

# **CBO TESTIMONY**

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**Statement of  
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Director**

## **The Role of the Economy in the Outlook for Social Security**

**before the  
Subcommittee on Social Security  
Committee on Ways and Means  
U.S. House of Representatives**

**June 21, 2005**

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**CONGRESSIONAL BUDGET OFFICE  
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WASHINGTON, D.C. 20515**



Mr. Chairman, Congressman Levin, and Members of the Subcommittee, I appreciate the opportunity to appear before you today to discuss Social Security and the economic factors that influence its financial outlook.

As you know, Social Security is the single largest federal program. In 2004, the Social Security system received \$569 billion in tax revenue and paid out \$493 billion in benefits. The program provided benefits to more than 47 million people—about two-thirds of them retired workers and the rest disabled workers, survivors of deceased workers, workers' spouses, and minor children.

Although today the program takes in more revenue than it spends, that situation will not continue once large numbers of baby boomers begin claiming retirement benefits. In coming years, the Social Security system will face mounting financial pressures as its outlays start to grow much faster than its revenue. The Congressional Budget Office (CBO) projects that scheduled Social Security outlays (those implied by the current benefit formula) will rise from 4.3 percent of gross domestic product (GDP) in 2004 to 6.4 percent in 2050.<sup>1</sup> Revenue, however, is scheduled to average less than 5.0 percent of GDP.

The aging of the population will place similar pressures on the government's two big health care programs, Medicare and Medicaid. Without changes in spending or revenue policies, federal debt could begin to grow at an unsustainable pace. Faster economic growth would help reduce some of that budgetary imbalance, but it is highly unlikely that economic growth alone could solve the problem. Conversely, slower growth would exacerbate the situation. Prefunding future retirement obligations by increasing national saving could noticeably reduce the burdens that an aging population would impose on future workers, and taking action sooner rather than later could lessen some of the uncertainties that future retirees face.

## **The Financial Outlook for Social Security**

The next decade will see the beginning of a significant, long-lasting shift in the age profile of the U.S. population. Over the next 50 years, the number of people ages 65 and older will more than double, while the number of adults under age 65 will grow by less than 20 percent. That shift reflects demographic trends that have been evident for years and that are expected to continue, such as the aging of the baby-boom generation, increases in life spans, and a relatively low fertility rate.

Those trends imply that the number of workers per Social Security beneficiary will decline significantly, from 3.3 in 2004 to 2.0 in 2050. Because Social Security depends on revenue from current workers to finance benefits, that demographic shift will have a profound impact on the system's finances.

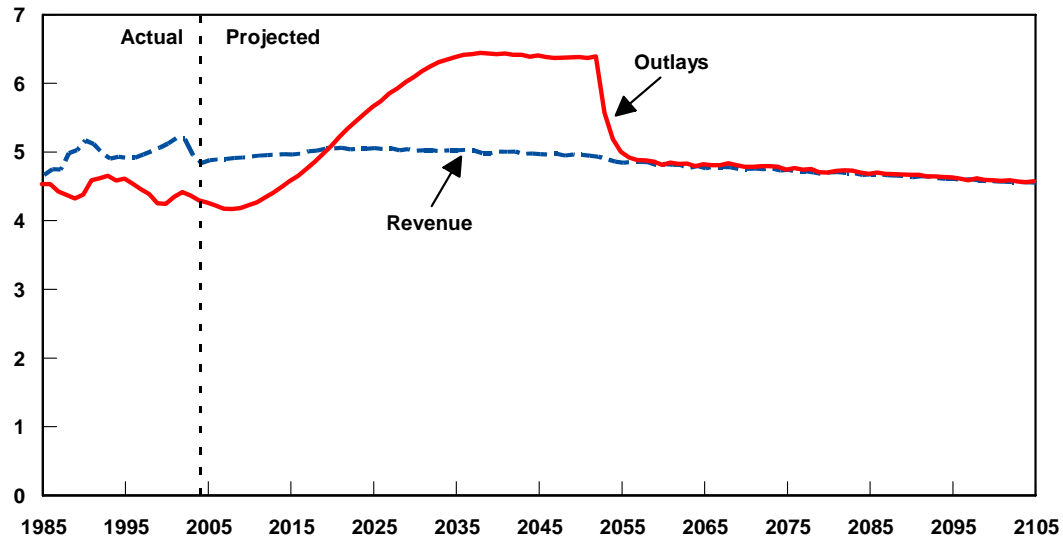
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1. See Congressional Budget Office, *Updated Long-Term Projections for Social Security* (March 2005).

**Figure 1.**

## **Social Security Revenue and Outlays Under Current Law**

(Percentage of GDP)



Source: Congressional Budget Office.

Note: The projections in this figure employ the Social Security trustees' 2004 intermediate demographic assumptions and CBO's January 2005 economic assumptions. Revenue includes payroll taxes and income taxes on benefits but not interest credited to the Social Security trust funds; outlays include trust-fund-financed Social Security benefits and administrative costs. Under current law, outlays will begin to exceed revenue in 2020; starting in 2053, the program will no longer be able to pay the full amount of scheduled benefits.

### **Social Security's Finances**

In 2009, the Social Security surplus—the amount by which the program's dedicated revenue in a year exceeds the benefits paid in that year—will start to diminish. In 2020, that surplus will disappear, and outlays for benefits will begin to surpass the system's annual revenue (see Figure 1). To pay full benefits, the Social Security system will eventually have to rely on interest on the government bonds held in its trust funds—and ultimately, on the redemption of those bonds. In the absence of other changes, bonds can continue to be redeemed until the trust funds are exhausted, which will occur in 2052, CBO projects. But where will the Treasury find the money to pay for the bonds? Will policymakers cut back other spending in the budget? Will they raise taxes? Or will they borrow more?

Once the trust funds are exhausted, the Social Security Administration will no longer have the legal authority to pay full benefits. As a result, it will have to reduce payments to beneficiaries to match the amount of revenue coming into the system each year. Although the exact size of that reduction is uncertain, CBO

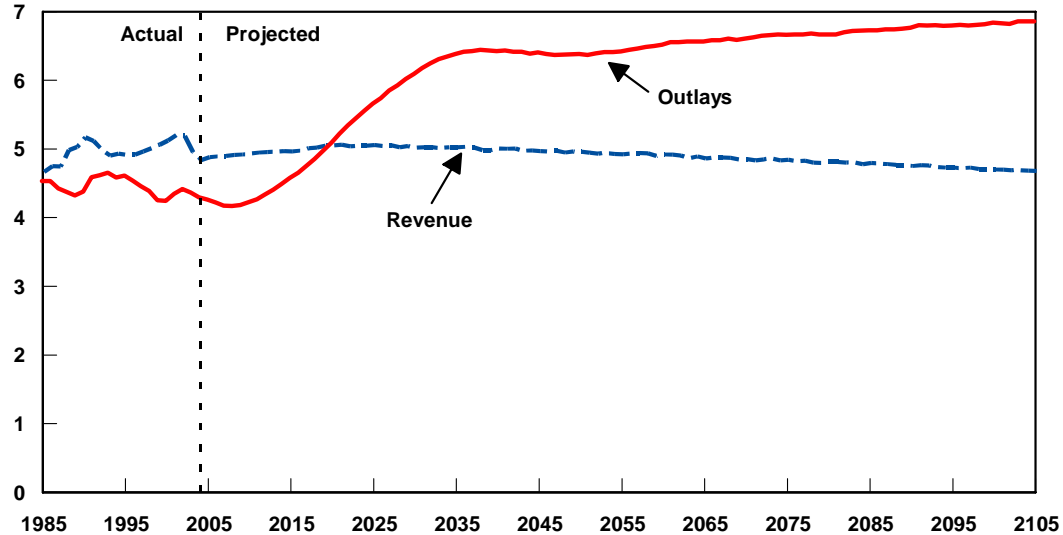
**Figure 2.**

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## Social Security Revenue and Outlays with Scheduled Benefits Extended

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(Percentage of GDP)



Source: Congressional Budget Office.

Note: The projections in this figure employ the Social Security trustees' 2004 intermediate demographic assumptions and CBO's January 2005 economic assumptions. Revenue includes payroll taxes and income taxes on benefits but not interest credited to the Social Security trust funds; outlays include Social Security benefits and administrative costs. In this outlay projection, currently scheduled benefits are assumed to be paid in full after 2052 using funds from outside the Social Security system.

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estimates that benefits will have to be cut—both for current recipients and for new beneficiaries—by about 22 percent to match the system's available revenue.

The key message from those numbers is that with benefits reduced annually to equal revenue, as they will be under current law when the trust funds run out, some form of the Social Security program can be sustained forever. Of course, many people would not consider a sudden 22 percent cut in benefits to be desirable policy. In addition, the budgetary demands of bridging the gap between spending and revenue in the years before that cut could prove onerous. But Social Security is sustainable from a narrow programmatic perspective. What is not sustainable is continuing to provide the present level of scheduled benefits given the system's present financing (see Figure 2).

### Implications for the Budget and the Economy

CBO's projections offer some guidance about the potential impact of those developments on the budget. Under CBO's assumptions, the Social Security surplus

(excluding interest on bonds in the trust funds) will reach about \$100 billion in 2007. By 2025, however, the surplus will have turned into a deficit of roughly \$100 billion (in 2005 dollars). That \$200 billion swing will represent a significant challenge for the budget as a whole, especially in light of the current budget deficit.

The demand on the budget from Social Security will take place at the same time as—but is projected to be eclipsed by—the demand from Medicare and Medicaid. Currently, outlays for Social Security benefits are slightly more than 4 percent of GDP, as is federal spending on Medicare and Medicaid combined. But whereas Social Security outlays are projected to grow to 6.4 percent of GDP by 2050, spending on the two health programs could reach a total of 20 percent of GDP if current trends in health care costs continue.

Without changes in policy, therefore, federal spending is likely to increase sharply in coming decades. Unless taxes rise well above their historical levels, the gap between spending and revenue will widen, expanding the amount of federal borrowing. The resulting increase in government debt could seriously harm the economy. It could crowd out private capital formation, and although its impact on capital accumulation could be muted by borrowing from abroad, foreign borrowing is no panacea. The debt owed to foreigners would still have to be serviced. In the end, federal debt would reduce the disposable income of U.S. residents and erode future living standards.

## **Effects of Economic Assumptions**

Projections of the future financial status of Social Security depend on a number of demographic and economic assumptions. In its projections, CBO uses the demographic assumptions of the Social Security trustees and its own economic assumptions. CBO's economic assumptions for the next 10 years are described in *The Budget and Economic Outlook* (January 2005); the assumptions for later years are consistent with those used in the 10th year of the projection.

Assumptions about four economic factors affect the finances of the Social Security system: the growth of earnings, the interest rate used to compute the interest credited to the trust funds, employment, and inflation. Of those four, earnings growth has the largest impact on Social Security's outlays and revenue. The interest rate affects Social Security's finances because it determines the amount of interest paid to the trust funds, but that interest is an intragovernmental transfer and has no effect on the total budget. The other factors have important implications for overall economic performance, but they do not affect Social Security's finances significantly.

## Earnings Growth

Real (after-inflation) earnings growth—and its main underlying determinant, productivity growth—is the key economic determinant of Social Security’s finances as well as of the performance of the economy in general. Social Security benefits are based on earnings during a person’s working years. Workers with higher lifetime earnings receive higher benefits, as do their dependents and survivors. The benefit formula is also structured to ensure that as average earnings grow, benefits for new recipients grow at approximately the same rate. As long as the system pays scheduled benefits, Social Security benefits will replace the same portion of earnings for future generations as they do for today’s beneficiaries (for workers who claim benefits at the normal retirement age). However, the purchasing power of those benefits will be greater than that of benefits paid today.

Although initial Social Security benefits are indexed to earnings, higher-than-expected earnings growth would improve Social Security’s financial position. Higher real earnings immediately result in higher payroll tax revenue, but outlays do not increase until the workers with higher earnings claim benefits, which can be years or even decades later. The benefits paid to current recipients are indexed to prices, not earnings, so overall outlays do not increase in lockstep with real earnings.

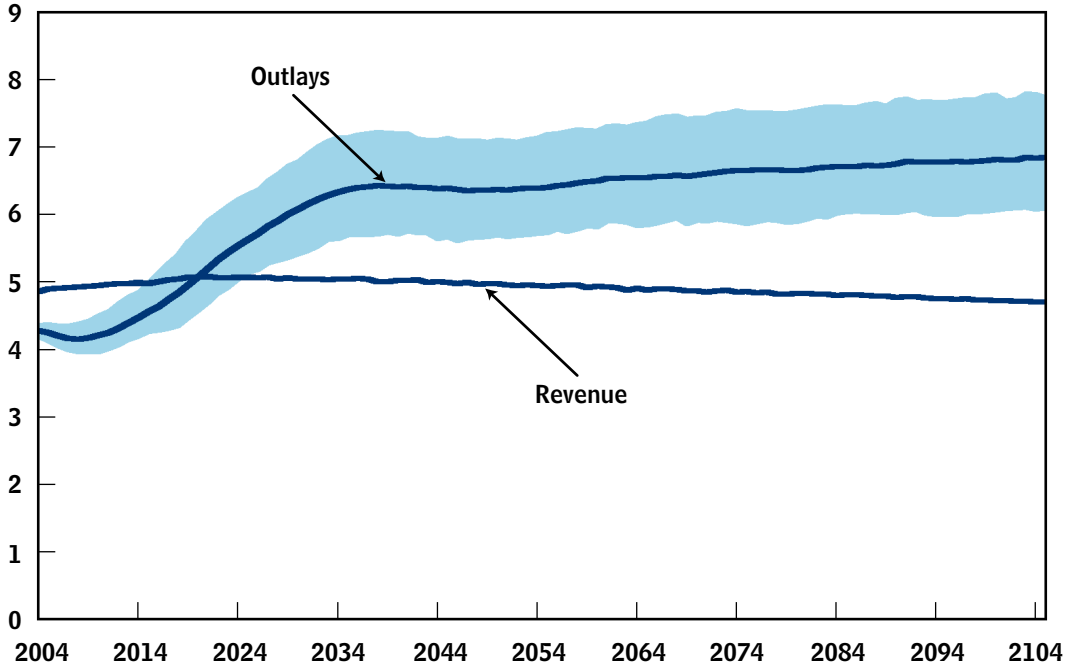
In the long run, workers’ compensation grows with productivity. Productivity growth in turn stems from two factors: increases in the amount of capital per worker and, more important, technological advances that raise the amount of goods and services that can be produced with a given level of capital and labor—so-called total factor productivity (TFP). Workers do not receive all of their compensation in the form of earnings; some is received in nontaxable forms, such as health benefits. CBO assumes that the increasing share of compensation received as nontaxable benefits will slow the annual growth rate of taxable earnings by 0.1 percent. For its part, TFP is assumed to increase at an average annual rate of 1.25 percent over the long term. With the growth in nontaxable compensation and other technical factors that affect earnings accounted for, that assumption implies that earnings will grow by about 1.2 percent annually.

Uncertainty about earnings growth results in uncertainty about the size of future Social Security shortfalls—but there is little, if any, uncertainty that shortfalls will exist. On the basis of analysis of historical variation in TFP, CBO has projected the range of probable outcomes for Social Security outlays that lies between the 10th and 90th percentiles for TFP (see Figure 3). By definition, there is a 10 percent chance that TFP will be above the 90th percentile and a 10 percent chance that it will be below the 10th percentile. CBO projects that the gap between Social Security spending and revenue will equal 1.39 percent of GDP in 2050. The 10th percentile projection for that year is a deficit of 2.1 percent of GDP, and the 90th percentile projection is a deficit of 0.7 percent of GDP. Moreover, even the 99th

**Figure 3.**

## **Social Security Revenue and the Potential Range of Scheduled Outlays with Uncertainty About Productivity**

(Percentage of GDP)



Source: Congressional Budget Office.

Notes: The dark lines in this figure indicate CBO's projections of expected revenue and outlays based on the Social Security trustees' 2004 intermediate demographic assumptions and CBO's January 2005 economic assumptions. In those projections, annual Social Security outlays (for benefits and administrative costs) exceed revenue (from payroll taxes and income taxes on benefits but not interest credited to the Social Security trust funds) starting in 2020. Currently scheduled benefits are assumed to be paid in full after 2052 using funds from outside the Social Security system.

The shaded area indicates the 80 percent range of uncertainty for projected outlays, assuming that total factor productivity varies as it has in the past. (The 80 percent range of uncertainty means that 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 it. The uncertainty range is based on a distribution of 500 simulations.)

percentile projection (which implies only a 1 percent chance that TFP will be so high) shows the Social Security system running a deficit of 0.3 percent of GDP.

### **Interest Rate**

The real interest rate has no direct effect on annual Social Security revenue and outlays. However, it does affect trust fund measures and summarized measures, such as the 75-year summarized balance (the difference between the present values of projected revenue and outlays over 75 years).



The interest rate used to calculate the interest credited to the trust funds is equal to an average of the rates on privately held Treasury bonds.<sup>2</sup> A higher rate results in a later trust fund exhaustion date. CBO assumes that the real interest rate will be 3.3 percent. If that rate was 1 percentage point higher (4.3 percent), the exhaustion date would be extended from 2052 to 2066. A rate of 2.3 percent would accelerate the exhaustion date to 2045.

In the computation of summary financial measures, future outlays and revenue are discounted using the real interest rate. A higher discount rate would weight past and current surpluses more heavily and would give less weight to future shortfalls. With a higher real interest rate, the summarized balance would show an improvement.

From the perspective of the total budget, the interest rate is important because it determines the amount of interest that the federal government will owe to members of the private sector and foreign governments that hold Treasury securities.

### **Employment**

Higher levels of employment increase total earnings and thus revenue from Social Security payroll taxes. They also lead to higher Social Security benefits in the future. On net, however, higher employment levels improve Social Security's financial position because the higher revenue precedes payment of the associated benefits, often by many years.

The percentage of the population working is determined by two factors: the labor force participation rate, which measures the portion of people working or seeking work, and the unemployment rate, which measures the share of people in the labor force who are unemployed. Over the long term, reasonable variation in either factor is not likely to have a large impact on the financial outlook for Social Security. In its most recent long-term Social Security projections, CBO assumed an average unemployment rate of 5.2 percent. If the average rate turned out to be 6.2 percent, the Social Security deficit in 2050 would be 1.38 percent of GDP rather than the projected 1.39 percent. The effects of reasonable variation in labor force participation are of the same magnitude.

### **Inflation**

In general, the economy benefits from low and stable inflation. However, in a mechanical sense, high inflation actually improves Social Security's finances.

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2. Specifically, the interest rate on new special obligations equals the average market yield on all outstanding, marketable U.S. obligations that are due or callable more than four years in the future. See Jeffrey L. Kunkel, *Social Security Trust Fund Investment Policies and Practices*, Actuarial Note 142 (Social Security Administration, Office of the Chief Actuary, January 1999).

Assuming that real earnings growth is constant, higher inflation will immediately result in higher earnings and higher payroll tax revenue. But Social Security benefits will not be adjusted for inflation until the following year.<sup>3</sup> Of course, higher inflation can also have broader negative effects on the economy that may worsen Social Security's finances.

In its most recent long-term Social Security projections, CBO assumed an average inflation rate of 2.2 percent. If the average rate turned out to be 3.2 percent, the Social Security deficit in 2050 would be 1.29 percent of GDP instead of 1.39 percent, as projected.

### **Consistency of Projections**

A concern that arises among some analysts is the consistency of economic projections, including CBO's, that envision much slower growth of GDP than was experienced over the past 50 years and projections of earnings growth that are at the same pace as historical experience. The projections of lower GDP growth stem from projections of slower labor force growth. CBO does not anticipate that the fertility rates experienced during the baby boom will recur. Moreover, since 1950, the labor force participation rate of women has risen from 40 percent of the rate for men to 80 percent, an increase that is numerically impossible to repeat. However, the continued rise in productivity will be reflected in growing earnings per worker, and the flexible adjustment of a market economy will ensure sustained high rates of employment.

## **Prefunding Future Obligations and Economic Growth**

Any strategy to prepare the United States for an aging population must deal with a key fact: the goods and services that retirees will consume in the future will have to be produced by the U.S. economy or imported from abroad at that time. From that perspective, what matters is not the financial structure of the Social Security program but the capacity of the economy and the distribution of economic output. Various options for changing Social Security will have different effects on the economy and on the division of resources between the elderly and other people. To the extent that those options boost the future size of the economy by increasing the nation's accumulation of assets, they will make it easier to support a larger portion of the population in retirement.

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3. The annual cost-of-living adjustment that applies to payments beginning in January is determined by the increase in the consumer price index for urban wage earners and clerical workers (CPI-W) from the third quarter of two years before to the third quarter of the previous year. For example, the adjustment made to payments in January 2005 was determined by the increase in the CPI-W from the third quarter of 2003 to the third quarter of 2004.

Just as individuals prepare for their retirement by saving in advance, a nation can prepare for an aging population by prefunding its future obligations. That goal can be accomplished by increasing national saving, which is the combined saving of the private sector and the government. A rise in national saving increases the pool of funds available for investment at home and abroad, thus adding to the stock of productive capital and providing resources to purchase assets from other countries. As investment in businesses' structures and equipment increases, workers become more productive, real wages rise, and the United States is able to produce more goods and services. Moreover, the income from additional foreign assets supplements the income produced domestically.

Prefunding could have a noticeable effect on the future production of goods and services. In 2004, net national saving amounted to only 2.2 percent of net national product (though it averaged 6.1 percent from 1980 to 2000), and CBO projects that it will average 3.9 percent between 2005 and 2015.<sup>4</sup> If net national saving was permanently increased by 2 percentage points of net national product, the nation's capital stock would be 15 percent larger in 2050, CBO estimates. With more capital, workers would earn higher wages, and real GDP per capita would rise by 4.3 percent. Even a more modest goal of simply saving Social Security's noninterest surplus instead of spending it could raise real GDP per capita by 1.5 percent in 2050.<sup>5</sup>

In principle, prefunding could be carried out by either the private sector, the government, or both. Households could prefund their future retirement by saving more; the government could prefund its future obligations by reducing the budget deficit. However, not all policies intended to increase private or government saving are equally effective in raising total national saving. For example, higher income tax rates might increase government saving but might also serve to reduce private saving. Similarly, tax incentives to stimulate private saving might involve revenue losses to the government, which reduce the amount of government saving. Conversely, curbing the growth of entitlement benefits might raise both government saving and private saving, as beneficiaries saved more to offset the reduced benefits. For example, indexing initial Social Security benefits to prices instead of to wages, as the President's Commission to Strengthen Social Security proposed as part of its Plan 2, would raise both private and government saving initially and could boost the capital stock by between 4½ percent and 6½ percent in 2050, CBO estimates. In the end, what matters for the growth of the capital

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4. Net national saving is national saving minus depreciation of the capital stock. Net national product is gross national product minus depreciation.

5. That calculation assumes that private savers would respond to the change in government saving as they have in the past.

stock and the economy is the combined impact of a policy change on government saving and private saving—not the effect on either one alone.

In practice, could the government actually maintain the potential budget surpluses that would be generated from a tax increase or spending cut? That question has provoked a great deal of controversy, particularly in the context of Social Security's cash flow surplus. From a technical standpoint, the question is impossible to answer because it is impossible to know how other policies would have been changed if the Social Security surplus did not exist. The ultimate question of whether a surplus in the Social Security program causes policymakers to spend more on other programs—or tax less—is thus not one that is easy to answer.

Some analysts point to the reduction in federal debt in the late 1990s as evidence that the government could save if it tried; others argue that the experience of the past few years shows the enormous difficulty of maintaining budget surpluses over an extended period, even despite efforts to put Social Security surpluses in a “lock box.” Indeed, many proponents of personal savings accounts argue that diverting the Social Security surpluses to personal accounts could create a more effective “lock box.” In their view, such accounts would raise total national savings and effectively prefund future retirement obligations by making it more difficult for policymakers to spend resources.

The effectiveness of accounts in increasing national savings, however, would depend on how the accounts were financed and on the rules governing both accumulations in and withdrawals from them. For example, if it was too easy to take money from an account before retirement, participants might not accumulate as much as they would under a more restrictive arrangement. Administrative costs could also reduce the amount of net savings created by the accounts. Furthermore, some individuals might respond to personal accounts by reducing other private saving. Indeed, experience with 401(k) plans suggests that although low-income people increased their saving in response to tax incentives that favor such plans, most high-income people responded by shifting their assets from other accounts into their 401(k) plan rather than by increasing their total saving. Combining a tax incentive for saving with lower future Social Security benefits, however, could limit the risk that people would reduce other saving dollar for dollar, because those who did could have less income in retirement.

Some analysts have also suggested that private accounts might strengthen marginal incentives to work because people would see the link between their contributions to the accounts and their eventual retirement benefits more clearly than they do under the current system. That effect might not have a large impact on the labor supply, however. Although perceptions of improved marginal incentives would tend to boost the labor supply, perceptions of higher—and possibly more certain—retirement income would tend to reduce it (because people would not

have to work as much to reach a given standard of living). The net effect on the labor supply would depend on the balance between those two factors and might not be large.

## **Making Changes Now or Later: Economic and Budgetary Effects**

Uncertainty is an economic cost in its most fundamental form, and in the current context, there is uncertainty about the future of Social Security: what the program will look like and who will be affected by changes to it. The sooner that uncertainty is resolved or reduced, the better served will be current and future beneficiaries, who must make various decisions about their retirement. Phasing in changes to Social Security allows for gradual accommodation, giving people time to modify their expectations and to adjust their work and saving behavior. For example, younger workers who learned that they would receive lower-than-anticipated retirement benefits would have many years to respond. They could work or save a little more each year. If the same benefit cuts were announced as those workers neared retirement, however, workers might be forced to make dramatic changes and still might not have time to accumulate sufficient savings.

One way to gauge the advantage of acting earlier is to examine potential changes to the current pay-as-you-go Social Security system. As noted above, CBO projects that the Social Security trust funds will become exhausted in 2052 under current law. After that, the Social Security Administration will lack the authority to pay benefits in excess of the system's annual revenue, meaning that outlays will have to be reduced immediately by 22 percent to match that revenue, CBO estimates. Put another way, current law constitutes a "wait and change" strategy. Until 2052, beneficiaries would continue to receive scheduled benefits; however, those benefits would have to be cut by 22 percent in 2053, and larger reductions would be needed in later years.

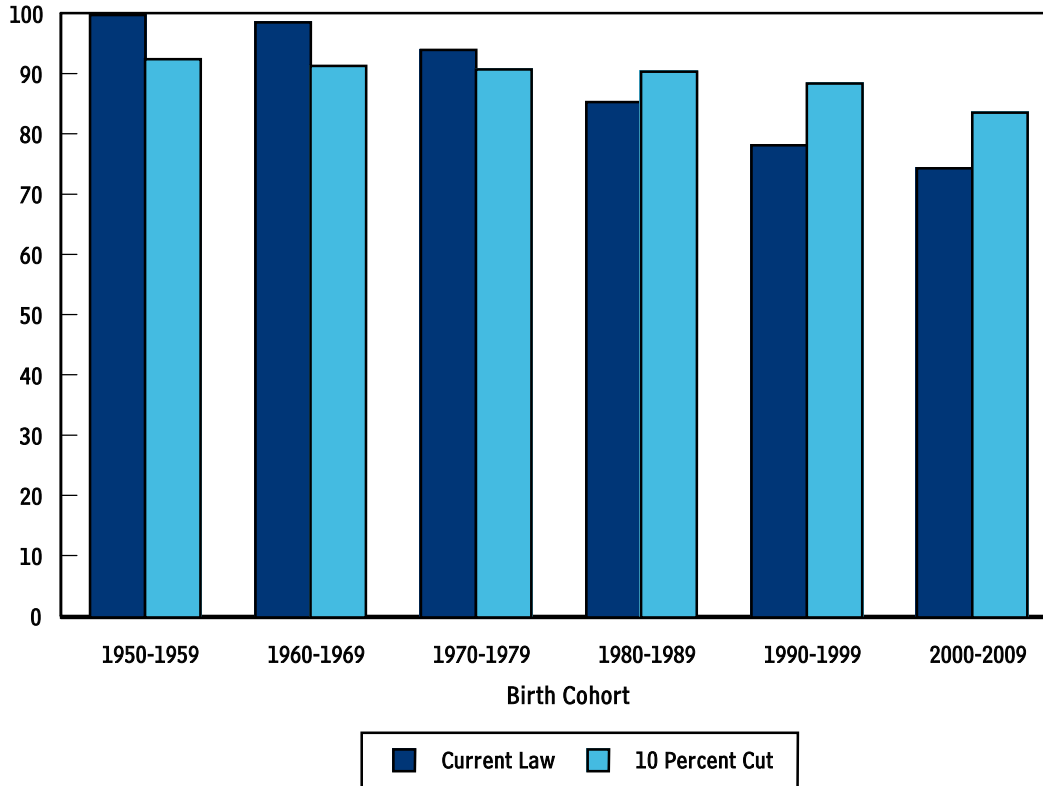
Alternatively, policymakers could reduce the benefits paid to earlier cohorts so that the benefits paid to later cohorts would not have to be cut as much. To illustrate that point, CBO examined a hypothetical policy that would reduce all new Social Security benefit awards by 10 percent (relative to those currently scheduled) beginning with people retiring or becoming disabled in 2012.

In general, lifetime benefits for current workers (those born before 1980) would be lower under this policy than if no changes were made to the program (see Figure 4). However, assuming other government finances were held constant, such a change would allow greater benefits to be paid to later generations than under current law. The reduced benefits paid to earlier generations would result in gov-

**Figure 4.**

## **Lifetime Social Security Benefits Under Current Law and with a 10 Percent Benefit Cut Beginning in 2012**

(Percentage of scheduled benefits)



Source: Congressional Budget Office.

ernment savings, probably in the form of lower debt, that could be used to pay higher benefits to later generations.

Such a policy could also substantially slow the growth of federal debt held by the public over coming decades. Compared with current law, a 10 percent cut in new benefit awards starting in 2012 could reduce federal debt by 25 percent of GDP by 2050 (see Figure 5). That debt reduction could also bring economic benefits from more private saving, faster capital accumulation, and higher economic growth. Enacting the same policy 10 years later would also reduce federal debt, but the effects would be smaller.

The mechanistic approach of CBO's example is not intended as a recommendation or a comprehensive gauge of options. More-realistic proposals would include

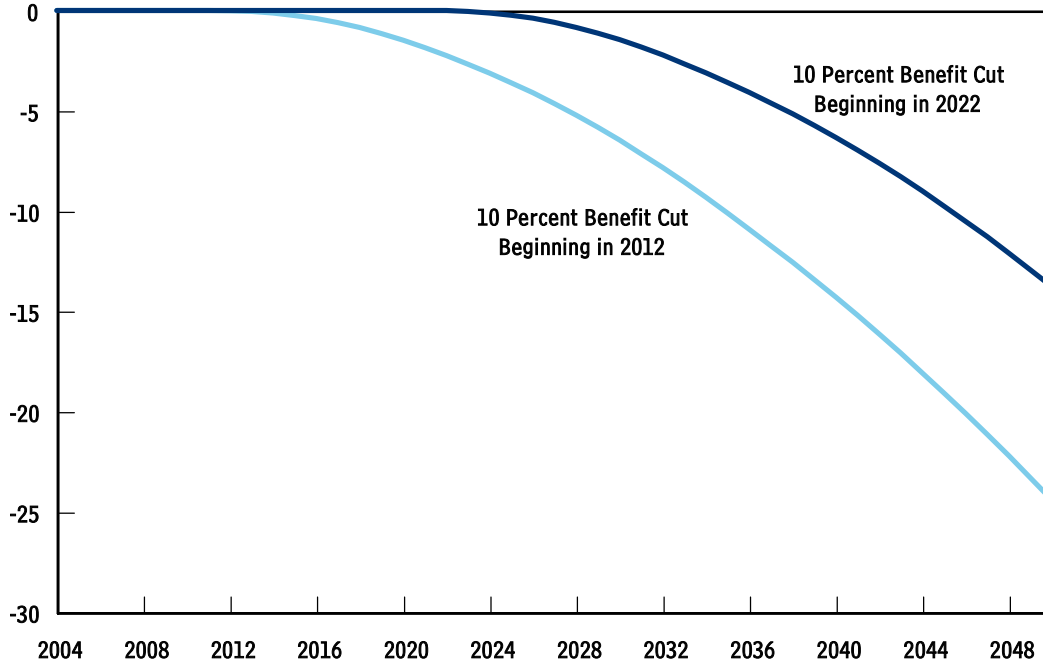
**Figure 5.**

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**Change in Federal Debt Held by the Public from a  
10 Percent Cut in Social Security Benefits**

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(Percentage of GDP)



Source: Congressional Budget Office.

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multiple provisions (such as tax increases, benefit reductions, or both) and would most likely be instituted gradually. This example is merely a convenient means of demonstrating the implications of earlier changes versus later ones.

Such policy changes entail a variety of trade-offs about how to allocate the burden of bringing Social Security into long-term balance. One trade-off involves making decisions about the value of consumption today relative to the value of consumption tomorrow. The more that consumption is delayed, the more that resources are available for capital investment, which can boost economic growth. Another set of trade-offs involves balancing fairness across income classes and generational cohorts. In some respects, those trade-offs cannot be neatly separated into decisions about income groups and generations, since the prospect of rising wages is likely to make future generations more affluent than current generations, on average.

Whatever the policy—benefit reductions, tax increases, transfers of resources from other federal programs, or a combination of those approaches—earlier action would distribute the burdens of the change over more generations. For both workers and beneficiaries, gradual changes are generally preferable to precipitous and disruptive actions, such as sudden, large reductions in benefits or sudden, large increases in taxes. Moreover, if changes were announced in advance and phased in gradually, workers and beneficiaries would have more time to prepare and to appropriately adjust their decisions about work and saving.



