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Surpluses and Federal Debt

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Summary

The federal government had a surplus of \$70 billion in fiscal year (FY) 1998 while total federal debt increased by \$109 billion. Why did the debt increase even though the government had a surplus? The answer involves understanding what drives changes in the two components of federal debt, debt held by the public (such as that held by individuals, pension funds, banks, and insurance companies, among others) and debt held by government accounts (mostly in federal trust funds, such as Social Security). Debt held by the public declines when the government has a surplus. But when the government accounts that hold federal debt have surpluses, these surpluses increase debt held by government accounts. If the debt held by government accounts increases faster than debt held by the public decreases, total federal debt rises.

For the next decade, the expected overall surpluses will reduce the amount of debt held by the public. Debt held in government accounts will continue increasing since these accounts will continue to run surpluses. Because of this, total federal debt will continue growing through FY2005 and then fall through FY2009 (the end of the projection period), according to the CBO projections.

Total federal debt rose from \$5,369.7 billion to \$5,478.7 billion, an increase of \$109.0 billion between the end of fiscal year (FY) 1997 and the end of FY1998. But the government's total surplus was \$70 billion in FY1998. The question then arises as to why the debt went up and not down. If deficits make the debt rise, should not surpluses make the debt fall?

For the purposes of understanding the effect of deficits or surpluses on the debt, a knowledge of the composition of federal debt is needed. The all-encompassing measure of Federal debt is total or gross federal debt. It has two components. One is directly affected by the government's overall surpluses or deficits and is called debt held by the public. The other is affected by internal government transactions and bookkeeping and is called debt held by government accounts.

Measures of Federal Debt

Federal debt is any debt instrument issued by the Treasury or other federal department or agency. Total federal debt consists of all these securities that are outstanding.¹ Total debt can be divided into debt issued by the Treasury (called either Treasury debt or public debt) and debt issued by federal agencies (called agency debt). Of the \$5,478.7 billion in gross federal debt outstanding at the end of FY1998, \$5,449.3 billion (99.5%) had been issued by the Treasury and \$29.4 billion (0.5%) had been issued by federal agencies.

For the purposes of understanding the effect of the government's deficits and surpluses on federal debt, dividing total debt into the two major holders of the debt, debt held by the public and debt held by government accounts, is the more interesting and useful split. As defined by the General Accounting Office (GAO), debt held by the public is, "That part of the gross federal debt held outside of the federal government. This includes any federal debt held by individuals, corporations, state or local governments, the Federal Reserve System, and foreign governments and central banks."² The Administration's budget documents in referring to debt held in government accounts states that, "Trust funds, and some public enterprise revolving funds and special funds, accumulate cash in excess of current requirements in order to meet future obligations. These cash surpluses are invested mostly in Treasury debt and, to a very small extent, in agency debt."³ The vast majority of debt held by government accounts is held by federal trust funds.

At the end of fiscal year 1998, debt held by the public totaled \$3,720.1 billion. Debt held in government accounts totaled \$1,758.6 billion.⁴ Table 1 contains data on federal debt for the fiscal years 1985 through 2009.

Deficits and Surpluses

As currently defined, the government's *total* surplus or deficit (also called the unified surplus or deficit) is the difference between the money the government collects from the public (receipts) and the amount it spends (outlays). If the government collects more than it spends, it has a surplus; if it spends more than it collects it has a deficit. The total surplus or deficit does not include internal transactions among government accounts.

By law, the current definition of *on-budget* activities excludes the transactions of the Social Security trust funds and the Postal Service. This is a legal separation of federal accounts and has no effect on the government's interactions with the wider economy.

¹Total or gross federal debt is sometimes called the national debt, a term that has no official definition.

²GAO. A glossary of terms used in the federal budget process: exposure draft. p.38 Revised January 1993. GAO/AFMD-2.1.1

³OMB. The Budget of the United States Government for fiscal year 1999. Analytical perspectives. p. 251. February 1998.

⁴In 1998, trust funds held \$1,645.5 billion and federal funds held \$113.1 billion of the debt held by government accounts..

Most analysis of federal budget activity uses totals for federal spending and receipts that ignore this distinction.

For FY1998, the government had a surplus of \$70.0 billion. This is the first surplus for the government since FY1969 (the surplus that year was \$3.2 billion). It also represents a large turnaround in federal finances. In FY1992, the deficit reached a dollar record high of \$290.4 billion.

| FY | Total Federal Debt | Debt Held by the Public | Debt Held in Government Accounts |
|-----------|--------------------|----------------------------|-------------------------------------|
| 1985 | \$1,817.5 | \$1,499.9 | \$317.6 |
| 1986 | 2,120.6 | 1,736.7 | 383.9 |
| 1987 | 2,346.1 | 1,888.7 | 457.4 |
| 1988 | 2,601.3 | 2,050.8 | 550.5 |
| 1989 | 2,868.0 | 2,189.9 | 678.2 |
| 1990 | 3,206.6 | 2,410.7 | 795.8 |
| 1991 | 3,598.5 | 2,688.1 | 910.4 |
| 1992 | 4,002.1 | 2,998.8 | 1,003.3 |
| 1993 | 4,351.4 | 3,247.5 | 1,103.9 |
| 1994 | 4,643.7 | 3,432.1 | 1,211.6 |
| 1995 | 4,921.0 | 3,603.4 | 1,317.6 |
| 1996 | 5,181.9 | 3,733.0 | 1,449.0 |
| 1997 | 5,369.7 | 3,771.1 | 1,598.6 |
| 1998 | 5,478.7 | 3,720.1 | 1,758.6 |
| Estimates | | | |
| 1999 | 5,578.9 | 3,630.4 | 1,948.6 |
| 2000 | 5,668.8 | 3,514.9 | 2,153.9 |
| 2001 | 5,742.9 | 3,377.7 | 2,365.2 |
| 2002 | 5,772.3 | 3,183.4 | 2,588.9 |
| 2003 | 5.810.1 | 2,989.0 | 2,821.2 |
| 2004 | 5,830.6 | 2,770.4 | 3,060.1 |
| 2005 | 5,839.1 | 2,529.1 | 3,310.0 |
| 2006 | 5,804.6 | 2,236.9 | 3,567.7 |
| 2007 | 5,753.3 | 1,916.8 | 3,836.6 |
| 2008 | 5,681.7 | 1,574.3 | 4,107.3 |
| 2009 | 5,587.1 | 1,205.2 | 4,381.5 |

| Table 1. | Components of Federal Debt, 1985-2009 |
|----------|--|
| | (In billions of dollars) |

Sources: OMB. Budget of the United States Government for FY2000. Historical Tables. February 1999. CBO. The economic and budget outlook: fiscal years 2000-2009. January 1999.

The Link Between Surpluses and Deficits and Changes in the Debt

What links the annual surplus or deficit to the annual change in total federal debt? For that portion of total federal debt held by the public, the link is very close. When the government has a deficit it acquires the money it needs beyond its receipts by borrowing through the sale of debt instruments to the private financial markets. This increases the amount of debt held by the public. If the government has a surplus, maturing federal debt is paid off with the extra cash the government has available.⁵ This decreases the amount of debt held by the public. The size of the surplus or deficit is similar to the annual change in federal debt held by the public.

Changes in the amount of debt held by government accounts is relatively independent of the government's overall surplus or deficit. Instead these changes result from the

⁵When the government has deficit, it usually pays holders of maturing debt by issuing new debt.

surpluses or deficits, including interest transfers from the general fund, of the accounts themselves.

Changes in Debt Held in Government Accounts. What drives changes in that portion of federal debt held in government accounts? The government holds its own debt within designated accounts because it is required to by law. The annual surpluses (and in recent years it is always a surplus) in these accounts cumulatively is what drives changes in debt held by government accounts. Any account surplus is converted into more debt

held by these accounts. Most of the programs with significant holdings of federal debt fall into the category of federal trust funds, such as the Social Security and the Highway Trust Funds. Some federal programs produce surpluses (or sometimes deficits) within their accounts because they were established to have income (including the interest earnings on their holdings of federal debt) and outlays credited directly to their programs. In contrast, the majority of federal programs, in number if not in size, receive funding from the Treasury's general fund, usually through appropriations. They do





not have their own earmarked or dedicated sources of income.

Any surplus generated in government accounts is required, by law, to be invested in government debt. The mechanism by which this occurs, since it occurs completely within government accounts, differs materially from the borrowing that the government does from the public. All money that the government receives from the public flows through the Treasury. The Treasury then credits specified federal accounts with receipts earmarked for them (e.g. payroll taxes for Social Security) and adds in any interest earnings on their already held debt. If an account that can hold government debt is credited with more income than it needs for its expenditures, the Treasury issues an amount of debt to that account equal to its surplus income. The actual cash from the accounts in surplus is then credited to the general fund.

The Means of Financing. Because of the intricacies of federal accounting, the match between deficits and surpluses and the annual change in debt held by the public is not exact. Table 2 links the budget's annual balance, surpluses or deficits, and the changes in debt held by the public. In addition to the surplus or deficit affecting the debt held by

the public, there are a number of factors called *other means of financing* or OMOF. These factors,

"affect the government's need to borrow money from the public...[They] include reductions (or increases) in the government's cash balances, seigniorage, and other, miscellaneous changes. The largest of the other borrowing needs reflects the capitalization of financing accounts used for credit programs...[Direct loan and credit] programs require disbursements up front by the government with the promise of repayment at a later date. Those up-front outlays are not counted toward the deficit [or surplus], which reflects only the estimated subsidy costs of such programs.."

| (in billions of dollars) | | | | | | | | | | |
|--------------------------|------------|------|--------------|---|--------------|---|-------------|---|------------|--|
| | Deficit or | | Other Means | | Change in | | Trust fund | | Change in | |
| FY | Surplus(-) | | of Financing | | Debt held by | | surpluses & | | total debt | |
| | Surprus(-) | | (OMOF) | | the public | | adjustments | | total debi | |
| 1985 | \$212.3 | + | -\$12.9 | = | \$199.4 | + | \$53.5 | = | \$252.9 | |
| 1986 | 221.2 | $^+$ | 15.6 | = | 236.8 | + | 66.3 | = | 303.1 | |
| 1987 | 149.8 | $^+$ | 2.2 | = | 152.0 | + | 73.5 | = | 225.5 | |
| 1988 | 155.2 | $^+$ | 6.9 | = | 162.1 | + | 93.1 | = | 255.2 | |
| 1989 | 152.5 | + | -13.4 | = | 139.1 | + | 127.6 | = | 266.7 | |
| 1990 | 221.2 | $^+$ | -0.4 | = | 220.8 | + | 117.8 | = | 338.6 | |
| 1991 | 269.4 | $^+$ | 8.0 | = | 277.4 | + | 114.5 | = | 391.9 | |
| 1992 | 290.4 | $^+$ | 20.3 | = | 310.7 | + | 92.9 | = | 403.6 | |
| 1993 | 255.0 | $^+$ | -6.3 | = | 248.7 | + | 100.6 | = | 349.3 | |
| 1994 | 203.1 | + | -18.5 | = | 184.6 | + | 107.7 | = | 292.3 | |
| 1995 | 163.9 | $^+$ | 7.4 | = | 171.3 | + | 106.0 | = | 277.3 | |
| 1996 | 107.4 | + | 22.2 | = | 129.6 | + | 131.3 | = | 260.9 | |
| 1997 | 21.9 | $^+$ | 16.2 | = | 38.1 | + | 149.7 | = | 187.8 | |
| 1998 | -70.0 | + | 19.0 | = | -51.0 | + | 160.0 | = | 109.0 | |
| Estimates | | | | | | | | | | |
| 1999 | -107.1 | $^+$ | 17.4 | = | -89.7 | + | 189.9 | = | 100.2 | |
| 2000 | -130.7 | $^+$ | 15.2 | = | -115.5 | + | 205.4 | = | 89.9 | |
| 2001 | -150.9 | $^+$ | 13.7 | = | -137.2 | + | 211.3 | = | 74.1 | |
| 2002 | -208.7 | $^+$ | 14.4 | = | -194.3 | + | 223.7 | = | 29.4 | |
| 2003 | -209.4 | + | 15.0 | = | -194.4 | + | 232.2 | = | 37.8 | |
| 2004 | -233.5 | + | 14.9 | = | -218.6 | + | 239.1 | = | 20.5 | |
| 2005 | -255.8 | $^+$ | 14.5 | = | -241.3 | + | 249.8 | = | 8.5 | |
| 2006 | -306.1 | + | 13.9 | = | -292.2 | + | 257.7 | = | -34.5 | |
| 2007 | -333.5 | + | 13.4 | = | -320.1 | + | 268.8 | = | -51.3 | |
| 2008 | -355.3 | + | 12.8 | = | -342.5 | + | 270.9 | = | -71.6 | |
| 2009 | -381.4 | + | 12.6 | = | -368.8 | + | 274.2 | = | -94.6 | |

Table 2. Budget Balance and the Change
in Federal Debt, 1986-2009

Sources: OMB. Budget of the United States government for FY2000. Historical Tables. February 1999. CBO. The economic and budget outlook: fiscal years 2000-2009. January 1999.

To make the calculations in the table 2 easier to follow, deficits are shown as positive since they increase the debt held by the public and surpluses are shown as negative since they reduce it. The OMOF are shown as positive if they increase debt and negative if they decrease it.⁷

⁶CBO. The economic and budget outlook: fiscal years 1999-2008. January 1998. p. 41-42.

⁷In 1997, the OMOF was \$16.2 billion while the deficit was \$21.9 billion. The change in debt held by the public was a \$38.1 billion increase, making the OMOF 42.5% of the total change in debt held by the public. In the example for 1991, the OMOF was 2.9% of the total change in debt held (continued...) Over the next decade, the OMOF is expected to decline slightly, from \$18 billion in FY1999 to \$12 billion in FY2009, and be relatively small compared to the size of the surpluses in the first decade of the new century. This decline and relatively small size combined with the expectation of growing surpluses should make the expected surpluses good proxies for the annual change in the debt held by the public.⁸

The sum of the changes in debt held by the public and the changes in debt held by government accounts equals changes in total federal debt. Table 2 displays the major components of change in total federal debt. The surplus or deficit is combined with the other means of financing resulting in the change in debt held by the public. This amount is then combined with the change in debt held by government accounts to produce the change in total federal debt. If the surpluses in the accounts that hold debt are larger than the overall surplus, total federal debt will rise. If the accounts' surpluses are smaller than the overall surpluses, total federal debt will fall.

According to CBO estimates from January 1999, the government will have surpluses in its annual budget for all the fiscal years from 1998 through 2009. The annual surpluses will reduce the debt held by the public through this entire period. The continuing surpluses in federal accounts that hold federal debt will keep increasing the debt held by government accounts throughout the period. This combination will mean that total federal debt will increase for several years, through FY2005 until the overall surplus exceeds the surplus in the accounts holding federal debt. Total federal debt will decline through FY2009, the edge of the projection period. Currently, debt held by the public is over twice the size of debt held in government accounts. In addition, the CBO projections show that by the end of FY 2004, the debt held by government accounts will exceed debt held by the public for the first time ever. The projections indicate that by the end of 2009, internally held debt will be 3.6 times larger than the debt held externally. Figure 1 shows these changes graphically.

⁷(...continued)

by the public.

⁸The *other means of financing* are discussed in more detail in the CRS report, The Debt, the Deficit, and the Means of Financing (report number 94-1004E), December 5, 1994.