The Federal Government's Budget Surplus: Cause for Celebration?

GERALD P. DWYER JR. AND R.W. HAFER
Dwyer is vice president in charge of the financial section of the Atlanta Fed's research department. Hafer is a professor in the Department of Economics, Southern Illinois University at Edwardsville, and a visiting scholar at the Atlanta Fed. *They thank Lucy Ackert, Frank King, Larry Wall, and Madeline Zavodny for helpful comments.*

PROJECTED SURPLUSES IN THE FEDERAL GOVERNMENT'S BUDGET HAVE GENERATED FANFARE SOMETIMES VERGING ON EUPHORIA. BECAUSE THE FEDERAL GOVERNMENT LAST HAD A SURPLUS IN 1969, A PROJECTED SURPLUS FOR FISCAL YEAR 1998 AND LATER YEARS IS BEING VIEWED AS SOMETHING OF A MILESTONE. UNLIKE POLICIES OF THE LAST THREE DECADES THAT HAVE SOUGHT TO LOWER THE DEFICIT, POLICY OPTIONS NOW MAY INCLUDE WAYS TO USE THE SURPLUS.

The budget surplus and projections of surpluses for a number of years have brought forth a variety of opinions and suggestions about what to do with them. Some have called for lowering taxes. Others have suggested that the federal government could now engage in greater spending. And some have called for retiring government debt. Herbert Stein, a former chairman of the president's Council of Economic Advisers, recently suggested that "We had an agreed-upon answer for what to do about deficits: Reduce them. . . . Now no one knows what the surplus constraint is. We are at sea" (1998).

Some of this rhetoric might be interpreted as hyperbole. Still policy discussions often seem to have focused on how to reduce the deficit to the exclusion of all else. This single-minded approach to the budget reflects the argument that federal government deficits absorb saving. As Benjamin Friedman put it, the claim is that deficits in the 1980s "consumed most of what individuals and businesses . . . saved during this period" (1988, 167). In this view deficits are bad because they reduce national saving, decrease funds available for net investment, and therefore retard economic growth. While the evidence has not been kind to this argument (Seater 1993), this reasoning suggests that a balanced budget or, even better, a surplus should be the goal of the federal government's fiscal policy.

The size of the deficit by itself does not provide much information about the federal government's activities. Federal government spending and taxation are more informative. Suppose that two economies both have balanced budgets. Conventional wisdom about deficits might suggest that the impact of the two governments on their economies is similar: both budgets are balanced. In one economy, though, government spending and taxes might be 90 percent of gross domestic product (GDP); in the other economy, government spending and taxes might equal 10 percent of GDP. The impact of the governments on the two economies is likely to be quite different even though both have balanced budgets.

The purpose of this article is to amplify on the importance of considering spending and taxes when analyzing the federal government's budget. The first section looks at the behavior of federal government budgets in the past, with special emphasis on trends in spending and taxation. The article then considers in more detail the prospects for future surpluses. A key element in the recent projections of surpluses is the role of trust funds, especially the Social Security trust fund, in federal budget accounting.

Perspective on the Surplus

Loosely speaking, when spending exceeds tax receipts, there is a deficit; when spending is less than tax receipts, there is a surplus. Although *deficit* is a more convenient term at times and *surplus* is more convenient at other times, the terms are mirror images. A negative deficit is a surplus and a negative surplus is a deficit.

Deficits characterize the federal budget for most of the last fifty years: the federal government's spending has generally exceeded its receipts. Chart 1 shows the federal government's unified budget surplus for fiscal years since 1950. The *unified budget* consolidates the spending and revenues of all federal government agencies and trust funds into an overall budget to reflect the government's transactions with the rest of the economy (Office of Management and Budget [OMB] 1998a, 323).[1] The fiscal year ends on June 30 through 1976 and on September 30 since then. Chart 1 reflects the change in fiscal year by not connecting the values for 1976 and 1977.[2] The surpluses in the chart are deflated by the GDP chain price index to put the figures in terms of 1992 dollars.[3] Many discussions of the deficit rely on current dollar measures of the deficit, a practice that is quite misleading for comparing deficits across time when there is substantial inflation. For instance, the federal government deficit was about $53.2 billion for fiscal year 1975 and about $107.4 billion for 1996, values that indicate a roughly doubled deficit. The level of prices as measured by the GDP chain price index, however, was 2.6 times higher in 1996 than in 1975. Hence, the larger deficit in terms of current dollars is really smaller in terms of the inflation-adjusted amount.

Changes in the economy, such as recessions and expansions, are one major reason the deficit changes, as Chart 1 shows. The shaded bars indicating recessions show how recessions are related to changes in the surplus. The surplus tends to decrease during recessions for two reasons. First, federal government tax receipts decrease during recessions, largely because income and related tax receipts fall. Second, recessions trigger automatic increases in federal government spending; for example, payments for unemployment compensation increase during recessions because more individuals are unemployed.

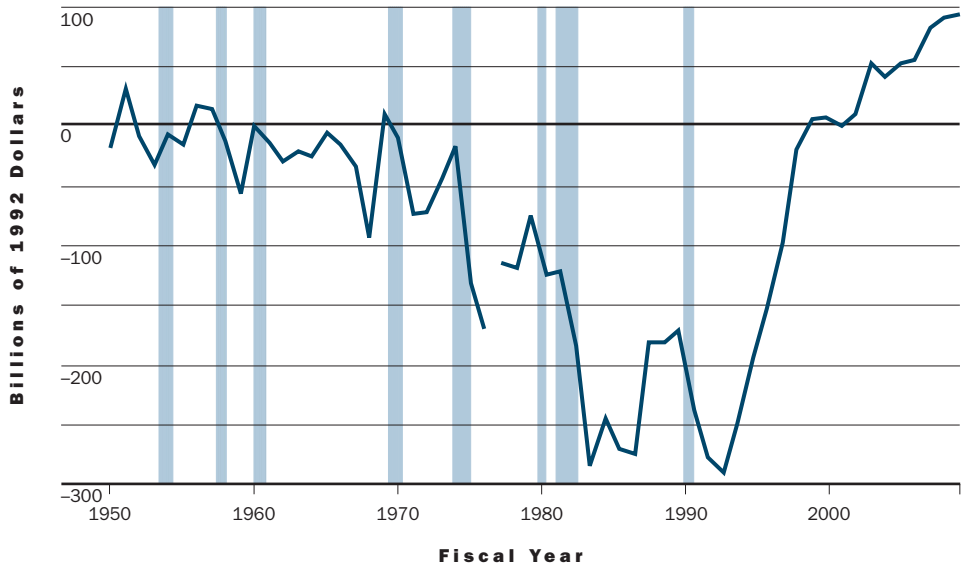
Chart 1 also includes projections of the budget surplus made by the Congressional Budget Office (CBO). The projections made in March 1998 indicate that federal government receipts will exceed outlays throughout the next decade. The CBO projects that by 2008 the budget surplus will reach $95 billion in 1992 dollars. As the chart makes clear, a decade of continued budget surpluses would be extraordinary compared with the past fifty years. Another ten years without a recession also would be extraordinary, which is one reason for being uncertain about this projection. Ten years of expansion would be longer than the previous record expansion of almost eight years from November 1982 to July 1990, and the implied expansion would be significantly longer than this, from April 1991 through September 2008. Recessions are hard to predict, however, and no evidence in March 1998 (or as of this writing) indicates much likelihood of one in the predictable future. Overall, based on current laws, this projection of a decade of budget surpluses is based on the best available information.

Does the current federal government surplus signal the onset of a new age in government fiscal policy? The answer to this question is not so obvious.

What are the trends in government spending and taxes that have produced the past deficits and projections of surpluses? Chart 2 shows federal government spending and revenue in 1992 dollars. The current dollar values are deflated by the GDP price index to make the dollar amounts more comparable across time. In addition, the vertical axis has a proportional rather than a linear scale. On this proportional scale any given distance on the vertical axis represents the same proportional dollar amount rather than the same dollar amount, as would be the case with a linear scale. As a result, the slope of the line connecting any two points in the chart is the growth rate. The chart indicates that the projected surpluses

1. *Evans (1997) provides a good introduction to the terminology and concepts of the budget.*
2. *The transition quarter in 1976 is excluded.*
3. *Additional adjustments, not necessary for this article, would improve the deficit as a measure of the change in indebtedness of the federal government (Dwyer 1982; Eisner 1986, chap. 2; Kotlikoff 1992; Penner 1982; Webb 1991).*

CHART 1 The Federal Government Unified Budget Surplus



Note: Shaded areas indicate recessions.
Sources: OMB (1998b, 23–24, table 1.3); CBO (1998a, table 2); recession dates from the National Bureau of Economic Research

result from a higher projected growth rate for revenue than for spending.

It would be easy to place too much reliance on the projected budget surpluses in Charts 1 and 2. As already mentioned, the projections rely on the absence of a recession. In addition, federal government laws affecting spending are not likely to stay the same. Even without these possibilities, ten years is a long time in terms of achieving any reliability in budget projections; the Congressional Budget Office calls the figures projections rather than forecasts to make the tentative nature of the numbers clear (CBO 1998a, chap. 1). Budget projections are subject to large changes. In January 1997 the CBO's forecast of the 1997 fiscal-year deficit was $100 billion too large (CBO 1998a, chap. 2). Fiscal year 1998 illustrates the difficulties again. In February 1998 the CBO forecast that the federal government would run a budget deficit of $5 billion in the fiscal year ending September 1998 (CBO 1998a, chap. 2). By May this deficit projection became a projected surplus of $43 billion to $63 billion, a change of $48 billion to $68 billion in the deficit projection for the fiscal year in progress (CBO 1998c). By July the projection was that the surplus would be "near the upper end of this range" (CBO 1998d).

While a ten-year period is long for reliable forecasts, it can be short for evaluating the long-run state of the budget. The projection of surpluses until 2008 shown in Charts 1 and 2 masks important concerns over longer periods. Most importantly, the trust funds for Social Security are projected to have a surplus of about $93 billion in fiscal year 1998 but are projected to begin running deficits by 2006 to 2018 (Social Security Administration 1998, 25). Partly because of the Social Security trust funds, the CBO also projects that the unified budget will swing from surpluses to persistent, increasing deficits by 2020 (CBO 1998b).

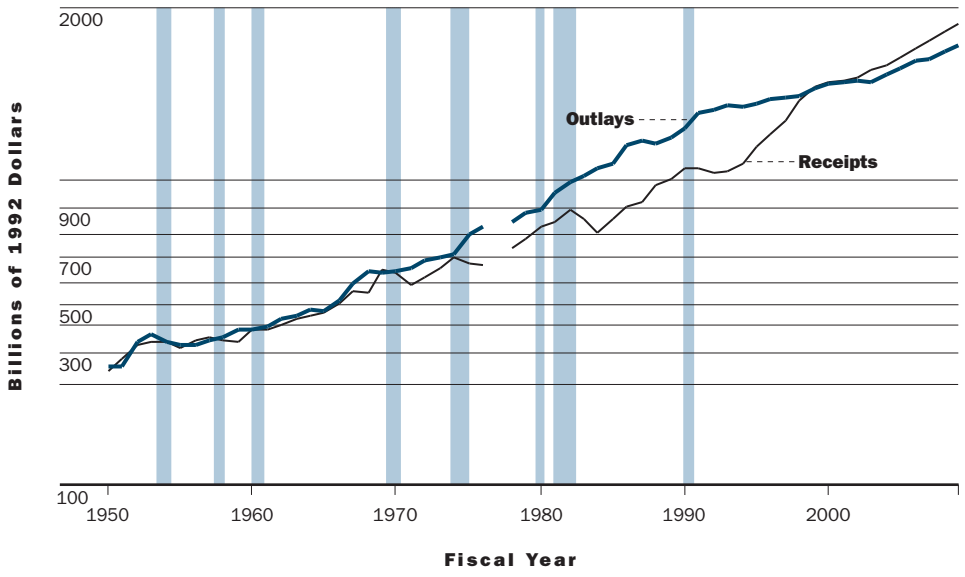
The next section of the article examines trends in federal government spending and revenues and taxes and discusses the implications of current policies for future spending and tax policies.

Federal Government Spending and Receipts

Spending. Federal government *spending* (also called *outlays*) is the sum of the amounts spent on goods and services and transfer payments plus net interest paid on outstanding federal debt. These parts of spending can have quite different effects on the economy.

Government Purchases. Government purchases are purchases by the government of newly produced goods and services; they represent withdrawals of resources from the economy that are used by the government for its activities rather than by private individuals for private purposes. Government purchases cover a wide range of goods, from airplanes and computers to pencils. They also include earnings received by government employees. When the government buys a computer, the value of the good is reflected in its price. Government employees' earnings also reflect the value of resources withdrawn from the economy if the employees' earnings are equal to their opportunity cost and that opportunity cost equals the value of goods or services the employees would have produced in private employment. Thus, government em-

CHART 2 Federal Government Spending and Taxes



Note: Shaded areas indicate recessions.
Sources: OMB (1998b, 23–24, table 1.3); CBO (1998a, table 2)

ployees' earnings is a reasonable measure of the value of forgone private goods and services.[4] Based on this supposition, government purchases equal the value of payments made by the government for goods and services currently produced. The government uses the goods and services purchased as well as government employees' services to provide services such as defense, education, and police protection that can provide benefits to the economy.[5]

Transfer Payments. Transfer payments, unlike purchases, are not payments for goods currently produced or services currently rendered. Instead, transfer payments redirect income from one person to another via the government. Transfer payments include payments made to recipients in programs such as Aid to Families with Dependent Children, Medicaid, unemployment insurance, and Social Security. Perhaps less obviously, transfer payments also include pension payments to retired government employees, both civilian and military. These payments are, after all, for services rendered in the past, not services currently provided.

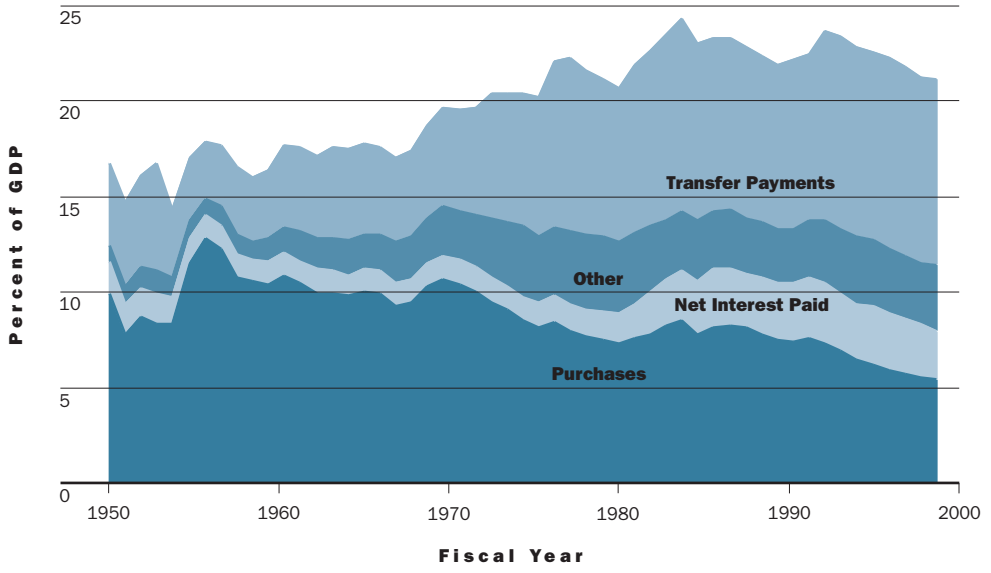
Net Interest Payments. Net interest paid is interest paid by the federal government less interest received. Net interest payments by the government, like transfer payments, also are not for goods and services that could have been used directly to produce other goods and services during the current period. Interest payments are made to the holders of government securities—those who lend funds by purchasing these securities. Unlike many other categories of spending, net interest payments are not under the federal government's immediate control, at least short of default. Net interest payments are a function of conditions that are largely determined by the federal government's past actions: the size of the outstanding debt issued in earlier years and the interest rate on that debt when issued.

Interest payments on outstanding federal government debt are sometimes viewed as a pernicious result of government deficits. Interest payments finance past spending that was financed by issuing debt rather than raising taxes. The payment of interest to service the current debt has led some observers (for example, Stein 1998) to suggest that current and prospective surpluses be used to retire outstanding federal government debt. From one point of view, it is always preferable that interest payments be lower. Current taxpayers would prefer to pay lower taxes, other factors being equal, and they could pay lower taxes if it were possible to have lower interest payments and keep everything else the same. In general, though, it is not possible to have everything else the same. For example, if the government had spent less in the past

4. This supposition is not always a good one. When there was a military draft in the United States, the wages paid were not sufficient to induce people to join the military, so people were drafted.

5. Purchases are not the only way the federal government affects the allocation of resources in the economy. Legal requirements and regulations do not appear in the budget but also affect the economy.

CHART 3 Federal Government Spending as a Percentage of GDP



Source: OMB (1998b, 262–64, table 14.1)

on highways, there would be fewer highways today and transportation costs would be higher. More generally, interest payments can be the result of past spending that provides current benefits, an arrangement that has the potential to make everyone better off. Interest on government debt is the price paid for postponing payment, just as for private interest payments, and interest payments similarly can reflect optimal or improvident behavior.

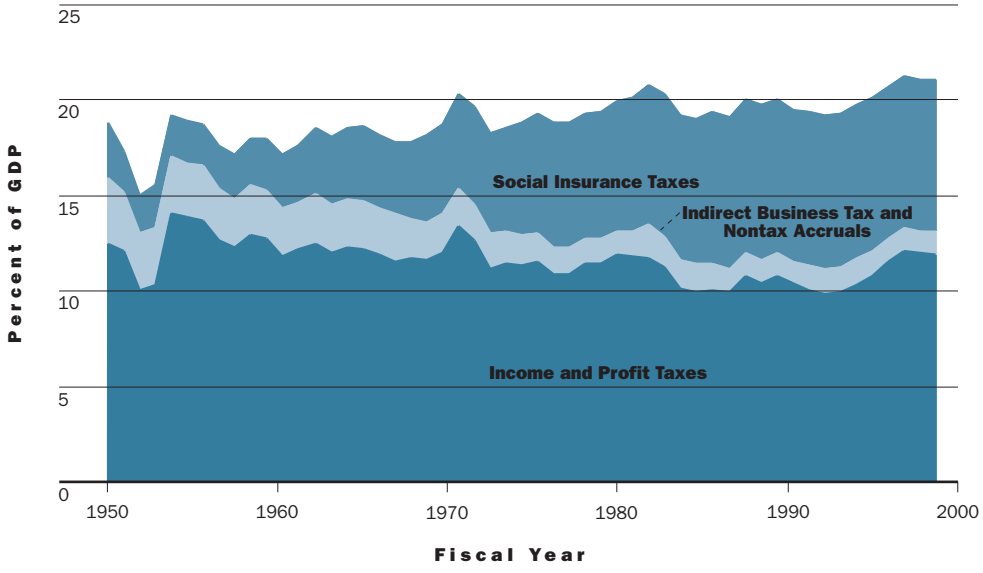
Chart 3 shows the trend of federal government spending relative to GDP since 1950. The chart breaks spending into four broad components: purchases, transfer payments, net interest payments, and other. The residual category denoted *other* includes grants to state and local governments and subsidies less surpluses of federal government enterprises.[6] The chart indicates a number of important developments during the past several decades. The most obvious development is the increase in federal government spending relative to GDP. In 1950, total spending was about 18 percent of GDP; in 1997 it was 22 percent of GDP.[7] Another development is a decline in the ratio of spending to GDP since the early 1980s. In 1983 spending was over 23 percent of GDP, higher than in any fiscal year since 1950.

Chart 3 also shows that the distribution of spending has changed over time. During the 1950s transfer payments accounted for a relatively small proportion of spending. For example, in 1951, transfer payments were 3.5 percent of GDP. Transfer payments increased in importance in the 1960s and 1970s, and by 1997 transfer payments accounted for about 9.9 percent of GDP. This growth of transfer payments understates the change in domestic transfer payments. Foreign aid, or transfers to foreigners, was 1 percentage point of GDP in 1951 and 0.2 percentage points in 1997. Domestic transfer payments almost quadrupled during that period, from 2.5 percent of GDP in 1951 to 9.7 percent in 1997. This shift in spending from purchases to domestic transfer payments indicates that the government is now withdrawing fewer resources from the economy than in the past and is redistributing more income.

Receipts. Federal government *receipts* primarily are taxes, which fund most of the government's spending. Descriptions of the sources of taxes often characterize them according to who writes the check for the tax. Common lists include individual income taxes, corporate income taxes, excise taxes, and social insurance payroll taxes. While such a division may be useful for some purposes, it is misleading for determining where the final tax burden lies. First, corporations do not pay taxes; people, whether they are shareholders, employees, or customers, do. Second, whether shareholders, employees, or customers ultimately bear the burden of a tax depends on the tax's effects on the prices paid and received and incomes of shareholders, employees, and customers. The burden of the tax is not necessarily, or even in general, borne by whoever has the legal liability for writing a check to the government.

Chart 4 shows total taxes as a percentage of GDP since 1950.[8] The federal government's tax receipts increase substantially, from 14 percent of GDP in 1950 to 20 percent in 1997. Chart 4 also indicates the composition of receipts. Income and profit taxes are the largest portion—about 66 percent of total tax receipts in 1950 and about 57 percent in 1997.

CHART 4 Federal Government Taxes as a Percentage of GDP



Source: OMB (1998b, 262–64, table 14.1)

Relative to GDP, social insurance taxes are noticeably higher in 1997 than in 1950. Sometimes called "contributions" instead of taxes because the individuals making the payments become entitled to certain benefits, these taxes generally are mandatory, not optional. In 1950 social insurance taxes were about 2 percent of GDP and 14 percent of federal government receipts; in 1997 they were about 8 percent of GDP and 39 percent of federal government receipts. The increase in this component is largely due to increases in receipts from Social Security and Medicare taxes.

This growth in Social Security tax receipts has come about primarily through increases in underlying tax rates. Measuring tax receipts relative to GDP removes the effect of general increases in income. The Social Security taxes paid are determined partly by the tax rate and the income subject to the tax, generally labor income (or earnings). In addition, there is a maximum level of earnings subject to the tax for Old Age, Survivors, and Disability Insurance (OASDI). There is no limit on earnings subject to the tax for Medicare (Hospitalization Insurance, or HI). The first payment in 1937 of Social Security taxes was quite small compared with payments in later years. When introduced, the total Social Security tax rate was 2 percent of earnings up to $3,000. In 1998 the total Social Security tax rate includes an OASDI tax rate of 12.4 percent payable on earnings up to $68,400 and an HI tax rate of 2.9 percent on all earnings.

Chart 5 shows the combined tax rate for OASDI and HI and the maximum income subject to the OASDI tax from 1937 through 1997. The tax rate includes both employees' and employers' contributions. Other than the legal distribution of tax liability, the only difference between the employers' and employees' share of the tax is whether the tax is included in employees' gross pay. If all Social Security taxes were paid by either employers or employees, the before-tax wage paid by employers, the after-tax wage received by employees, and the level of employment would be the same.[9]

The adjustment of earnings for inflation is important. From the inception of Social Security until 1951, the maximum amount of earnings subject to tax was $3,000, which is less than one-twentieth of the maximum earnings of $68,400 subject to OASDI tax in 1998. When adjusted for changes in the level of prices, however, the difference in taxable earnings is not even the same order of magnitude. The consumer price index was about 11.1

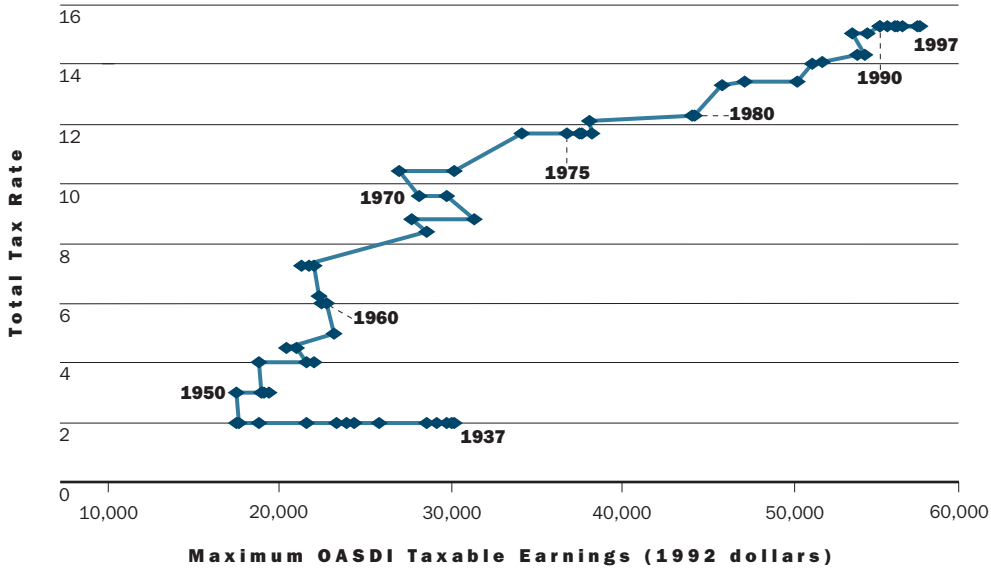
6. This category also includes wage disbursements less accruals, an item that was 0.1 percent of GDP in 1950 and 1996.

7. These figures include only the federal government; including all governments—federal, state, and local—magnifies the size of the increase.

8. These numbers do not include revenues from providing goods and services, such as selling electricity or admitting people into national parks. If state and local government receipts from taxes were included, government receipts would be 21 percent of GDP in 1950 and 30 percent in 1997 (OMB 1998a, 270, table 15.3).

9. This observation assumes that other tax rates would be adjusted to reflect the change in income subject to those taxes.

CHART 5 Social Security and Taxable Earnings



Source: Social Security Administration (1998, table II.B1)

times higher in 1997 than in 1937. Hence, the $3,000 subject to OASDI tax in 1937 would buy about the same amount as $33,600 in 1998. Still, with the maximum amount of earnings subject to Social Security tax in 1998 at over $68,000, the amount adjusted for inflation is twice what it was in 1937, not twenty times larger.

Chart 5 shows that the tax rate for Social Security has risen substantially since the program's inception. The rate was 15.3 percent in 1997, quite a bit higher than the 2 percent rate in 1937.

Such tax increases affect economic decisions and behavior. Consider a change in the Social Security tax rate on earnings. If other factors remain the same, an increase in the marginal tax rate on earnings lowers the private marginal return from activities that generate labor income, resulting in fewer hours worked and less output produced in the economy.

Social Security taxes are not unique in affecting private behavior. Virtually all, if not all, taxes and transfer payments change relative prices and consequently the decisions people make. Income taxes lower the marginal return from generating income. Transfer payments generally have implicit tax rates. Qualifying for a transfer payment generally depends on a person's income and assets. A higher income often reduces the size of the transfer payment, with the loss offsetting part of the increase in income, but the after-transfer change in income is less than the gross change in income.

Perhaps obviously, it does not follow that, because tax rates change people's behavior, there should be no taxes. Tax effects such as reductions in the quantity of labor supplied represent an *excess burden* of taxes—a cost of government actions that should be considered when making choices about the government's activities.

Fiscal Policy Now and in the Future

Is there a federal government surplus that somehow must be distributed? In one sense, the answer is yes. At a broad level, the government's unified budget is nothing more than a cash-flow identity that can be written

$$surplus = tax - pur - tr - int$$

or

$$deficit = pur + tr + int - tax,$$

where *tax* is government tax receipts, *pur* is government purchases, *tr* is transfer payments, and *int* is net interest payments. The deficit approximately equals the amount of additional debt issued by the Treasury. During 1998, it has become apparent that the federal government has an unexpected surplus, at least partly because of unexpectedly higher tax receipts. Something must happen with these higher receipts: they cannot disappear into a void. Either taxes will be decreased; government spending, interest payments, or transfer payments will be increased; or the federal government will reduce its outstanding debt.

Does the current federal government surplus signal the onset of a new age in government fiscal policy, as Herbert Stein suggested? The answer to this question is not just a matter of arithmetic and is not so obvious.

There are developments in the budget that throw cold water on euphoria about a surplus, whether due to lower federal government spending or higher taxes. In particular, the Social Security trust fund (OASDI plus HI)

TABLE 1 Projected Unified Budget Surpluses and Trust Fund Surpluses

	Surplus in Fiscal Year (billions of dollars)						
	Actual	Projected					
	1997	1998	1999	2000	2001	2002	2003
Unified Budget	–22	8	9	1	13	67	53
Trust Funds	126	149	171	173	177	201	202

Note: The unified budget projections are the CBO's projections issued in March 1998. The projections for the trust funds are from the budget proposed for fiscal year 1999 in January 1998 by the OMB (1998a) and therefore reflect any pertinent budget proposals.
Sources: Unified budget surplus projections from CBO (1998e, table 1); trust fund surpluses from OMB (1998a, 323).

has a projected surplus of about $93 billion in fiscal year 1998, which is greater than any estimate of the surplus in the unified budget. If Social Security were removed from the unified budget and no other changes were made, the federal government's budget would have a deficit on the order of $25 billion to $45 billion for fiscal year 1998. While small by recent standards, this deficit has rather different connotations than a budget surplus.

The federal government's unified budget includes current federal government activities and the receipts and expenditures of various dedicated funds established by legislation. Social Security's trust funds are the most prominent, but there are others that are nearly as large. Table 1 shows the overall surplus for the trust funds for fiscal years 1997 to 2003 along with corresponding estimates of the federal government's unified surplus. Overall, the trust funds are running surpluses and, consequently, accumulating nonmarketable federal government debt.[10] If the trust funds were not accumulating federal government debt and other taxes and spending were the same, deficits instead of surpluses would be projected for the federal government for these years.

The current Social Security surplus is not accidental: it is an expected result of changes in taxes in 1983 to cover future Social Security spending. The Social Security trust funds are accumulating nonmarketable Treasury securities in anticipation of increases in spending. When the projected increases in Social Security spending occur, the trust fund will exchange the securities with the Treasury for funds to pay for the increases. If federal government spending other than interest payments and taxes is unaffected, the Treasury then will issue debt to the public to acquire the funds to finance the higher spending. In sum, the current budget surplus reflects taxes paid now to finance expected increases in future spending.

Why might it be desirable to have the Social Security trust funds run surpluses now? A common justification is to tax people now who will receive benefits in the future. The fact that Social Security is designed partly to redistribute income limits the force of this argument.

An arguably more important reason to run surpluses is to smooth tax rates over time. If Social Security spending now and in the future remains unchanged, the only issue is when—not whether—taxes will be paid to finance the spending. Lowering taxes today implies raising taxes in the future, and, conversely, raising taxes today implies lowering taxes in the future. In short, pay now or pay later, but pay you will.

If Social Security spending were unchanged and Social Security tax rates were lower now, tax rates would have to be increased in the future from their current level. Lower tax rates now would lower the excess burden of the tax today at the cost of an increase in the excess burden in the future. Higher tax rates would increase the excess burden of the tax more in the future than it would decrease the burden today if, as is likely, the excess burden increases more at higher tax rates. Hence, higher tax rates today can be interpreted at least partly as an attempt to smooth the excess tax burden.

The CBO's projections of ten years of unified budget surpluses actually mask longer-term difficulties concerning the federal government's budget and Social Security. Even though Social Security is projected to have a surplus of about $93 billion in fiscal year 1998, Social Security

10. Nonmarketable securities are issued by the federal government but never sold to the public, to outside agencies, or in secondary markets. In effect, these securities represent funds borrowed and lent between different parts of the federal government. The Treasury borrows from trust funds when the latter run surpluses and uses these funds to replace borrowing from the public. Evans (1997, chap. 7) and the OMB (1998a, sec. 17) provide more detailed analyses.

spending is projected to exceed receipts by about 2012, and the trust fund is projected to be depleted by about 2032 (Social Security Administration 1998, 25). Obviously, projected depletion in precisely 2032 is subject to substantial uncertainty: any projection of what might happen decades from now based on current policies is fraught with peril.[11] Ten years of surpluses do not resolve these future problems (Social Security Administration 1998; CBO 1998b). As a recent CBO analysis states, "fundamental long-term budgetary problems will remain. Eventually the federal debt and deficit will start to rise as a result of pressures on the budget from Social Security, Medicare, Medicaid, and other programs that serve the elderly" (CBO 1998b, 1). Without a policy change, the CBO projects that the federal government's unified deficit would increase to 10 percent of GDP by the year 2040 (CBO 1998b, chap. 2). This situation hardly resembles financial well-being, and, indeed, changes in Social Security—whether cutting benefits, raising taxes, or privatizing Social Security—are quite likely.

Conclusion

Whether or not the projected federal government budget surplus for fiscal year 1998 is desirable, it is not a panacea. The projected budget surpluses in 1998 and succeeding years are based on projections of slower growth in federal government spending than in receipts. These surpluses have generated calls to decrease taxes, increase expenditures, or retire federal government debt. Actually, the surpluses can be interpreted as largely reflecting taxes paid now to finance expected increases in spending in the future, in particular on Social Security.

More generally, a budget surplus or deficit is not an adequate summary of how federal government spending and taxes affect the economy. A surplus or deficit is a result of choices concerning spending and taxation, choices that have substantial implications for the allocation of resources in the economy. Any analysis of fiscal policy that neglects spending, taxes, and tax rates is woefully deficient.

11. As Cogan (1998) points out, even assuming that the surplus will result in a reserve is inconsistent with the federal government's past behavior.

REFERENCES

COGAN, JOHN F. 1998. "Social Security Surpluses Never Last." *Wall Street Journal,* July 31, sec. A.

CONGRESSIONAL BUDGET OFFICE. 1998a. *The Economic and Budget Outlook: Fiscal Year 1999–2008.* Washington, D.C.: Government Printing Office. January.

———. 1998b. *Long-Term Budgetary Pressures and Policy Options.* Washington, D.C.: Government Printing Office. May.

———. 1998c. *Monthly Budget Review: Fiscal Year 1998, May 6, 1998.* Available on-line at <www.cbo.gov/showdoc.cfm?index=469&sequence=0&from=1> [July 13, 1998].

———. 1998d. *Monthly Budget Review: Fiscal Year 1998, July 9, 1998.* Available on-line at <www.cbo.gov/showdoc.cfm?index=648&sequence=0&from=7> [July 13, 1998].

———. 1998e. *Revised Baseline Budget Projections for Fiscal Years 1999–2008, March 3, 1998.* Available on-line at <http://www.cbo.gov/showdoc.cfm?index=356&from=4&sequence=0> [July 13, 1998].

DWYER, GERALD P., JR. 1982. "Is Inflation a Consequence of Government Deficits?" Federal Reserve Bank of Atlanta *Economic Review* 67 (August): 25–32.

EISNER, ROBERT. 1986. *How Real Is the Federal Deficit?* New York: Free Press.

EVANS, GARY R. 1997. *Red Ink: The Budget, Deficit, and Debt of the U.S. Government.* San Diego: Academic Press.

FRIEDMAN, BENJAMIN M. 1988. *The Day of Reckoning: The Consequences of American Economic Policy under Reagan and After.* New York: Random House.

KOTLIKOFF, LAURENCE J. 1992. *Generational Accounting: Knowing Who Pays, and When, for What We Spend.* New York: Free Press.

OFFICE OF MANAGEMENT AND BUDGET. 1998a. *Budget of the United States Government, Fiscal Year 1999, Analytical Perspectives.* Washington, D.C.: Government Printing Office.

———. 1998b. *Budget of the United States Government, Fiscal Year 1999, Historical Tables.* Washington, D.C.: Government Printing Office.

PENNER, RUDOLPH G. 1982. "How Much Is Owed by the Federal Government?" In *Monetary Regimes and Protectionism,* edited by Karl Brunner and Allan H. Meltzer. Carnegie-Rochester Conference Series on Public Policy, vol. 16. Amsterdam: North-Holland Publishing Company.

SEATER, JOHN J. 1993. "Ricardian Equivalence." *Journal of Economic Literature* 31 (March): 142–90.

SOCIAL SECURITY ADMINISTRATION. 1998. *1998 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.* Washington, D.C.: Government Printing Office.

STEIN, HERBERT. 1998. "At Sea with Surpluses." *Wall Street Journal,* May 19, sec. A.

WEBB, ROY H. 1991. "The Stealth Budget: Unfunded Liabilities of the Federal Government." Federal Reserve Bank of Richmond *Economic Review* 77 (May/June): 23–33.