

CRS Report for Congress

Social Security and Medicare: The Economic Implications of Current Policy

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Summary

The retirement of the baby boomers, rising life expectancy, and the rising cost of medical care are projected to place current federal policy on an unsustainable fiscal basis over the next several decades. Social Security outlays are projected to rise from 4.3% of gross domestic product (GDP) today to 6% of GDP in 2030, and Medicare and Medicaid outlays are expected to rise from 4.5% today to as much as 12% of GDP in 2030 and 22% of GDP in 2050 — greater than total spending today. These increases in spending are not expected to subside after the baby boomers have passed away. Without any corresponding rise in revenues, this spending path would lead to unsustainably large budget deficits that would push up interest rates and the trade deficit, crowd out private investment spending, and ultimately cause fiscal crisis.

To avoid this outcome, taxes would need to be raised or benefits would need to be reduced. Altering taxes and benefits ahead of time would reduce the size of cuts required in the future, if the proceeds were used to increase national saving. (Making changes ahead of time would also allow individuals time to adjust their private saving behavior.) National saving can be increased by using the proceeds to pay down the national debt, purchase financial securities, or finance individual accounts. Individual accounts financed by increasing the budget deficit, however, would not increase national saving or reduce the government's fiscal imbalance and could exacerbate the government's fiscal imbalance over the 75-year projection.

Relatively small tax increases or benefit reductions could return Social Security to long-run solvency. Restraining the growth in Medicare and Medicaid spending is more uncertain and difficult, however. The projected increase in spending is driven more by medical spending outpacing general spending increases than by demographic change. But it is uncertain how to restrain cost growth because much of it is the result of technological innovation that makes new and expensive treatments available. To finance projected increases in Medicare and Medicaid spending would require tax increases of an unprecedented magnitude. From a government-wide perspective, Social Security or Medicare trust fund assets cannot help finance future benefits because they are redeemed with general revenues.

The reason revenues are not projected to rise when outlays rise is that these programs are financed on a pay-as-you-go basis: current workers finance the benefits of current retirees. Current budget deficits remove the limited prefunding that already exists in the system, exacerbating the future fiscal shortfall. In the future, there will be fewer workers per retiree. Once a pay-as-you-go system is up and running and faced with an adverse demographic shift, there is no reform that can avoid making some present or future generation receive less than past generations. Under current policy, future generations will be made worse off by higher taxes or lower benefits. Under a reform that increases national saving, some of that burden would be shifted to current generations. This report will be updated as events warrant.

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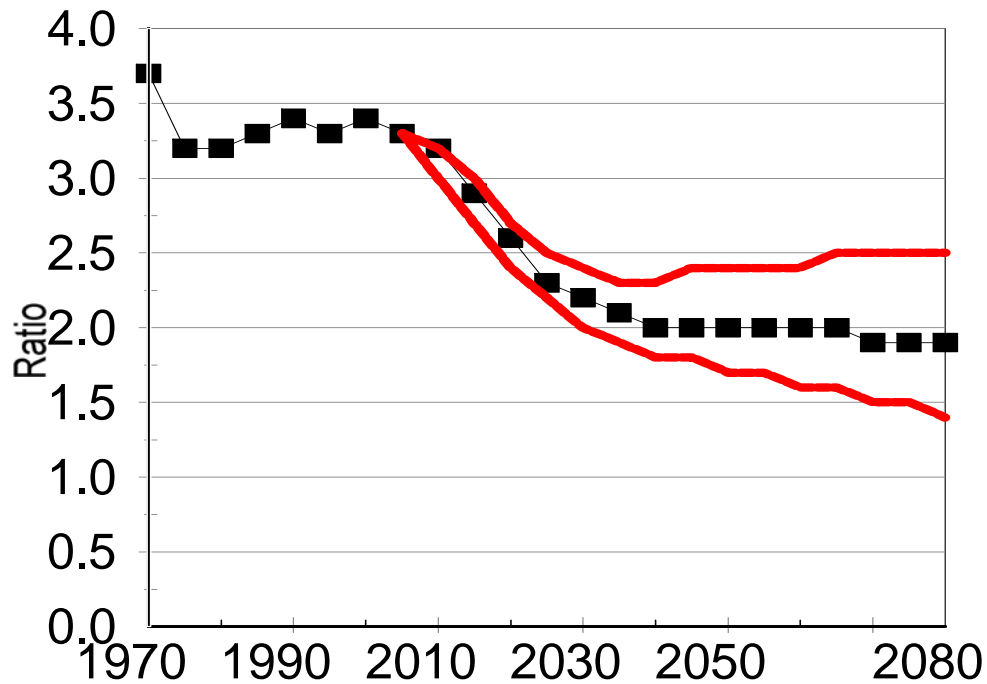
The United States is projected to undergo a demographic shift as the aging of the baby boomers causes an unprecedented increase in the fraction of the population that is retired. Coupled with rising life expectancy, this means, under current policy, a steady increase in the portion of the population that is not working and dependent on social insurance benefits from the government. This situation poses serious problems for the government's fiscal position and the economy as a whole if left unattended.¹

Why Is Current Fiscal Policy Unsustainable?

Social Security and Medicare are financed primarily on a pay-as-you-go basis: benefits paid to today's elderly are based on dedicated payroll taxes collected from today's workers.² Under current policy, benefits will grow much more rapidly than revenues because of the increase in retirees relative to workers. The worker-recipient ratio for Social Security is shown in **Figure 1** and will fall from 3.3 workers per recipient today to 2 workers per recipient in 2030. (The worker-recipient ratio for Medicare is slightly lower than for Social Security, but follows the same pattern over the long-run projection.) The worker-recipient ratio will fall because of the retirement of the baby boomers, declining fertility, and increasing life expectancy, which means that, under current policy and retirement patterns, workers will be spending a larger fraction of their lives retired. Thus, the increases in spending are not projected to subside after the baby boomers have passed away. Worker-recipient forecasts are subject to large margins of uncertainty, represented by the dashed lines in the graph. But even under the most optimistic of assumptions the worker-recipient ratio will fall well below historical levels in coming years, unless immigration is dramatically expanded — the additional immigrants needed to keep the ratio at current levels would represent 35% of the total workforce.

¹ For overviews and current legislation, see CRS Report RL33544, *Social Security Reform*, by Dawn Nuschler; CRS Report 95-543, *The Financial Outlook for Social Security and Medicare*, by Dawn Nuschler; CRS Report RL31058, *Medicare Structural Reform: Background and Options*, by Hinda Chaikind, Jennifer O'Sullivan, and Jennifer Boulanger.

² An exception is the portion of Medicare Part B which is financed through premiums paid by the elderly. About one-quarter of Part B spending is paid through premiums and the other three quarters is paid by taxpayers, and can be considered to be financed on a pay-as-you-go basis. Part of Medicare Part D, the prescription drug benefit, will also be paid for by the elderly through premiums when implemented. A small fraction of Social Security's revenues also come from the taxation of some Social Security benefits. Disability benefits are also part of the Social Security system.

Figure 1. Worker-Beneficiary Ratio for Social Security, 1970-2080

Source: Trustees of OASDI, Annual Report, 2007, Table IV.B2.

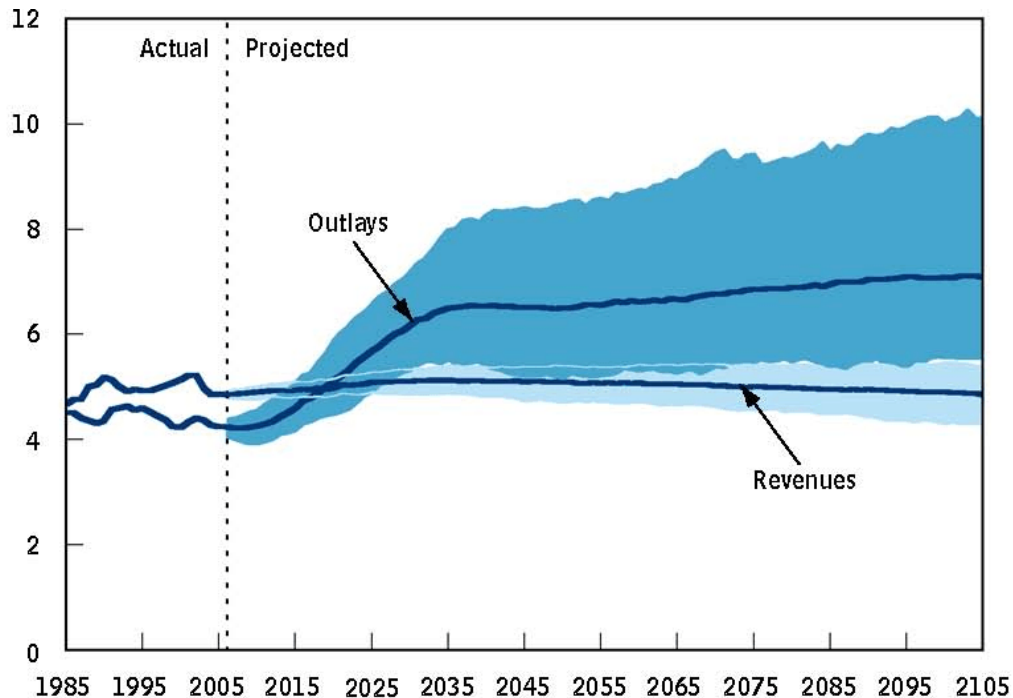
Note: Solid line based on Trustees' intermediate assumptions. Dashed lines represent worker-recipient ratio under alternative scenarios. Beneficiaries include the retired, survivors, dependents, and the disabled.

For elderly entitlement spending to keep in line with revenues in light of these demographic changes, either benefits must be reduced or taxes must be increased. Social Security and Medicare are financed through dedicated revenues: the payroll (FICA) tax. As shown below, diverting existing general revenues to entitlement spending cannot realistically cover the financing gap because of the sheer magnitude of the gap relative to total government revenues. Thus, the financing problem should not be thought of as a programmatic problem, but rather a government-wide problem, and is best analyzed as a share of economic output (GDP). (The role of the Social Security and Medicare trust funds will be discussed below.)

Figure 2 illustrates the projected increase in Social Security spending from the present to 2105. Projected spending increases from 4.3% of GDP today to 6.2% of GDP in 2030 and 6.5% of GDP in 2050, whereas revenues stay fairly constant. However, there is a high degree of uncertainty surrounding these projections. CBO estimates that there is a 10% chance that spending will exceed 8.25% of GDP by 2050, and a 10% chance that spending will be below 5.25% of GDP that year. By contrast, revenue projections show a very narrow degree of uncertainty as a share of GDP, so that under almost any scenario there will be a shortfall between revenues

and spending.³ In present value terms, it is projected that all future benefits exceed future revenues by \$15.7 trillion.⁴

Figure 2. Social Security Spending and Revenues as a % of GDP



Source: Congressional Budget Office, *Updated Long-Term Projections for Social Security*, June 2006.

Notes: The dark lines indicate CBO's projections of expected outcomes. In those projections, annual Social Security outlays exceed revenues starting in 2020, and scheduled benefits cannot be paid beginning in 2053. Shaded areas indicate the 80 percent range of uncertainty around each projection. (In other words, there is a 10 percent chance that actual values will be above that range, a 10 percent chance that they will be below it, and an 80 percent chance that they will fall within the range. Those uncertainty ranges are based on a distribution of 500 simulations from CBO's long-term model.) Outlays are defined as scheduled benefits and administrative costs; revenues are defined as payroll taxes and revenues from the taxation of benefits.

Social Security projections are based on straightforward assumptions since benefits are determined by specific rules and formulas and demographic projections. By contrast, there is no obvious way to project Medicare and Medicaid spending into

³ Data from Congressional Budget Office, *Updated Long-Term Projections for Social Security*, June 2006.

⁴ Boards of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, *2007 Annual Report*, March 2007, Table IV.B7. For alternative estimates, see Jagdeesh Gokhale and Kent Smetters, *Fiscal and Generational Imbalances* (Washington, DC: AEI Press, 2003), p. 26; Alan Auerbach, William Gale, and Peter Orszag, "Sources of the Long-Term Fiscal Gap," *Tax Notes*, May 24, 2004, p. 1049. Projections from different sources are based on different assumptions.

the future.⁵ Although there are fairly reliable projections of Medicare beneficiaries, there is no obvious assumption that can be made about how much will be spent per beneficiary under current law. Although current law broadly specifies the medical services that Medicare and Medicaid will cover, projecting spending is difficult because little is known about how medical treatments, costs, and technologies will evolve in the future, and there is no way to know what new treatments will be available in the future. Although new technologies have the potential to lower costs through productivity gains, they also have the potential to raise costs by making new treatments available that are both more effective and more expensive. In recent history, the latter has occurred, and health spending has risen more rapidly than GDP. However, there is no guarantee that this pattern will continue in the future, since it implies that Americans will want to devote more and more of their income to health spending.

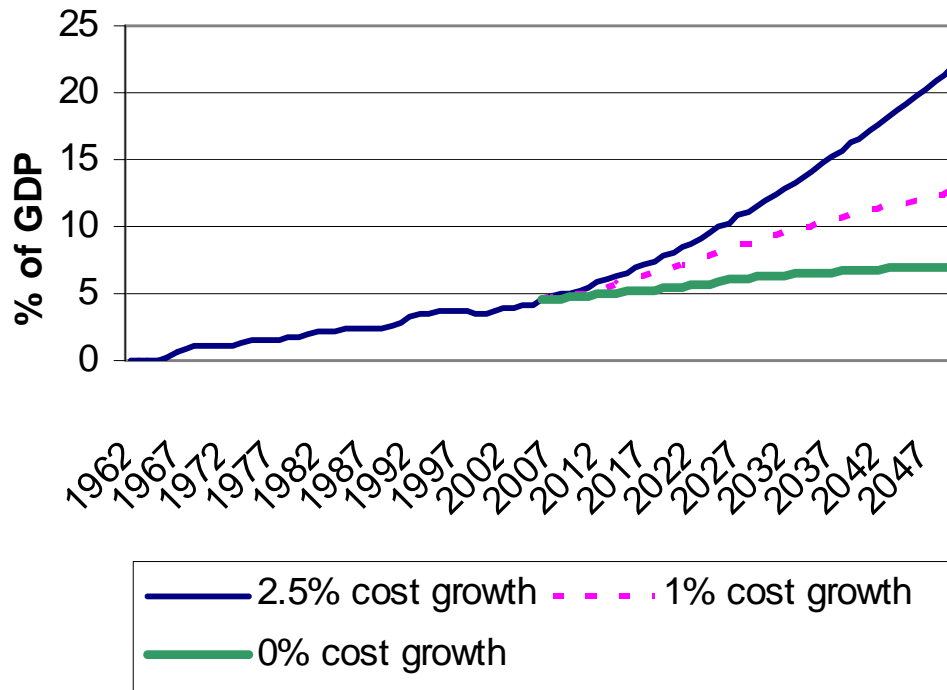
To illustrate the sensitivity of Medicare and Medicaid spending to different assumptions about “excess cost growth” per enrollee above growth in GDP per capita, **Figure 3** shows CBO’s projection of Medicare and Medicaid spending under three different scenarios: zero excess cost growth (spending per enrollee grows at the rate of GDP per capita), excess cost growth equal to the 1960-2001 average of 2.5%, and excess cost growth equal to 1%. Comparing these scenarios, it can be seen that excess cost growth is a more important factor driving projections than demographic change. If excess cost growth equaled its historical average of 2.5%, Medicare and Medicaid spending would increase from 4% of GDP today to 12% of GDP in 2030 and 22% of GDP in 2050. Alternatively, if there were no excess cost growth, then Medicare and Medicaid spending would only increase to 6% of GDP in 2030 and 7% of GDP in 2050. Under the 1% cost growth assumption, spending would increase to 12.5% of GDP in 2050, and one study estimated that all future benefits would exceed future revenues by \$70 trillion in present value terms.⁶ Medicare’s dedicated revenues are also projected to stay relatively constant at about 1.5% of GDP (these programs have always received additional general revenues), so even under the rosiest scenarios, these programs would put a serious strain on general revenues under current policy.⁷

⁵ Medicaid covers much long-term care spending and health spending for the lower-income elderly. CBO estimates that at least 25% of all Medicaid spending is on the elderly.

⁶ Alan Auerbach, William Gale, and Peter Orszag, “Sources of the Long-Term Fiscal Gap,” *Tax Notes*, May 24, 2004, p. 1049. This estimate assumes that Medicare and Medicaid are assigned their current shares of general revenues. See also Jagdeesh Gokhale and Kent Smetters, *Fiscal and Generational Imbalances* (Washington, DC: AEI Press, 2003), p. 26.

⁷ Data from Congressional Budget Office, *The Long-Term Budget Outlook*, December 2005. All projections in this report come from this document unless otherwise noted. Estimates of Medicaid spending presented here are for federal Medicaid spending only; state governments are also projected to see a large increase in future Medicaid spending.

Figure 3. Projected Spending for Medicare and Medicaid as a % of GDP Under Different Assumptions about Excess Cost Growth



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

Note: Excess cost growth refers to growth in spending per beneficiary above GDP per capita growth.

Although most of the policy debate to date has focused on ways to reform Social Security, it is Medicare and Medicaid that pose a far larger strain on the federal budget. Between now and 2030, Social Security spending will increase by 1.6 percentage points, while Medicare and Medicaid will increase by 5 percentage points of GDP under intermediate scenarios, and as much as 8 percentage points of GDP under high cost scenarios.

Other areas of government spending will also be affected by an aging society. These programs include Supplemental Security Income (SSI) and health and pension spending for civil servants and veterans.⁸ Some analysts fear that the finances of the Pension Benefit Guarantee Corporation, a government agency that insures private defined benefit pension plans, could also be negatively affected if firms do not take steps to improve their pension reserves.⁹ (On the other hand, government spending

⁸ For more information, see CRS Report 94-486, *Supplemental Security Income: A Fact Sheet*, by Jennifer Lake.

⁹ Sylvester Schieber and John Shoven, "The Consequences of Population Aging for Private Pension Fund Saving and Asset Markets," *The Economic Effects of Aging in the United States and Japan* (Chicago: University of Chicago Press, 1997), p. 111. See also CRS Report RL32702, *Can the Pension Guarantee Corporation Be Restored to Financial* (continued...)

on the young could fall as a share of GDP as our society ages.) The increase in projected spending for these programs is small as a share of GDP compared with the increases in Social Security, Medicaid, and Medicare spending, however. In 2000, Social Security, Medicare, and Medicaid accounted for about 85% of total federal spending on the elderly.¹⁰

Also, there are no straightforward assumptions to make to project current tax policy. If current law were literally extended, the 2001 and 2003 tax cuts would expire and 70% of taxpayers would eventually fall under the alternative minimum tax due to inflation. A more realistic projection of current tax policy may be to assume that revenue as a share of GDP remains at historical levels (which would require tax increases, since revenue is currently very low by historical standards).¹¹ Likewise, discretionary spending is set annually through the appropriations process, so there is no obvious estimate of its future size. An assumption that nondefense discretionary spending will stay at its historical average as a percentage of GDP (which is lower than today) seems reasonable for a long-term projection. CBO assumes defense spending will decline as a percentage of GDP in its projections, despite its recent rise.

If these assumptions are an accurate portrayal of current policy, then the increase in entitlement spending under the projections would not be matched by any increase in general revenues or decrease in other spending, and would need to be entirely deficit financed under current policy. The effects of these projected deficits on the economy will be considered in the next section.

What Would Happen to the Economy in the Absence of Reform?

The budget deficits projected under current policy (as described in the previous section) would become unsustainably large very quickly, as shown in **Figure 4**, unless spending patterns were very favorable. Unless health care spending grew no faster than GDP and other spending fell as a share of GDP (the low cost scenario), CBO projects that deficits would reach 8.8%-13.8% of GDP by 2030 and 19.4%-37.5% of GDP by 2050. The United States has never financed a peacetime deficit above 6% of GDP and foreign countries have not succeeded in financing persistent deficits that were much larger. Although larger U.S. deficits were financed during wars, wars are only temporary, whereas the fiscal imbalance under current law is permanent. In essence, the rise in entitlement spending under the intermediate or high cost scenario is too large and permanent to be financed by pushing its cost forward through borrowing.

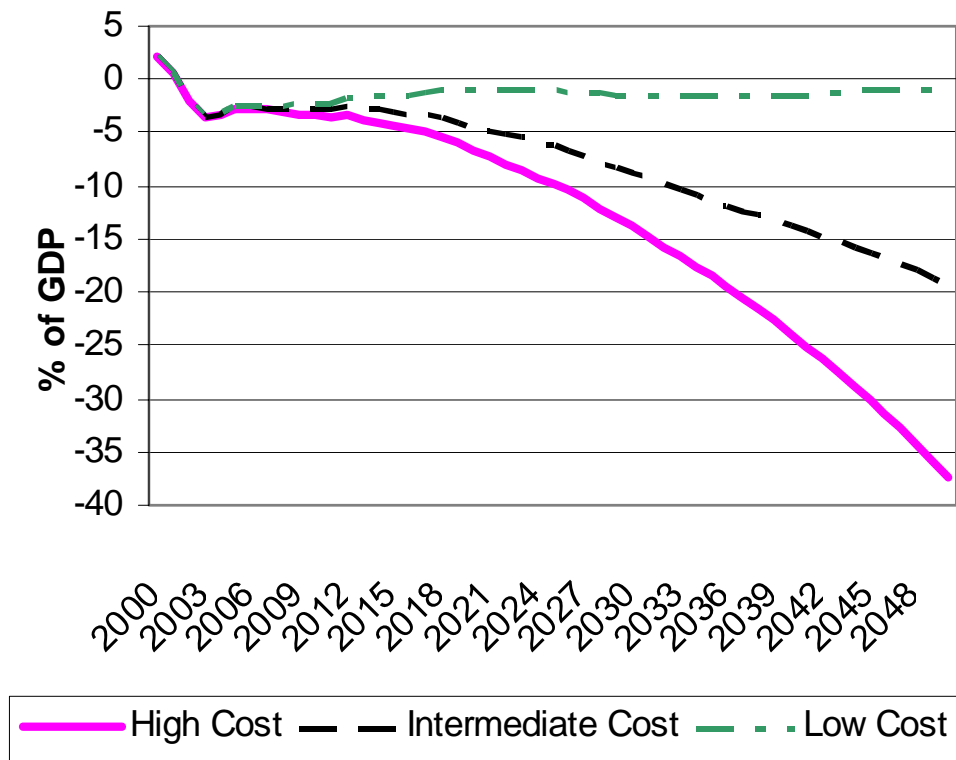
⁹ (...continued)

Health?, by Neela Ranade.

¹⁰ Congressional Budget Office, *Federal Spending on the Elderly and Children*, July 2000.

¹¹ Withdrawals from tax-deferred saving vehicles have been projected to lead to only a small increase in revenues when the baby boomers retire, and may be more than offset by other factors that make revenues fall. Alan Auerbach, William Gale, and Peter Orszag, "Reassessing the Fiscal Gap: The Role of Tax-Deferred Saving," *Tax Notes*, July 28, 2003.

Figure 4. Budget Deficits Under Three Different Projections of Current Policy



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

Notes: All three scenarios assume that revenues equal their historic average of 18.3% of GDP over the long run. The high cost, medium cost, and low cost scenarios assume annual excess health care cost growth of 2.5%, 1%, and 0%, respectively. The high and medium cost scenarios assume that nondefense discretionary and nonelderly mandatory spending equal their historic average over the long run, and the low cost scenario assumes that it falls. All three scenarios assume that military spending declines as a share of GDP, but the high cost scenario assumes a smaller decline.

If current policy were maintained and the assumptions in the intermediate or high cost scenarios proved to be accurate, investors would, at some point, refuse to finance a budget deficit that the government had no reasonable hope of ever servicing. This could occur before the debt became unsustainably large if investors (foreign and domestic) became convinced that default was unavoidable, and withdrew from the Treasury market in anticipation of default. At this point, unable to secure further credit, the government would be forced to default on its debt. This would destroy its reputation for safety that allows it to borrow at lower rates than any other domestic entity. Unable to raise sufficient funds from credit markets, it could be forced to turn to the printing press, and use the “inflation tax” option of printing money to close the gap. This would quickly lead to hyperinflation, undermining the efficient functioning of the American economy. No nation has been able to maintain high, sustainable economic growth in the presence of hyperinflation because it reduces the ability of prices to allocate resources, leads to barter replacing the

payment system, undermines the financial system, increases uncertainty, and leads to unproductive uses of people's time as they try to avoid the costs of hyperinflation. It also arbitrarily redistributes resources to those who protected themselves against inflation (by holding their wealth in a form that is inflation-protected) from those who did not.

In addition to the effects of hyperinflation, there would be a number of negative effects on the financial system from a debt default because of the central role U.S. Treasuries currently play as a financial benchmark. Both individual and institutional investors who had believed that they were investing in a "safe haven" by buying U.S. Treasuries would have risks introduced into their portfolios that they had not protected themselves against. This could lead to insolvency among institutional investors heavily invested, partly for regulatory reasons, in Treasuries, such as banks, insurance companies, and pension funds. Treasuries are used as collateral for financial instruments such as loans and derivatives, and it is unclear what would happen to these contracts if the underlying collateral became worthless. Treasuries are an important source of liquidity and information in the pricing of other financial securities; if they ceased to provide these roles, the efficiency of the financial sector would be severely hampered, at least temporarily. Given the large foreign holdings of U.S. Treasuries (more than one half of the outstanding debt), a default could cause economic repercussions abroad and lead to a precipitous decline in the dollar.

Presumably, policy will be altered before this point is reached. But in the interim, the deficit would still have a negative impact on the economy long before the fiscal outlook reached crisis. A rising risk premium due to an unsustainable fiscal policy is only one reason for interest rates to rise. The deficit also causes interest rates to rise because it is competing with private investment for a finite pool of national saving, thereby pushing up the demand for loanable funds. Interest rates rise to equilibrate the higher demand for loanable funds with supply, national saving. Unless private saving rose dramatically from current levels, the deficits would quickly swamp national saving.¹²

Whatever the cause of the increase in interest rates, the effect on the economy is the same: higher interest rates reduce private capital investment. Lower rates of capital formation cause economic growth to slow, leading to lower U.S. living standards in the long run than they otherwise would have been. Foreign capital flows can offset part or all of the decline in national saving, but this will still result in lower U.S. standards of living than if the budget had been balanced because the income from that capital will flow to foreigners instead of Americans.¹³

Ultimately, the resources available in the economy as a whole, not the promises made by current policy, will determine the level of government spending which is feasible in the future. A smaller economy as a result of the deficit "crowding out"

¹² National saving consists of household saving, business saving, and government saving (a surplus). A budget deficit is defined as a negative government saving rate, and directly reduces national saving.

¹³ See CRS Report RL31775, *Do Budget Deficits Push Up Interest Rates and Is This The Relevant Question?*, by Marc Labonte.

private investment means that fewer resources will be available from which the government can draw in the future to finance the retirement of the baby boomers. Raising a given amount of tax revenue from an economy that is smaller than it would have been in the absence of deficits, in turn, would require higher tax rates and a greater loss in economic efficiency. Even if the budget deficits were reduced to the point where they become sustainable, because of crowding out, future living standards would be lower than they would be if the budget had been balanced.

CBO long-term projections do not include any of the macroeconomic effects discussed in this section — the projected deficits are not assumed to affect interest rates or GDP through crowding out effects. If macroeconomic effects were included, the projections would be more unfavorable — interest payments on the national debt would be higher and tax revenues would be lower.

Why Can't the Contributions of Young Workers Finance the Benefits That They Have Been Promised?

It is popularly perceived to be “unfair” that projections indicate a shortfall of revenues in the future to finance the benefits that have been promised under current law. After all, retirees today paid the same or lower tax rates than today’s workers, and they are receiving the benefits equal to (or exceeding) what they were promised. While this predicament may be perceived as unfair, it is unavoidable: it is inherent in a pay-as-you-go system where benefits are financed by those working at the time. When the worker-retiree ratio falls, only two options are available under pay-as-you-go: benefits to retirees fall and/or taxes on workers rise. A pay-as-you-go system is fundamentally different from the fully funded pension systems which private employers run, where an employee’s contributions are invested to finance his future benefits, rather than used to pay the benefits of current retirees. (Even a fully funded pension system would pay smaller monthly annuities when life expectancy rose, however.)

Once a pay-as-you-go system is up and running and faced with an adverse demographic shift, there is no reform that can avoid placing a burden on some participants in the system by making some present or future generation receive less than past generations. It is most useful to think of this burden in terms of generations participating in the system, rather than in terms of taxes and benefits. The burden imposed by a tax on today’s workers is equivalent to the burden of a benefit cut when today’s workers retire. Reform cannot avoid making current or future generations worse off because the windfalls initially created by a pay-as-you-go system have already been collected and spent by the early workers in the system who received benefits that far exceeded their contributions.¹⁴

Evaluating the generational equity of a reform proposal is best done from a government-wide perspective, and not from a programmatic perspective. For

¹⁴ See Henning Bohn, “Social Security Reform and Financial Markets,” in Steven Sass and Robert Triest, eds., *Social Security Reform*, Federal Reserve Bank of Boston, Conference Series 41, June 1997, p. 196; John Geanakopolis, Olivia Mitchell, and Stephen Zeldes, “Social Security Money’s Worth,” NBER Working Paper 6722, September 1998.

example, proposals can appear to raise entitlement benefits paid to any given generation through general revenue transfers or increasing the national debt. But general revenue transfers or a larger national debt must (eventually) be financed through higher taxes or lower government spending. Thus, the burden has been shifted out of the program and into the general budget — it has not been reduced.

Can the Trust Funds Help Finance Future Benefits?

According to law, when benefit costs of Social Security and Medicare Part A exceed income, their trust funds can be drawn down to finance benefits. It is often argued that benefits can be financed in full until their trust funds are exhausted in 2042 and 2019, respectively. (Medicare Part B does not have a dedicated revenue source and relies heavily on general revenue transfers already.) While this is true from the programs' perspective, the trust funds have no effect on solvency from the overall government's perspective. The trust funds hold U.S. Treasury securities, which are nothing more than an IOU from the government to the trust fund. Therefore, Social Security and Medicare can only be financed in full as long as the government can find the budgetary resources to finance them. Arguing that the trust fund provides those resources by its presence is equivalent to arguing that one has purchasing power because one's right pocket contains an IOU from one's left pocket. The problem is not that, from the trust fund's perspective, the government will not honor its Treasury securities. The problem is that, from the government's perspective, it must find the budgetary resources to honor those securities. Under current policy, it will lack the resources long before the trust funds are exhausted because tax revenue is not projected to rise nor nonentitlement spending projected to fall in tandem with the rise in entitlement spending.

If the trust fund surpluses created future budgetary resources at the time they were accumulated, then those surpluses could be thought of as having a valid economic "claim" on those resources (although the political process would still determine whether they received their claim). Unfortunately, the government's overall fiscal position has precluded the possible use of the surpluses to create future budgetary resources. Surpluses of the Social Security and Medicare systems have not been — and are still not being — used to improve the government's fiscal condition in preparation for the retirement of the baby boomers, with the exception of the surpluses from 1999-2000. Instead, they are being used to support the government's current fiscal stance, in which revenues and other outlays are set at a level where they are not in balance. If the surpluses were being saved, they could be given "credit" for freeing up future budgetary resources, and an argument could be made that those freed-up resources should then be devoted to the entitlement programs. But since they are being diverted to finance nonentitlement spending, the presence of trust fund surpluses has not created any future budgetary resources that can be used by future governments to honor the Treasury securities held by the trust funds. It is the government's unwillingness to balance revenues and outlays outside the trust funds that prevents the trust fund surpluses from generating real resources that can be drawn down in the future.¹⁵

¹⁵ Some argue that the surpluses have created real resources because the government's
(continued...)

Focusing the reform debate on the government's overall fiscal position rather than the position of the program's trust fund also would have the benefit of avoiding budgetary gimmicks that may give the false appearance that the programs' fiscal position has been improved. For example, some reform proposals return the trust funds to solvency through general revenue transfers or by "investing" the entitlement surpluses in nongovernmental financial assets (either collectively or through individual accounts) without increasing the government's tax revenue. Although these proposals make the programs' financial position look improved in isolation, they do nothing to reduce the overall imbalance between government outlays and government revenues. In the case of the latter, surpluses diverted from financing general government outlays for "investment" purposes must be replaced by increasing the national debt in the absence of other policy changes. For the government as a whole, higher earnings on the trust funds or individual accounts are offset by higher interest on the national debt.

Economic Effects of Reform Options

Reform may encompass several goals — altering the redistributive characteristics of the system, giving people more choices about the form their benefits take, and so on. This section considers reform options in light of only one goal — altering current policy to achieve future fiscal solvency — because it is the only inescapable problem that requires a solution in light of an aging society. Achieving this goal is possible only through higher taxes or lower spending; as demonstrated above, maintaining current policy through borrowing is unsustainable. Since entitlement spending will dwarf all other spending in the future, a lower spending option can only be feasibly pursued through lower entitlement spending. Because the fiscal shortfall is so great, a solution to the problem would likely entail a combination of both higher taxes and lower spending.

Although the fiscal problems facing the government in the future are large, they are also distant. Budgetary resources are available for policy to continue along its current course for at least another decade or two. In this light, before evaluating specific reform proposals, it is useful to explore the motives for reform now rather than postponing reform until it becomes unavoidable. Reforming now rather than later has been justified on at least three grounds: to reduce the scope of future policy changes, to improve inter-generational equity, and to reduce uncertainty.

Prefunding to Reduce the Scope of Policy Changes. One reason given to undertake reform today is to reduce the scope of the policy changes that must be ultimately undertaken. Reform, as defined in this report, reduces the government's

¹⁵ (...continued)

unified budget deficit would have been even larger if it had not been for the trust fund surpluses. This argument cannot be settled conclusively since there is no way of knowing the size of the unified budget deficit in the counterfactual case where there had not been Social Security surpluses. For a comparison of perspectives on the trust fund, see Kent Smetters, "Is The Social Security Trust Fund Worth Anything?," *National Bureau of Economic Research*, Working Paper 9845, July 2003.

overall future fiscal shortfall. Reforms made today can reduce the future fiscal shortfall without reducing the present fiscal shortfall. For example, a benefit cut could be announced today that did not go into effect until, say, 2030. But for reform to reduce the ultimate scope of future benefit cuts or tax increases, it must incorporate *prefunding* — *raising resources today and saving them so that more resources are available in the future to pay future benefits*. In other words, a smaller benefit cut could restore fiscal solvency if it went into effect today and its proceeds were saved than if it went into effect in 2030.¹⁶

Prefunding can be done through the government (by paying down the national debt or investing the trust funds in private assets) or through individual accounts. The salutary effects of prefunding on the future fiscal imbalance are not limited to changes in Social Security and Medicare. Any policy change that reduced the current budget deficit would reduce the government's future fiscal gap; likewise, current budget deficits increase that fiscal gap. Prefunding increases the resources available to the government and economy as a whole by raising the national saving rate.¹⁷ The additional saving is then available to finance additional capital investment spending (or reduce reliance on foreign saving to finance current investment), which increases national output. A greater national output increases the future resources available to finance the needs of an aging population, and reduces the government's fiscal shortfall. The current fiscal stance of budget deficits, by contrast, eliminates the prefunding that would presently occur if the Social Security surpluses were saved and exacerbates the future fiscal shortfall for the same reasons. But making the transition to a prefunded system makes current generations worse off, because the prefunding must be financed either through higher taxes or lower benefits. Reform cannot make everyone better off, as some proponents have claimed.

Prefunding requires a new revenue source since under pay-as-you-go, existing revenues are already financing the benefits of current beneficiaries. (And because of the on-budget deficit, trust fund surpluses are already financing other government spending.) If reform were instead financed through borrowing, it would not improve the government's ability to pay benefits in the future (after adjusting for risk) — it would saddle future generations with explicit general government liabilities, in the form of a greater national debt. If reform is financed by borrowing, the increase in national saving in the trust fund or individual accounts is offset one for one by the decrease in government saving through the larger budget deficit.

Unfortunately, because benefits are tied to wages and GDP, prefunding not only increases the resources available to finance existing benefits promised by current law,

¹⁶ For example, the Social Security Advisory Board has calculated that Social Security trust fund solvency could be restored through 2075 with a 2% payroll tax rate increase today, or a 2.4% payroll tax rate increase in 2020 followed by an additional 2.4% increase in 2050. Social Security Advisory Board, *Social Security: Why Action Should Be Taken Soon*, July 2001.

¹⁷ It should be noted that from an economic perspective, increasing resources available to the government is not important, since theoretically the government can raise taxes to any level they desire at any time. It is the increase in the resources of the economy that is important.

it also increases the benefits themselves. (Prefunding leads to some fiscal improvement because it does not increase the Social Security benefits of those already retired.) To make prefunding a more effective strategy for improving future fiscal solvency, benefits could be de-linked from economic growth. De-linking Social Security benefits from economic growth is straightforward and can be accomplished by no longer tying benefits growth to wage growth. De-linking Medicare benefits from economic growth is less straightforward — as long as demand for health care increases with income, policies to increase GDP are also likely to increase the demand for Medicare spending.

Plans to reform through prefunding face a difficult political dilemma: how can a commitment to prefund be maintained and reform plans preserve a course of action that spans decades in the face of the comings and goings of new Congresses every two years? If reform plans cannot be preserved, little may be gained, from an economic perspective, by reforming now.¹⁸ This is a particular concern since there could potentially be significant short-term political gains and few political costs from diverting prefunding resources to unrelated policy goals. History suggests that this concern is a real one: for example, remember the “Social Security lock box,” a congressional action that failed to prevent Social Security surpluses from being diverted to finance other spending beginning in 2001.¹⁹ For this reason, prefunded individual accounts might have an important political advantage over centralized government prefunding because they take those resources “off the table” politically so that they could not be diverted to other uses. However, it is important to note that if individual accounts are debt-financed rather than prefunded, they will not be taking any resources “off the table.”²⁰ Proponents argue that a centrally controlled trust fund invested in private assets would be another way to take those resources “off the table.” Opponents argue that the earnings of a centrally controlled trust fund could be siphoned off to finance other government spending just as easily as the interest earnings of the trust funds are siphoned off today.

Inter-generational Equity. Another reason given for undertaking reform today is to alter inter-generational equity. The choice for policymakers is whether to spread the tax increases and/or spending cuts over all generations beginning now through prefunding, or whether to concentrate the policy changes on future generations. Financing government spending through budget deficits does not impose less of a burden than tax increases or other spending cuts — it shifts the

¹⁸ Bosworth and Burtless present international evidence that saving in a public pension system is offset by dissaving in the rest of the government’s budget. Barry Bosworth and Gary Burtless, “Pension Reform and Saving,” working paper presented at the International Forum of Collaboration Projects, Tokyo Japan, February 17-19, 2003.

¹⁹ See CRS Report RS20165, *Social Security and Medicare “Lock Boxes,”* by David Koitz and Dawn Nuschler.

²⁰ Peter Diamond argues that these resources would not really be “off the table” because there would be political pressure to allow pre-retirement withdrawals from the accounts, as is allowed for individual retirement accounts (IRAs), and to substitute withdrawals from the accounts for government spending. See Peter Diamond, “Macroeconomic Aspects of Social Security Reform,” *Brookings Papers on Economic Activity* 2, 1997, p. 1.

burden forward to future generations through a lower saving rate and capital stock.²¹ The longer reform is postponed, the greater the benefit reductions or tax increases imposed on future generations. Economic theory cannot judge the desirability of a reform that shifted to prefunding because it is a question of inter-generational equity: is it “fair” that future generations are treated worse than current and past generations under current policy because of the effects of adverse demography on a pay-as-you-go system? Prefunding would reduce the inferior treatment of future generations, but would be unlikely to eliminate it since past generations received benefits that far exceeded their contributions. Under current policy, the Trustees report for Social Security and Medicare estimated, respectively, that there will be a transfer of resources from future generations to past and present generations equal to \$14.4 trillion for Social Security and \$11.4 trillion for Medicare in present value terms.²² Some would argue that it is fairest to spread the unavoidable burdens of a pay-as-you-go system among all generations, rather than placing the entire burden on future generations. Others would argue that placing the burden on future generations is justified since they will be wealthier than current generations because of future economic growth.

Deciding between benefit reductions and tax increases to restore future fiscal solvency is often viewed through the prism of fairness. This is somewhat misleading — in the aggregate, there is not much difference in fairness between cutting benefits and raising taxes on the same individual. For equity considerations, the generation affected by the reform is more important than the form that reform takes. Reforms undertaken now can raise taxes or lower benefits on current generations or future generations; reforms postponed to the future will only affect future generations. However, Social Security does provide favorable benefits to individuals who are low-income, widows, dependents, and disabled, and maintaining the favorable treatment they currently receive would depend on the nature of the benefit cuts.

Reducing Uncertainty. Finally, reform can be undertaken today on the grounds that it will reduce uncertainty. Workers trying to plan their optimum private saving behavior today are hampered by uncertainty concerning the benefits that will be provided by the government in the future. Uncertainty is caused by the future fiscal shortfall, and can only be reduced if the shortfall is reduced. Uncertainty can be reduced with or without prefunding. For example, making the future benefit cuts implied by the revenue shortfall explicit in law would also eliminate uncertainty. Uncertainty has implications for the types of reforms that can be undertaken. Policy options that affect individuals when they are old must be adopted far ahead of time if individuals are to be given time to adapt to those changes. For example, benefit cuts must be announced far in advance if individuals are to be given the opportunity to save more in their working years to offset benefit cuts. By contrast, policy options,

²¹ See CRS Report RL30520, *The National Debt: Who Bears Its Burden?*, by Marc Labonte and Gail Makinen.

²² The \$11.4 trillion Medicare transfer is an underestimate because it does not include the general revenue transfers to past and current generations equal to \$16.9 trillion that the trustees assume will occur. Some of these general revenues will be paid by future generations and some by present generations. See Tables III.C16 and III.C24 of the Medicare Trustees' Report.

such as tax increases, that affect individuals when they are young can be adopted immediately. This implies that postponing reform is likely to bias the eventual solution toward tax increases rather than spending cuts.

Reform Options: Reducing Benefits

Social Security.²³ Although the funding shortfall in Social Security looks daunting, relatively minor changes in benefit calculations could bring outlays back in line with revenues under the intermediate scenario.²⁴ For example, if initial benefits were indexed to price inflation instead of wage growth, outlays would fall significantly in the long run. If this were done, benefits would still be rising in nominal terms (and keeping constant in real terms), but the replacement rate of benefits compared to wages would fall. The advantage of this approach would be that savings to the government would rise over time (as the spread between wages and prices grew) to offset the increasing fiscal imbalance. (Since budgetary savings grow under this approach, larger reductions would be needed if postponed to the future.) A disadvantage of this proposal is that it is not directly tied to the size of the financial shortfall, so if the shortfall turned out to be smaller (larger) than expected, benefits would be cut more (less) than needed to restore solvency. CBO estimates that one proposal along these lines could reduce outlays to 4.7% of GDP from 6.4% of GDP (under current law) by 2050.²⁵ This would keep Social Security spending near its current level as a share of GDP.

To avoid a reduction in their standard of living in retirement following a benefit cut, workers would have to save more of their income during their working years or work longer. Thus, to the extent that Social Security substitutes for private saving, benefit cuts could lead to higher saving or labor supply which, in turn, would boost economic growth.²⁶ But to the extent that Social Security substitutes for family income transfers, households fail to plan ahead for retirement saving, or private saving is driven by other motives, such as a bequest motive or precautionary saving, reduced Social Security benefits would not influence private saving. Furthermore, the relatively unequal distribution of U.S. wealth suggests that private saving may not

²³ It should also be recognized that any proposed benefit reductions to close the fiscal gap are relative, not absolute, reductions. If future generations receive only the benefits that can be financed by dedicated revenues under current law, their dollar amount will still exceed the benefits paid to retirees today. However, these benefits will be lower relative to earnings because future earnings and life expectancy will be higher. (Likewise, tax increases would reduce after-tax income as a share of future income, but would still leave future citizens with higher incomes than today in absolute terms.) Similarly, under current law, even though the retirement age has increased, future retirees will spend more years in retirement collecting benefits than current retirees because of increases in life expectancy.

²⁴ The effect of a number of reform proposals on system solvency can be found in Social Security Advisory Board, *Why Action Should Be Taken Soon*, (Washington, DC: July 2001). The report also illustrates how much larger reforms would need to be if postponed.

²⁵ Congressional Budget Office, *The Long Term Budget Outlook*, December 2005, p. 22.

²⁶ See Barry Bosworth and Gary Burtless, "Supply Side Consequences of Social Security Reform: Impacts on Saving and Employment," Center for Retirement Research at Boston College, Working Paper 2004-1, January 2004.

be that sensitive to changes in Social Security. At the top of the income distribution, which accounts for most U.S. saving, Social Security makes up little if any of an individual's retirement income. For example, elderly in the highest quartile of the income distribution received 21% of their income from Social Security in 2002.²⁷ At the bottom of the income distribution, a sizable fraction of Americans have very little private saving, and would presumably suffer a reduction in living standards rather than raise their saving rate in light of a benefit cut.²⁸

An alternative approach to reducing benefits would be to raise the retirement and early retirement ages. This approach could avoid reducing monthly benefit payments, although lifetime benefits would fall since retirees would begin to collect benefits later in life. Proponents justify this approach on the grounds that rising life expectancy means that retirees are collecting benefits for longer than previous retirees — in effect, longer life expectancy has inadvertently caused lifetime benefits to increase. In addition, raising the retirement age would directly increase output by keeping workers in the labor force longer, thereby providing the economy as a whole with more resources to cope with an aging society. One study estimates that raising the retirement age to 70 would increase employment rates among men age 55-74 by as much as 15%, or total employment among men by 3%.²⁹ CBO estimated that a proposal to raise the retirement age and reduce early retirement benefits would reduce outlays in 2050 from a projected 6.4% of GDP under current policy to 5.6% of GDP.³⁰

Medicare and Medicaid. Unlike Social Security, there are no straightforward proposals to reduce the long-term growth in Medicare and Medicaid spending. Social Security spending is based on specific formulas that can be altered to reach a desired spending level. Health spending, by contrast, is not currently set directly by the government. Rather, the government chooses the services it will finance, and the spending on those treatments ultimately depends on supply and demand. Few concrete policy proposals have yet been forwarded that grapple with Medicare's long-term fiscal imbalance, so little is known about how much savings could be garnered from the proposals discussed below; it is likely that none of the proposals adopted in isolation could close the fiscal imbalance.³¹

²⁷ CRS Report RL32697, *Topics in Aging: Income and Poverty Among Older Americans in 2002*, by Patrick Purcell and Debra Whitman.

²⁸ See James Poterba, "Discussion," in Steven Sass and Robert Triest, eds., *Social Security Reform*, Federal Reserve Bank of Boston, Conference Series 41, June 1997, p. 146. Data can be found in CRS Report RL30327, *The Distribution of Household Wealth in the United States*, by Brian Cashell; and CRS Report RL32697, *Topics in Aging: Income and Poverty Among Older Americans in 2002*, by Patrick Purcell and Debra Whitman.

²⁹ See Barry Bosworth and Gary Burtless, "Supply Side Consequences of Social Security Reform: Impacts on Saving and Employment," Center for Retirement Research at Boston College, Working Paper 2004-1, January 2004, p. 38.

³⁰ Congressional Budget Office, *The Long Term Budget Outlook*, December 2005, p. 23.

³¹ Ten-year cost estimates for many Medicare reform proposals can be found in Congressional Budget Office, *Budget Options*, February 2007.

The central challenge for policymakers is to reduce excess cost growth. If spending on the health programs grew at the rate of GDP, they would not place a significant strain on government finances. Because of the great uncertainties inherent in projecting into the distant future, it is not known what path spending would take in the absence of reform. One study suggests that continuing excess cost growth at the historical rate of 2.5% is infeasible because it would imply that nonhealth consumption would decline in real terms by 2011 and fall to zero by 2060, even though overall income would be growing. The study finds that any excess cost growth rate above 1% would cause nonhealth consumption to fall to zero within 100 years.³² It is possible that technology or consumer preferences would change on their own such that excess cost growth wanes without government intervention. But it may be more prudent to assume that it will not wane, given historical patterns. Then the challenge becomes finding policy actions that can restrain excess cost growth.

Policymakers can attempt to restrain cost growth through the demand side or supply side of the market. Demand could be reduced by shifting Medicare costs from the government to the beneficiaries, which would also directly reduce the government's fiscal gap and alter generational equity, if applied to current generations. (Shifting costs to the beneficiaries in the Medicaid program seems less philosophically compatible since it is a low-income support program.) Demand could be reduced by making beneficiaries bear a greater portion of Part B premiums.³³ (If desired, higher premiums could be means-tested to avoid negative effects on low-income individuals.) Beneficiaries currently pay about 25% of premiums and general revenues pay the remainder. However, higher premiums may have little effect on medical spending of participants (although it could reduce participation) since it would not influence the marginal cost of specific treatments (because premiums finance the overall insurance, not specific treatments). To influence marginal costs, raising deductibles and co-insurance rates would be more effective. But even if marginal costs were increased, some analysts are skeptical that consumers could make well-educated decisions based on price since choosing between medical procedures, unlike most goods, involves a highly specialized knowledge of medicine. And unless rules on supplemental coverage were altered, privately-purchased supplemental plans or Medicaid could cancel out policy changes that made marginal costs higher and shift health spending from Medicare to private spending and Medicaid.³⁴

Another way to reduce demand would be to restrict enrollment. One way would be to raise the age of eligibility. In fact, unlike Social Security, Medicare's eligibility age is not already rising under current law. Modifying Medicare's eligibility age to

³² Glen Follette and Louise Sheiner, "The Sustainability of Health Spending Growth," Federal Reserve Board of Governors, *Finance and Economics Discussion Series 2005-60*, September 2005.

³³ Revenue estimates for raising premiums and other reform options can be found in Marilyn Moon, Misha Segal, and Randall Weiss, "A Moving Target: Financing Medicare for the Future," *Inquiry*, vol. 37, no. 4, Winter 2000/2001, p. 338. For example, the authors find that roughly quadrupling premiums in 2025 would raise government revenues by about 2% of GDP.

³⁴ See General Accounting Office, *Medigap*, GAO-02-533T, March 14, 2002.

match Social Security's would save billions of dollars, but the saving would still be modest in light of the program's future fiscal shortfalls.³⁵

Budgetary savings is not a rationale for reducing demand in and of itself. From an economic perspective, reducing demand is only desirable if the benefits of receiving the health care are outweighed by the costs to society of their provision. Medicare may provide a good (elder health care) that could not be efficiently provided by the market, notably because of adverse selection.³⁶ If higher costs to beneficiaries caused them to drop out of Part B or receive too little care (notably preventive care), Medicare spending could fall to a socially sub-optimal level. (Non-participation could be avoided by making participation mandatory, although this would increase budgetary pressures). On the other hand, since patients do not directly bear the costs, medical care may be over-consumed at present from a society-wide perspective, which would make a reduction in demand more economically efficient.

On the supply side of the market, spending could be reduced by restricting the medical services that the government will reimburse or limiting the coverage of newly developed treatments. If this approach is pursued, some medical spending would cease and some would be shifted to private spending and private insurance. It is beyond the scope of this report to speculate on what services and treatments the government should or should not reimburse. In any case, treatments several decades from now will probably be of a very different cost and nature than the present.

Proponents argue that another path to restraining cost growth lies with transforming Medicare from a government monopsony to a competitive market of private insurers, including the health maintenance organization (HMO) model that dominates employer-based coverage.³⁷ (This approach is sometimes referred to as "premium support.") They argue that government lacks the profit-incentive, competitive pressures, and market savvy needed to restrain costs. Opponents argue that government provision has two advantages over competition that make it more suitable. First, only government has monopsony bargaining power and economies of scale (which it does not fully use at present), and these can be used to hold down costs more effectively. Second, an efficient insurance mechanism broadly pools risk so that the premiums of the healthy offset the costs of the sick. Health insurance could only be efficiently provided in competitive markets if adverse selection and cherry picking (private plans only serving healthy individuals to lower costs) could be avoided. Theoretically, adverse selection could be avoided through some

³⁵ See, for example, Congressional Budget Office, *Cost Estimate of S.947/H.R.2015 as passed by the Senate on June 25, 1997*, July 2, 1997. Because of changes to Medicare since this cost estimate was conducted, it should be viewed as giving only an order of magnitude estimate to the cost savings of the proposal.

³⁶ Adverse selection is caused by asymmetric information because patients know more about their health conditions (and therefore, potential medical costs) than insurers. Because of asymmetric information, sick patients will find an average price offered by insurers profitable and healthy patients will find it unfavorable. As a result, healthy patients could be driven out of the market, driving average prices up.

³⁷ Jonathan Oberlander, "Is Premium Support the Right Medicine for Medicare?," *Health Affairs*, vol. 19, no. 5, September/October 2000, p. 86.

combination of nondiscriminatory coverage, risk-adjusted premiums, and Medicare regulating the types of coverage that any plan must provide, but designing these tools effectively has been difficult in reality.³⁸ In any case, as an empirical matter, HMOs do not have a long enough track record to reach a consensus on whether they can reduce costs continually or only on a one-time basis. Although many analysts credit HMOs with reducing cost growth following their adoption in the 1990s, cost growth accelerated again in this decade.³⁹ Another problem with an HMO approach is ensuring that all beneficiaries have access to a plan, particularly in rural areas. In 2003, 25% of beneficiaries did not have access to a Medicare Advantage plan.⁴⁰

For the HMO model to reduce Medicare spending, it would have to be set up differently than the current Medicare Advantage system.⁴¹ In the Medicare Advantage system, the government sets the minimum beneficiary premiums, the basic benefits offered, and the payments to companies. Thus, companies are not really free to compete on price, and efficiency gains cannot be translated into lower spending. Instead, companies compete on the medical services offered (they must offer a basket of services set by the government and can add additional services to that basket), so that, holding government-mandated premiums constant, efficiency gains are translated into higher profits or greater medical spending (because the company will offer the beneficiary more medical services). Preventing companies from competing on price is a way to reduce (but not likely eliminate) adverse selection; for companies to compete on price and the market to function efficiently, other tools would need to be found to prevent adverse selection.

Some analysts argue that reforms to Medicare's payment system could also generate cost savings. Health care providers are paid on a fee-for-service basis, which may give them an incentive to over-provide. Medicare payments are set by complex formulas that may not always match the price that Medicare could secure if bargained in the market. Once a treatment is approved by Medicare, the government leaves it to physicians, who have little incentive to consider the government's objective of limiting spending, to prescribe its use. Some researchers argue for "evidence-based medicine," claiming that cost-saving could be achieved by substituting less expensive treatments that are similarly effective.⁴² For example, some researchers claim that the differences in outlays by region cannot be explained

³⁸ As an example of how adverse selection may already affect Medicare, some analysts argue that HMOs providing Medicare+Choice plans are only profitable because they attract enrollees more healthy than the average but are paid by Medicare according to the average. See Barbara Cooper and Bruce Vladeck, "Bringing Competitive Pricing to Medicare," *Health Affairs*, vol. 19, no. 5, September/October 2000, p. 55.

³⁹ For example, see Marsha Gold, "Can Managed Care and Competition Control Medicare Costs?," *Health Affairs*, Web Exclusive, April 2, 2003.

⁴⁰ MedPAC, *Data Book: Health Care Spending and the Medicare Program*, June 2004.

⁴¹ For more information, see CRS Report RL32618, *Medicare Advantage Payments*, by Hinda Chaikind and Paulette Morgan.

⁴² For studies of variations in medical treatments and outcomes, see Dartmouth Atlas of Health Care, "Dartmouth Studies Show Wide Variation in Hospital Care and Outcomes For Chronically Ill Medicare Patients," press release, October 7, 2004.

by cost of living and patient characteristics.⁴³ However, these type of reforms may lead to one-time, rather than continuous, cost savings.

Two other proposals to limit supply meet skepticism among economists. First, queuing (rationing under-supply through waiting lists) is widely used to reduce costs in foreign countries with nationalized health systems. But economists are skeptical that the benefits of the lower financial costs exceed the nonfinancial costs of queuing. The nonfinancial cost can be thought of as the monetary price patients would be willing to pay to avoid the wait. Second, cutting Medicare's payments to providers cannot be used to restrain cost growth on an ongoing basis. While this strategy has been used in the past for short-term budgetary savings, to use it on an ongoing basis would require providers to accept continually lower payments for their services. Eventually, this would cause providers to withdraw their services, and some analysts have argued that this has occurred when payments have been cut in the past.

When evaluating all of the proposals made above, it is useful to consider whether the goal of reform is to reduce federal spending or economy-wide spending on elderly health care. This issue is beyond the scope of this report. Many proposals could potentially replace Medicare spending with private spending, either by individuals or by the corporations from which they retired, or spending by state and local governments. Some proposals, adopted in isolation, would shift some spending from Medicare to Medicaid, which would limit the proposal's budgetary saving. Since Medicaid is a jointly funded state-federal program, there is frequently tension to shift costs back and forth between the two when either is looking to reduce overall spending.

Reform Options: Raising Taxes

The tax increases required to place Social Security back on a solvent financial path under the intermediate scenario are also manageable from an economic perspective. If Social Security is maintained on a pay-as-you-go basis, tax increases of about 2% of GDP would be needed by 2050. To place this total in perspective, tax revenues increased by 2.5 percentage points of GDP between 1993 and 1999, with little evidence of negative ramifications for the economy. If taxes are increased sooner and the revenues saved, the increase required to bring the system back to solvency would be smaller.

Unfortunately, the tax increases required to keep Medicare and Medicaid on sustainable paths and maintain benefits are much more daunting. If excess cost growth is high, taxes would need to rise about 8 percentage points of GDP by 2030 and 18 percentage points of GDP by 2050. Even gradual tax increases of these magnitudes need not be ruled out as infeasible since many Western European countries collect more than 50% of GDP in tax revenue, compared with a historical federal average of 18.3% in the United States. Alternatively, if there were no excess cost growth, taxes would need to increase less than 2.0 percentage points of GDP by 2030 and 2.5 percentage points of GDP by 2050.

⁴³ Uwe Reinhardt, "Health Care for the Aging Baby Boom: Lessons from Abroad," *Journal of Economic Perspectives*, vol. 14, no. 2, Spring 2000, p. 71.

If reform relied on tax increases, what form could they take? Maintaining a dedicated revenue source appeals to some for political reasons, but money is fungible across the budget, so any type of tax increase could return the government to fiscal solvency. (Entitlement spending is not on an unsustainable path under current policy because spending exceeds dedicated revenue but because it exceeds the entire revenues available to the government.) In any case, long-term fundamental reform need not be limited to wage (payroll) tax increases both because any type of tax could be dedicated and because Medicare Part B is already financed through general revenues and premiums.

If taxes were levied on individuals, they could take the form of wage (payroll) taxes, income taxes, or consumption taxes. (If levied on corporations, other options would be available.) Tax revenue can also be raised at existing tax rates by broadening the tax base, an approach often favored by economists. Consumption and wage taxes affect labor supply but not saving decisions; income taxes affect both. Income taxes have a broader base and require lower tax rates in the long run. Wage or income tax increases could be made more progressive through a graduated rate structure; progressivity would be harder to achieve with consumption taxes. Consumption taxes would shift more of the burden of reform to the existing elderly because they tax existing saving when it is drawn down.

Besides tax rate increases, there could be changes made to the tax treatment of Social Security to raise revenue. For example, if policymakers wanted to make the system more progressive, the income ceiling on the payroll tax could be removed for Social Security (there is none for Medicare). Alternatively, Social Security benefits could be taxed in full (currently about two thirds of recipients pay no tax on their benefits). These modifications could be justified economically if Social Security is viewed as a government program rather than a pension scheme. Revenues could be raised within Medicare through higher premiums for Part B or D.

If the long-term fiscal imbalance were closed through higher taxes, raising taxes today and saving the proceeds through prefunding would require smaller tax increases than postponing tax increases to the future. Smaller tax increases today would be more economically efficient than large increases and would affect generational equity by shifting some of the cost of reform to present generations. If taxes were raised today and the proceeds not saved, then the tax increases required in the future would not be reduced.

There is a widespread belief that lower spending is better for economic growth than higher taxes but there is not strong evidence for this belief. Economic theory is ambiguous as to whether higher taxes would increase or decrease growth. Either way, empirical evidence suggests that the effect is small. For example, CBO estimates that eliminating the overall fiscal shortfall through higher taxes would cause annual growth to fall by 0.13 percentage points (GDP would be a cumulative 6% lower in 2050) compared to lower benefits.⁴⁴ In any case, individuals would not change their behavior as much in response to an increase in taxes for Social Security

⁴⁴ Congressional Budget Office, *The Long Term Budget Outlook*, December 2005, p. 17.

compared with a normal tax increase, because reducing labor supply would directly reduce the individual's benefits.

Taxes can affect economic growth by influencing labor supply (both the decision to work and the number of hours worked) or the saving rate. Empirical evidence is inconclusive as to the effects of taxes on saving because the decision to save is a very complicated one made over time and motivated by many different factors. Thus, results turn out to be highly sensitive to the model used. Currently, Social Security and Medicare Part A are financed by payroll taxes, which do not affect saving. However, even under the assumption that tax increases had no effect on the decision to save at the margin, raising taxes by several percentage points of GDP could reduce private saving by reducing after-tax income. Empirical evidence suggests that labor supply is relatively unresponsive to tax changes — most people, particularly men and single women, will work full-time regardless of tax rates.⁴⁵

One demographic group whose labor supply may be more sensitive to tax rates is the elderly and near-elderly. This suggests that reform options that affect the tax rate on the elderly could have important effects on the economy, even when those policies are intended to reduce entitlement spending. When entitlement spending is influenced by current income, spending policies too can act as a tax by reducing benefits when income rises.⁴⁶

Some argue for reform based on tax increases on the grounds that recent tax cuts have contributed to the overall future shortfall between projected revenues and outlays. For example, the recent tax cuts, EGTRRA (P.L. 107-16) and JGTRRA (P.L. 108-27), have been estimated to increase the “fiscal gap,” the long-term budget deficit, by 2.2% of GDP. To offset the effects of these tax cuts on the fiscal gap would require an estimated 9% permanent reduction in all (noninterest) spending.⁴⁷

⁴⁵ See Theresa Devine, “Demographics, Social Security Reform, and Labor Supply” and Eric Engen and William Gale, “Effects of Social Security Reform on Private and National Saving,” both in Steven Sass and Robert Triest, eds., *Social Security Reform*, Federal Reserve Bank of Boston Conference Series 41, June 1997, p. 77; Congressional Budget Office, *Labor Supply and Taxes*, memorandum, January 1996; Jerry Hausman, “Taxes and Labor Supply,” Alan J. Auerbach and Martin Feldstein, eds., *Handbook of Public Economics*, vol.1, New York, North Holland, 1985; CRS Report RL31949, *Issues in Dynamic Revenue Estimating*, by Jane Gravelle.

⁴⁶ For example, after a worker has accumulated 35 years of Social Security contributions, additional payroll taxes may exceed the further increases in benefits that they produce. Features of Social Security, Medicare, and tax policy like these cause the overall implicit “tax on work” after the age of 62 to far exceed the actual tax rate. One study shows that for a representative worker, the implicit marginal tax on work rises from 14.2% at age 55 to 24.7% at age 62 to 39.4% at age 65 to 49.5% at age 70. In other words, at age 70 a worker can only increase his after-tax and after-benefit spending by 50 cents for every dollar earned. These calculations are based on a representative worker who is a single male with a defined contribution pension. Women and married men with working spouses face somewhat lower implicit marginal tax rates. Barbara Butrica et al., “Does Work Pay at Older Ages?,” Center for Retirement Research at Boston College, Working Paper 2004-31, November 2004.

⁴⁷ Alan Auerbach, William Gale, and Peter Orszag, “Sources of the Long-Term Fiscal Gap,”
(continued...)

Reform Options: Individual Accounts

Many proponents have pointed to individual accounts as a potential solution to Social Security's financing problems.⁴⁸ They argue that payroll tax revenues could be diverted to accounts that would be owned by the individual, and these accounts could be invested in financial securities. The high rate of return earned by the accounts, it is argued, could be used to reduce Social Security's fiscal shortfall.

Switching Social Security to a system of individual accounts, partially or completely, raises many economic issues, including questions of risk sharing, adverse selection, moral hazard, annuitization, bequests, and so on which will not be addressed in this report.⁴⁹ Furthermore, individual accounts alone would not address the system's current social goals, which include redistribution and the provision of benefits for survivors, dependents, and the disabled (which currently account for 38% of the system's outlays). This report will only analyze the claim that individual accounts can improve the government's fiscal position.

As illustrated below, individual accounts would not be self-financing because savings to the government from the individual accounts would not occur until the account holders retire. All payroll tax revenues are currently dedicated to the payment of benefits to current retirees or the financing of general government spending — despite the Social Security surplus, there are no unused funds available to finance the creation of individual accounts. Thus, individual accounts would need to be financed by immediately raising taxes, reducing spending, or issuing Treasury securities (increasing the budget deficit); this is sometimes referred to as the “transition cost” of implementing individual accounts.⁵⁰

Individual accounts are one vehicle through which prefunding can be implemented if financed through higher taxes or lower government spending. Then the government's overall fiscal position will improve, national saving will rise, private investment will increase, and this will increase the future size of the economy.⁵¹ As noted above, individual accounts are not necessary for prefunding —

⁴⁷ (...continued)

Tax Notes, May 24, 2004, p. 1049.

⁴⁸ Similar proposals have been made by some for Medicare but have not received any congressional attention. See Martin Feldstein, “Prefunding Medicare,” *National Bureau of Economic Research*, Working Paper 6917, January 1999. In his proposal, individual accounts would accumulate savings that could then be used to purchase health insurance upon retirement. See also Thomas Saving, “Making the Transition to Prepaid Medicare,” *Journal of Economic Perspectives*, vol. 14, no. 2, Spring 2000, p. 85; and Laurence Seidman, “Prefunding Medicare Without Individual Accounts,” *Health Affairs*, vol. 19, no. 5, September/October 2000, p. 72.

⁴⁹ These issues are comprehensively analyzed in CRS Report RL31498, *Social Security Reform: Economic Issues*, by Jane Gravelle and Marc Labonte.

⁵⁰ See CRS Report RS22010, *Social Security: “Transition Costs,”* by Laura Haltzel.

⁵¹ This assumes that the individual accounts are “carved out” of the existing Social Security (continued...)

prefunding can also occur if the government reduces the national debt or collectively invests in private securities. However, individual accounts may also be created without prefunding by increasing the size of the budget deficit.⁵² If this occurs, no additional economic resources will be generated to reduce the government's fiscal imbalance. Any gain in government revenues from the individual accounts will be offset by higher interest payments on the national debt (because the individual accounts were debt financed) and a lower rate of return earned by private investors (because the increased demand for private securities and government debt will push down the return on private securities and raise the interest rate that the government must pay to finance its debt). If individual accounts equal to 2%-4% of payroll (0.8%-1.6% of GDP) were introduced without a new source of revenue, as the President's Commission to Strengthen Social Security proposed, the effect on interest rates and private rates of return could be significant. The creation of debt-financed individual accounts is a zero sum game for the economy as a whole because they do not raise the national saving rate (the rise in private saving is canceled by the decline in public saving) nor the national capital stock, so they do not increase national income. Most proposals do not allow accounts to be "topped up" with voluntary private contributions, so there is little reason to think that the increase in private saving will exceed the decrease in private saving.⁵³

This argument can be made more concrete using official estimates provided by Social Security Administration actuaries of Option 1 in the President's Commission to Strengthen Social Security. In Option 1, workers under 55 could elect to deposit 2% of their OASDI taxable earnings in an individual account, with an offsetting reduction in benefits based on diverted amounts compounded at a real rate of return 3.5%, which is the source of budgetary saving to the government. Since Option 1 does not identify any new source of revenue to finance the accounts, they can be considered to be debt-financed. It is analyzed here because it is the only option that relies solely on individual accounts (Options 2 and 3 are a combination of individual accounts and benefit reductions.)

⁵¹ (...continued)

system through benefit offsets and diverting some of the payroll tax. Some policymakers have instead recommended that the accounts be "added on" to Social Security by not altering present law benefits and not diverting the payroll tax. The effects of "add on" accounts on the economy are the same as "carve outs": if the accounts are financed through higher taxes or lower spending, then they will increase national saving (although less than one for one because there will be some offset in private saving), which will increase GDP. But if they are financed through larger budget deficits, they will not contribute to national saving, and therefore not increase GDP. However, no matter how they are financed, "add on" accounts do not reduce the government's fiscal gap because they do not reduce Social Security's liabilities nor introduce a new revenue stream that can be used to finance Social Security's liabilities.

⁵² The Administration stated that this was its plan at an economic summit in December 2004. Edmund Andrews, "Bush Puts Social Security at Top of Economic Conference," *New York Times*, December 15, 2004.

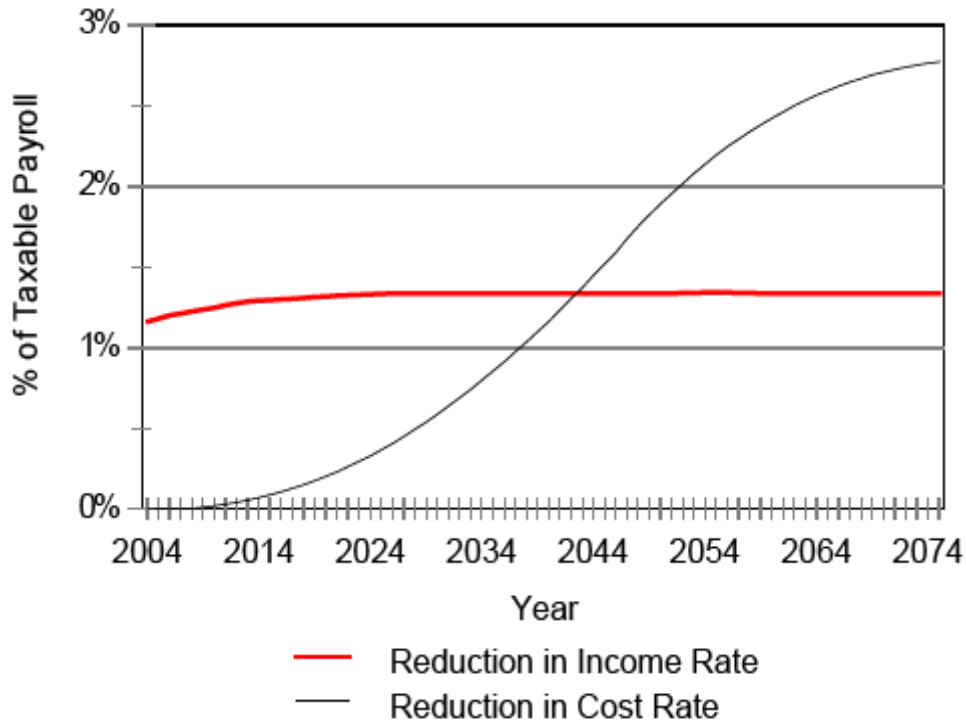
⁵³ Since the individual accounts do not reduce the government's fiscal gap, rational individuals should not respond to the creation of the accounts by reducing their private saving. Nevertheless, if individuals perceived the individual accounts as new net wealth to them, they might decide that they need to save less to meet their retirement needs.

Figure 5 illustrates the *change* in the income and cost rates of the Social Security system as a percentage of taxable payroll caused by introducing individual accounts.⁵⁴ Diverting 2% of the payroll tax to individual accounts would reduce the income rate by an amount that would stabilize at about 1.33% of taxable payroll in a decade, assuming two-thirds of eligible workers participate. However, individual accounts would not lead to any significant decline in the cost rate for many years, since funds would not be withdrawn from individual accounts (which reduces the cost rate through the Social Security benefit offset) until they retire. The reduction in the cost rate steadily increases over time, approaching 2.75% of payroll in 2075, as larger individual accounts are amassed and then drawn down. For the first 40 years after the introduction of individual accounts, the accounts would generate less revenue than was being diverted from beneficiaries. Roughly 40 years after the introduction of individual accounts, when enough retirees had spent their entire career making contributions, the reduction in benefits from the offset would exceed the revenue lost from a 2% marginal payroll tax cut. After that, the savings to the government would get larger and larger and eventually become quite significant.⁵⁵

⁵⁴ The income rate refers to payroll tax revenue collected by the Social Security system. The cost rate refers to the benefits paid by the Social Security system. Taxable payroll is the tax base from which payroll revenues are collected.

⁵⁵ Since the graph shows the *change* in the income and cost rates caused by introducing individual accounts, the future financing crisis is not averted if the proposals generate additional revenues. It is only averted if the proposals generate enough additional revenues to cover the entire financing gap.

Figure 5. Change in Social Security’s Finances From Introducing 2% Individual Accounts



Source: Chief Actuaries of Social Security Administration, *Memorandum to President’s Commission to Strengthen Social Security*, December 2001, p. 53.

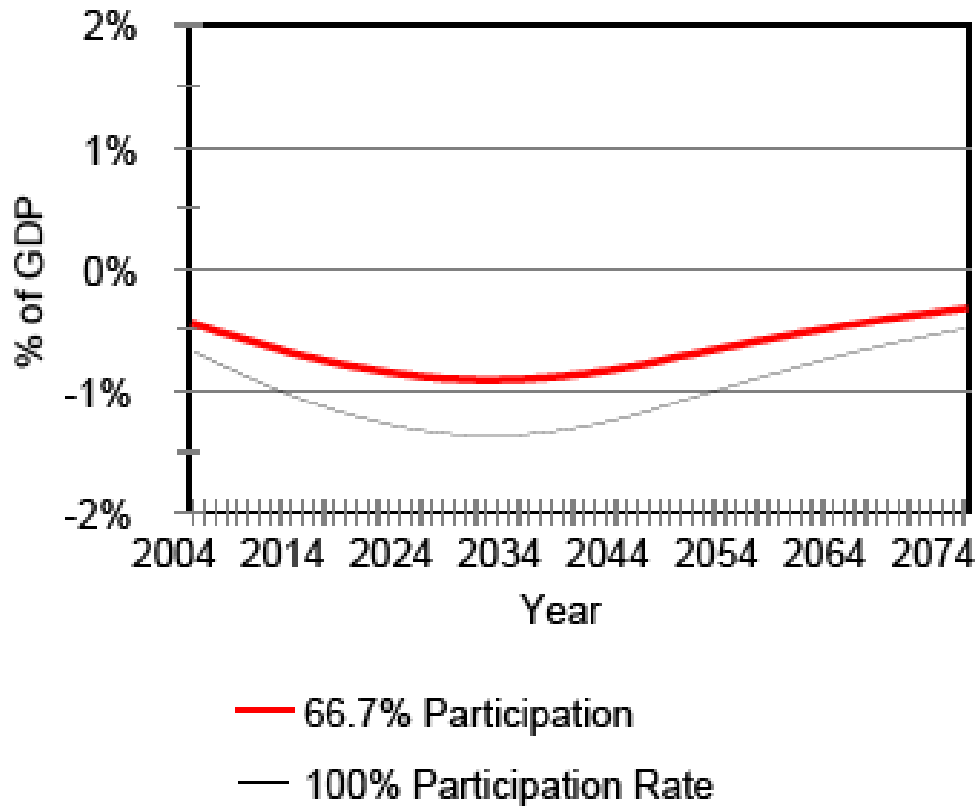
Notes: Estimates based on Commission’s Option 1 reform plan with 66.7% participation rate. It assumes accounts equal to 2% of payroll are introduced in 2004.

Thus, individual accounts would exacerbate the financing problems of the Social Security system for roughly 40 years, but improve the system’s finances from that point on. Whether this is desirable can only be determined by judging the effect of the accounts on the economy and government as a whole. And such accounts would improve the government’s overall finances and national saving only if the revenue shortfalls caused by them in the first 40 years of their existence were financed through tax increases or benefit reductions.⁵⁶ By contrast, **Figure 6** illustrates the *increase* in the unified budget deficit compared with current policy if the individual accounts are debt financed (i.e., introduced without an accompanying source of financing).⁵⁷ As explained above, the effect on the unified budget balance is the most meaningful measure because it is the only one that clearly identifies the cost of reform to the government as a whole.

⁵⁶ There is little reason to believe that the accounts would raise private saving by more than the fall in public saving, since the accounts come from tax revenue and cannot be supplemented by private saving contributions.

⁵⁷ This graph does not illustrate the overall budget deficit under a system of individual accounts, but rather the *change* in the budget deficit caused by the introduction of individual accounts.

Figure 6. Change in Unified Budget Deficit From Introducing 2% Debt-Financed Individual Accounts



Source: Chief Actuaries of Social Security Administration, *Memorandum to President's Commission to Strengthen Social Security*, December 2001, pp. 53-54.

Note: Estimates based on Commission's Option 1 reform plan with 66.7% and 100% participation rate. It assumes accounts equal to 2% of payroll are introduced in 2004.

Over the first 40 years of the accounts' existence, the decline in the income rate would exceed the decline in the cost rate, and the government would have to borrow the difference, increasing the national debt and interest payments on the debt. Once the decline in the cost rate exceeded the decline in the income rate, the effect of the individual accounts on the budget would be positive; however, this saving would be offset by the higher interest payments on the larger national debt. As long as the additional interest payments on the debt plus the decline in the income rate exceed the decline in the cost rate, the net effect of the individual accounts on the budget deficit would be negative. **Figure 6** indicates that individual accounts, if debt financed, *worsen the government's fiscal shortfall through 2075*.⁵⁸

Because the private assets in individual accounts are growing through the accumulation of interest, these results may seem puzzling. Although the assets in

⁵⁸ At some point beyond the 75-year projection window, the effect of introducing debt-financed individual accounts on the budget deficit may turn positive, but projections of a long enough duration to answer that question are not available.

individual accounts are growing, the debt issued by the government to finance the accounts is also growing because of interest accumulation. The individual accounts offset government benefits at a higher rate of return than the interest payments on government debt (3.0%), so eventually (outside the 75-year window) the individual accounts save the government money. (It is the benefit offset, not the earnings of the accounts, that reduce the government's liabilities.) But because so much debt must be issued immediately, it takes more than 75 years before the accounts pay for themselves. In fact, the actuaries of the SSA make two sets of assumptions, both of which are illustrated in **Figure 6**. Since the accounts are voluntary, they estimated the costs under the assumptions (1) that 66.7% of eligible individuals elect to participate, and (2) that 100% elect to participate. Comparing the results under the two assumptions leads to a result that may buck conventional wisdom: when individual accounts are debt financed, the cost to the government can be reduced by reducing the participation rate.

The President's Commission on Social Security made it clear that Option 1 would not avert a future financing crisis. For that reason, it also proposed two further options that coupled the introduction of individual accounts with benefit reductions. But it follows from the data presented on Option 1, that it is only the benefit reductions, not the individual accounts (if debt financed) that improve the system's financial position in Options 2 and 3 through 2075.

Depending on the details, some individual account proposals could worsen the government's fiscal outlook by adding benefits or administrative costs to the current Social Security system. Many proposals allow the individual account's balance to be left as a bequest to heirs when the owner dies; when an individual dies prematurely in Social Security, the excess of taxes paid over benefits collected improves the system's financing. Individual accounts may require regulatory oversight financed from general revenues (e.g., to ensure that the accounts are not being invested fraudulently.) The government may feel obligated to "bail out" individual accounts with general revenue in the event of a stock market crash, even if it was never explicitly promised. Individual accounts may receive better or worse tax treatment than Social Security benefits, which would worsen or improve the government's finances, respectively. For example, 100% of withdrawals from individual retirement accounts (IRAs) are taxed, while 0% to 85% Social Security benefits are taxed (depending on income level). However, contributions to IRAs are deducted from taxable income, while the employee's half of Social Security contributions (payroll taxes) are not. If withdrawals from individual accounts receive the same tax treatment as IRAs, it would increase tax revenues; if contributions receive the tax treatment of IRAs, it would decrease revenues.

It should briefly be noted that the economic benefit of introducing individual accounts is unrelated to its effects on government finances. The economic benefit of individual accounts is that it could potentially lead workers to view Social Security less as a tax and benefit program and more as a pension. If so, it could reduce the distortions to work and save currently caused by Social Security. For example, workers may be more likely to continue working after they become eligible for retirement if they can continue accumulating contributions in their individual account, whereas the increase in Social Security benefits from working after normal

retirement age are relatively small.⁵⁹ Whether these distortions are sizable, or even necessarily negative for growth, is an open question among economists. These economic benefits of switching to individual accounts would need to be weighed against the economic costs.⁶⁰ If features are added to the accounts to reduce the economic costs, the economic benefits will also tend to be reduced.

Conclusion

The retirement of the baby boomers, increased life expectancy, and the rising cost of health care make current policy unsustainable in the long term. These increases in spending are not projected to subside after the baby boomers have passed away. Either the projected rise in Social Security, Medicare, and Medicaid spending will have to be reduced or taxes will have to be increased to avert a fiscal crisis over the next 50 years.

However, if reforms are made ahead of time, the ultimate size of required tax increases or benefit reductions could potentially be reduced. For this to occur, the revenues generated through tax increases or benefit cuts must be dedicated to a higher rate of public saving, thereby boosting economic growth. (The current fiscal stance, by contrast, makes future problems worse.) If the revenues are instead spent on other government spending or tax cuts, the ultimate size of future benefit cuts and tax increases will not have been reduced. The salutary effects of prefunding on the future fiscal imbalance are not limited to changes in Social Security and Medicare. Any policy change that reduced the current budget deficit would reduce the government's future fiscal gap; likewise, current budget deficits increase that fiscal gap. Restoring the system to solvency ahead of time would also allow individuals enough forewarning that they could adjust to future benefit reductions without disrupting their spending patterns — for this reason, if reform is postponed, it is more likely to result in tax increases since notions of fairness make benefit cuts to those already retired unlikely. Determining how much benefits and revenues should be altered ahead of time is difficult, however, because of the wide degree of uncertainty associated with long-term government projections.

Social Security faces a financial imbalance that can be eliminated through relatively small increases in taxes and decreases in benefits,⁶¹ and the changes could be reduced further if they were prefunded today. The system faces no immediate financial shortfall, and could continue in its current state until at least 2018.

⁵⁹ Barry Bosworth and Gary Burtless, "Supply Side Consequences of Social Security Reform: Impacts on Saving and Employment," Center for Retirement Research at Boston College, Working Paper 2004-1, January 2004.

⁶⁰ The economic costs and benefits of the current system compared with a system of individual accounts are analyzed in CRS Report RL31498, *Social Security Reform: Economic Issues*, by Jane Gravelle and Marc Labonte. The economic costs of switching to individual accounts include problems of moral hazard, adverse selection, and less risk pooling.

⁶¹ For examples of specific proposals, see Peter Diamond and Peter Orszag, *Saving Social Security* (Washington, DC: Brookings Institution Press, 2004).

Individual accounts are not a substitute for benefit cuts or tax increases, although they could be a vehicle for either. Debt-financed individual accounts, by themselves, typically worsen the fiscal outlook over the next 75 years and do not increase GDP through higher national saving.

Medicare and Medicaid face much larger and more intractable financial problems than Social Security. Historically, health care spending generally, and health care spending on the elderly particularly, have risen much more rapidly than overall economic activity. If this pattern occurs in the future and Medicare and Medicaid benefits remain unchanged, the programs would swamp budgetary resources. Yet unlike Social Security, spending on the health programs cannot be controlled directly unless access is restricted or rationed. Assuming unprecedented tax increases of up to 17% of GDP are ruled out, to avoid fiscal insolvency the government must find a way to either reduce the price or quantity of elderly health care provided. Quantity can be reduced either through restrictions on the medical treatments offered or by lowering demand. Demand could possibly be reduced through higher costs to the recipient, but the link between price and demand will always be indirect in an insurance program since marginal costs are largely borne by the insurer (in this case, largely the government), not the insured. Continually reducing prices on the supply side cannot be accomplished simply by continually reducing payments to providers. Ultimately, if payments decline and providers' costs do not, providers will stop offering those services. Prices could be reduced on the supply side through technological improvements or efficiency gains. Unfortunately, on the whole, technological improvements have led to higher prices in recent years by making new (but expensive) treatments available. It is unclear what interventions government can pursue to reverse that trend. Certain modifications have been suggested that might lead to one-time efficiency gains, such as changes to the Medicare reimbursement system or the adoption of private-sector HMO administration. But it is less clear that these modifications could lead to the continuous efficiency gains required to hold cost growth down.