Order Code RS20767
January 4, 2001

CRS Report for Congress

Received through the CRS Web

How Budget Surpluses Change Federal Debt

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Summary

The federal government had a surplus of $237.0 billion in fiscal year (FY) 2000, while total federal debt increased by $22.9 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 total federal debt, *debt held by the public* (which includes debt held by individuals, pension funds, banks, and insurance companies, among other entities) and *debt held by government accounts* (almost all in federal trust funds, such as Social Security). A total or unified surplus, meaning that the government receives more dollars from the public than it spends on the public, generally will reduce debt held by the public. A surplus in federal trust fund accounts, meaning that their income (from both the public and other parts of the government) is greater than their outgo (to both the public and other parts of the government), increases their holdings of federal debt. The trust funds are required to invest surpluses in government debt. If debt held by the trust funds increases faster than debt held by the public decreases, total federal debt rises.

For the next decade, the projected overall surpluses will reduce the amount of debt held by the public. The Congressional Budget Office (CBO) even expects that, by late in the decade, the government will need to find something to do with its accumulating cash balances other than reducing the publicly held debt. Debt held in government accounts will continue increasing since these accounts will continue to run surpluses. Total federal debt is projected to fall through much of the decade and then rise as debt held by the public is eliminated while debt held by government accounts continues to increase.

This report will be updated as events warrant.

Total federal debt rose from $5,606.1 billion to $5,629.0 billion, an increase of $22.9 billion, between the end of fiscal year (FY) 1999 and the end of FY2000. But the government's total surplus was $237.0 billion in FY2000. 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?

Understanding the effect of the government's total or unified deficits or surpluses on the debt, requires understanding the composition of federal debt. The all-encompassing measure of federal debt is total or gross federal debt. It has two components. One, *debt held by the public*, is directly affected by the government's overall surpluses or deficits (the balance of the government's transactions with the public). The other, *debt held by government accounts,* is determined by the accounts' transactions with the public and other parts of the government, and by the government's accounting rules and practices.

Measures of Federal Debt

Federal debt consists of securities issued by the Treasury and a relatively few issued by a limited number of federal agencies.[1] The Treasury issues debt called either *public debt* or *Treasury debt*. Federal agencies have, in the past, issued debt called *agency debt*, but rarely do so today. Of the $5,629.0 billion in gross federal debt outstanding at the end of FY2000, $5,601.3 billion (99.5%) had been issued by the Treasury and $27.7 billion (0.5%) had been issued by federal agencies.[2]

Different factors affect these two groupings of federal debt, *debt held by the public* and *debt held by government accounts.* 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.[3]

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 .... These cash surpluses are invested mostly in Treasury debt and ... in agency debt."[4] Almost all debt held by government accounts is held by federal trust funds. At the end of FY2000, trust funds held 94.3% of federal debt held by government accounts.[5]

At the end of FY2000, total federal debt was $5,629.0 billion; debt held by the public totaled $3,410.2 billion; and debt held in government accounts totaled $2,218.8 billion. Table 1 contains data on federal debt and its components for the fiscal years 1985 through the estimates and projections for the fiscal years 2001 through 2010.

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[1]The popular term *national debt*, which is often substituted for gross or total federal debt, is not used in federal government publications.

[2]Federal agencies do not include Government-sponsored enterprises (GSEs) and the government's debt numbers do not include debt issued by GDEs.

[3]GAO. *A Glossary of Terms Used in the Federal Budget Process: Exposure Draft*, GAO/AFMD-2.1.1, p. 38. Revised Jan. 1993.

[4]OMB. *The Budget of the United States Government for Fiscal Year 2001*. Analytical Perspectives. p. 275. Feb. 2000.

[5]This paper will use *trust fund* as a proxy term for those federal accounts holding federal debt.

Table 1. Components of Federal Debt, 1985-2010
(In billions of dollars)

FY	Total Federal Debt	Debt Held by the Public	Debt Held by Government Accounts
Actual			
1985	$1,818	$1,500	$318
1986	2,121	1,737	384
1987	2,346	1,889	457
1988	2,601	2,051	551
1989	2,868	2,190	678
1990	3,207	2,411	796
1991	3,599	2,688	910
1992	4,002	2,999	1,003
1993	4,351	3,248	1,104
1994	4,644	3,432	1,212
1995	4,921	3,603	1,318
1996	5,182	3,733	1,449
1997	5,370	3,771	1,599
1998	5,479	3,720	1,759
1999	5,606	3,633	1,973
2000	5,629	3,410	2,219
Estimates and Projections			
2001	5,616	3,158	2,485
2002	5,596	2,854	2,742
2003	5,563	2,522	3,041
2004	5,513	2,165	3,348
2005	5,444	1,774	3,670
2006	5,331	1,315	4,016
2007	5,456	1,081	4,375
2008	5,737	989	4,784
2009	6,024	887	5,137
2010	6,370	830	5,540

Sources: OMB. *Budget of the United States Government for FY2001*, Historical Tables, Feb. 2000; CBO. The *Economic and Budget Outlook: an Update*, July 2000. Dept. of the Treasury, *Final Monthly Treasury Statement of Receipts and Outlays*, Sept. 2000.

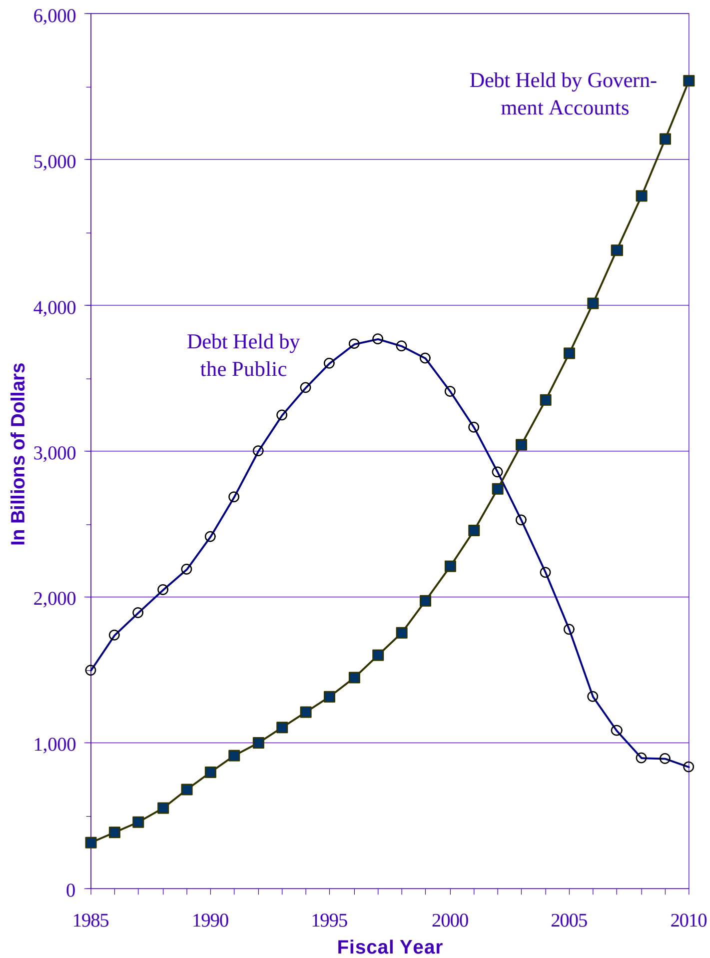
Deficits and Surpluses

As currently defined, the government's *total* or *unified* surplus or deficit is the difference between the net receipts the government collects from the public and the money it sends back to the public as net outlays. The measure approximates the number of dollars collected from and spent on the public. If the government collects more than it spends, it has a surplus; if it spends more than it collects, it has a deficit.

For FY2000, the government had a surplus of $237.0 billion. This is the third annual surplus in a row for the government. These surpluses represent a significant turnaround in federal finances; they follow three decades of deficits.

Within the government, the Treasury, acting much as the government's bank and bookkeeper, tracks the income and outgo of the government's multitude of accounts and funds. The income and outgo measures used within the government differ somewhat from the usual definition of receipts and outlays. Income and outgo include payments from and to government agencies, as well as payments to and collections from the public. As an example, the Social Security trust funds are credited with payroll tax collections from the public, as well as interest payments (made by the Treasury) on the fund's existing holdings of federal debt and federal agency payments for federal employer contributions on behalf of federal employees. The program's outgo is mostly payments to the public. The resulting surplus for the program is a result of this mixture of internal and external collections and payments. Other trust funds would show a similar mixture of internal and external collections and expenditures. Because these internal collections and expenditures are netted against each other, they do not become part of the government's total receipts or outlays.

Figure 1. Debt Held by the Public and by Government Accounts, 1985-2010(projections)



Changes in Federal Debt

Changes in the holdings of federal debt in the two groups of holders are driven by different mechanisms. Changes in debt held by the public are closely linked to the government's total surplus or deficit. The amount of debt held by the public represents the net borrowing – the sum of surpluses and deficits – throughout the government's history. The changes in the debt holdings of government accounts are propelled by the surpluses or deficits in the accounts themselves. The cumulative effect of these individual changes produces the overall change in debt held by government accounts.

Changes in Federal Debt Held by the Public. If the government has a deficit, it must borrow from the public to acquire the financial resources it needs to cover a portion of its obligations. It generally borrows by selling debt instruments to the financial markets or directly to investors. These actions increase the amount of federal debt held by the public by approximately the size of the deficit. If the government has a surplus, it has more resources than it needs to cover its obligations. With these extra resources, it redeems debt, either as it matures or by purchasing government debt from the financial markets. The redemptions reduce the amount of debt held by the public by approximately the size of the surplus.

Changes in Federal Debt Held by Government Accounts. Changes in the amount of debt held by government accounts are independent of the government's overall surplus or deficit. Instead, these changes in debt holdings depend on the surpluses or deficits in the trust funds themselves. These surpluses or deficits are determined by the government's accounting rules and the legislation establishing or modifying the revenues and programs associated with the accounts and trust funds. If they have surpluses, they are required by law to invest them in Treasury debt securities. This investment increases the amount of debt held by government accounts. If the trust funds should have deficits, they must redeem some of their debt holdings through the Treasury for the resources needed to cover some part of their obligations. Their redemption reduces the amount of debt held by government accounts.

The Means of Financing. Various relatively small financing factors, combined in the category called other *means of financing* (MOF) mean that deficits or surpluses do not equal the annual change in debt held by the public. Table 2 links the budget's annual balance, surpluses or deficits, and the changes in debt held by the public. These factors

> include reductions (or increases) in the government's cash balances, seigniorage, and other, miscellaneous changes. The largest [element in this category]...reflects the capitalization of financing accounts used for credit programs...[direct loan and loan guarantee 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.[6]

To make the calculations in 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 MOF are shown as positive if they increase debt and negative if they decrease it.[7]

Over the next decade, the MOF is expected to stabilize between $10 billion and $13 billion a year, which would be relatively small compared to the size of the expected changes in debt held by the public during the same period. This result should make the projected surpluses fairly good proxies for the annual change in the debt held by the public, at least through mid-decade.[8]

The sum of the changes in debt held by the public and the changes in debt held by government accounts equals change in total federal debt. Table 2 displays the major components of change in total federal debt. The surplus or deficit is combined with the

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[6]CBO, The Economic and Budget Outlook: Fiscal Years 1999-2008, Jan. 1998, pp. 41-42.

[7]In 1999, the MOF was 30.2% of the total change in debt held by the public. In 2000, the MOF was 6.4% of the total change in debt held by the public.

[8]The other *means of financing* are discussed in more detail in the CRS Report 94-1004E, *The Debt, the Deficit, and the Means of Financing*, Dec. 5, 1994.

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 changes in the debt held by government accounts are larger than the changes in debt held by the public, total federal debt will rise.

Table 2. Budget Balance and the Change in Federal Debt, 1985-2006

(In billions of dollars)

FY	Deficit or Surplus(-)		Means of Financing (MOF)		Change in Debt Held by the Public		Trust fund and Account Surpluses and Adjustments		Change in Total Debt
1985	$212	+	$-13	=	$199	+	$54	=	$253
1986	221	+	16	=	237	+	66	=	303
1987	150	+	2	=	152	+	74	=	226
1988	155	+	7	=	162	+	93	=	255
1989	153	+	-13	=	139	+	128	=	267
1990	221	+	0	=	221	+	118	=	339
1991	269	+	8	=	277	+	115	=	392
1992	290	+	20	=	311	+	93	=	404
1993	255	+	-6	=	249	+	101	=	349
1994	203	+	-19	=	185	+	108	=	292
1995	164	+	7	=	171	+	106	=	277
1996	107	+	22	=	130	+	131	=	261
1997	22	+	16	=	38	+	150	=	188
1998	-70	+	19	=	-51	+	160	=	109
1999	-124	+	35	=	-89	+	216	=	127
2000	-237	+	14	=	-223	+	246	=	23
Estimates									
2001	-268	+	17	=	-251	+	251	=	-1
2002	-312	+	8	=	-304	+	284	=	-20
2003	-345	+	13	=	-332	+	299	=	-33
2004	-369	+	12	=	-357	+	307	=	-50
2005	-402	+	11	=	-391	+	322	=	-69
2006	-469	+	10	=	-459	+	346	=	-113

Sources: OMB. *Budget of the United States Government for FY2001*, Historical Tables, Feb. 2000; CBO, *The Economic and Budget Outlook: An Update*, July 2000. Dept. of the Treasury, *Final Monthly Treasury Statement of Receipts and Outlays*, Sept. 2000.
Note: CBO's report assumes the government will retain some debt held by the public (possibly savings bonds and the state and local government series) and will invest some of the surpluses after FY2006.

Although the government is expected to have large surpluses throughout this decade, total federal debt may or may not be smaller at the end of the decade than at the beginning. According to CBO's projections, the surpluses will reduce the debt held by the public through at least FY2006, when CBO assumes that the government will use part of the surplus for something other than reducing the publicly held debt (and debt held by the public becomes very small). During the same period, the continuing surpluses in federal trust funds, in particular, will increase the debt held by government accounts. CBO's projections show total federal debt falling through FY2006 and then rising for the rest of the decade. Large government surpluses do not assure a reduction in total debt, only a reduction in debt held by the public.