The New Budget Outlook: Policymakers Respond to the Surplus

Alan D. Viard

A variety of proposals would reduce the projected surpluses by cutting taxes or increasing federal spending.

The federal budget landscape has changed dramatically during the last six years. After a steady decline in the deficit from 1993 to 1996, a budget "surprise" unexpectedly brought the budget close to balance in 1997 and moved it into surplus in 1998 for the first time in twenty-nine years. The deficit decline and the move into surplus resulted from a combination of factors, including a surge in individual income tax receipts, slower growth of medical costs, lower interest rates, economic growth, and the 1990 and 1993 deficit-reduction laws.

These events, combined with legislation adopted in 1997, have produced a new budget outlook. If current policies are maintained, surpluses are expected to continue for twenty years, completely retiring the outstanding federal debt. However, deficits are expected to reappear after 2020 due to rising Social Security and medical spending. Of course, the magnitudes of the surpluses and subsequent deficits are subject to substantial uncertainty.

After decades of struggling to reduce deficits, policymakers now face the unfamiliar issue of how to respond to surpluses. A variety of proposals would reduce the projected surpluses by cutting taxes or increasing federal spending. President Clinton has proposed reducing the projected surpluses by 32 percent through spending increases for defense, education, and other programs, and tax cuts to fund individual savings accounts. Congress has adopted a budget resolution that envisions reducing the projected surpluses by a similar amount, primarily through tax cuts.

Reducing the surpluses would lower government saving and would require tax increases or spending cuts in the future. Under plausible assumptions, most of the proposed tax cuts and spending increases would reduce national saving because private saving would not rise to fully offset the decline in government saving. As a result, the proposals would increase current consumption but would reduce future output and consumption. In particular, the proposals are likely to increase consumption by current generations and reduce consumption by future generations. An evaluation of the desirability of this shift depends on value judgments about the needs, rights, and obligations of the different generations.

Different considerations are relevant for some proposed tax cuts and spending increases. Proposals to reduce the tax burden on saving or to create tax-funded individual savings accounts might stimulate private saving, although the increase would probably still not be sufficient to

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Figure 1

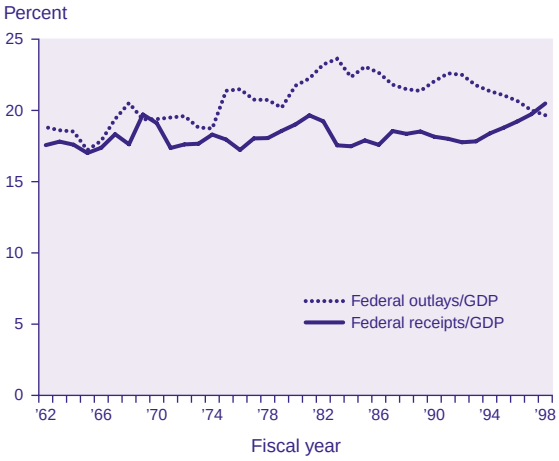
Federal Debt Burden Peaks in 1993

(Federal debt held by public/GDP)

SOURCE: Office of Management and Budget (1999, pp. 110–111).

Figure 2

Receipts Exceed Outlays in 1998



SOURCE: Office of Management and Budget (1999, pp. 21–22).

offset the decline in government saving. Compared with preserving the projected surpluses, individual accounts would have distinctive implications for personal freedom, risk allocation, administrative costs, and political viability. Increases in government investments, such as education and infrastructure, would be desirable if they corrected market failures in ways that offered higher returns than private investment.

BACKGROUND

Although this article does not offer a detailed description of historical budget policy, it is useful to review a few major trends. Figure 1 indicates that the ratio of publicly held federal debt to gross domestic product (GDP) declined from fiscal 1962 to 1974,[1] except during recessions, because deficits were sufficiently small that the debt grew more slowly than GDP. As shown in Figure 2, outlays rose sharply as a share of GDP in 1966–68, but receipts also increased due to the income surtax. The decline of the debt-to-GDP ratio was halted in 1974, and the ratio remained relatively stable until 1981. Outlays rose during this period, but receipts also increased as high inflation pushed taxpayers into higher individual income tax brackets. The ratio of debt to GDP nearly doubled from 1981 to 1993, an unprecedented rise during a peacetime expansion. By 1993 the debt equaled 50 percent of annual GDP, the highest level since 1956. Receipts declined as a share of GDP, as a result of the 1981 across-the-board income-tax-rate reduction, while outlays grew.

The debt-to-GDP ratio declined after 1993, falling to 44 percent in 1998. Figure 2 reveals that this decline was achieved by both increasing receipts and reducing outlays, as shares of GDP. In 1998, the ratio of receipts to GDP was at its highest level since 1944, and the ratio of outlays to GDP was at its lowest level since 1974.

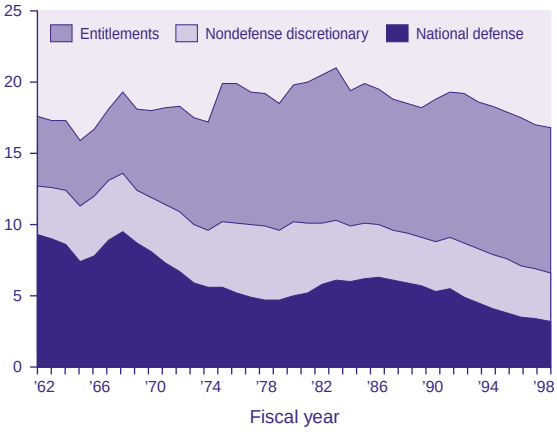
The composition of outlays has also changed dramatically. The budget laws divide noninterest spending into two categories: discretionary and entitlement programs. Discretionary programs may continue to operate only if Congress and the president approve their funding through annual appropriation bills. Half of all discretionary spending currently goes to national defense, with the rest funding a wide range of programs such as highways, law enforcement, and national parks. Entitlement programs do not require annual appropriations because Congress and the president have permanently authorized them to pay benefits to eligible individuals based on formulas set by law. These programs may operate indefinitely, unless Congress and the president change the underlying laws. Three-quarters of entitlement spending goes to Social Security, Medicare, and the federal share of Medicaid. The other quarter is devoted to a range of smaller programs, including veterans' benefits, unemployment compensation, farm subsidies, and welfare.

As shown in Figure 3, defense spending, nondefense discretionary spending, and entitlement spending have followed sharply different patterns (as shares of GDP) over the 1962–98 period. Defense spending followed a strong downward trend, from 9.3 percent to 3.2 percent of

Figure 3

Entitlement Spending Crowds Out Discretionary Spending

Percent of GDP

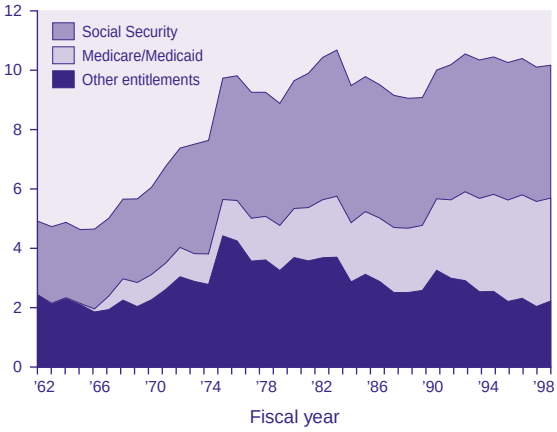


SOURCE: Office of Management and Budget (1999, p. 120).

Figure 4

Social Security and Medical Programs Dominate Entitlement Spending

Percent of GDP



SOURCE: Office of Management and Budget (1999, pp. 121–25, 169–70).

GDP, interrupted in 1966–68 during the Vietnam conflict and during the 1980–86 defense buildup; its 1998 share of GDP was the lowest since 1940. Representing 3.4 percent of GDP, nondefense discretionary spending generally rose before 1981 and fell thereafter, with little net change. As discussed below, recent deficit reduction efforts have focused on cutting defense and nondefense discretionary spending. In contrast, entitlement spending has followed a strong upward trend, from 4.9 percent to 10.2 percent of GDP.[2] As indicated in Figure 4, most of this growth has been in Social Security, Medicare, and the federal share of Medicaid.

RECENT BUDGET DEVELOPMENTS

Steady Deficit Decline, 1993–96

The unexpected move into surplus was preceded by a steady reduction in the deficit from 1993 to 1996. After peaking at $290 billion in fiscal 1992, the deficit declined to $107 billion in fiscal 1996.

A combination of economic events and policy changes precipitated this deficit decline. The continued economic expansion boosted receipts, and lower nominal interest rates reduced the government's interest expense. The conclusion of the costly savings and loan bailout also reduced outlays. One important trend, shown in Figure 5, was the slower growth of medical costs, which restrained Medicare and Medicaid spending. However, a major portion of the decline was the result of policy changes made by the 1990 and 1993 deficit-reduction laws. These laws tightened Medicare reimbursements to health care providers, increased income and excise taxes, and locked in fiscal discipline through the Budget Enforcement Act (BEA).

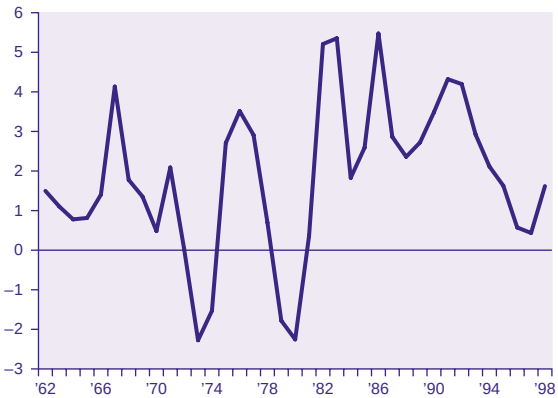
The BEA, adopted for fiscal years 1991–95 by the 1990 law and extended to 1998 by the 1993 law, imposed two important restrictions on budget policy. First, it capped nominal discretionary spending at approximately $550 billion throughout this period, reducing defense and nondefense discretionary spending as shares of GDP, as shown in Figure 3. Second, the BEA imposed a pay-as-you-go rule that prohibited changing the laws to reduce taxes without reducing entitlement spending or to increase entitlement spending without increasing taxes, although it did not require any action to offset

Figure 5

Slower Growth of Medical Costs

(Annual change, relative CPI for medical care)

Percent



SOURCE: Bureau of Labor Statistics.

the entitlement growth built into current law. The discretionary cap and the pay-as-you-go rule could be waived if Congress and the president designated a measure as an emergency.[3]

Budget Surplus Surprise, 1997–98

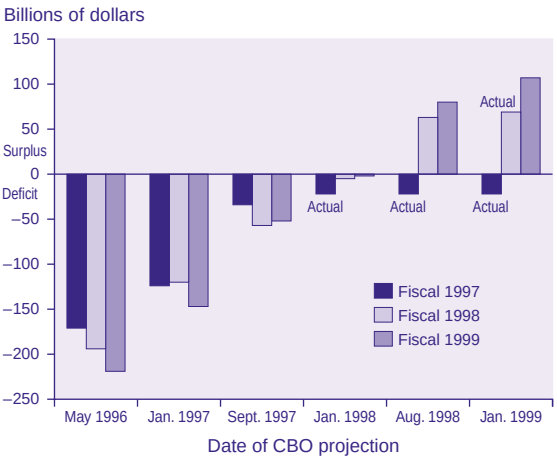
The steady deficit decline from 1993 to 1996 was followed by a surprise that moved the budget close to balance in 1997 and into surplus in 1998. To appreciate the magnitude of this budget surplus surprise, it is necessary to understand what forecasters expected in 1996.

Although the deficit had declined for four consecutive years, forecasters expected it to begin rising again. Figure 6 charts budget projections for fiscal years 1997–99 made at various dates by the Congressional Budget Office (CBO). (The projections assumed there would be no changes in tax and entitlement laws and that discretionary spending would equal the BEA cap until it expired.) In May 1996, CBO projected deficits of about $200 billion for 1997–99. Although there were no major relevant policy changes, persistent good news repeatedly forced CBO to alter its forecasts. Fiscal 1997 ended with a deficit of only $22 billion and 1998 with a surplus of $69 billion; CBO now projects a $107 billion surplus in 1999. The magnitude of these forecast deviations is unprecedented.

Analysts are still trying to fully explain the budget surplus surprise, but several factors emerge from a comparison of the actual fiscal 1998 budget outcome with the May 1996 CBO projection (*Table 1*). One-third of the forecast deviation was caused by an overestimate of outlays. Almost half of the outlay overestimate was in Medicare and Medicaid, reflecting the continued slower growth of medical costs. Interest outlays also were lower than predicted, reflecting both lower debt and lower nominal interest rates.

Two-thirds of the deviation was caused by an underestimate of receipts, primarily reflecting an unexpected surge in individual income tax receipts. Income tax receipts were boosted by strong economic growth and by several other factors, as discussed by CBO (1999b). Income from partnerships and S corporations rose sharply, and wages and salaries grew most rapidly in the highest tax brackets. One important factor was the rapid rise of net capital gains realizations, as shown in Figure 7, which largely reflected the recent stock market boom.[4] The stock market's continued strength suggests that realizations remained high in 1998, boosting fiscal 1999 receipts.

Figure 6
CBO Revises Its Budget Projections Upward

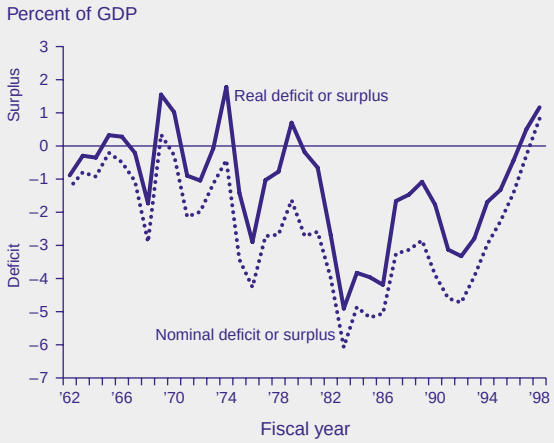


SOURCE: CBO (1996, 1997a, 1997b, 1998b, 1998c, 1999b).

Adjusting the Deficit For Inflation

The deficits and surpluses reported in this article are measured in nominal terms. Although simple, these nominal figures are inaccurate during periods of inflation. While the nominal deficit measures the change in the dollar value of government debt during the year, it is more meaningful to measure the change in the real value of government debt. For example, suppose the government has $100 debt outstanding at the beginning of the year, with a 4-percent annual interest rate. If the government collects $30 of revenue and spends $33 ($29 for programs and $4 for interest), the nominal deficit during the year is $3 and the debt is $103 at the end of the year. However, if the inflation rate during the year is 2 percent, the debt at the end of the year has about the same real value as $101 of debt at the beginning of the year. The real deficit is the increase in the real value of the debt, which is about $1.

Figure B.1
Budget Trends Largely Unchanged by Inflation Correction



SOURCES: Office of Management and Budget (1999, pp. 20, 110–11); Bureau of Economic Analysis, *National Income and Product Accounts*; author's calculations.

This real deficit can be obtained by correctly measuring the government's real interest expense. Although holders of the government debt receive 4-percent interest payments, the real value of their principal (the government's obligation) declines by 2 percent. The real return paid by the government to the bondholders is only 2 percent and the real interest payment is only $2. Recalculating spending and the deficit with this $2 interest expense yields the real deficit of $1.

Figure B.1 compares nominal deficits to real deficits for the 1962–98 period. (The inflation rate is measured by the change in the personal consumption expenditures implicit price deflator during the fiscal year, taking the deflator at the end of each fiscal year to be the geometric mean of the values for the last quarter of the fiscal year and the following quarter.) Although the levels were different, the nominal and real deficits generally followed similar patterns. The budget moved into real surplus in fiscal 1997, one year before it moved into nominal surplus. Since the trends are similar, I use the nominal figures, which are emphasized by policymakers, throughout this article.

Table 1
Fiscal 1998 Receipts, Outlays, and Surplus
(Comparison of May 1996 CBO projection and actual outcome)

	May 1996 projection	Actual outcome	Forecast deviation*
Total receipts	1,544	1,722	179
Individual income tax	694	829	135
Social insurance taxes	553	572	19
Corporate income tax	172	189	17
Other receipts	125	133	8
– Total outlays	1,737	1,653	84
Social Security	383	376	7
Medicare and Medicaid	351	312	39
Interest	257	243	14
Other outlays	746	722	24
= Budget balance	–194	69	263

* Forecast deviations that increase the surplus are listed as positive numbers.

NOTES: All numbers are billions of dollars. Details may not add to totals because of rounding. Medicare spending is gross of beneficiary premiums.

SOURCE: CBO (1996, 1999b).

THE NEW BUDGET OUTLOOK

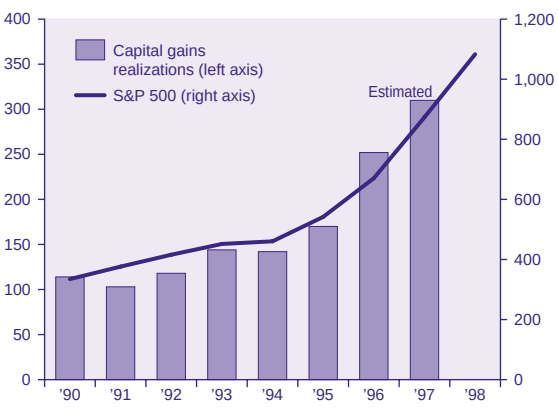
The budget surplus surprise, combined with new legislation adopted on August 5, 1997, has profoundly altered the budget outlook. In 1996, CBO's ten-year forecast projected large and growing deficits. Now, the ten-year forecast predicts large and growing surpluses, if current policies are maintained. CBO's longer term projections predict that surpluses will continue for an additional decade after 2009 but that deficits will reemerge after 2020.

As shown in Figure 8, CBO steadily altered its forecasts for fiscal 2002 and 2006, as it did for 1997–99. (The projections assumed discretionary spending would grow with inflation after the BEA cap expired.) CBO now projects a $306 billion surplus for 2006 if current policies are maintained, a stunning $709 billion change from the $403 billion deficit projected in May 1996. The predicted surplus grows to $381 billion in 2009, with the publicly held federal debt (which is reduced by each year's surplus[5]) declining from $3.77 trillion on September 30, 1997, to $1.21 trillion on September 30, 2009.

Most of the revision in the 2006 forecast reflects the continued effects of the budget surprise, but part of it reflects the August 1997 legislation. Unlike the 1998 forecast deviation, most of the change takes the form of lower outlays rather than increased receipts (*Table 2*).

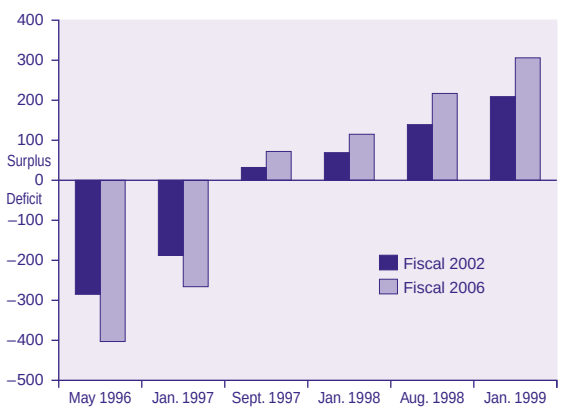
One-third of the improvement is attributable to lower interest expense, primarily reflecting the dramatically lower path of federal debt (the September 30, 2006, debt is now projected to be $2.53 trillion rather than the $6.75 trillion projected in 1996). One-sixth of the improvement is due to the 1997 legislation. This legislation extended the BEA (both the $550 billion discretionary cap and the pay-as-you-go rule) through 2002, tightened Medicare reimbursements and increased beneficiary premiums, and increased tobacco and airline taxes, although it reduced income taxes for parents, investors, and students. CBO (1997b) credits the legislation with reducing the 2006 deficit by $118 billion: $60 billion in savings from the discretionary cap extension, $72 billion in Medicare savings, and $20 billion in interest savings, offset by a $34 billion net revenue loss. Medicare and Medicaid

Figure 7
Capital Gains Realizations Surge During Stock Market Boom



SOURCES: Internal Revenue Service, *Statistics of Income*; author's calculations.

Figure 8
CBO Dramatically Revises Future Budget Projections



SOURCE: CBO (1996, 1997a, 1997b, 1998b, 1998c, 1999b).

spending has been revised downward and income tax receipts have been revised upward because CBO (1999b) assumes that part, but not all, of the slower growth of medical costs and the surge in individual income tax receipts will continue.

As with any ten-year forecast, the projection of a $381 billion surplus in 2009 is subject to substantial uncertainty. CBO (1999b) estimates that a reduction of 0.1 percent in each year's real GDP growth throughout the next decade would reduce the 2009 surplus by $40 billion, whereas a permanent increase of one percentage point (100 basis points) in nominal interest rates would reduce it by $20 billion. Other sources of uncertainty include the growth of medical costs and the level of individual income tax receipts.

Although its detailed forecast extends only through fiscal 2009, CBO (1999b) presents a summary projection through 2060. (The projection assumes entitlement laws do not change and discretionary spending and revenues rise with GDP after 2009). According to this forecast, surpluses will continue through 2020, and the entire publicly held federal debt will be retired around 2012.

However, entitlement spending is expected to rise sharply after 2010, first reducing the surpluses and then moving the budget back into deficit after 2020. The anticipated increase in spending results from two long-term trends. First, the dependency ratio (the ratio of the population aged 65 and over to those aged 20 to 64) will rise as the baby boomers begin turning 65 in 2011 and as life spans are extended. Figure 9 plots the future dependency ratio from the Social Security trustees' intermediate projections. Second, despite recent slow growth, medical costs are expected to resume their rapid increase. Figure 10 graphs predicted Social Security and Medicare spending (gross of beneficiary premiums) from the intermediate projections of the Social Security and Medicare trustees. Federal Medicaid spending (not shown) is also expected to rise sharply.

Because of the rise in entitlement costs, tax increases or spending cuts will be needed to restore long-term fiscal balance. CBO (1999b) estimates that a permanent tax increase or

Table 2
Projected Fiscal 2006 Receipts, Outlays, and Surplus
(Comparison of May 1996 and January 1999 CBO projections)

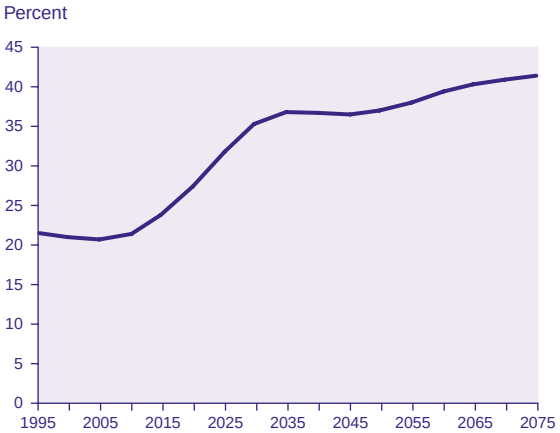
	May 1996 projection	January 1999 projection	Forecast revision*
Total receipts	2,232	2,393	161
Individual income tax	1,051	1,138	87
Social insurance taxes	800	816	16
Corporate income tax	214	250	36
Other receipts	167	189	22
– Total outlays	2,636	2,086	550
Social Security	567	538	29
Medicare and Medicaid	706	537	169
Interest	385	140	245
Other outlays	978	871	107
= Budget balance	–403	306	709

* Forecast revisions that increase the surplus are listed as positive numbers.

NOTES: All numbers are billions of dollars. Details may not add to totals because of rounding. Medicare spending is gross of beneficiary premiums.

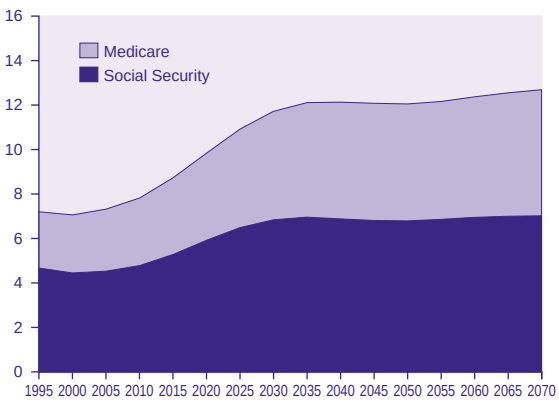
SOURCE: CBO (1996, 1999b).

Figure 9
Dependency Ratio Projected to Rise Sharply After 2010
(Population aged 65 and over / population aged 20–64)



SOURCE: Board of Trustees (1999a, p. 145).

Figure 10
Social Security and Medicare Costs Expected to Soar



SOURCE: Board of Trustees (1999a, p. 187; 1999b, p. 57).

Social Security and the Budget

Throughout this article, I use the unified-budget numbers that appear in CBO and Office of Management and Budget reports rather than the "on-budget" numbers that also appear in the reports. The on-budget numbers exclude the Social Security trust fund, which was placed "off-budget" in 1985.

The payroll and self-employment taxes earmarked for Social Security (and some income taxes paid on Social Security benefits) are credited to a separate trust fund in the budget accounts. Social Security benefits and administrative costs are charged against the fund. When Social Security taxes exceed Social Security spending (as in each of the last fourteen years), this excess reduces the amount the U.S. Treasury borrows from the public and its future interest payments to the public. To ensure that the budget accounts attribute these effects to the Social Security program, the bonds the Treasury avoids selling to the public are "bought" by the trust fund with its excess revenues. Each year, the Treasury "pays" interest on these bonds to the trust fund, thereby crediting the trust fund with the interest that it avoids paying to the public. In any year in which Social Security spending exceeds taxes and the trust fund's interest income, the trust fund finances its deficit by "selling" bonds back to the Treasury.

In fiscal 1998, the trust fund was credited with $478 billion of income, consisting of $416 billion in payroll and self-employment taxes, $9 billion in income tax on benefits, $7 billion in employer payroll tax "paid" by the federal government for its own employees, and $46 billion in interest "paid" by the Treasury. Since Social Security benefits and administrative costs were only $379 billion, the trust fund posted a $99 billion surplus. On September 30, 1998, the trust fund held $730 billion of bonds, indicating that if the past Social Security surpluses had not occurred the Treasury would owe the public $4.45 trillion rather than $3.72 trillion.

The on-budget numbers for fiscal 1998 differed significantly from the unified-budget numbers. The on-budget accounts recorded only $1,306 billion in receipts, rather than $1,722 billion, because they ignored the $416 billion payroll and self-employment taxes. They recorded only $1,046 billion of noninterest outlays, rather than $1,409 billion, because they ignored $370 billion of Social Security spending[1] but included the $7 billion of employer payroll taxes "paid" to the trust fund. Finally, they recorded $290 billion of interest expense rather than $244 billion because they included the $46 billion in interest "paid" to the trust fund. With total outlays of $1,336 billion and receipts of $1,306 billion, the on-budget accounts recorded a $30 billion deficit. This number differed from the $69 billion unified-budget surplus by $99 billion, the amount of the trust fund surplus.

If current policies are maintained, the difference will rise over the next two decades as the trust fund runs larger surpluses. For fiscal 2009, for example, CBO (1999b, p. 33) projects an on-budget surplus of $164 billion, a trust fund surplus of $217 billion, and a unified-budget surplus of $381 billion. However, the trust fund will run deficits after 2020, causing the on-budget deficit to be smaller than the unified-budget deficit.

Economists rarely use the on-budget numbers, which distort federal activity by ignoring important components of receipts and outlays and treating an internal payment as an interest expense. For example, the 1998 on-budget numbers would not have changed if Social Security payroll and self-employment taxes had been abolished, even though the $416 billion revenue loss would have greatly weakened the federal government's financial position. Economists usually use the unified-budget numbers, which include Social Security outlays and revenues and correctly measure the government's interest payment to the public.[2]

[1] The other $9 billion of Social Security spending was included in on-budget outlays to balance the inclusion of the $9 billion income tax on benefits in on-budget receipts.

[2] Although private firms' accounting methods do not ignore pension operations in the way the on-budget accounts ignore Social Security, they also do not include pension obligations on a cash basis in the way the unified accounts do. Instead, they record pension obligations as they accrue. Analysis of this issue lies outside the scope of this article.

spending cut equal to 0.6 percent of GDP would restore long-term balance, if it were adopted immediately. The necessary tax increase or spending cut will be larger if it is delayed.

Of course, these long-term projections are subject to even greater uncertainty than the ten-year forecasts because economic growth, the relative price of medical care, fertility, and life expectancy are difficult to predict over an extended horizon. Some analysts are particularly skeptical of the projection by the Social Security trustees and CBO that life expectancy at birth will rise by only five years from now to 2075. As discussed by Lee and Skinner (1999), time series analysis of the mortality rate suggests that the increase might be twice as great, which would further increase Social Security and Medicare costs and the size of the long-term fiscal imbalance.

PROPOSALS TO REDUCE THE PROJECTED SURPLUSES

As described by Stein (1998), the arrival of the surpluses has left policymakers adrift. For the last two decades, there was widespread agreement in principle that the appropriate goal was to balance the budget. After 1981, proposals for large tax cuts or spending increases were consistently rejected because they would impede this goal. Some economists and policymakers continue to oppose tax cuts and spending increases, arguing that the projected surpluses should be preserved. But others support tax cuts or spending increases, which are now consistent with budget balance, although these measures would reduce the projected surpluses. Because the BEA remains in effect through fiscal 2002, tax cuts or spending increases would require altering the discretionary cap or pay-as-you-go rule or invoking their emergency exceptions.

The projected surpluses are already lower than they could have been, because of tax reductions and spending increases adopted during the last two years. The August 1997 legislation provided tax credits for children and higher education costs, expanded the capital gains preference and tax-deferred savings opportunities, and created a new Children's Health Insurance Program. June 1998 legislation modified the BEA to permit $20 billion to $30 billion of annual transportation spending outside the discretionary cap, and October 1998 legislation invoked the BEA's emergency exception to increase defense and nondefense discretionary spending by $17 billion in fiscal 1999 and $5 billion in fiscal 2000.

Many tax cuts and spending increases that would reduce the projected surpluses have been proposed. In his fiscal 2000 budget proposal, President Clinton proposes spending increases and tax cuts that would reduce by about 32 percent the cumulative surpluses projected during the next ten years. His proposal would reduce the surpluses by 24 percent

through spending increases for education, national defense, and other programs and by another 13 percent through tax cuts to fund individual savings accounts, as described below. However, it would increase the surpluses by 5 percent by raising tobacco and other taxes. President Clinton proposes that most of the spending increases and tax cuts be adopted only after a Social Security reform plan is enacted.[6]

On April 15, Congress adopted a fiscal 2000 budget resolution that envisions reducing the projected surpluses by 27 percent, with a 35 percent reduction from unspecified tax cuts offset by an 8 percent increase from spending cuts. Some members of Congress suggest reducing individual income tax rates, while others call for tax cuts for two-income married couples, reform or abolition of the alternative minimum individual income tax, and further expansion of the capital gains preference.

In view of the variation in these proposals, no single analysis can accurately describe their effects. To draw out the major implications, I classify the proposals into three categories. First, I consider transfer payments or tax cuts in which the amount received by each individual does not depend upon the amount he or she saves. Second, I consider tax cuts that increase the reward to saving, including tax cuts to fund individual savings accounts. Third, I consider increases in the government's purchases of goods or services.

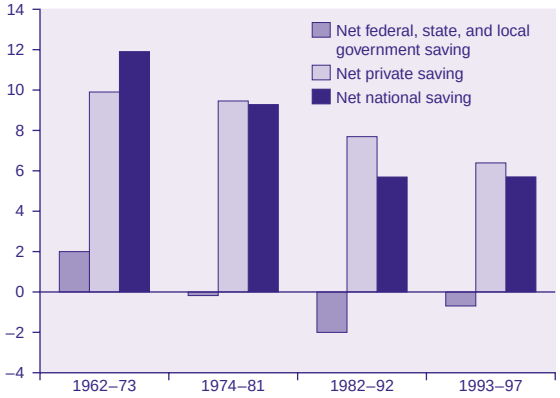
Tax Cuts and Transfer Payments With No Reward for Saving

Surplus reductions through higher transfer payments or lower taxes would place the federal debt on a higher path. The government budget constraint would then require that taxes be increased or spending be reduced in the future to service the additional debt.

While it might seem that the tax cuts or transfer payments would increase living standards today and that the necessary future tax increases or spending cuts would reduce living standards when they are implemented, the effects actually depend upon how these policies affect national saving. National saving, which measures the portion of national income withheld from current consumption and invested to increase future consumption, equals the private saving by individuals and businesses plus government saving. Surpluses constitute government saving, and deficits constitute negative government saving. Since reducing the surpluses would reduce government saving, national saving would decline if private saving did not change. However, if private saving rose by an offsetting amount, national saving would be unchanged.

Figure 11
National Saving Rate Is Below Historical Levels

Percent of net national product



SOURCE: Bureau of Economic Analysis, *National Income and Products Accounts*.

Figure 11 displays the past behavior of net private saving and net government (federal, state, and local) saving, measured as percentages of net national product. As government saving declined during the 1962–92 period, private saving also declined, causing a sharp drop in national saving. As government saving increased after 1992, private saving continued to decline, leaving national saving essentially unchanged.

One leading view of the relationship between private and government saving is the Ricardian equivalence theory, which is the subject of an extensive literature survey by Elmendorf and Mankiw (1998). According to this theory, taxpayers realize the transfer payments or tax cuts they receive today will require tax increases or spending cuts in the future. To prepare for this burden, they increase their private saving by the full amount of the tax cut or transfer payment, leaving national saving unchanged. The key assumption is that individuals rationally plan their consumption based on their expected lifetime income.

Under the Ricardian theory, the initial tax cuts or transfer payments do not increase consumption, because individuals save the money they receive. Conversely, the future tax increases or spending cuts do not reduce consumption when they occur, because individuals draw upon their additional savings. Reduction of the surpluses through tax cuts or increased transfer payments, therefore, has no profound economic implications.

However, as Elmendorf and Mankiw (1998) note, a majority of economists reject the Ricardian equivalence theory. Although direct empirical tests have been inconclusive, these economists reject the theory because they doubt the plausibility of its assumptions. If these economists are correct, private saving would not rise to fully offset the reduction of the surpluses, and national saving would decline.

This reduction in national saving would increase current consumption but would reduce future national income and consumption. National saving is invested in various forms of capital in the United States, including corporate and noncorporate business investment, owner-occupied housing, consumer durables, and human capital such as education or training, and is also used to purchase foreign assets. A reduced supply of saving would increase interest rates and reduce these investments. With less capital, future income and consumption would be lower. Workers would suffer part of the loss, because the reduction in the capital stock would lower labor productivity and real wages.

The amount of future consumption that would be lost depends on the real pretax rate of return to investment. This return is uncertain because it is affected by a variety of shocks to the economy. Its expected value can be estimated from the historical average of the ratio of pretax real net-of-depreciation capital income to the value of the capital stock.[7] The expected real return is 6 percent to 7 percent per year, according to estimates by Elmendorf and Mankiw (1998), Bosworth (1997), Cooley and Prescott (1995), Fullerton and Rogers (1993), and Summers (1990).[8] The relatively high return implies that a reduction in national saving significantly decreases future consumption. For example, consuming one dollar more (saving one dollar less) today would reduce consumption by four dollars (adjusted for inflation) twenty-five years in the future.

However, a reduction in national saving might be desirable even if the amount of consumption lost in the future was greater than the amount gained in the present. The relevant issue is how the changes in consumption at each date affect human well-being. To examine this issue, it is important to distinguish two ways in which national saving might decline. First, members of each generation might consume more when they are young and less when they are elderly. Second, current generations might consume more throughout their lifetimes, and future generations might consume less. Under certain circumstances, tax cuts or transfer payments could reduce national saving in either manner.

Tax cuts and transfer payments could cause people to consume earlier in their lifetimes if they are subject to incomplete information or myopia. Individuals might not know whether their tax cut or transfer payment was financed by a reduction in the surplus that will trigger future tax increases or spending cuts or by an increase in someone else's taxes. The benefit of having this information might not justify the substantial costs of learning the relevant economic concepts and reviewing published budget materials. Surveys by Allers, de Haan, and de Kam (1998) and Gruen (1991) find widespread unawareness and misinformation about the level of and changes in government debt. Alternatively, as Elmendorf and Mankiw (1998) discuss, even if individuals understood the future tax implications, they might not fully use this information in formulating a rational lifetime consumption plan. The complexity of intertemporal decision making may lead them to rely on rules of thumb to plan their consumption.

The assumption that individuals do not allocate consumption over their lifetimes in a perfectly rational, far-sighted manner is supported by empirical evidence. Campbell and Mankiw (1991) find that consumption rises when income rises, even when the income increase was predictable in advance, which contradicts the assumption that individuals prepare for predictable income changes by adjusting their consumption when they learn about the increases. Campbell and Mankiw's results are consistent with approximately half of aggregate consumption being done by individuals who consume a constant fraction of their current disposable income, without regard to their future income. If these individuals receive tax cuts and transfer payments in the present, financed by tax increases and spending cuts in the future, they will increase their current consumption and reduce their future consumption.

Would this change in consumption patterns be desirable? Since neither the original consumption decisions nor the new ones are optimal, no definitive general conclusion is possible.[9] Many individuals are likely to experience significant tax increases or benefit reductions when the federal government confronts the post-2020 budget challenge. Individuals who are unaware of this prospect or have not incorporated it into their saving behavior may be consuming too much now and will be forced to consume too little later in life because of their

inadequate saving. Tax cuts and transfer payments could further lower their well-being. Conversely, individuals who overestimate the stringency of future tax increases or spending cuts[10] may be saving too much, needlessly sacrificing current consumption to acquire excessive future consumption. Tax cuts and transfer payments could increase their well-being.

One complication is that saving is taxed by individual and corporate income taxes and property taxes, which prevents savers from earning the full 6 percent to 7 percent expected annual real return that their saving generates. The tax penalty on saving induces people to consume earlier in their lives than they would under a neutral tax system. If, for some reason, the taxation of saving cannot be changed, then tricking people into saving more would help offset the distortion caused by the tax system. This is an imperfect solution, however; it would be preferable to directly eliminate the distortion by reforming the tax system.

In any case, many economists believe that the most important effects of tax cuts and transfer payments are not changes in when each generation consumes, but changes in how much consumption is enjoyed by each generation. They believe that tax cuts and transfer payments would increase the consumption of earlier generations at the expense of later generations because later generations would bear part of the necessary future tax increases and spending cuts.[11] Gokhale, Kotlikoff, and Sabelhaus (1996) argue that the recent decline in national saving was largely the result of fiscal policies that transferred resources from later generations to earlier generations.

Under this assumption, the desirability of tax cuts and transfer payments depends on value judgments about the needs, rights, and obligations of different generations. Eisner (1998) argues that there is little reason to increase national saving because future generations will be wealthier than current generations. However, Feldstein (1998) and Romer (1988) present mathematical calculations suggesting the utility gained by future generations would be greater than the utility sacrificed by current generations, because of the high rate of return from saving. But Elmendorf and Mankiw (1998) point out that such analyses are inconclusive because they depend on the weights given to utility at different levels of wealth. Furthermore, many philosophers object to the utilitarian approach underlying these analyses, stressing instead the rights and obligations of different individuals and generations. Some analysts contend these rights and obligations cannot be determined in any conclusive manner.[12]

Greenspan (1999), Passell (1998), Stein (1998), and Steurle (1997) oppose reducing the projected surpluses to any significant extent, arguing that additional saving is desirable to ease the burden current and future generations will face from the post-2020 budget challenge. Greenspan and Steurle emphasize the possibility that these burdens will be greater than expected if part of the projected surpluses does not materialize because of slow economic growth or other deviations from forecast assumptions.

Tax Cuts That Reward Private Saving

Although a majority of economists believe tax cuts and transfer payments generally reduce national saving, this conclusion may not hold for tax cuts that increase the reward for private saving (or reduce the penalty the current tax system imposes on saving). These proposals would probably boost private saving, which could offset the decline in government saving.

Many tax-cut proposals, such as reducing income tax rates, would slightly increase the after-tax return to saving. Other proposals would do this to a greater extent. Some proposals would reduce the surplus by replacing the income tax with a consumption tax, setting the consumption tax rate below the level that would replace current revenues. Although a revenue-losing switch to a consumption tax could increase private saving by enough to keep national saving unaffected, such an outcome is unlikely. Engen and Gale (1996) survey the potential effects on saving of switching to a consumption tax and suggest caution in estimating the magnitude of any increase. An increase in national saving would be more likely if such reforms were implemented on a revenue-neutral basis.

A different approach is to give individuals a tax cut, with the condition that they place the funds in an individual retirement saving account. In his fiscal 2000 budget, President Clinton proposes that tax cuts of this type be used to fund a system of Universal Savings Accounts. Workers with incomes below $40,000 would be given $300 for their accounts and would receive dollar-for-dollar government matching for up to $700 of additional contributions, with smaller benefits for those with higher incomes. An alternative proposal by Feldstein and Samwick (1998) would give each worker an amount equal to 2 percent of earnings subject to Social Security tax for his or her account.

President Clinton's proposed accounts would not be integrated with the Social Security system, but the Feldstein-Samwick proposal would reduce Social Security benefits by seventy-five cents for each dollar withdrawn from the accounts during retirement.

Reducing the surpluses through tax cuts that fund individual savings accounts would probably reduce national saving to some extent. Current workers would receive the tax cuts, while future generations might bear part of the future tax increases and spending cuts necessitated by the reduction in the surpluses. Also, acting on incomplete information, workers who might not have reduced their saving to offset government budget surpluses might reduce their other saving to offset the highly visible wealth in their accounts. However, the saving reduction would be smaller under the Feldstein-Samwick plan because lower future Social Security benefits would offset up to 75 percent of the wealth.

CBO (1998a) analyzes the relative merits of private saving in individual accounts and government saving through budget surpluses. Individual accounts would offer greater personal freedom because individuals could make their own portfolio choices. But not all individuals will necessarily be prepared to make these choices. In surveys cited by Levitt (1998) and Diamond (1997), many Americans express unfamiliarity with the benefits of diversification, the relationship of bond prices to interest rates, and the differences between stocks and bonds. To reduce the problems posed by limited knowledge, individual portfolio choice would probably be restricted to some extent, although neither the president nor Feldstein and Samwick specify the restrictions they would impose. Supporters also argue that the introduction of individual accounts would spur individuals to learn more about portfolio choice.

Although the aggregate return on additional investment and its total uncertainty would be the same whether the investment was financed from savings in individual accounts or from budget surpluses, the allocation of risk would be different. With surpluses, the government could diversify risk, particularly across generations. With individual accounts, the extent of diversification would depend on workers' portfolio decisions. Budget surpluses might pose greater political risk because the allocation of the future tax reductions or spending increases permitted by the surpluses would depend on political decisions that could not be predicted. Since individual accounts would be private property, workers would have some assurance they could retain the wealth in their accounts regardless of political developments.

Unlike budget surpluses, individual accounts would have significant administrative costs. Mitchell (1998) and Diamond (1997) observe that administrative costs consume 10 percent of returns for many private saving vehicles. Costs might be reduced to some extent if individuals were limited to a few standardized portfolio options.

Feldstein and Samwick (1998) also argue that Congress and the president will inevitably yield to temptation and reduce the surpluses by adopting some form of tax cuts or spending increases. They warn that rejecting individual accounts and attempting to preserve the surpluses would actually result in lower national saving because Congress and the president would eventually backslide and reduce the surpluses through spending increases or tax cuts that did not reward saving. However, it might be possible to prevent this outcome by imposing constitutional or other institutional restrictions that preclude future backsliding.

Increases in Government Purchases

Another way to reduce the surpluses would be to increase the government's purchases of goods and services. Many forms of government purchases, such as Medicare spending, are essentially current consumption. Increases in government consumption raise issues similar to those posed by transfer payments or tax cuts that increase private consumption. The choice between private and government consumption should depend upon how effectively each type of consumption satisfies the preferences of individuals.

Other forms of government purchases, such as education, public infrastructure, and health care for workers, can increase future output. Public investment of this type is desirable if it corrects market failure in a way that provides a higher return than private investment. Of course, these returns are often difficult to measure and may vary greatly across different types of government purchases.

CONCLUSION

A combination of economic events and policy changes reduced the federal budget deficit for five years in a row and unexpectedly moved the budget into surplus last year. If current policies are maintained, surpluses are expected to continue for twenty years, com-

pletely retiring the outstanding federal debt, although deficits are expected to return after 2020. Congress and President Clinton are considering proposals to reduce the projected surpluses through tax cuts or spending increases.

Under plausible assumptions, many of the proposed tax cuts and spending increases would reduce national saving and lower future output because they are likely to increase the consumption of current generations and reduce the consumption of future generations. Evaluation of the desirability of this outcome requires a value judgment about the needs, rights, and obligations of the different generations. Different considerations are relevant for some proposed tax cuts and spending increases. Tax cuts that reward saving or fund individual savings accounts might increase private saving but probably not enough to offset the reduction in government saving. Increases in government investments, such as education and infrastructure, would be desirable if they corrected market failures in ways that offered higher returns than private investment.

The decision on whether and how to reduce the projected surpluses will have important effects on the well-being of current and future Americans.

NOTES

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1 Fiscal years 1976 and earlier began on July 1 of the preceding year, while fiscal years 1977 and later begin on October 1 of the preceding year. The period July 1 to September 30, 1976, which was a transitional quarter not included in any fiscal year, is not shown in the figures.

2 The entitlement spending plotted in the figure is mandatory spending (other than interest) minus offsetting receipts. Collender (1999) provides more detail on these budget categories.

3 Collender (1999) provides a thorough description of the BEA.

4 The reduction in the top tax rate on long-term capital gains from 28 percent to 20 percent, which took effect on May 7, 1997, also probably increased 1997 realizations. Moreover, mutual funds, which generally realize gains to a greater extent than do individual investors, now own a larger portion of stocks. Barclay, Pearson, and Weisbach (1998) document and analyze mutual funds' willingness to realize capital gains.

5 Although policymakers and journalists sometimes discuss "using" the surpluses to reduce the debt, this terminology is somewhat misleading. Unless the government increases its cash balances or holdings of financial assets, surpluses necessarily reduce the debt. By the same token, deficits necessarily increase the debt, unless the government reduces its cash balances or its holdings of financial assets.

6 The reductions in the surplus are calculated from CBO (1999a, pp. xiii, 2, 3, 22). I treat the proposed stock purchases and associated interest costs as not reducing the surplus.

7 As discussed by Summers (1990), this method is subject to several potential problems. Both capital income and the capital stock may be mismeasured, particularly because consumer durables, human capital, and government capital are excluded. The average return obtained by this method may differ from the marginal return if the production function does not exhibit constant returns to scale. Moreover, the private return earned by capital may differ from the social return because of monopoly power, externalities, and the marginal cost of public services (such as police and fire protection) provided to capital.

8 Some authors, such as Feldstein (1998), use values of 9 percent or more, based on the pretax return to corporate capital. But, as CBO (1998a), Elmendorf and Mankiw (1998, p. 23 n.9), Bosworth (1997, p. 163), Diamond (1997, p. 21 n.24), and Summers (1990, p. 117) observe, corporate capital has higher pretax returns than other investments because it is taxed more heavily and because after-tax (risk-adjusted) returns on different investments should be equal.

9 As Elmendorf and Mankiw (1998, pp. 50–52) discuss, some individuals who wish to borrow to consume earlier in their lifetimes may be unable to do so because bankruptcy risk causes private lenders to restrict the amount they will lend to these consumers. If it can, the government should help individuals sidestep these restrictions by borrowing on their behalf (giving them a tax cut or transfer payment, financed by a future tax increase). However, if the government's ability to collect taxes is the same as private lenders' ability to collect loan repayments, then it cannot accomplish this objective. For each dollar of additional government borrowing, private lenders would reduce their loans by one dollar.

10 In surveys cited by Burtless (1997, p. 400), 70 percent of voters under age 50 state that they expect to receive no Social Security benefits at all, suggesting that many people have unfounded beliefs about the magnitude of the necessary adjustments.

11 Even if future generations bear the tax increases or spending cuts, Ricardian equivalence could still be valid and national saving still might not decline. Current generations might increase their private saving to leave larger gifts and bequests to their heirs, compensating them for the burden they will face. Elmendorf and Mankiw (1998, pp. 45–50) survey the literature on

this issue. However, empirical evidence suggests that households do not systematically alter their gifts and bequests to offset changes in their heirs' circumstances (Hayashi, Altonji, and Kotlikoff 1996).

[12] Legal scholar Richard Epstein (1992, p. 85) comments, "I confess that my moral intuitions are not as well developed…on this grand scale. Hard as I try I cannot determine precisely what it is that my parents owed me, or what their generation owed my generation or those yet to come. I am also somewhat overwhelmed by a similar inability to speak about what I owe my children, as distinguished from what I hope to provide for them." Kinsley (1994) expresses similar views.

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