# CBO MEMORANDUM

# THE STANDARDIZED BUDGET: REVISED HISTORICAL ESTIMATES

June 2000

### **ERRATA**

The second column of data in Tables 1 and 2 has been revised in this electronic version to correct the column heading.

CONGRESSIONAL BUDGET OFFICE SECOND AND D STREETS, S.W. WASHINGTON, D.C. 20515 This Congressional Budget Office (CBO) memorandum presents revised historical estimates of CBO's measure of fiscal policy—the standardized budget. The main innovations in the revisions are adjustments for special factors that were not addressed in previously published calculations.

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### CONTENTS

SUMMARY AND INTRODUCTION	1
THEORETICAL ASSUMPTIONS UNDERLYING THE STANDARDIZED BUDGET	2
ASSESSING FISCAL EFFECTS	4
Accounting Adjustments Economic Feedbacks to the Budget Expectations and Dynamic Factors	5 8 11
CONCLUSIONS	13

### TABLES

1.	Standardized-Budget Deficit or Surplus and Related Series, Fiscal Years 1960-1999 (In billions of dollars)	15
2.	Standardized-Budget Deficit or Surplus and Related Series, Fiscal Years 1960-1999 (As a percentage of potential GDP)	16
FIG	URE	
1.	The Change in the Standardized-Budget Balance as a Share of Potential GDP	2

As part of preparing its economic forecast, the Congressional Budget Office (CBO) assesses whether the change in the budget balance caused by legislation and other factors is restraining or stimulating short-term economic growth. The fiscal policy measure CBO uses for that purpose is the change in an adjusted version of the budget balance—specifically, the change in the standardized-budget surplus (or deficit). The *change* in the budget balance, appropriately adjusted, affects short-term growth because the rate of growth of total demand for goods and services in the economy depends on such factors as changes in tax rates and federal purchases. (The *level* of the federal surplus or deficit, by contrast, is an important determinant of living standards in the long run, because federal surpluses add to national saving and the formation of capital.)

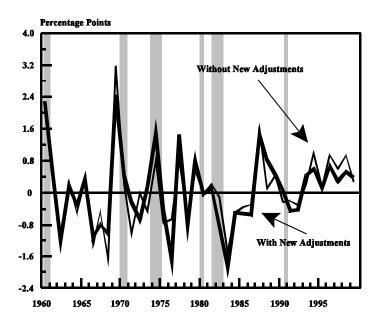
To calculate the standardized budget, CBO adjusts the actual budget in various ways. In the past, CBO made two types of adjustments. First, it excluded the automatic but temporary changes in taxes and federal spending caused by fluctuations in output and unemployment—changes that indicate the effects of the business cycle. Those adjustments are particularly important during recessions and significant downturns in growth, when changes in the budget balance can be dominated by cyclical effects. Second, it excluded accounting items (such as the government's sales of assets) that affect measures of the budget but not short-term economic growth.

Recently, further analysis has suggested that other adjustments are necessary to improve the standardized-budget measure. This memorandum discusses both the adjustments that CBO has used in the past and the new, additional adjustments that it is now applying. The memorandum also describes a few special factors (such as the effects of policy changes that are anticipated versus the effects of changes that are not anticipated) that may be important but whose effects cannot be quantified with any certainty.

In roughly three-fourths of the fiscal years from 1960 through 1999, the new adjustments alter the annual change in the standardized budget as a share of potential GDP by less than 0.5 percentage points (see Figure 1). Thus, in most years, the record of fiscal policy (broadly speaking, changes in federal taxes and spending that affect short-term growth) is not significantly different in these revised estimates. In

<sup>1.</sup> Estimates of the cyclical component of taxes and spending depend on the gap between actual gross domestic product (GDP) and potential GDP, which is the level of output consistent with stable inflation. Although different estimates of potential GDP would produce different estimates of the size of the standardized-budget surplus, the changes from year to year are much less sensitive to how potential GDP is calculated. For a discussion of the relationship between the standardized budget and potential GDP, see Congressional Budget Office, *The Budget Adjusted for Effects of the Business Cycle* (July 30, 1999, available at www.cbo.gov). See also Darrel Cohen and Glenn Follette, "The Automatic Fiscal Stabilizers: Quietly Doing Their Thing," *Economic Policy Review*, Federal Reserve Bank of New York, vol. 6, no. 1 (April 2000), pp. 35-67.

FIGURE 1. THE CHANGE IN THE STANDARDIZED-BUDGET BALANCE AS A SHARE OF POTENTIAL GDP (By fiscal year)



SOURCE: Congressional Budget Office.

NOTE: Positive changes in the standardized-budget balance indicate a dampening effect (fiscal restraint) on overall demand. Negative changes indicate a stimulating effect (fiscal stimulus).

particular, the new adjustments remove only part of the fiscal restraint from recent years that reflects factors other than new tax or spending legislation. Nevertheless, the historical stance of fiscal policy appears significantly different in the two sets of estimates in roughly one-fourth of the years.

# THEORETICAL ASSUMPTIONS UNDERLYING THE STANDARDIZED BUDGET

The standardized budget assumes that under certain circumstances, changes in federal taxes and spending may affect total demand for goods and services in the short run. In particular, increases in federal spending and reductions in taxes are assumed to stimulate consumption and investment, although their effects may be offset by monetary policy, developments in financial markets, or other influences on total demand. Similarly, reductions in federal spending and increases in taxes are assumed to dampen spending by households and businesses.

Without that basic assumption linking federal taxes and spending to total demand, changes in the standardized budget would not help to explain short-term growth, even when special factors were taken into account. Indeed, many economists do not believe that changes in the balance of the federal budget significantly affect total demand because their views of the economy are based in part on different assumptions. In one version of the neoclassical view of the economy, for example, tax cuts have no impact on total demand. According to that model, people believe that cuts in current taxes will be matched by higher taxes in the future, and they therefore save the money from the tax cuts in anticipation of those higher future taxes. Federal spending can raise total demand in that model, but only under certain conditions. Otherwise, federal spending simply displaces private spending. Because of those assumptions about the effects of federal taxes and spending, the standardized budget is not a useful measure in the neoclassical view of the economy.

Other economists have stressed that at times, federal spending and taxes can have effects on total demand that are contrary to standard predictions. That may happen, for example, when the economy is at a threshold, or so-called trigger point, characterized by extremely large amounts of public debt. In that case, a debt-financed cut in taxes or increase in spending may weaken rather than strengthen short-term growth because people may expect the additional debt to trigger a large tax increase in the near future to stop the debt from growing further. According to that view of the economy, the standardized budget would be misleading when the economy was close to a trigger point.

Those views and others notwithstanding, the standardized budget in various forms is widely used as a measure for assessing the stance of fiscal policy. The new adjustments that CBO is now making in its standardized-budget calculations are meant to improve that measure.

<sup>2.</sup> See Alan J. Auerbach and Laurence J. Kotlikoff, *Dynamic Fiscal Policy* (Cambridge: Cambridge University Press, 1987).

<sup>3.</sup> See Robert J. Barro, "Are Government Bonds Net Wealth?" *Journal of Political Economy* (November/December 1974), pp. 1095-1117.

<sup>4.</sup> See Marianne Baxter and Robert G. King, "Fiscal Policy in General Equilibrium," *American Economic Review* (June 1993), pp. 315-334.

<sup>5.</sup> See Alan Sutherland, "Fiscal Crises and Aggregate Demand: Can High Public Debt Reverse the Effects of Fiscal Policy?" *Journal of Public Economics* (August 1997), pp. 147-162; and Giuseppe Bertola and Alan Drazen, "Trigger Points and Budget Cuts: Explaining the Effects of Fiscal Austerity," *American Economic Review* (March 1993), pp. 11-26.

Calculations of the standardized budget that appeared in earlier CBO reports already incorporate some adjustments to help determine whether the change in the federal budget is restraining or stimulating short-term growth. The data do not, however, include other adjustments for additional factors that would help prevent the standardized budget from sometimes giving misleading signals. All of these factors can be grouped into three categories:

- o Factors that are related to accounting and therefore have an effect on the standardized budget but no effect on short-term growth. Included in this category are large changes in the sales of federal assets and significant changes in overwithholding of taxes from paychecks. Adjustments for most of these factors are already in the historical estimates of the standardized budget.
- Factors that reflect misleading feedbacks from the economy to the standardized budget that are not related to the business cycle. Changes in capital gains realizations that in turn produce changes in tax collections belong in this category, as do changes in federal interest payments caused by inflation.
- Factors that reflect the expectations and behavior of households and businesses in a dynamic, forward-looking framework. These factors are important because the standardized budget is a static fiscal measure that does not look into the future. Such factors include differences in the economic impact of permanent and temporary fiscal changes and of anticipated and unanticipated fiscal changes.

Although these factors affect the standardized budget in every year to varying degrees, this memorandum focuses on factors with significant effects. Moreover, the possibility that some important factors have been overlooked underlines the need for caution in using the standardized-budget measure to gauge the effects of the federal budget on short-term economic growth. The three types of factors that can cause the standardized budget to be a misleading indicator of fiscal policy are discussed below.

<sup>6.</sup> Several of the adjustments discussed in this memorandum for factors such as timing shifts, asset sales, and deposit insurance are incorporated in the federal budget on a national income and product account (NIPA) basis. But other adjustments—for capital gains, overwithholding, and allied contributions for Operation Desert Storm, for example—are not. As a result, those factors can cause misleading shifts in the standardized budget reported on a NIPA basis.

#### **Accounting Adjustments**

As noted earlier, CBO has already made most of the necessary accounting adjustments in previously published historical estimates of the standardized-budget surplus (or deficit). Thus, those figures already reflect adjustments for such things as sales of federal assets, deposit insurance, and allied contributions for Operation Desert Storm. New adjustments include those for shifts in the timing of outlays and tax collections before 1985 and for changes in the amount of taxes that have been overwithheld. (Unless otherwise indicated, all years referred to in subsequent discussions are fiscal years.)

<u>Sales of Federal Assets</u>. Asset sales are one of the factors already reflected in estimates of the standardized budget. When the federal government sells a financial or physical asset, the proceeds raise the standardized-budget surplus. But those transactions have little economic impact. Asset sales and similar transactions do not constitute fiscal restraint because unlike a tax hike, they do not decrease private wealth. Such sales represent exchanges of assets of equal value and therefore have no short-term effect on the economy.

On several occasions, the Congress has used asset sales to reach particular fiscal goals. For example, large sales of federal assets were legislated in the late 1980s, when policymakers were striving to meet the budget targets of the Balanced Budget and Emergency Deficit Control Act of 1985. Use of the asset-sale approach declined following passage of the Budget Enforcement Act of 1990 and its extensions in 1993 and 1997, because deficit targets were replaced by caps on discretionary spending and by a pay-as-you-go requirement for changes in taxes and mandatory spending. In recent years, proceeds from auctions of licenses for use of portions of the electromagnetic spectrum have had a budgetary effect similar to that of asset sales. Therefore, the standardized budget includes adjustments for large swings in the proceeds from those auctions.

<u>Deposit Insurance</u>. The historical estimates of the standardized budget already contain an adjustment for outlays for deposit insurance, which largely consist of spending to restore insured deposits that exceeded the value of the assets in failed thrift institutions and spending to purchase failed thrifts' assets. Neither type of spending has an impact on the economy at the time it is recorded in the budget: outlays to restore insured deposits simply replace current government borrowing for an earlier government guarantee, and outlays to purchase the assets of failed thrifts are purely financial transactions that are neutral with respect to short-term growth.

<sup>7.</sup> See Robert D. Reischauer, "Taxes and Spending Under Gramm-Rudman-Hollings," *National Tax Journal* (September 1990), pp. 223-232; and Alan J. Auerbach, "Formation of Fiscal Policy: The Experience of the Past 25 Years," *Economic Policy Review*, Federal Reserve Bank of New York, vol. 6, no. 1 (April 2000), pp. 9-24.

The largest increase in outlays for deposit insurance was \$36 billion in 1990. The largest decreases, reflecting the sale of previously purchased assets, were \$64 billion in 1992 and \$31 billion in 1993.

Although federal outlays for deposit insurance did not affect total demand when they were recorded in the budget, they had an important, earlier impact. By preventing a decline in consumer wealth that would otherwise have occurred when a thrift institution became insolvent, the insurance avoided a negative shock to total demand. The cumulative cost to taxpayers for that insurance benefit was roughly \$90 billion. However, available estimates do not identify any years in which the implied economic effect of that insurance was particularly large or small. Including such effects in the standardized budget would therefore not have much impact on the year-to-year change measured relative to potential GDP and would not significantly alter that measure's historical portrayal of fiscal policy.

Allied Contributions for Operation Desert Storm. The United States received roughly \$43 billion from its allies to help finance Operation Desert Storm in 1991 and about \$5 billion in 1992. Those contributions were recorded as negative outlays and thus reduced the standardized-budget deficit. But they did not reduce federal purchases of goods and services for Operation Desert Storm and thus had no restrictive impact on overall demand. Instead, they were a means of financing outlays without raising taxes or federal debt. Estimates of the standardized budget already exclude those contributions. Without such an adjustment, the standardized budget would overstate fiscal restraint by about 0.8 percent of potential GDP in 1991 and 0.1 percent in 1992.

Changes in the Timing of Outlays and Receipts. An artificial change in the timing of federal outlays (or receipts) can happen either automatically or by design. In most fiscal years, for example, there are 12 payments of Social Security benefits, one at the beginning of each month. In some years, however, the beginning of a fiscal year falls on a weekend, and a slightly early payment for that month then shows up in the preceding fiscal year. That automatic change in timing usually increases the surplus for the upcoming fiscal year because a year with 13 monthly payments tends to be followed by one with only 11 payments. The result is that the standardized budget artificially shows more fiscal stimulus in the year with 13 payments and less in the year with 11 payments.

<sup>8.</sup> As of 1995, when the Resolution Trust Corporation was closed, the General Accounting Office estimated that nonrecoverable costs to taxpayers since 1989 totaled approximately \$90 billion, including about \$8 billion in tax concessions. See General Accounting Office, Financial Audit: Resolution Trust Corporation's 1995 and 1994 Financial Statements, GAO/AIMD-96-123 (July 1996).

<sup>9.</sup> See Congressional Budget Office, The Economic and Budget Outlook: An Update (August 1991).

Similar shifts in the timing of outlays (or receipts) can result from legislative or administrative action. For example, federal payments for goods and services can be accelerated or delayed by a few days, causing those outlays to be recorded in a different fiscal year. Those shifts affect the standardized budget, but they do not reflect a change in fiscal policy that affects total demand.

Calculations of the standardized budget already include many adjustments for recent timing shifts. A case in point is an adjustment that reversed the effects of legislation shifting roughly \$12 billion of the 1998 surplus into 1999. That shift largely consisted of a delay in collecting excise taxes (mainly on gasoline) as well as an adjustment that evened out the number of monthly entitlement payments made in 1998 and 1999.

Adjustments for timing shifts that occurred before 1985, however, were not part of the historical estimates of the standardized budget before the current revision. Now, CBO has added two such adjustments. The first involves payment of a subscription fee to the International Monetary Fund. In the actual budget, the fee of more than \$1 billion (0.3 percent of potential GDP) had been moved from July 1959 (the first month of fiscal year 1960) to June 1959 (the last month of fiscal year 1959). An adjustment to the standardized budget now reverses that timing shift. Second, the Tax Adjustment Act of 1966 accelerated roughly \$4 billion of corporate tax payments, or about 0.6 percent of potential GDP, from 1968 to 1967. A new adjustment now reverses that acceleration.

Overwithholding of Income Taxes. Most workers have part of their paycheck withheld by their employer for income taxes. For most people, the amount withheld during the year exceeds their tax liability. They therefore receive a tax refund the following year when they file their income tax return.

The Internal Revenue Service usually adjusts rates of withholding when large changes are made in tax laws. But sometimes the adjustments are too large or too small compared with the legislated change in tax liabilities. In such cases, overwithholding for taxpayers as a whole increases or decreases unless taxpayers readjust their withholding. But even without such readjustments, the effect on federal revenues tends to be temporary because an increase or decrease in overwithholding after the first year is offset by corresponding changes in refunds and final tax payments in later years.

A large increase in overwithholding can substantially raise the standardized-budget surplus, but that effect should not be viewed as additional fiscal restraint (or less stimulus). The reason is that most people base their consumption on their income net of their tax liabilities rather than net of their withheld taxes. Overwithholding becomes an important consideration only for liquidity-constrained taxpayers—those who cannot finance their consumption with credit or by drawing

down savings, or those whose behavior is similar but for other reasons. Liquidity-constrained taxpayers may account for as much as 30 percent of all consumption.<sup>10</sup>

Overwithholding increased dramatically in calendar year 1972, following passage of the Tax Reduction Act of 1971. Overwithholding rose because withheld taxes did not decline much despite the cut of roughly \$8 billion in tax liabilities. About half of the overwithholding contributed to revenues for fiscal year 1972 and to the fiscal restraint shown in the standardized budget. Although some of the overwithholding may have affected liquidity-constrained consumers, the rest (perhaps 70 percent) came from the paychecks of taxpayers without such constraints, causing the standardized budget to overstate fiscal restraint by roughly 0.3 percent of potential GDP.

Withholding rates were reduced significantly in March 1992 by executive order. That action lowered revenues (and overwithholding) by more than \$14 billion in fiscal year 1992 and by about \$5 billion in 1993, even though there was no corresponding reduction in tax liabilities. Because only part of that reduction in withheld taxes affected liquidity-constrained consumers, the standardized budget overstated fiscal stimulus by about \$10 billion in 1992 and \$4 billion in 1993.

More recently, an increase in overwithholding was associated with the Taxpayer Relief Act of 1997. It occurred because many people did not reduce their 1998 withholding to account for the child and education tax credits that became effective in that year. That overwithholding amounted to perhaps \$12 billion in fiscal year 1998. After taking into account the effect of overwithholding on liquidity-constrained consumers, the standardized budget probably overstated fiscal restraint in 1998 by about \$8 billion, or 0.1 percent of potential GDP. Previous estimates of the standardized budget did not include an adjustment for overwithholding, but CBO's new figures now include that change.

### Economic Feedbacks to the Budget

The factors in this category reflect feedbacks from the economy to the standardized budget that cause misleading signals about fiscal policy but are not related to the business cycle. CBO did not include adjustments for those factors in previously published historical estimates of the standardized budget, but they are now reflected in the revised historical data presented in this memorandum.

<sup>10.</sup> See Robert E. Hall and Frederic S. Mishkin, "The Sensitivity of Consumption to Transitory Income: Estimates from Panel Data on Households," *Econometrica* (March 1982), pp. 461-481; Matthew J. Cushing, "Liquidity Constraints and Aggregate Consumption Behavior," *Economic Inquiry* (January 1992), pp. 134-153; and Randall P. Mariger, *Consumption Behavior and the Effects of Fiscal Policies* (Cambridge, Mass.: Harvard University Press, 1986).

<u>Changes in Taxes on Capital Gains</u>. Significant changes in taxes paid on capital gains can cause the standardized budget to give misleading signals about the fiscal stance of the federal sector. A legislated *decrease* in capital gains taxes can induce people to realize more of their capital gains because of the so-called unlocking effect. When that happens, the induced increase in tax payments for the first year or two raises the standardized-budget surplus, which makes overall fiscal policy appear restrictive. But in fact, a cut in taxes on capital gains increases consumer wealth and thus stimulates consumption and short-term growth.

Similarly, a legislated *increase* in taxes on capital gains can cause the standardized budget to overstate the amount of short-term fiscal restraint and can make that restraint appear before the scheduled tax increase takes effect. That happens because some individuals can partly avoid the scheduled increase by realizing more of their gains in the year before the higher tax goes into effect. The result is a temporary bulge in capital gains tax collections, followed by a drop. That pattern causes fiscal policy (as measured by the standardized budget) to appear restrictive before the tax increase takes effect and stimulative afterward. In fact, the end result would be some restraint because of the negative effect on consumer wealth.

Finally, changing conditions in the stock market and other asset markets can increase or decrease the growth of realized capital gains (and the associated taxes), even if there is no legislated change in the tax treatment of those gains. The resulting impact on the standardized budget would produce a misleading signal about the stance of fiscal policy. By raising tax collections, a booming stock market may erroneously cause fiscal policy to appear restrictive. By contrast, a sagging stock market may erroneously cause fiscal policy to appear stimulative.

The Tax Reform Act of 1986 produced the most notable distortion of the standardized budget caused by capital gains. The act repealed the 60 percent exclusion of long-term capital gains, beginning in January 1987. It also reduced the top marginal tax rate on ordinary income from 50 percent to 28 percent. With that reduction came an increase in the effective top tax rate on capital gains from 20 percent to 28 percent. Investors responded by realizing a huge amount of their gains in the last quarter of calendar year 1986—the beginning of fiscal year 1987. The large jump in taxes paid on capital gains in that fiscal year caused the standardized budget to overstate fiscal restraint by about 0.5 percent of potential GDP.

More recently, in August 1997, capital gains taxes were reduced retroactively to May of that year, and the maximum tax rate was lowered to 20 percent. Because the provision was retroactive, it probably did not cause investors to postpone the realization of their capital gains from 1997 to 1998 and later. Instead, in all likelihood, it accelerated realizations, as reflected by an estimated increase of \$6 billion in final tax payments due in 1998. Despite the boost in collections, however,

the economic effect of that tax cut was stimulative, not restrictive, because it increased consumer wealth.

The rise in wealth from the booming stock market of the past few years has boosted the growth of capital gains tax revenues substantially. Indeed, the large increase in realizations accounts for about a third of the rise in tax liabilities relative to GDP.<sup>11</sup> In turn, the increase in capital gains tax collections in excess of growth in GDP has caused the standardized budget to overstate fiscal restraint. The largest effect was in 1996, amounting to 0.3 percent of potential GDP.

One way to adjust the standardized budget for the effects of capital gains would be to remove the revenue effects of specific episodes, such as those discussed above, and instead include some measure of the effect on consumer wealth. Another approach, and the one adopted here, is to completely remove the revenue effects of capital gains from the standardized budget. Although that reduces the level of revenues in all years, it also eliminates the sharp changes that cause the standardized budget to give misleading signals about the overall impact of fiscal policy on short-term growth.

<u>Changes in Federal Interest Payments Caused by Inflation</u>. By raising nominal interest rates, high rates of inflation increase interest payments, which can cause the standardized budget to understate the amount of fiscal restraint from the budget (or overstate the amount of fiscal stimulus). An increase in interest payments that stems from inflation simply compensates the holders of government bonds for that inflation by repaying their principal early. The repayment is not likely to strengthen overall demand for goods and services in the economy; instead, bondholders are likely to save their principal.

The standardized budget can be adjusted in different ways to eliminate the effect of inflation on the interest paid to bondholders. One approach is to remove all interest payments from the standardized budget to construct the so-called primary standardized budget. But that removes the return to bondholders as well as the repayment of their principal. An alternative method, and the one adopted here, is to subtract from standardized-budget outlays the decline in the real (inflation-adjusted) value of publicly held federal debt. <sup>12</sup> That decline is only an approximation of the inflation component of interest payments, however, because it is based on actual inflation, whereas interest rates reflect expected inflation. The size of the adjustment depends directly on the rate of inflation and the outstanding amount of federal debt. In recent years, the adjustment has declined to less than 1 percent of potential GDP

<sup>11.</sup> See Richard Kasten, David J. Weiner, and G. Thomas Woodward, "What Made Receipts Boom and When Will They Go Bust?" *National Tax Journal* (September 1998), pp. 325-338.

<sup>12.</sup> See Robert Eisner, How Real Is the Federal Deficit? (New York: The Free Press, 1986).

because of low inflation and less federal borrowing. By contrast, the adjustment was more than 2 percent of potential GDP from 1979 through 1981.

### **Expectations and Dynamic Factors**

This category includes adjustments for factors that reflect the expectations and behavior of households and businesses in a dynamic, forward-looking framework. Those adjustments are needed because the standardized budget is calculated on a year-to-year basis, without considering budgetary changes in future years. Yet the effects of such factors that try to capture the future are difficult to quantify with much confidence. As a result, CBO has included a new adjustment for only one—the difference between temporary and permanent policy changes. That adjustment was not made in historical estimates of the standardized budget in previous CBO publications.

<u>Permanent and Temporary Policy Changes</u>. Permanent and temporary changes in fiscal policy initially have the same impact on the standardized budget, but they can have quite different effects on short-term growth. Perhaps the best example involves personal income taxes. To the extent that people base their decisions about current consumption on their expected lifetime income, a temporary tax reduction has a much smaller impact on their purchases of goods and services than does a permanent change. The reason is that a temporary decrease in people's tax liabilities increases their lifetime income by much less than a tax reduction that is perceived to be permanent, or at least to last a long time.<sup>13</sup>

For some people, however, a temporary tax change may affect their current consumption by as much as a permanent change would. People who do not have access to enough cash or credit to finance a smooth path of consumption, for example, will receive at least some of the liquidity they need from a tax reduction, even if it is only temporary.

A well-known historical example of a large but temporary tax change is the tax surcharge imposed in 1968 and extended into 1969 and 1970. The estimated gain in revenues for fiscal year 1969 was about \$12 billion—\$8 billion from individuals and \$4 billion from corporations. The surcharge was sufficiently large that economists generally thought it would help slow the economy significantly and thus help reduce inflation. Now it is generally acknowledged that the surcharge had much less of a restraining impact than was originally thought (perhaps only 5 percent as much for those who were not liquidity constrained). The reason is that the surcharge was clearly temporary rather than permanent. Excluding most (two-thirds) of the tax

11

<sup>13.</sup> For a more general assessment of policy changes, see Robert E. Lucas Jr., "Econometric Policy Evaluation: A Critique," *Carnegie-Rochester Conference Series on Public Policy*, vol. 1 (1976), pp. 19-46.

surcharge from the standardized budget reduces measured fiscal restraint in 1969 by about 1 percent of potential GDP. It also eliminates the stimulus formerly shown for fiscal year 1971, the year after the surcharge was discontinued.

Another example of a temporary change is the rebate of up to \$200 on 1974 tax liabilities that was enacted in the Tax Reduction Act of 1975. That rebate reduced revenues for fiscal year 1975 by roughly \$8 billion and caused the standardized budget to overstate fiscal stimulus in that year (and to understate restraint in 1976) by about two-thirds as much. Other provisions were originally enacted as temporary measures but were extended or made permanent in subsequent tax legislation. CBO adopts no adjustment in those cases.

Anticipated and Unanticipated Policy Changes. Whether or not a change in fiscal policy is anticipated can influence the impact of that change (or at least the timing of that impact). Unlike the effects of an unanticipated change in policy, which cannot occur before the change is enacted, the effects of anticipated changes are likely to precede enactment. When that happens, the anticipated policy change can appear to have no economic impact when it is enacted because the impact actually occurred earlier.

In practice, most policy changes are anticipated to some extent because they are publicly debated long before they become law. People who considered it likely that a policy proposal, such as a tax reduction, would be passed might spend more in anticipation of that change than they otherwise would. If the policy was never enacted, however, the earlier actions taken by some people in anticipation of the change would affect short-term growth, even though the effects would not be reflected in the standardized budget then or later.

The lag between the proposal of a policy change and its enactment can vary substantially. For example, the lag was 13 months for the Revenue Act of 1964 and 11 months for the Revenue and Expenditure Control Act of 1968 but only two months for the Tax Reduction Act of 1975. At the other extreme, Medicare and Medicaid were debated for more than 20 years before they were enacted in 1965.

Despite the potential importance of the distinction between anticipated and unanticipated policy changes, CBO has not adjusted the revised estimates of the standardized budget because the effects of that distinction cannot be quantified with much confidence.

<sup>14.</sup> The difference between anticipated and unanticipated changes in fiscal policy is discussed in Olivier J. Blanchard, "Output, the Stock Market, and Interest Rates," *American Economic Review* (March 1981), pp. 132-143.

<u>Changes in Fiscal Policy Regimes</u>. Some changes in fiscal policy can affect short-term growth by altering expectations about future fiscal policy, but the effects of changes in those expectations are not reflected in the standardized budget. For example, the Balanced Budget and Emergency Deficit Control Act of 1985 set targets for reducing the deficit to reach a balanced budget by 1991. After those targets were modified and postponed in 1987, they were replaced by legislation in 1990 (the Budget Enforcement Act) establishing caps on discretionary spending and deficit-neutral requirements for changes in taxes and mandatory spending.

Those policy actions could have substantially changed people's expectations about the future. Even if the targets and caps were not completely credible, people might have assigned a higher probability than before to having smaller future budget deficits. In that case, the demand-dampening effects of the ensuing deficit reductions might have been offset by the effect of people's anticipation of how those reductions would affect long-term interest rates. By contrast, uncertainty about how deficit targets or spending limits would be achieved could have reduced short-term growth by raising precautionary saving. In either case, such effects are very difficult to estimate, and therefore no adjustment was made.

### **CONCLUSIONS**

Even after the additional adjustments discussed in this memorandum, the historical record of fiscal policy as measured by changes in the standardized budget is not much different in most years. But in roughly one-fourth of them, the annual changes are significantly different (by at least 0.5 percent of potential GDP). For example, fiscal year 1969 now appears much less restrictive (and 1971 appears less stimulative) because of the adjustment for the temporary tax surcharges. Also, 1982 appears significantly more stimulative because the adjustment for the inflation component of federal interest payments fell sharply as a result of the drop in the rate of inflation. Yet even after all capital gains tax collections have been removed from the estimates, 1987 does not appear much less restrictive because the adjustment for capital gains tax revenues in that year is largely offset by the adjustment for the effect of inflation on interest payments. Finally, although the new adjustments reduce the amount of fiscal restraint indicated by the standardized budget in recent years, the stance of fiscal policy still appears restrictive, in part because other factors contributed to the rapid growth in revenues.<sup>15</sup>

Despite incorporating more adjustments than before, the revised history of the standardized budget reported in Tables 1 and 2 should still be used with caution. As indicated above, some important factors may have been overlooked. Also, the effects

<sup>15.</sup> See Kasten, Weiner, and Woodward, "What Made Receipts Boom?"

of other factors have not been included because they are quite difficult to measure. Consequently, changes in the standardized budget from year to year may not always accurately reflect the overall impact of fiscal policy on short-term growth.

No single fiscal indicator, including the standardized budget, can adequately summarize the effects of fiscal policy. A better way to quantify the budget's impact on short-term growth may be to compare various economic models that incorporate alternative assumptions about economic behavior. Although the standardized budget is not a complete measure, it is nevertheless useful as a general indicator of the budget's overall effect on short-term growth. However, because fiscal policy currently is not a major factor in that growth, the standardized budget is not a major element in CBO's current forecast.

TABLE 1. STANDARDIZED BUDGET DEFICIT OR SURPLUS AND RELATED SERIES, FISCAL YEARS 1960-1999 (In billions of dollars)

	Budget			Standardized-Budget			
	Deficit (-) or Surplus	Cyclical Adjustment <sup>a</sup>	Other Adjustments <sup>b</sup>	Deficit (-) or Surplus	Revenues	Outlays	
1960	c	с	c	1	91	90	
1961	-3	6	1	3	98	94	
1962	-7	3	1	-4	100	104	
1963	-5	2	c	-3	107	110	
1964	-6	-1	1	-5	110	115	
1965	-1	-3	2	-3	112	115	
1966	-4	-11	3	-12	118	130	
1967	-9	-11	c	-19	134	153	
1968	-25	-9	5	-29	141	171	
1969	3	-12	c	-9	164	174	
1970	-3	-5	2	-6	178	184	
1971	-23	4	10	-9	187	196	
1972	-23	1	4	-18	201	220	
1973	-15	-11	8	-18	216	234	
1974	-6	-9	17	1	252	250	
1975	-53	17	31	-5	293	298	
1976	-74	23	15	-36	307	343	
1977	-54	13	29	-12	357	369	
1978	-59	c	28	-31	392	423	
1979	-41	-10	35	-15	446	461	
1980	-74	14	42	-18	515	533	
1981	-79	24	38	-17	606	622	
1982	-128	59	22	-47	652	699	
1983	-208	79	10	-120	644	763	
1984	-185	27	12	-147	669	816	
1985	-212	14	20	-178	721	900	
1986	-221	8	-1	-213	747	961	
1987	-150	8	-17	-159	809	968	
1988	-155	-9	35	-129	868	997	
1989	-152	-19	57	-115	937	1,052	
1990	-221	-8	109	-120	992	1,113	
1991	-269	49	65	-156	1,068	1,224	
1992	-290	65	34	-191	1,122	1,313	
1993	-255	58	25	-172	1,170	1,342	
1994	-203	38	26	-140	1,254	1,393	
1995	-164	21	5	-138	1,335	1,473	
1996	-107	20	-6	-93	1,422	1,515	
1997	-22	-12	-41	-75	1,499	1,574	
1998	70	-45	-58	-33	1,597	1,630	
1999	124	-72	-55	-2	1,668	1,670	

SOURCE: Congressional Budget Office.

a. The cyclical adjustment is positive when cyclical conditions are temporarily depressing revenues and raising outlays.
 b. Consists of deposit insurance, receipts from auctions of the electromagnetic spectrum, timing adjustments, asset sales, adjustments for certain changes in the amount of taxes overwithheld, adjustments for temporary tax changes, the inflation component of federal interest payments, tax receipts from capital gains, and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).

TABLE 2. STANDARDIZED BUDGET DEFICIT OR SURPLUS AND RELATED SERIES, FISCAL YEARS 1960-1999 (As a percentage of potential GDP)

	Budget Deficit (-) or Surplus <sup>a</sup>	Cyclical Adjustment <sup>b</sup>	Other Adjustments <sup>c</sup>	Standardized-Budget		
				Deficit (-) or Surplus	Revenues	Outlays
1960	0.1	d	0.1	0.2	17.5	17.3
1961	-0.6	1.1	0.1	0.6	17.8	17.2
1962	-1.3	0.5	0.1	-0.6	17.3	17.9
1963	-0.8	0.4	-0.1	-0.5	17.6	18.0
1964	-0.9	-0.1	0.2	-0.8	17.2	18.0
1965	-0.2	-0.5	0.3	-0.5	16.4	16.9
1966	-0.5	-1.5	0.4	-0.6	16.3	17.9
1967	-1.1	-1.4	0.1	-2.4	17.2	19.6
1968	-2.9	-1.1	0.6	-3.4	16.8	20.2
1969	0.3	-1.3	d	-1.0	17.9	18.9
1970	-0.3	-0.5	0.2	-0.6	17.7	18.3
1971	-2.1	0.3	0.9	-0.8	17.1	17.9
1972	-2.0	0.1	0.3	-1.5	17.0	18.5
1973	-1.1	-0.9	0.6	-1.4	16.9	18.3
1974	-0.4	-0.7	1.2	0.1	17.7	17.6
1975	-3.4	1.0	1.9	-0.3	18.1	18.5
1976	-4.2	1.3	0.8	-2.0	17.2	19.2
1977	-2.7	0.7	1.4	-0.6	17.8	18.4
1978	-2.7	d	1.3	-1.4	17.6	19.0
1979	-1.6	-0.4	1.4	-0.6	18.0	18.6
1980	-2.7	0.5	1.5	-0.7	18.6	19.2
1981	-2.6	0.8	1.2	-0.5	19.4	19.9
1982	-4.0	1.7	0.6	-1.4	19.0	20.4
1983	-6.0	2.1	0.3	-3.2	17.5	20.7
1984	-4.8	0.7	0.3	-3.7	17.0	20.8
1985	-5.1	0.3	0.5	-4.3	17.2	21.5
1986	-5.0	0.2	d	-4.8	16.9	21.7
1987	-3.2	0.2	-0.4	-3.4	17.3	20.7
1988	-3.1	-0.2	0.7	-2.6	17.4	20.0
1989	-2.8	-0.4	1.1	-2.2	17.5	19.7
1990	-3.9	-0.1	1.9	-2.1	17.4	19.5
1991	-4.5	0.8	1.1	-2.6	17.5	20.1
1992	-4.7	1.0	0.5	-3.0	17.5	20.5
1993	-3.9	0.9	0.4	-2.6	17.4	20.0
1994	-2.9	0.5	0.4	-2.0	17.8	19.8
1995	-2.2	0.3	0.1	-1.9	18.0	19.9
1996	-1.4	0.3	-0.1	-1.2	18.3	19.5
1997	-0.3	-0.2	-0.5	-0.9	18.4	19.3
1998	0.8	-0.5	-0.7	-0.4	18.8	19.2
1999	1.4	-0.8	-0.6	d	18.7	18.8

SOURCE: Congressional Budget Office.

a. The budget deficit or surplus is shown as a percentage of actual GDP.

b. The cyclical adjustment is positive when cyclical conditions are temporarily depressing revenues and raising outlays.

c. Consists of deposit insurance, receipts from auctions of the electromagnetic spectrum, timing adjustments, asset sales, adjustments for certain changes in the amount of taxes overwithheld, adjustments for temporary tax changes, the inflation component of federal interest payments, tax receipts from capital gains, and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).

d. Less than 0.05 percent.