and employees combined. No drastic economic consequences seemed to flow from this (or other) tax increases during this period. The economy had its share of difficulties in the 1970s, mostly from the effects of two oil shocks in 1973 and in 1979, the deep 1973–75 recession, followed by high inflation and all-time-high interest rates. Next to the other economic woes of the 1970s, Social Security’s rapid growth was not a particularly notable event.

**Fig. 28. Future Social Security Increases Are Comparable in Magnitude to But More Gradual than the Increases from 1965 to 1985**



Source: 2005 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, Table V.A.2.

Social Security has a financing gap equal to roughly 2 percent of covered payroll to make it solvent for the next 75 years. It is unlikely that solvency will be achieved with revenue-

only or spending-only solutions. Table 2 illustrates the solvency impact of a few fairly modest changes in either taxes or benefits.

<b>Table 2. Social Security Solvency Options and the Percent of the Long-Term Funding Gap They Fill</b>	
Options	SSA Estimates: Percentage of Long-term (75 Year) Deficit Resolved
<b>Across-the-Board Tax and Benefit Measures</b>	
Immediately raise payroll tax rates from 12.4% to 14.3%	100%
Immediately reduce benefits by 13%	100%
<b>Cost-of-Living Adjustment (COLA) Options</b>	
Reduce Consumer Price Index by 0.5% annually	36%
Reduce Consumer Price Index by 1.0% annually	69%
<b>Change the Benefit Calculation Formula</b>	
Index earnings to price inflation instead of wage inflation	112%
Add a third bendpoint: new bendpoints at \$580, \$725, and \$3,381; new rates at 90%, 50%, 25%, and 12%	25%
Increase number of work years used in benefit calculation from 35 to 38	11%
<b>Raise the Normal Retirement Age (NRA)</b>	
Raise the NRA to age 68	20%
Raise the NRA to age 70	26%
<b>Taxation of Benefits</b>	
Tax Social Security benefits like private pensions and put revenue in trust funds	17%
<b>Adjust the Taxable Maximum (maximum amount of wages or salaries subject to payroll tax)</b>	
Make 90% of earnings subject to payroll tax and credit them for benefit calculations	29%
<b>Other Options</b>	
Cover all newly hired state and local government employees	11%
Invest 40% of trust fund assets in stocks	48%
Source: ARC-AARP Social Security Solvency Model	

Although payroll tax rate increases might raise objections because of their putative effects on labor,<sup>59</sup> raising the taxable wage base to 90 percent of covered wages (roughly \$140,000) is an option that can restore the Old-Age, Survivors, and Disability Insurance (OASDI) taxable wage base to historical levels and close nearly a third of the funding gap. Other proposals would bring in additional revenues, such as including all newly-hired state and local workers in Social Security.

Benefit reductions are also likely, but some approaches make more sense than others. Stabilizing the relationship between years worked and the years spent in retirement has a compelling logic. The number of years of work required to support 10 years of retirement will not be sufficient to support 20 or more years of retirement, even if other factors (such as saving rates) remain equal. But in the post-WWII era, people have been retiring earlier

<sup>59</sup> There is very weak evidence that higher payroll tax rates will harm labor supply.

and living longer. That trend cannot continue indefinitely. Three policy options should be considered: (1) raising the retirement age, which is a favorite solution of policy analysts, but would deny retirement benefits to some workers who may not be able to work past age 62; (2) adjusting the Social Security benefit formula to scale total benefits back while protecting the lowest-income workers; or (3) indexing benefits for longevity, so that average lifetime benefits will not increase as a result of cohort-wide increases in life expectancy.

By 2030, when most boomers will have retired, Social Security costs will be growing mainly because of the boomers' longevity. No dramatic increases in benefits are projected beyond that point, and minor spending adjustments would be sufficient to keep the system solvent even beyond 2080. This is not to minimize the importance of achieving solvency or to say it will be easy to accomplish, but rather to point out that our most difficult future problems lie elsewhere, mainly in the health area as earlier noted. As others have noted, we know how to fix Social Security, but we cannot say the same about health care.

### ***6c. Restore the Federal Revenue Base***

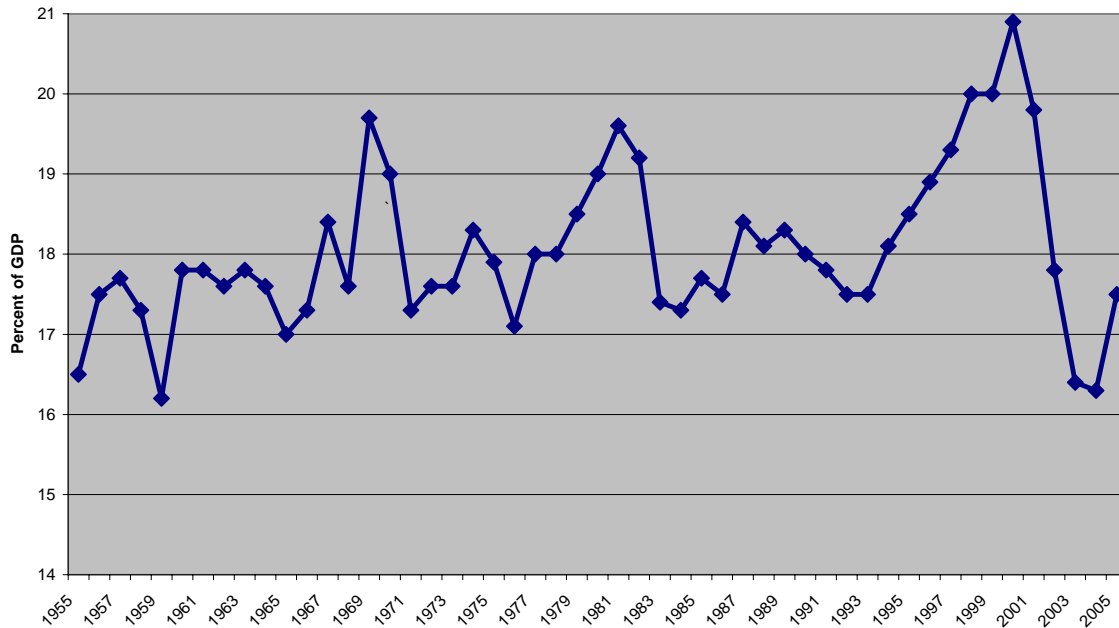
The federal revenue base has eroded at a rapid pace over the past five years. Federal revenues dropped by nearly 5 percent of GDP in only four years,<sup>60</sup> and the budget went from a surplus of 2.4 percent of GDP in 2000 to a deficit of 3.6 percent of GDP in 2004. Although revenues recovered somewhat in 2005 and have surged in 2006, they are still below their long-run average, and substantially below where they need to be to finance our increasing domestic and global commitments (figure 29).

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<sup>60</sup> Five percent of GDP in 2006 is about \$650 billion, more than twice the budget deficit for FY2006. It is only fair to note that this decline was from an all-time high of revenues as a percentage of GDP, which reached 20.9 percent of GDP in 2001.

As we move into the period when the boomers begin to leave the workforce, we need to bolster an inadequate revenue base. Income tax revenues rise automatically with real economic growth, but by lowering taxes on the most affluent households, the tax cuts since 2001 have reduced some of the tax code’s potential elasticity, i.e., the tendency for income tax revenue to rise faster than income. The reason is that taxpayers at the top who have received larger and larger shares of total national income have also received the largest tax rate cuts.

Figure 29. Federal Revenues as a Percent of GDP, 1955-2005



Source: Congressional Budget Office, *The Budget and Economic Outlook, Fiscal Years 2007 to 2016*, Appendix F, Historical Budget Data

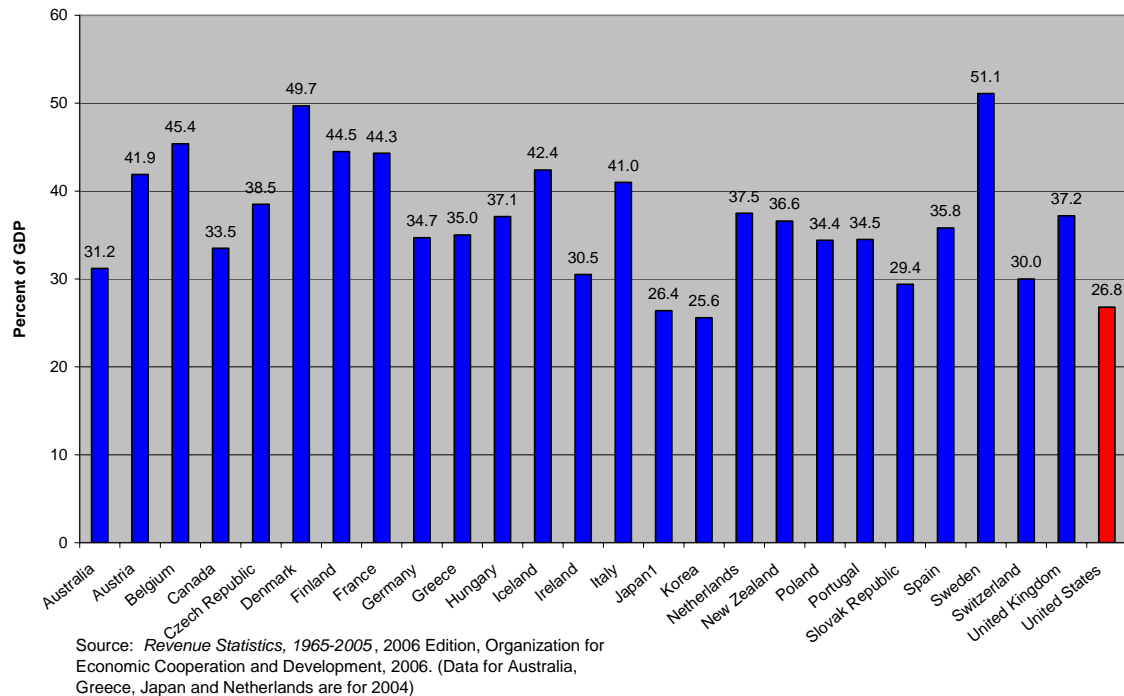
It is frequently argued that tax cuts promote economic growth by increasing the after-tax rate of return to investment. Conversely, higher marginal tax rates are said to reduce the incentives to work, save, and invest, lowering labor supply and capital investment. Therefore, some critics regard growth in federal spending financed by higher taxes as a threat to economic growth. While this view is derived from rigorous microeconomic theory, the empirical evidence (micro and macro) does not support it.<sup>61</sup> The relationship between tax revenue as a share of GDP and the growth rate of the economy among the countries of the Organisation for Economic Co-operation and Development (OECD) is zero.<sup>62</sup>

<sup>61</sup> As economic historian Peter Lindert’s recent comprehensive study of social spending and economic growth concluded, “Nine decades of historical experience fail to show that transferring a larger share of GDP from taxpayers to transfer recipients has a negative correlation with either the level or the rate of growth of GDP per person.” See *Growing Public: Social Spending and Economic Growth Since the Eighteenth Century*, (Cambridge: Cambridge University Press, 2004), 17.

<sup>62</sup> T. Hungerford, *The Effect of Government Expenditures and Revenues on the Economy and Economic Well-Being: A Cross-National Analysis*, CRS Report for the Congress, April 5, 2006.

Other developed nations have been able to maintain strong and growing economies while maintaining significantly larger public sectors. Compared to other OECD countries, the United States has among the lowest tax burdens (figure 30). The share of GDP going to public social expenditure in the United States was less than 15 percent, lower than any country shown except for Ireland at 13.8 percent. The United States could tolerate a substantially higher public sector share without experiencing severe economic dislocation.

**Figure 30. Tax Revenues as Percent of GDP, OECD Countries, 2005**



Further evidence that the economic impacts of rising versus constant tax rates on GDP are slight was presented in CBO's 2005 long-term budget outlook.<sup>63</sup> The CBO examined a pair of long-term budget scenarios that would achieve reasonable long-term growth while roughly balancing revenues and outlays. In one option, balance was achieved by allowing revenues to rise by 6.2 percent of GDP, in the other by cutting spending by that amount. CBO found that the revenue increase option resulted in an economy in 2050 of \$31.5 trillion compared with \$32.8 trillion with the lower-spending option. This difference represented an annual growth difference of 0.09 percentage points—e.g., a rate of 2.91 percent per year rather than 3 percent—hardly a doomsday scenario. Choosing some *combination* of increased revenues and spending rate reductions would presumably produce an even smaller reduction in future GDP.

One practical strategy noted by CBO for raising income tax revenues gradually would be to simply avoid tax cuts, because real bracket creep will gradually move more incomes into higher tax brackets. The CBO projects baseline income tax revenues as though

<sup>63</sup> Congressional Budget Office, *The Long-Term Budget Outlook*, December, 2005. Accessed at <http://www.cbo.gov/ftpdocs/69xx/doc6982/12-15-LongTermOutlook.pdf> on December 14, 2006.

Congress will take action periodically to cut taxes, but it projects baseline spending as if no action will be taken on entitlement or other spending. This asymmetry in CBO projections is in part responsible for future deficit projections. If baseline spending and revenues were both truly projected on a current law basis, future deficits would look smaller. This practice of defining the revenue baseline as though periodic tax cuts will occur biases the deficit debate by making future deficits look larger. CBO's baseline would be more neutral if it treated both baseline spending and baseline revenues as though no congressional action were taken. Congress would still be free to take whatever action it chose, but at least it would have a clearer picture of the future if it took no action at all, which is what the baseline was intended to do.

Payroll taxes are also relatively high in the United States, at a combined (employer and employee) 15.3 percent rate, but despite concerns that higher payroll taxes will stifle employment,<sup>64</sup> the evidence is not strong. Moreover, the costs of health care, even if contained as well as they have been for the past decade, will probably necessitate some increases in the payroll tax to finance Medicare Part B.

No OECD country relies as heavily on the income tax as the United States. Most have a combination of income, payroll, and consumption taxes. While the income tax is the most progressive of our taxes, income tax increases are also unpopular. However, the United States has almost no consumption taxes at the national level, with the exception of relatively small commodity taxes on cigarettes, alcohol, and gasoline. There is room for a consumption tax of some kind, either a value-added tax (VAT) or a modified flat tax to supplement existing federal revenues, because other nations' experiences have demonstrated that larger public sectors than ours do not necessarily destroy incentives, and that maintaining a small public sector does not guarantee growth. A consumption tax could yield significant revenues but also avoid discouraging saving, one of the perceived shortcomings of the income tax. Although a standard European-style VAT would be regressive taken on its own, offsetting income tax credits could alleviate the tax's regressivity. Alternatively, some form of progressive consumption tax such as the oft-proposed flat tax (perhaps with two rates instead of one) might be considered. Both would be easier to administer than the individual income tax.

#### ***6d. Increase Personal and National Saving***

The personal saving rate in the United States dropped below zero for the first time since the 1930s at the end of 2005, and every day brings new concerns about the inadequacy of retirement preparation among boomers. Various reasons for the low and declining saving rate have been cited, including inaccurate measurement,<sup>65</sup> the growth in entitlement

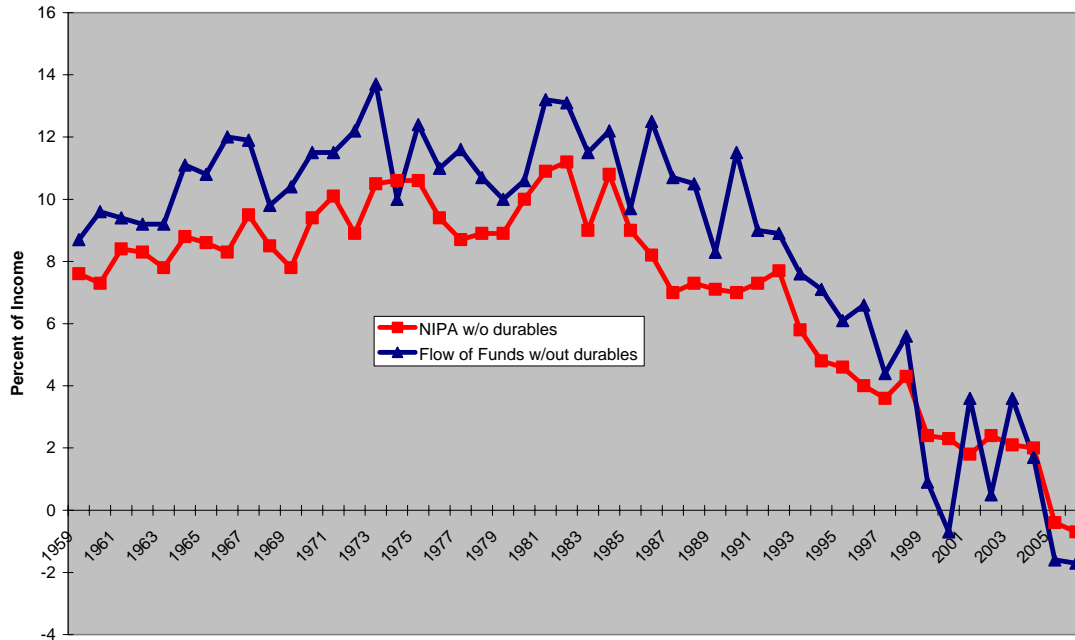
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<sup>64</sup> The research on the effects of marginal payroll tax rates on employment incentives has not found significant, substantial effects.

<sup>65</sup> See W. Gale and J. Sabelhaus, "Perspectives on the Household Saving Rate," *Brookings Papers on Economic Activity* 1 (1999), 181–224; and S. Verma and J. Lichtenstein, *The Declining Personal Saving Rate: Is There Cause for Alarm?* Issue Brief #42, AARP Public Policy Institute (March 2000). Accessed on December 14, 2006 at [http://assets.aarp.org/rgcenter/econ/ib42\\_alarm.pdf](http://assets.aarp.org/rgcenter/econ/ib42_alarm.pdf).

benefits,<sup>66</sup> and the “wealth effect,” which means that increased wealth on paper leads people to increase consumption out of income and leads to a decline in saving.<sup>67</sup> The chief reason is that barely half of U.S. workers are covered by an employer-sponsored pension plan.<sup>68</sup>

**Figure 31. Personal Saving Rate as Measured in National Income and Product Accounts (NIPA) and Federal Reserve Flow of Funds Accounts, 1959-2006**



Source: Federal Reserve Board, *Flow of Funds Accounts*, December 7, 2006

The structure of savings incentives in the tax code is not well designed or targeted to increase savings. Most savings provisions in the tax code have what have been called “upside-down” incentives. They benefit mostly the affluent—those who have the greatest ability to take advantage of saving incentives but who also have the least need for them—while at the same time they do not benefit those who have few resources to invest but have the greatest need to save. We have already demonstrated the skewed benefits of the largest tax entitlements. Because people with available financial resources can swap taxable assets for tax-exempt assets, thus realizing a tax cut without reducing consumption (i.e., without really adding to either private or national saving), these types of incentives are likely to result in revenue losses (public dissaving) without achieving increased private saving, possibly resulting in a net reduction in our national saving rate.

<sup>66</sup> J. Gokhale, L. Kotlikoff, and J. Sabelhaus, *Understanding the Postwar Decline in U.S. Saving: A Cohort Analysis*, NBER Working Paper #5571, May 1996. Accessed at <http://papers.nber.org/papers/w5571> on December 14, 2006.

<sup>67</sup> D. Maki and M. Palumbo, *Disentangling the Wealth Effect: A Cohort Analysis of Household Saving in the 1990s*, Federal Reserve Board, Finance and Economics Discussion Series, April 2001. Accessed at <http://www.federalreserve.gov/pubs/feds/2001/200121/200121pap.pdf> on December 14, 2006.

<sup>68</sup> A. Munnell, J. Lee, and K. Meme, “An Update on Pension Data,” Issue in Brief #20, Center for Retirement Research, Boston College, July, 2004.

If the objective is to increase total national saving, then tax incentives that target households that are not already saving at their desired level—mostly lower-income households—are likely to be more efficient. The best way to target those who are in the bottom tier of income is through employer-based salary reduction plans that are structured in ways to take advantage of the inertia and the “path of least resistance” that workers frequently exhibit. Plans that have automatic enrollment as the default option or a mandated contribution rate dedicated to personal retirement saving, an employer (or government) match for those with lower incomes, a moderate-risk default investment portfolio, and sharply limited opportunities for cashing out accounts are more likely to increase saving among lower-income workers. Plans that require employees to opt in, do not offer a match, allow workers to invest too conservatively, and make cashouts relatively easy are not likely to successfully increase saving.<sup>69</sup>

For those fortunate enough to have access to a 401(k) plan through their employer, introducing these automatic features has proven effective as a way to boost participation. For those less fortunate, pending legislative proposals to introduce an “auto-IRA” via payroll deduction would use the same method proven effective with 401(k)s to boost savings among those who have no pension at all.

The Saver’s Credit is the only vehicle that targets saving incentives to those with low and moderate income, whose saving is more likely to represent net additions to national saving rather than asset shifting. This provision was recently reauthorized by Congress and its income thresholds indexed for inflation. We have little data on which to judge the experience thus far, but only a little more than 5 million returns claimed the credit, and many that were eligible could not claim the credit because their income tax liability was not sufficient to make use of the entire credit. The maximum credit is \$1,000, but the average credit actually claimed in tax year 2002 was about \$200. The Saver’s Credit could be an even more effective saving incentive if it were expanded and made refundable, so that a greater benefit would flow to lower-income households. Its perverse income phaseout rates should also be modified to avoid creating excessively high effective marginal tax rates on individuals who pass from the lowest income-eligibility category (about twice the poverty line) to the next.<sup>70</sup> Ultimately, the Saver’s Credit could be explicitly linked to an auto-IRA program so savers could automatically receive a match from the federal government just as workers receive a match from their employers.

### ***6e. Restore Fiscal Discipline***

Personal saving is not the only saving that counts. Declines in private saving were offset in the 1990s by *public* saving due mostly to federal budget surpluses. Fiscal experts have said for years that the best way to increase national saving was to eliminate the federal

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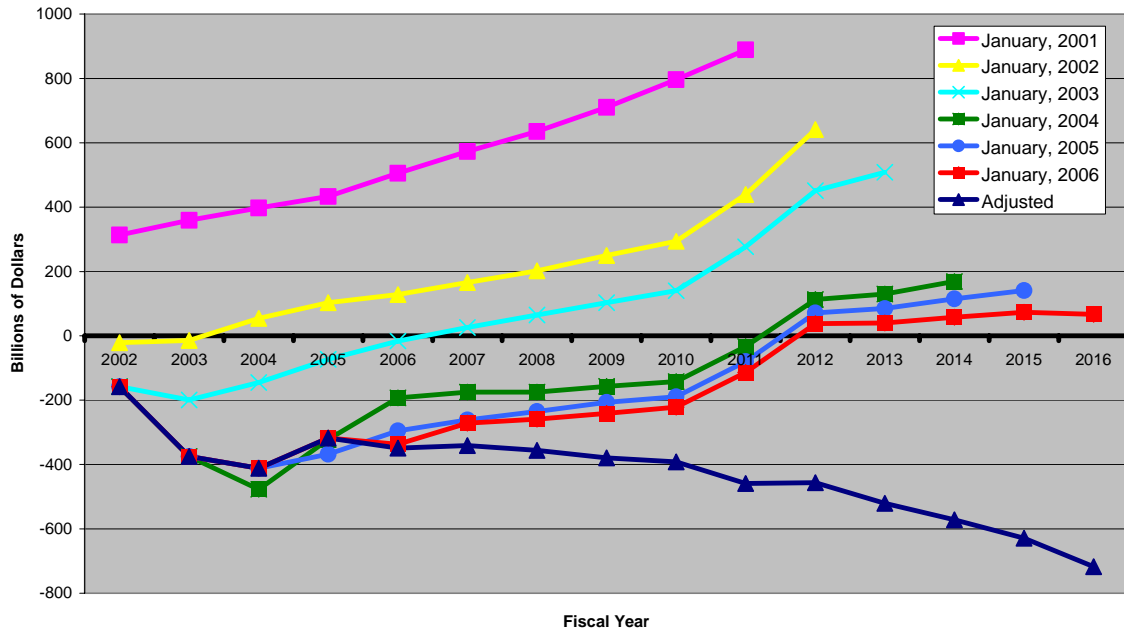
<sup>69</sup> J. Choi, D. Laibson, B. Madrian, and A. Metrick, *Defined Contribution Pensions: Plan Rules, Participant Decisions, and the Path of Least Resistance*, Working Paper #8655, National Bureau of Economic Research, December 2001; *For Better or For Worse: Default Effects and 401(k) Savings Behavior*, Working Paper #8651, National Bureau of Economic Research, December 2001.

<sup>70</sup> At \$15,000 income, a worker who saves \$2,000 would receive a \$1,000 credit, effectively increasing income by \$1,000. At \$15,001 of income, the same person with the same saving would receive only a \$400 credit, in effect losing \$600 of income for the added dollar of income.

budget deficit. What once seemed impossible—a balanced federal budget—was achieved by 1998, followed by three more surplus years. As recently as 2001, surpluses were forecast to continue into the era of boomers’ retirement, permitting the elimination of the entire public debt by FY2010.

As a result of tax cuts, large increases in defense and homeland security spending, and a brief recession, the fiscal picture rapidly turned south after 2001 (see figure 32).

**Figure 32. CBO's Unified Budget Projections, 2001-2006, With Deficit Adjusted for Extension of Tax Cuts**



Source: Auerbach, A., Gale, W., and Orszag, P. "Plus Ca Change, Plus C'est La Meme Chose," *Issue in Economic Policy* No. 3, The Brookings Institution, February 2006.

But even the January 2006 projection that indicates surpluses beginning in about 2012 is based on CBO assumptions that certain tax cuts enacted in 2001 and after will expire at the end of 2010, that there is no permanent reform of the alternative minimum tax, and that discretionary spending will only keep pace with inflation (not with growth in GDP). These are questionable, some would say wholly unrealistic, assumptions. If the tax cuts were made permanent and the AMT reformed (possibly repealed), the deficit situation would not look like any of CBO’s projections, but like the “adjusted” line in the figure above instead.<sup>71</sup> As previously noted, an important step toward rectifying our fiscal shortfalls is to increase our revenue base to a level that is adequate to meet our domestic and global commitments. Federal spending in 2005 was 20.1 percent of GDP, while revenues were at 17.5 percent, a large disparity for a period of economic expansion.

<sup>71</sup> A. Auerbach, W. Gale, and P. Orszag, “New Estimates of the Budget Outlook: Plus Ca Change, Plus C’est La Meme Chose,” *Issue in Economic Policy* 3 (Washington, D.C: The Brookings Institution, February 2006).

Increasing revenues can be accomplished without disruptive increases in the effective tax rates that economists worry so much about. For instance, despite rising ratios of revenue to GDP from 1993 to 2000, *effective* federal tax rates (not statutory rates, but rather the amount of taxes paid as a percentage of personal income) actually *fell* for most income quintiles of the U.S. population after 1996. The decline was the largest for the top 5 percent of the population.<sup>72</sup> We have already noted that the U.S. tax burden is one of the lowest in the developed world.

A return to the fiscal discipline that led to a balanced budget in the 1990s would require that any new spending or tax measure be weighed against its impact on the deficit. Important and desirable policy changes, such as reform of the individual AMT, should be undertaken with the goal that they should not worsen the overall budget deficit. A serious commitment to fiscal discipline requires that we reinstitute the pay-as-you-go (paygo) rules that require equal offsets for any increase in entitlement spending or reduction in taxes.

### ***6f. Strengthen the Economy***

As noted earlier, entitlement spending as a percentage of GDP is inversely related to economic growth, so strong economic growth is an important factor in helping to alleviate the burden of entitlements on future generations. Increased productivity is the key to faster economic growth. Labor productivity in the U.S. economy has grown more than twice as fast in the past decade (about 3 percent) as in the previous two decades (about 1.2 percent).<sup>73</sup>

Productivity improvements generally lead to higher wages and faster growth in GDP. Faster growth in GDP will increase revenues and cause countercyclical spending, such as entitlements, to decrease. Rising wages cause Social Security benefits to rise in real terms but with a lag relative to revenues, allowing wage increases to provide a near-term improvement in the fiscal gap. A continued surge in productivity would help to spur strong economic growth.

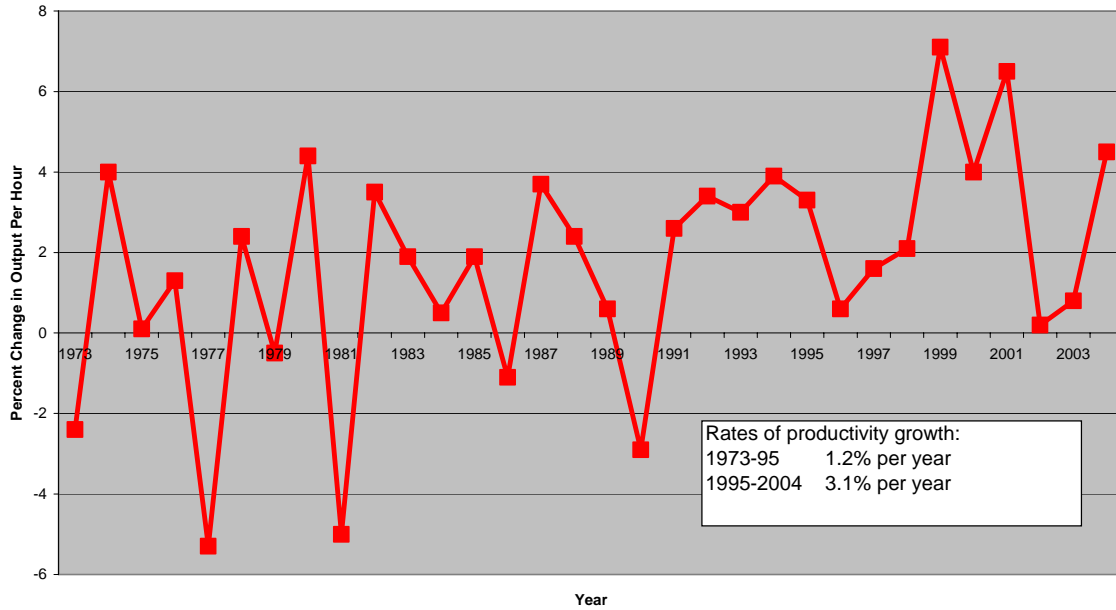
Productivity increased beyond expectations in the 1990s as a result of rapid improvements in information technology (figure 33). Some forecasters projected before the recent recession that the technological boom would continue for at least another decade, which could support a sustained level of economic growth. However, one of the factors leading to the brief recession in 2001 was a slowdown in the acquisition of new computer hardware, and productivity forecasts have been less ebullient since the recession.

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<sup>72</sup> Congressional Budget Office, *Historical Effective Tax Rates, 1979-2003*, December 2005.

<sup>73</sup> R. Ferguson and W. Wascher, "Distinguished Lecture on Economics in Government: Lessons from Past Productivity Booms," *Journal of Economic Perspectives* 18, no. 2 (Spring 2004): 3–28.

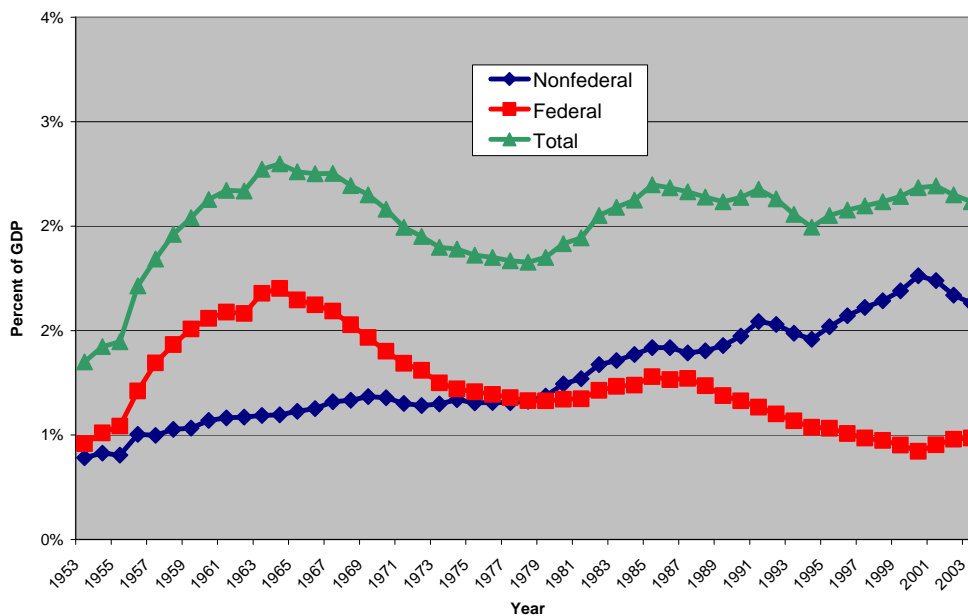
**Figure 33. Productivity Increased More Than Twice as Fast in the Past Decade (1995-2004) As in the Previous Two (1973-95)**  
 Percentage Change in Nonfarm Business Output Per Hour, 1973-2004 (4th quarter to 4th quarter)



Source: Bureau of Labor Statistics, Major Sector Productivity and Costs Index, accessed at <http://data.bls.gov/PDQ/servlet/SurveyOutputServlet>

Economic growth should be promoted by policies that increase national saving, such as reducing the budget deficit, investing in human capital through education and workforce training, and investing in physical capital such as infrastructure and research and development, which has declined steadily over the past 40 years (figure 34). Current projections have defense spending already declining over the next decade from 4 percent to 3 percent of GDP, which is where defense stood at the beginning of the Iraq war. Other discretionary spending also declines by a percentage point over the next decade. Higher discretionary spending for investment, to be consistent with greater fiscal discipline, would have to come at the expense of cuts in discretionary spending, cuts in entitlements, or additional revenues.

**Figure 34. Federal and Nonfederal Spending for R&D as Percent of GDP, 1950-2003**



Source: Congressional Budget Office, *R & D and Productivity Growth*, Background Paper, June, 2005.

### 6g. Improve Value from Health Care Spending

Health care spending is concentrated among people with high costs due to high utilization of services or less frequent use of very expensive acute care services. For example, although more than half of Medicaid enrollees had annual Medicaid spending of less than \$1,000, the very small share—3.6 percent—with spending above \$25,000 accounted for nearly half of all Medicaid spending in 2001.<sup>74</sup> A similar pattern is seen in the Medicare program (see figure 35). Within the Medicare program, much of the concentration of health costs is associated with chronic conditions, including multiple conditions: 32 percent of Medicare beneficiaries in 1999 had four or more chronic diseases and drove almost 79 percent of spending.<sup>75</sup> Nationally, more than 90 million Americans are living with chronic illness, and their care accounts for more than 75 percent of all U.S. health care spending.<sup>76</sup>

A number of strategies could help achieve better health and, as a potential result, reduced costs in health programs. Primary and secondary prevention of illness is often talked about, but its importance is increasingly evident. Among the medical conditions

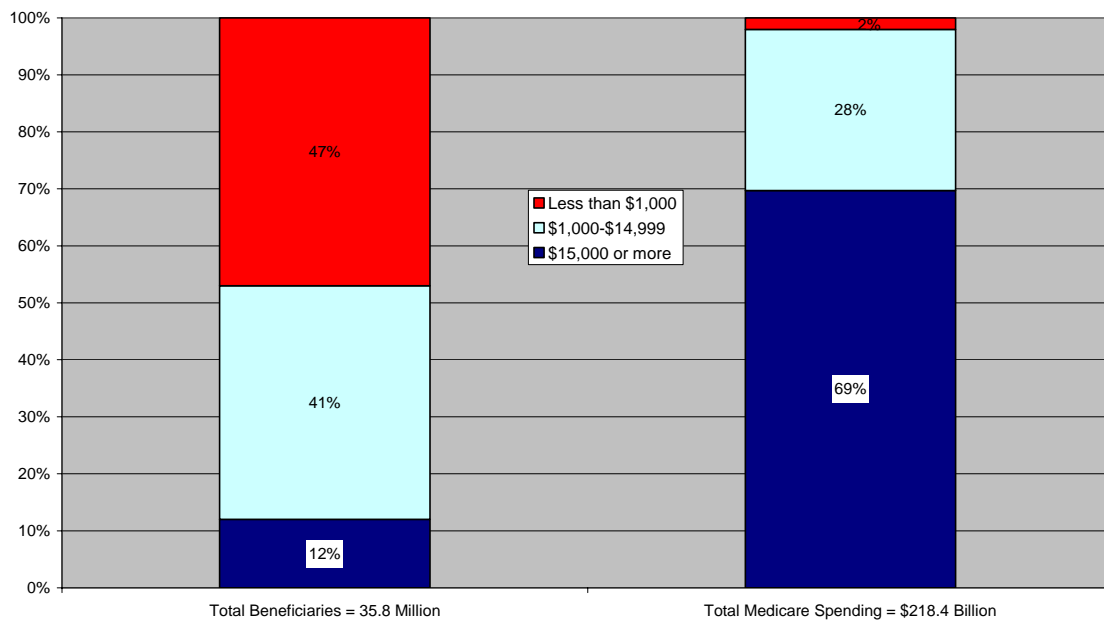
<sup>74</sup> A. Sommers and M. Cohen, *Medicaid's High-Cost Enrollees: How Much Do They Drive Program Spending?* (Menlo Park, CA: Kaiser Family Foundation, March 2006).

<sup>75</sup> R. Berenson and J. Horvath, "Confronting the Barriers to Chronic Care Management in Medicare," *Health Affairs*, Web Exclusive, W3-37, January 22, 2003, accessed December 18, 2006 at <http://content.healthaffairs.org/cgi/content/full/hlthaff.w3.37v1/DC1>.

<sup>76</sup> J.E. Wennberg et al., *The Care of Patients with Severe Chronic Illness: An Online Report on the Medicare Program by the Dartmouth Atlas Project*, 2006, accessed on December 18, 2006 at [http://www.dartmouthatlas.org/atlas/2006\\_Chronic\\_Care\\_Atlas.pdf](http://www.dartmouthatlas.org/atlas/2006_Chronic_Care_Atlas.pdf).

accounting for the greatest dollar growth in private health insurance spending for nonelderly adults from 1987 to 2002, the prevalence of treated disease was a bigger driver than cost per treated case or population growth for nearly all conditions, many of which are considered chronic.<sup>77</sup> While some of the rise in treated disease prevalence is desirable (e.g., early detection), some could be prevented through risk-factor reduction. Because few interventions have been successfully used to change health-related behavior, more attention needs to be given to identifying the key design features of effective programs and then providing incentives for their adoption.<sup>78</sup> Progress in this area is critical: health-related behaviors such as stress, diet, exercise, and smoking are estimated to account for about 40–50 percent of morbidity and mortality.

**Figure 35. Distribution of Fee-for-Service Medicare Beneficiaries and per Capita Medicare Spending, 2002**



Source: Kaiser Family Foundation analysis of the Medicare Current Beneficiary Survey 2002 Cost

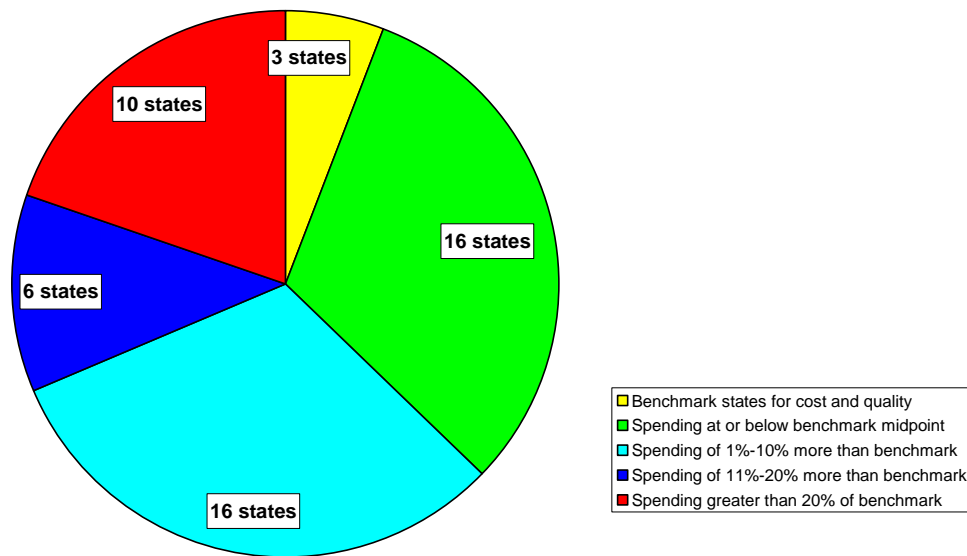
Efforts also need to be targeted at providing more appropriate and efficient care. Higher health care spending is not associated with patients’ need for care or better health care outcomes; instead, geographic variation in Medicare spending is largely due to the overuse of care, which is influenced by the available supply of resources (e.g., providers, technology) and for which there are few clinical guidelines. For example, geographic disparities are found in the use of acute care hospitals to manage chronic illness, a situation that extends to all of the health care system (see figure 36).<sup>79</sup>

<sup>77</sup> K. Thorpe, C. Florence, D. Howard, and P. Joski, “The Rising Prevalence of Treated Disease: Effects on Private Health Insurance Spending,” *Health Affairs*, Web Exclusive, W5-317, June 27, 2005, accessed at <http://content.healthaffairs.org/cgi/content/full/hlthaff.w5.317/DC1 December 18, 2006>.

<sup>78</sup> K. Thorpe, “The Rise in Health Care Spending and What to Do About It,” *Health Affairs* 24, no. 6 (November–December 2005): 1436–1445.

<sup>79</sup> Wennberg et al, 2006.

**Figure 36. Medicare Per Capita Spending and Resource Inputs for Patients with Severe Chronic Illness During the Last Two Years of Life, 2000-2003**



Source: Dartmouth Atlas of Care, Center for the Evaluative Sciences.  
 Note: Benchmark refers to combination of low cost and high quality.  
 Benchmark midpoint is midpoint of spending for benchmark states.

Identifying efficient providers—those that deliver high-quality and low-cost care in the most appropriate setting—is key, as well as improving the way chronic illnesses are managed. Several current Medicare demonstrations are expected to show whether care coordination can reduce high service use and improve outcomes. In some cases, care is not being provided according to recommended standards (e.g., underuse of annual eye exams for diabetic patients), and the remedy may lead to additional spending.

Getting better value out of programs that ensure access to essential health and long-term care for a beneficiary population numbering more than 80 million requires making more systemwide progress. Especially critical is continued progress in the following areas: developing the evidence base that underpins more rational use of health services, including new technologies and prescription drugs; providing information to support the delivery of appropriate clinical care by providers as well as wise decisions by consumers, particularly on the cost/value tradeoff; creating better clinical outcome data and measures of provider efficiency; and rewarding high-quality, highly efficient providers through payment. Both clinical and administrative improvements depend, in part, on a much more highly evolved information infrastructure than exists today.<sup>80</sup>

<sup>80</sup> U.S. Government Accounting Office, *Comptroller General’s Forum on Health Care: Unsustainable Trends Necessitate Comprehensive and Fundamental Reforms to Control Spending and Improve Value*, GAO-04-793SP, May 2004.

## 7. CONCLUSION

The “graying” of America has caused alarm among many experts that the future cost of federal health and retirement programs will create huge federal deficits, dry up capital for investment, and jeopardize long-term economic growth. Spending entitlements—specifically Social Security, Medicare, and Medicaid—are generally seen as the main factor driving this scenario.

Standard criticisms of entitlement spending generally don’t point out the very substantial favorable impacts they have had on poverty and inequality reduction, income support, greater living independence, and better health coverage. Critics often claim that older Americans benefit disproportionately from entitlement spending, but in fact, when tax entitlements and spending entitlements are cumulated, a majority of combined entitlement benefits actually are received by people under age 65.

Although population aging presents a serious fiscal challenge to the nation, there are hopeful trends that may portend a more sustainable economic future. Older workers have been staying in the labor force longer, a trend that means higher Social Security taxes to improve the system’s finances. In addition, disability rates appear to have declined steadily for the past decade or more, and nursing home utilization rates have also declined. The productivity of workers has surged in recent years and, if sustained, could help offset the future expected decline in the size of the labor force.

A plausible long-term scenario suggests that a future “train wreck” can be averted if we are able to maintain the same level of spending restraint in our health programs that we have already achieved in the past decade *and* we allow revenues to rise automatically without legislating additional tax cuts. In such a scenario, the primary deficit would be no larger in 2050 than it is today. Because debt would still be rising in this scenario, additional policy solutions would be needed to keep debt from growing faster than GDP.

At least six important additional solutions are needed:

1. Transform our health care system by paying more appropriately for services, extending coverage to those without insurance, and improving the quality of medical care.
2. Grow existing revenue sources and enact a new revenue source such as a VAT or progressive consumption tax that would yield significant revenues while limiting saving disincentives and administrative inefficiencies.
3. Reform Social Security to make it solvent for the long-run, *including* changes that would promote longer work lives.
4. Renew overall fiscal and budgetary discipline and reimpose the paygo spending caps.
5. Promote individual saving opportunities for low- and moderate-income households through universal “auto-IRAs” using payroll deduction and subsidies

for low-income savers, and by converting “upside-down” tax incentives to refundable credits.

6. Promote economic growth by extending work lives, increasing national saving, and investing in human and physical capital to sustain productivity growth.

The needed policy changes will require leadership from government, the private sector, and non-government organizations, and contributions by both workers and employers. Concerted action in the near-term is critical if we are to create the conditions for continued economic growth while providing health and economic security for current and future generations of Americans, both in their working years and in retirement.