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Federal Debt: Answers to Frequently Asked Questions—An Update

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Budgetary Effects of Federal Debt

Q. What does it mean to have a budget surplus or deficit and how are they related to federal debt?

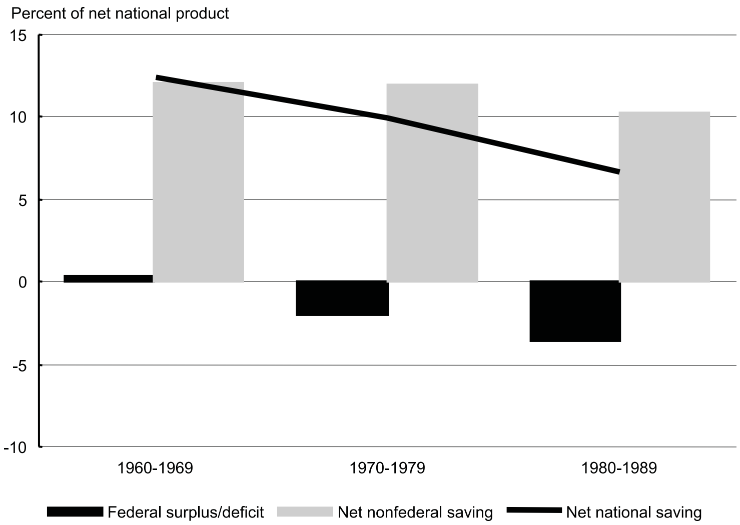
A. The budget surplus or deficit (also called the "unified" or "total" budget surplus or deficit) is the difference between total federal spending and revenue in a given year. To finance a budget deficit, the government borrows from the public. With a unified budget, available surpluses in trust funds reduce or eliminate the need for the government to borrow from the public to pay for current expenditures. Alternatively, when a budget surplus occurs, the government accumulates excess funds that are used to reduce debt held by the public. In other words, deficits or surpluses generally can be viewed as the annual net change in the amount of government borrowing, while the debt held by the public generally represents the amounts of unified deficits accumulated over time less any surpluses.

When the Congress makes budgetary decisions, it is also indirectly making decisions about the nominal level of debt held by the public. If the budget is in deficit, the government has to issue new debt in addition to rolling over maturing debt. In the case of a balanced budget, the amount of debt held by the public would not change because the government does not retire a portion of its principal each year. Rather, the Treasury pays only the interest costs of debt held by the public. The principal that comes due is paid off with cash raised by issuing new securities, and the debt is rolled over.[1] A unified budget surplus allows the Treasury to reduce the nominal level of debt held by the public by rolling over less debt when it matures. (See section IV for more information about the Treasury's debt management.)

[1]A balanced budget would not change debt levels themselves but would reduce the ratio of debt to GDP assuming continued economic growth.

Figures II.1 and II.2 show the budget surplus or deficit and the debt held by the public as shares of GDP.

Figure II.1: Surplus or Deficit as a Share of GDP (1797-1998)

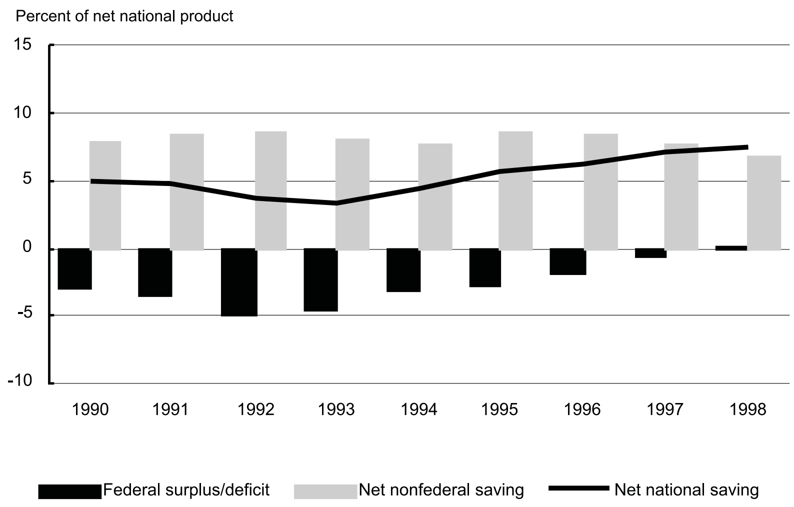


Note: Data until 1940 are shown as a percent of gross national product (GNP); data from 1940 to present are shown as a percent of GDP.

Sources: OMB, Department of Commerce, Department of the Treasury.

Short deficit periods have caused increases in debt that lingered long after annual deficit levels declined. For example, the federal budget deficit increased sharply from about 4 percent to about 30 percent of the economy between the years 1941 and 1943 and, correspondingly, federal debt held by the public increased sharply until it reached its zenith as a percentage of GDP in 1946. It then took 17 years, from 1946 until 1963, for the debt-GDP ratio to return to its 1941 level.

Figure II.2: Federal Debt Held by the Public as a Share of GDP (1797-1998)



Note: Data until 1940 are shown as a percent of GNP; data from 1940 to present are shown as a percent of GDP.

Sources: OMB, Department of Commerce, Department of the Treasury.

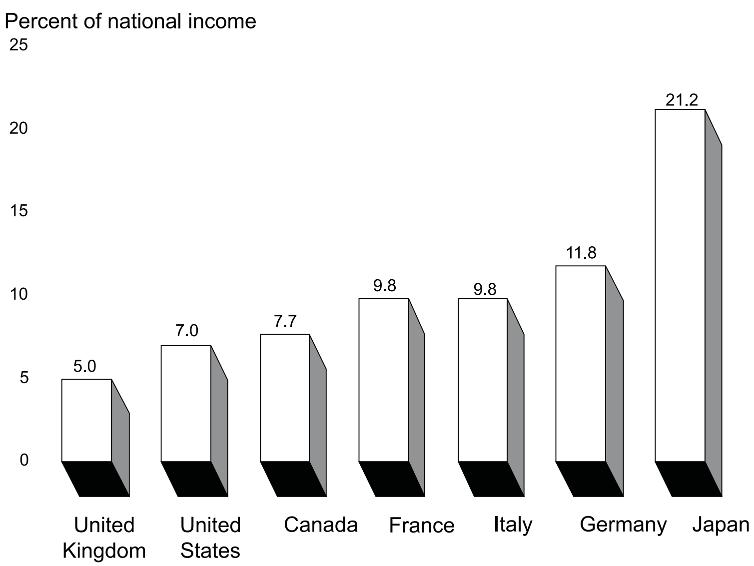
In the past, the debt-GDP measure rose substantially only as the result of wars and recessions. Borrowing during these times helped protect the nation from foreign aggression and stabilize the economy. Between the early days of the republic and the recent past, the only events that led debt held by the public to increase above 30 percent of GDP were the Civil War, World War I, the Great Depression, and World War II.

Recent increases in the debt broke with historical patterns by climbing significantly during a period marked by the absence of either a major war or depression. Beginning in the late 1970s, rising federal budget deficits fueled a corresponding increase in debt held by the public. It essentially doubled as a share of GDP over a 15-year period through the mid-1990s and reached about 50 percent of GDP in 1993. Since then, the debt-GDP measure has stabilized and begun to drop, as budget deficits were turned to a surplus in 1998 and economic growth continued.

At the end of fiscal year 1998, debt held by the public was about 44 percent of GDP. While it has begun to decline, this level still is relatively high by historical standards. In fact, prior to 1990, the only time the debt-GDP measure has exceeded the current level was during World War II and the postwar period.

CBO's January 1999 projection shows that sustained surpluses could allow debt held by the public to drop to about 9 percent of GDP by 2009, the lowest level since 1917. CBO's projection, however, is a baseline projection that assumes no changes in tax or spending policies over the period—that is, it assumes that the entire unified budget surplus would be used to reduce debt held by the public. Under this assumption, debt held by the public as a percentage of GDP would be lower than debt held by government accounts as a percentage of GDP beginning in 2004. Debt held by government accounts will continue to rise steadily during this timeframe under CBO's projections as well. (See figure II.3.)

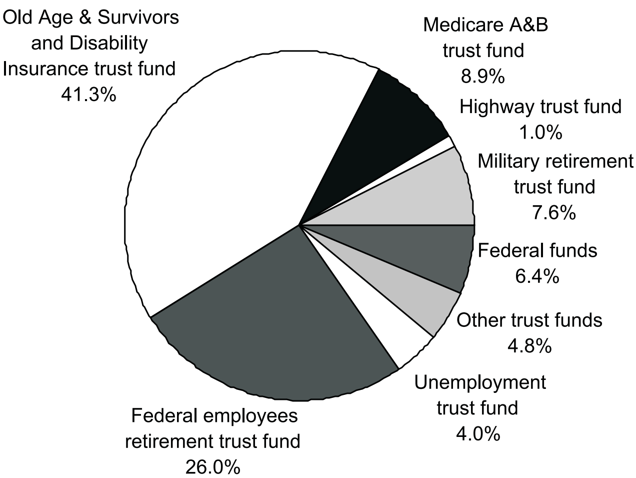
Figure II.3: Federal Debt as a Share of GDP (1970-2009)



Sources: Department of Treasury, CBO's January 1999 projections for fiscal years 1999 through 2009.

While the current ratio of debt held by the public to GDP in the United States is high by historical standards, in 1997 the United States was in the middle of a group of seven major industrialized nations when looking at net general government debt[2] as a share of the economy. (See figure II.4.)

Figure II.4: Net General Government Debt of Selected Countries (1997 Estimates)



Source: Organization for Economic Cooperation and Development

Q. What is the role of trust funds in measuring budget deficits or surpluses?

A. Although the unified budget balance is the most comprehensive measure of net annual spending or revenue in a given year, another measure—the federal funds balance—is necessary to explain annual changes in the gross federal debt. As noted earlier, the

[2]General government debt includes the debt of all levels of government (national, state or regional, and local).

gross debt includes the debt held by federal trust fund accounts. Recently, in the aggregate, these trust funds have been running cash surpluses which are invested in special U.S. Treasury securities.[3] These surpluses reduce the need for the federal government to borrow from the public. When the trust fund surpluses and the interest they earn from the Treasury are excluded from the budget, there is a deficit in the remainder of the budget—the so-called federal funds portion. In 1998, the unified budget had a surplus of $70.0 billion—the net result of a trust funds surplus of $155.8 billion and a federal funds deficit of $85.8 billion. (See figure II.5.) This is the first time since 1969 that trust funds surpluses exceeded the federal funds deficit—leading to a unified budget surplus.

[3]The Social Security trust funds have run the largest surpluses. Some other trust funds like the Hazardous Substance Superfund had deficits in 1998.

Figure II.5: Unified Budget Deficit or Surplus and Its Components (1968-1998)

Source: Department of the Treasury.

If a trust fund program does not run a cash surplus in a given year, the fund redeems its Treasury securities to meet its obligations. The Treasury would need to obtain cash to pay these redemptions in one of the following ways: increased taxes, spending cuts, increased borrowing from the public, or (if the total budget is in surplus) retiring less debt. Some trust funds support programs with long-term commitments where current expenditures already exceed annual tax revenues. The Medicare Hospital Insurance (Part A) Trust Fund has been in this position since 1992 and, as a result, it redeems a portion of its accumulated securities each year to pay current claims. The combined Social Security trust funds are projected to reach the point when current expenditures exceed annual receipts by 2014.[4]

Q. How does the federal debt affect the federal budget and how has this relationship changed over time?

A. The federal debt primarily affects the federal budget through the level of interest spending. The federal government pays interest to holders of Treasury securities. There are two measures of federal interest—net interest and gross interest. Net interest, largely the interest paid on the debt held by the public,[5] represents the current burden of servicing the debt. It reflects the amount the government pays to its outside creditors.

Gross interest includes both net interest and the interest credited to federal government trust funds and other government accounts that hold federal debt. The trust funds interest payments do not affect either the budget or the economy because there is no net change in current spending—in effect, one part of the government pays the interest and another part receives it. However, this interest, along with all other

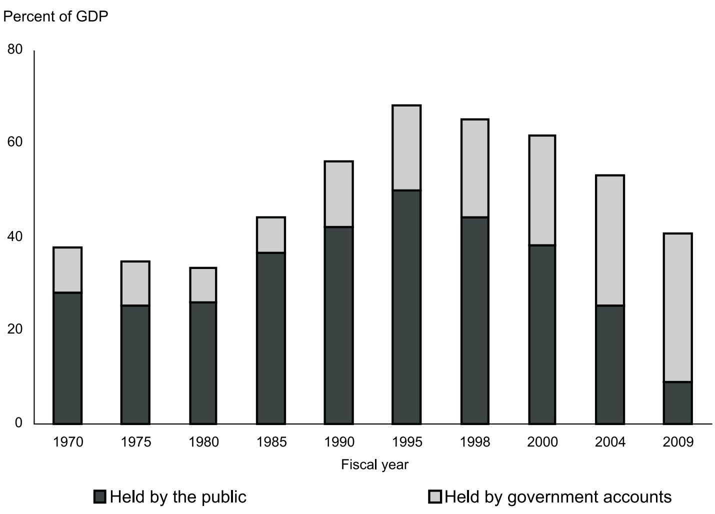
[4]See Social Security and Surpluses: GAO's Perspective on the President's Proposals, (GAO/T-AIMD/HEHS-99-95, February 23, 1999); Social Security and Surpluses: GAO's Perspective on the President's Proposals, (GAO/T-AIMD/HEHS-99-96, February 23, 1999); and Social Security: What the President's Proposal Does and Does Not Do, (GAO/T-AIMD/HEHS-99-76, February 9, 1999).

[5]In addition to the interest that the federal government pays on debt held by the public, the government also earns some interest from various sources and pays interest for purposes other than borrowing from the public. These amounts are only a small portion of net interest and, taken together, somewhat reduce its total.

trust fund revenue, makes up part of the trust fund surplus, which is invested in government debt securities.

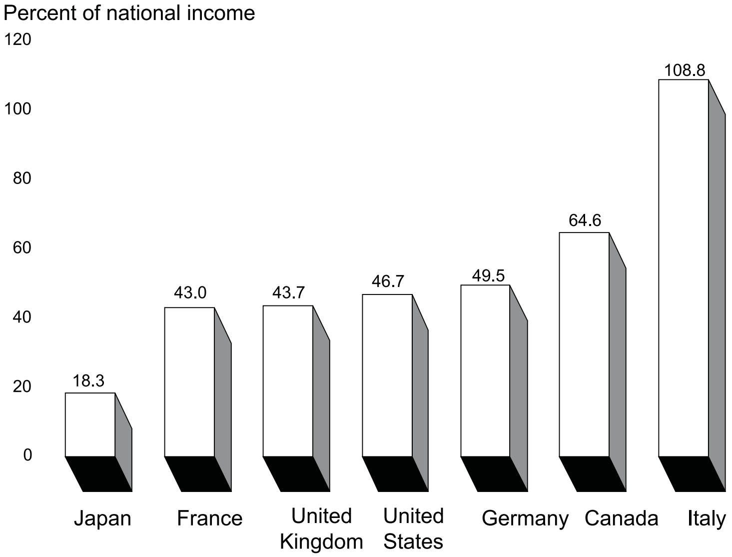
Net interest rose sharply from about 9 percent of total federal spending in fiscal year 1980 to about a 15 percent in fiscal year 1995 and has remained almost flat since then. (See figure II.6.) In 1998, net interest spending was about $243 billion—14.7 percent of total federal outlays—and it remained the third largest spending item in the federal budget. (See figure II.7.) This relatively large interest burden can significantly reduce budgetary flexibility. Unlike most of the budget, it cannot be changed directly.

Figure II.6: Net Interest as a Share of Total Federal Outlays (1940-2009)



Sources: CBO and OMB.

Figure II.7: Federal Outlays by Selected Functions (Fiscal Year 1998)

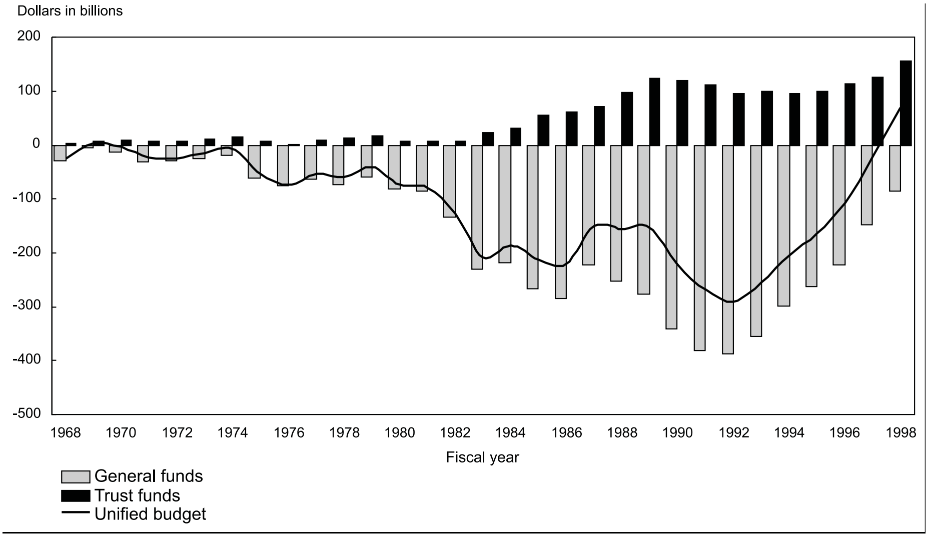


Sources: CBO, OMB, and Department of the Treasury.

Interest spending is a function of interest rates and the amount of debt on which interest must be paid. At any given interest rate, additional borrowing will drive up interest payments. Similarly, at any given level of debt, higher interest rates increase the amount of interest paid.

Although the debt incurred during World War II was extremely large, interest rates were much lower than they are today. (See figures II.2 and II.8.)

Figure II.8: Average Interest Rate on the Federal Debt (1940-1998)



Note: The average interest rate was calculated by dividing net interest payments by the previous year's debt held by the public.

Sources: OMB, Department of Commerce, and Department of the Treasury.

In the past, interest payments contributed to deficits and helped fuel a rising debt burden. Rising debt, in turn, raised interest costs to the budget, and the federal government increased debt held by the public to finance these interest payments.

A change from a budget deficit to a surplus reduces federal debt and replaces this "vicious cycle" with a "virtuous cycle" in which budget surpluses result in lower debt levels. Lower debt levels lead to lower interest payments—possibly at lower interest rates.[6] These lower interest payments in turn lead to larger potential surpluses and/or increased budget flexibility. CBO figures show that if all projected surpluses are retained and are used to reduce debt held by the public, net interest—primarily the interest paid on debt held by the public—will decline from about 15 percent of net outlays in fiscal year 1998 to about 4 percent in fiscal year 2009.[7] (See figure II.6.) CBO numbers also show that about 23 percent of the growing budget surpluses projected over the next 10 years come from interest savings if the surplus is maintained and is fully used to reduce debt held by the public. Using CBO estimates, if the budget were to be in balance rather than in surplus from 2000-2009, net interest costs in fiscal year 2009 would be $137 billion greater—or about $584 billion cumulatively between now and then. Nevertheless, despite the stabilization of the interest burden since 1995, the budget remains vulnerable to changes in interest rates because the debt remains relatively high as a percentage of GDP. CBO estimates that if interest rates rise by 1 percentage point above their projected levels for fiscal years 2000-2009, the surplus would be about $20 billion lower each year.[8]

[6]Just as deficits put upward pressure on interest rates, a period of budget surpluses should relieve this pressure. Lower interest rates then reduce interest costs.

[7]CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, January 1999.

[8]Ibid., p. 112.

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