FEDERAL BORROWING AND DEBT

16. FEDERAL BORROWING AND DEBT

Debt is the largest legally binding obligation of the Federal Government. At the end of 2008, the Government owed $5,803 billion of principal to the individuals and institutions who had loaned it the money to fund past deficits. During that year, the Government paid the public approximately $260 billion of interest on this debt.

Table 16–1. TRENDS IN FEDERAL DEBT HELD BY THE PUBLIC
(Dollar amounts in billions)

Fiscal Year	Debt held by the public:		Debt held by the public as a percent of:		Interest on the debt held by the public as a percent of: [3]	
	Current dollars	2008 dollars [1]	GDP	Credit market debt [2]	Total outlays	GDP
1946	241.9	2,232.2	108.6	N/A	7.4	1.8
1950	219.0	1,642.1	80.2	53.3	11.4	1.8
1955	226.6	1,491.8	57.2	43.2	7.6	1.3
1960	236.8	1,382.5	45.6	33.7	8.5	1.5
1965	260.8	1,423.4	37.9	26.9	8.1	1.4
1970	283.2	1,284.2	28.0	20.8	7.9	1.5
1975	394.7	1,317.1	25.3	18.4	7.5	1.6
1980	711.9	1,643.1	26.1	18.5	10.6	2.3
1985	1,507.3	2,652.9	36.3	22.3	16.2	3.7
1990	2,411.6	3,637.6	42.0	22.6	16.1	3.5
1995	3,604.4	4,792.2	49.2	26.7	15.8	3.3
1996	3,734.1	4,871.2	48.5	26.3	15.8	3.2
1997	3,772.3	4,836.6	46.1	25.3	15.7	3.1
1998	3,721.1	4,713.7	43.1	23.4	15.1	2.9
1999	3,632.4	4,541.9	39.8	21.4	13.8	2.6
2000	3,409.8	4,179.0	35.1	19.0	13.0	2.4
2001 …	3,319.6	3,974.7	33.0	17.5	11.6	2.1
2002	3,540.4	4,159.5	34.1	17.5	8.9	1.7
2003	3,913.4	4,506.6	36.2	17.8	7.5	1.5
2004	4,295.5	4,821.1	37.3	18.0	7.3	1.5
2005	4,592.2	4,994.0	37.5	17.6	7.7	1.6
2006	4,829.0	5,079.3	37.1	16.9	8.9	1.8
2007	5,035.1	5,154.9	36.9	16.2	9.2	1.8
2008	5,802.7	5,802.7	40.8	17.6	8.7	1.8
2009 estimate	8,531.4	8,408.3	59.9	N/A	5.2	1.5
2010 estimate	9,881.9	9,643.0	67.1	N/A	7.2	1.7
2011 estimate	10,873.1	10,465.8	70.1	N/A	10.5	2.4
2012 estimate	11,468.4	10,858.3	69.6	N/A	13.1	2.9
2013 estimate	12,027.1	11,185.9	68.7	N/A	14.1	3.1
2014 estimate	12,594.8	11,506.8	68.5	N/A	14.6	3.2

N/A = Not available.

[1] Debt in current dollars deflated by the GDP chain-type price index with fiscal year 2008 equal to 100.

[2] Total credit market debt owed by domestic nonfinancial sectors, modified in some years to be consistent with budget concepts for the measurement of Federal debt. Financial sectors are omitted to avoid double counting, since financial intermediaries borrow in the credit market primarily in order to finance lending in the credit market. Source: Federal Reserve Board flow of funds accounts. Projections are not available.

[3] Interest on debt held by the public is estimated as the interest on Treasury debt securities less the "interest received by trust funds" (subfunction 901 less subfunctions 902 and 903). The estimate of interest on debt held by the public does not include the comparatively small amount of interest paid on agency debt or the offsets for interest on Treasury debt received by other Government accounts (revolving funds and special funds).

The deficit was $459 billion in 2008. This $459 billion deficit and other financing transactions totaling $309 billion required the Government to increase its borrowing from the public by $768 billion last year. Debt held by the public increased from 36.9 percent of Gross Domestic Product (GDP) at the end of 2007 to 40.8 percent of GDP at the end of 2008. Largely as a result of the Government's actions to stabilize the financial markets and restore economic growth, the deficit is estimated to increase to $1,841 billion in 2009 and then begin to fall. Debt as a percentage of GDP is estimated to increase in 2009–2011, reaching 70.1 percent of GDP, and is projected to remain relatively stable in subsequent years.

Trends in Debt Since World War II

Table 16–1 depicts trends in Federal debt held by the public from World War II to the present and estimates from the present through 2014. (It is supplemented for earlier years by Tables 7.1–7.3 in *Historical Tables*, which is published as a separate volume of the Budget.) Federal debt peaked at 108.6 percent of GDP in 1946, just after the end of the war. From then until the 1970s, because of relatively small deficits, an expanding economy, and inflation, Federal debt as a percentage of GDP decreased almost every year. With households borrowing large amounts to buy homes and consumer durables, and with businesses borrowing large amounts to buy plant and equipment, Federal debt also decreased almost every year as a percentage of total credit market debt outstanding. The cumulative effect was impressive. From 1950 to 1975, debt held by the public declined from 80.2 percent of GDP to 25.3 percent, and from 53.3 percent of credit market debt to 18.4 percent. Despite rising interest rates, interest outlays became a smaller share of the budget and were roughly stable as a percentage of GDP.

Since the 1970s, Federal debt relative to GDP has been a function of the Nation's fiscal policy as well as overall economic conditions. During the 1970s, large budget deficits emerged as spending grew and as the economy was disrupted by oil shocks and rising inflation. The nominal amount of Federal debt more than doubled, and Federal debt relative to GDP and credit market debt stopped declining after the middle of the decade. The growth of Federal debt accelerated at the beginning of the 1980s, due in large part to a deep recession, and the ratio of Federal debt to GDP grew sharply. It continued to grow throughout the 1980s as large tax cuts, enacted in 1981, and substantial increases in defense spending were only partially offset by substantial reductions in domestic spending. The resulting deficits were large enough to drive the debt to almost 50 percent of GDP by 1993. The ratio of Federal debt to credit market debt also rose, though to a lesser extent. Interest outlays on debt held by the public, calculated as a percentage of either total Federal outlays or GDP, increased as well. The growth of Federal debt held by the public was decelerating by the mid-1990s, however, as two major budget agreements enacting spending cuts and tax increases reduced deficits to sustainable levels, and the debt declined markedly relative to both GDP and total credit market debt. The decline accelerated as surpluses emerged from 1997 to 2001. Debt fell steadily from 49.4 percent of GDP in 1993 to 33.0 percent in 2001. Interest as a share of outlays peaked at 16.5 percent in 1989 and then fell to 8.9 percent by 2002; interest as a percentage of GDP fell in a similar proportion.

An upward trend in debt relative to GDP began in 2002. The decline in the stock market, the recession, and the initially slow recovery all reduced tax receipts. The tax cuts of 2001 and 2003 had a similarly large and longer-lasting effect, as did the growing costs of the wars in Iraq and Afghanistan. Deficits ensued and debt began to rise, both in nominal terms and as a percentage of GDP. However, economic growth led to a revival of receipt growth and deficits and Federal debt as a share of GDP fell in 2006 and 2007.

As a result of the massive financial and economic challenges now facing the Nation, the deficit began increasing rapidly in 2008. The deficit will increase more substantially in 2009 as the Government takes aggressive steps to restore the health of the Nation's economy and financial markets. Deficits are projected to begin to decrease in 2010, roughly stabilizing as a percent of GDP in the outyears. Although debt in nominal dollars is estimated to continue to increase through 2019, debt as a percent of GDP is anticipated to increase noticeably in 2009 through 2011 and then to remain fairly level from 2012 through 2019.

Debt Held by the Public and Gross Federal Debt

The Federal Government issues debt securities for two principal purposes. First, it borrows from the public to finance the Federal deficit.[1] Second, it issues debt to Federal Government accounts, primarily trust funds, that accumulate surpluses. By law, trust fund surpluses must generally be invested in Federal securities. The gross Federal debt is defined to consist of both the debt held by the public and the debt held by Government accounts. Nearly all the Federal debt has been issued by the Treasury and is sometimes called "public debt," but a small portion has been issued by other Government agencies and is called "agency debt."[2]

Borrowing from the public, whether by the Treasury or by some other Federal agency, is important because it represents the Federal demand on credit markets. Regardless of whether the proceeds are used for tangible or intangible investment or to finance current consumption, the Federal demand on credit markets has to be financed out of the saving of households and businesses, the State and local sector, or the rest of the world. Federal borrowing thereby competes with the borrowing of other credit market sectors for financial resources in the credit market. Borrowing from the public thus affects the size and composition of assets held by the private sector and the amount of saving imported from abroad. It also increases the amount of future resources required to pay interest to the public on Federal debt. Borrowing from the public is therefore an important concern of Federal fiscal policy.[3] However, borrowing from the public is an

[1] For the purposes of the Budget, "debt held by the public" is defined as debt held by investors outside of the Federal Government, both domestic and foreign, including U.S. State and local governments and foreign governments. It also includes debt held by the Federal Reserve.

[2] The term "agency debt" is defined more narrowly in the budget than customarily in the securities market, where it includes not only the debt of the Federal agencies listed in Table 16–4, but also the debt of the Government-sponsored enterprises listed in Table 7–9 at the end of Chapter 7 of this volume and certain Government-guaranteed securities.

[3] The Federal subsector of the national income and product accounts provides a measure of "net government saving" (based on current expenditures and current receipts) that can be used to analyze the effect of Federal fiscal policy on national saving within the framework of an integrated set of measures of aggregate U.S. economic activity. The Federal subsector and its differences from the budget are discussed in Chapter 14 of this volume, "National Income and Product Accounts."

incomplete measure of Federal impact on credit markets. Different types of Federal activities can affect the credit markets in different ways. With the Federal Government's recent extraordinary efforts to stabilize credit markets, borrowing from the public is not a good measure of the Government's net effect on the credit markets, because the Government is using the borrowed funds to acquire financial assets that would otherwise require financing in the credit markets directly. (For more information on other ways in which Federal activities impact the credit market, see the discussion at the end of this chapter.)

Issuing debt securities to Government accounts performs an essential function in accounting for the operation of these funds. The balances of debt represent the cumulative surpluses of these funds due to the excess of their tax receipts, interest receipts, and other collections compared to their spending. The interest on the debt that is credited to these funds accounts for the fact that some earmarked taxes and user charges will be spent at a later time than when the funds receive the monies. The debt securities are a liability of the general fund to the fund that holds the securities and are a mechanism for crediting interest to that fund on its recorded balances. These accounting balances generally provide the fund with authority to draw upon the U.S. Treasury in later years to make future payments on its behalf to the public. Public policy may result in the Government's running surpluses and accumulating debt in trust funds and other Government accounts in anticipation of future spending.

However, issuing debt to Government accounts does not have any of the credit market effects of borrowing from the public. It is an internal transaction of the Government, made between two accounts that are both within the Government itself. It is not a current transaction of the Government with the public; it is not financed by private saving and does not compete with the private sector for available funds in the credit market; it does not provide the account with resources other than a legal claim on the U.S. Treasury, which itself obtains real resources by taxation and borrowing; and its current interest does not have to be financed by other resources.

Furthermore, the debt held by Government accounts does not represent the estimated amount of the account's obligations or responsibilities to make future payments to the public. For example, if the account records the transactions of a social insurance program, the debt that it holds does not represent the actuarial present value of estimated future benefits (or future benefits less taxes) for the current participants in the program; nor does it represent the actuarial present value of estimated future benefits (or future benefits less taxes) for the current participants plus the estimated future participants over some stated time period. The future transactions of Federal social insurance and employee retirement programs, which own 92 percent of the debt held by Government accounts, are important in their own right and need to be analyzed separately. This can be done through information published in the actuarial and financial reports for these programs.[4]

This Budget uses a variety of information sources to analyze the condition of Social Security and Medicare, the Government's two largest social insurance programs. Chapter 13 of this volume, "Stewardship," projects Social Security and Medicare outlays to the year 2080 relative to GDP. It also discusses the actuarial projections prepared for the Social Security and Medicare trustees' reports, which evaluate the long-run outlook for these programs. The excess of future Social Security and Medicare benefits relative to their dedicated income is very different in concept and much larger in size than the amount of Treasury debt that these programs hold.

For all these reasons, debt held by the public is a better gauge of the effect of the budget on the credit markets than gross Federal debt.

Government Deficits or Surpluses and the Change in Debt

Table 16–2 summarizes Federal borrowing and debt from 2008 through 2019. In 2008 the Government borrowed $768 billion, increasing the debt held by the public from $5,035 billion at the end of 2007 to $5,803 billion at the end of 2008. The debt held by Government accounts increased $267 billion, and gross Federal debt increased by $1,035 billion to $9,986 billion.

Debt Held by the Public.—The Federal Government primarily finances deficits by borrowing from the public, and it primarily uses surpluses to repay debt held by the public.[5] Table 16–2 shows the relationship between the Federal deficit or surplus and the change in debt held by the public. The borrowing or debt repayment depends on the Federal Government's expenditure programs and tax laws, on the economic conditions that influence tax receipts and outlays, and on debt management policy. The sensitivity of the budget to economic conditions is analyzed in Chapter 12 of this volume, "Economic Assumptions."

The total or unified budget surplus consists of two parts: the on-budget surplus or deficit; and the surplus of the off-budget Federal entities, which have been excluded from the budget by law. Under present law, the off-budget Federal entities are the Social Security trust funds (Old-Age and Survivors Insurance and Disability Insurance) and the Postal Service fund.[6] The on-budget and off-budget surpluses or deficits are added together to determine the Government's financing needs.

[4] Extensive actuarial analyses of the Social Security and Medicare programs are published in the annual reports of the boards of trustees of these funds. The actuarial estimates for Social Security, Medicare, and the major Federal employee retirement programs are summarized in the *Financial Report of the United States Government*, prepared annually by the Treasury Department.

[5] Treasury debt held by the public is measured as the sales price plus the amortized discount (or less the amortized premium). At the time of sale, the book value equals the sales price. Subsequently, it equals the sales price plus the amount of the discount that has been amortized up to that time. In equivalent terms, the book value of the debt equals the principal amount due at maturity (par or face value) less the unamortized discount. (For a security sold at a premium, the definition is symmetrical.) For inflation-indexed notes and bonds, the book value includes a periodic adjustment for inflation. Agency debt is generally recorded at par.

[6] For further explanation of the off-budget Federal entities, see Chapter 22 of this volume, "Off-Budget Federal Entities and Non-Budgetary Activities."

Table 16-2. FEDERAL GOVERNMENT FINANCING AND DEBT

(In billions of dollars)

	Actual	Estimate										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Financing:												
Unified budget deficit	458.6	1,841.2	1,258.4	929.4	557.4	512.3	535.9	527.7	645.4	674.5	687.7	778.7
Other transactions affecting borrowing from the public:												
Changes in financial assets and liabilities:[1]												
Change in Treasury operating cash balance	296.4	–301.6	......	......	......	......	......	......	......	......	......	......
Net disbursements of credit financing accounts:												
Direct loan accounts	27.2	567.4	128.3	91.1	69.9	82.2	80.4	78.1	73.4	70.4	68.6	65.2
Guaranteed loan accounts	5.6	4.4	–5.5	4.6	7.1	6.5	6.5	6.3	5.3	5.3	3.1	1.1
Troubled Asset Relief Program (TARP) equity purchase accounts	......	166.4	–9.5	–10.3	–13.7	–14.4	–24.3	–14.6	–10.4	–9.1	–9.1	–5.8
Financing accounts for potential additional financial stabilization efforts	......	459.9	–19.8	–21.7	–23.9	–26.3	–28.9	–31.8	–35.0	–38.5	–42.3	–51.2
Subtotal, net disbursements	32.9	1,198.0	93.6	63.6	39.4	48.1	33.7	38.0	33.3	28.1	20.2	9.2
Net purchases of non-Federal securities by the National Railroad Retirement Investment Trust (NRRIT)	–7.1	–8.4	–0.9	–1.3	–0.9	–1.0	–1.1	–1.3	–1.6	–1.4	–1.5	–1.4
Net change in other financial assets and liabilities[2]	–12.4	......	......	......	......	......	......	......	......	......	......	......
Subtotal, changes in financial assets and liabilities	309.8	888.0	92.7	62.3	38.5	47.1	32.6	36.7	31.7	26.6	18.7	7.8
Seigniorage on coins	–0.7	–0.6	–0.6	–0.6	–0.6	–0.7	–0.7	–0.7	–0.7	–0.7	–0.7	–0.7
Total, other transactions affecting borrowing from the public	309.0	887.5	92.1	61.7	37.9	46.4	31.9	36.0	31.0	25.9	18.0	7.1
Total, requirement to borrow from the public (equals change in debt held by the public)	767.6	2,728.6	1,350.5	991.2	595.3	558.7	567.8	563.7	676.4	700.5	705.8	785.8
Changes in Debt Subject to Statutory Limitation:												
Change in debt held by the public	767.6	2,728.6	1,350.5	991.2	595.3	558.7	567.8	563.7	676.4	700.5	705.8	785.8
Change in debt held by Government accounts	267.4	153.1	238.3	226.4	296.5	315.8	342.1	361.8	303.5	292.1	293.9	256.8
Less: change in debt not subject to limit and other adjustments	3.5	1.8	0.7	1.6	1.6	2.1	1.3	1.8	1.7	2.4	2.2	1.2
Total, change in debt subject to statutory limitation	1,038.5	2,883.5	1,589.5	1,219.1	893.5	876.5	911.2	927.3	981.6	995.0	1,001.8	1,043.9
Debt Subject to Statutory Limitation, End of Year:												
Debt issued by Treasury	9,960.6	12,842.5	14,431.6	15,649.7	16,541.8	17,417.0	18,326.8	19,253.2	20,233.6	21,227.9	22,229.2	23,272.4
Less: Treasury debt not subject to limitation (–)[3]	–14.5	–12.9	–12.5	–11.4	–10.1	–8.8	–7.4	–6.4	–5.2	–4.5	–4.0	–3.4
Agency debt subject to limitation	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Adjustment for discount and premium[4]	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
Total, debt subject to statutory limitation[5]	9,959.8	12,843.3	14,432.9	15,652.0	16,545.5	17,422.0	18,333.2	19,260.5	20,242.1	21,237.1	22,238.9	23,282.8
Debt Outstanding, End of Year:												
Gross Federal debt:[6]												
Debt issued by Treasury	9,960.6	12,842.5	14,431.6	15,649.7	16,541.8	17,417.0	18,326.8	19,253.2	20,233.6	21,227.9	22,229.2	23,272.4
Debt issued by other agencies	25.2	25.0	24.7	24.2	23.9	23.1	23.2	22.3	21.8	20.1	18.5	17.9
Total, gross Federal debt	9,985.8	12,867.5	14,456.3	15,673.9	16,565.7	17,440.2	18,350.0	19,275.5	20,255.4	21,248.0	22,247.7	23,290.3
Held by:												
Debt held by Government accounts	4,183.0	4,336.1	4,574.4	4,800.8	5,097.3	5,413.1	5,755.2	6,116.9	6,420.4	6,712.6	7,006.5	7,263.3
Debt held by the public[7]	5,802.7	8,531.4	9,881.9	10,873.1	11,468.4	12,027.1	12,594.8	13,158.6	13,835.0	14,535.4	15,241.2	16,027.0

[1] A decrease in the Treasury operating cash balance (which is an asset) is a means of financing a deficit and therefore has a negative sign. An increase in checks outstanding (which is a liability) is also a means of financing a deficit and therefore also has a negative sign.

[2] Besides checks outstanding, includes accrued interest payable on Treasury debt, uninvested deposit fund balances, allocations of special drawing rights, and other liability accounts; and, as an offset, cash and monetary assets (other than the Treasury operating cash balance), other asset accounts, and profit on sale of gold. Also includes the impact of changes to the U.S. quota and U.S. participation in the New Arrangements to Borrow at the International Monetary Fund.

[3] Consists primarily of debt issued by or held by the Federal Financing Bank.

[4] Consists mainly of unamortized discount (less premium) on public issues of Treasury notes and bonds (other than zero-coupon bonds) and unrealized discount on Government account series securities.

[5] The statutory debt limit is $12,104 billion, enacted on February 17, 2009.

[6] Treasury securities held by the public and zero-coupon bonds held by Government accounts are almost all measured at sales price plus amortized discount or less amortized premium. Agency debt securities are almost all measured at face value. Treasury securities in the Government account series are otherwise measured at face value less unrealized discount (if any).

[7] At the end of 2008, the Federal Reserve Banks held $491.1 billion of Federal securities and the rest of the public held $5,311.6 billion. Debt held by the Federal Reserve Banks is not estimated for future years.

Over the long run, it is a good approximation to say that "the deficit is financed by borrowing from the public" or "the surplus is used to repay debt held by the public." However, the Government's need to borrow in any given year has always depended on several other factors besides the unified budget surplus or deficit, such as the change in the Treasury operating cash balance. These other factors—"other transactions affecting borrowing from the public"—can either increase or decrease the Government's need to borrow and can vary considerably in size from year to year. As a result of the Government's recent extraordinary efforts to stabilize the Nation's credit markets, these other factors are currently resulting in dramatic increases in borrowing from the public. The other transactions affecting borrowing from the public are presented in Table 16–2 (an increase in the need to borrow is represented by a positive sign, like the deficit).

In 2008 the deficit was $459 billion while these other factors—primarily an increase in the Government's cash balances—increased the need to borrow by $309 billion. As a result, the Government borrowed $768 billion from the public. The large impact of the other factors in 2008 was primarily due to the record $296 billion increase in the cash balance, which was nearly entirely the result of Treasury's creation of the Supplementary Financing Program (SFP). Under this temporary program, Treasury issues short-term debt and deposits the cash proceeds with the Federal Reserve for use by the Federal Reserve in its actions to stabilize the financial markets.

Largely as a result of the Government's continued efforts to restore the health of the Nation's financial markets and economy—including the Troubled Asset Relief Program (TARP), purchases of mortgage-backed securities issued or guaranteed by the Government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac, and other financial stabilization activities—the other factors are estimated to increase borrowing by $887 billion in 2009. In 2010–2019, these other factors are expected to increase borrowing by annual amounts ranging from $7 billion to $92 billion.

Prior to 2008, the effect of these other transactions had been much smaller. In the 20 years between 1988 and 2007, the cumulative deficit was $2,956 billion, the increase in debt held by the public was $3,145 billion, and other factors added a total of $190 billion of borrowing, 6 percent of total borrowing over this period. By contrast, the other factors resulted in over 40 percent of the total increase in borrowing from the public for 2008 and are projected to result in 33 percent of the increase for 2009.

Three specific factors presented in Table 16–2 are especially important.

Change in Treasury operating cash balance.—The cash balance increased by a record $296 billion in 2008. As noted above, this increase was more than accounted for by Treasury's creation of the SFP. In the preceding 10 years, changes in the cash balance had been much smaller, ranging from a decrease of $26 billion in 2003 to an increase of $23 billion in 2007. The operating cash balance is estimated to decrease by $302 billion by the end of 2009, as the SFP winds down, and then to remain essentially level. Changes in the operating cash balance, while occasionally large, are inherently limited over time. Decreases in cash—a means of financing the Government—are limited by the amount of past accumulations, which themselves required financing when they were built up. Increases are limited because it is generally more efficient to repay debt.

Net financing disbursements of the direct loan and guaranteed loan financing accounts.—Under the Federal Credit Reform Act of 1990 (FCRA), budget outlays for direct loans and loan guarantees consist of the estimated subsidy cost of the loans or guarantees at the time when the direct loans are disbursed or the guaranteed loans are made. The cash flows to and from the public resulting from these loans and guarantees—the disbursement and repayment of loans, the default payments on loan guarantees, the collections of interest and fees, and so forth—are not costs (or offsets to costs) to the Government except for those costs already included in budget outlays. Therefore, they are non-budgetary in nature and are recorded as transactions of the non-budgetary financing account for each credit program.[7]

The financing accounts also include several types of intragovernmental transactions. In particular, they receive payment from the credit program accounts for the costs of new direct loans and loan guarantees; they also receive payment for any upward reestimate of the costs of direct loans and loan guarantees outstanding. These collections are offset against the gross disbursements of the financing accounts in determining the accounts' total net cash flows. The gross disbursements include outflows to the public—such as of loan funds or default payments—as well as the payment of any downward reestimate of costs to budgetary receipt accounts. The total net cash flows of the financing accounts, consisting of transactions with both the public and the budgetary accounts, are called "net financing disbursements." They occur in the same way as the "outlays" of a budgetary account and therefore affect the requirement for borrowing from the public in the same way as the deficit.

The intragovernmental transactions of the financing accounts do not affect Federal borrowing from the public. Although the deficit changes because of the budget's outlay to, or receipt from, a financing account, the net financing disbursement changes in an equal amount with the opposite sign, so the effects are cancelled out. On the other hand, financing account disbursements to the public increase the requirement for borrowing from the public in the same way as an increase in budget outlays that are disbursed to the public in cash. Likewise, financing account receipts from the public can be used to finance the payment of the Government's obligations, and therefore they reduce the requirement for Federal borrowing

[7] The Federal Credit Reform Act of 1990 (sec. 505(b)) requires that the financing accounts be non-budgetary. As explained in Chapter 22 of this volume, "Off-Budget Federal Entities and Non-Budgetary Activities," they are non-budgetary in concept because they do not measure cost. For additional discussion of credit reform, see Chapter 7 of this volume, "Credit and Insurance," Chapter 25, "The Budget System and Concepts," and the other references cited in Chapter 22 of this volume.

from the public in the same way as an increase in budget receipts.

In some years, large net upward or downward reestimates in the cost of outstanding direct and guaranteed loans may cause large swings in the net financing disbursements. In 2008 and 2009, the downward reestimates in some accounts largely cancelled out the upward reestimates in other accounts, for a net upward reestimate of $2.8 billion in 2008 and $0.5 billion in 2009.

The financing accounts are estimated to increase the need for borrowing by a record $1,198 billion in 2009, far exceeding the largest previous increase of $33 billion in 2008. Borrowing related to the financing accounts in 2009 is largely driven by credit market stabilization efforts, including a net $365 billion for the various components of the Troubled Asset Relief Program, $251 billion for purchases of mortgage-backed securities issued or guaranteed by the GSEs, and $460 billion for additional potential financial stabilization activities.[8] After 2009, the credit financing accounts are expected to increase borrowing by much smaller amounts ranging from $9 billion to $94 billion over the next 10 years.

Net purchases of non-Federal securities by the National Railroad Retirement Investment Trust (NRRIT).—This trust fund was established by the Railroad Retirement and Survivors' Improvement Act of 2001. In 2003, most of the assets in the Railroad Retirement Board trust funds were transferred to the new trust fund, which invests its assets primarily in private stocks and bonds. The Act required special treatment of the purchase or sale of non-Federal assets by this trust fund, treating such purchases as a means of financing rather than an outlay. Therefore, the increased need to borrow from the public to finance the purchase of non-Federal assets is part of the "other transactions affecting borrowing from the public" rather than included as an increase in the deficit. While net purchases and redemptions affect borrowing from the public, gains and losses on NRRIT's portfolio are included in both the other factors and, with the opposite sign, in NRRIT's net outlays in the deficit, for no net impact on borrowing from the public. The increased borrowing associated with the initial transfer expanded publicly held debt by $20 billion in 2003. Net transactions in subsequent years have been much smaller. In 2008, net reductions in the value of NRRIT's portfolio were $7 billion, due primarily to losses rather than redemptions, for little net impact on borrowing from the public. The net reductions are expected to be $8 billion in 2009 and then to be smaller amounts in future years.[9]

Debt held by Government accounts.—The amount of Federal debt issued to Government accounts depends largely on the surpluses of the trust funds, both on-budget and off-budget, which owned 93 percent of the total Federal debt held by Government accounts at the end of 2008. In 2008, the total trust fund surplus was $266 billion, and trust funds invested $258 billion in Federal securities. Investment may differ somewhat from the surplus due to changes in the amount of cash assets not currently invested. The remainder of debt issued to Government accounts is owned by a number of special funds and revolving funds. The debt held in major accounts and the annual investments are shown in Table 16–5.

Debt Held by the Public Net of Financial Assets and Liabilities

While debt held by the public is a key measure for examining the role and impact of the Federal Government in the U.S. and international credit markets and for other purposes, it provides incomplete information on the Government's financial condition. The U.S. Government holds significant financial assets, which must be offset against debt held by the public and other financial liabilities to achieve a more balanced understanding of the Government's financial condition.

One transaction that can increase both borrowing and assets is an increase to the Treasury operating cash balance. For example, in 2008, under the Supplementary Financing Program, the Government borrowed nearly $300 billion to increase the Treasury operating cash balance held with the Federal Reserve, to assist the Fed in its actions to stabilize the financial markets; the cash balance created by the program represents an asset that is available to the Federal Government. Looking at both sides of this transaction—the borrowing to obtain the cash and the asset of the cash holdings—provides much more information about the Government's financial condition than looking at only the borrowing from the public. Another example of a transaction that simultaneously increases borrowing from the public and Federal assets is Government borrowing to issue direct loans to the public. When the direct loan is made, the Government is also acquiring an asset in the form of future payments of principal and interest, net of the Government's expected losses on the loans. Similarly, when the National Railroad Retirement Investment Trust increases its holdings of non-Federal securities, the borrowing to purchase those securities is offset by the value of the asset holdings.

The magnitude and the significance of the Government's financial assets has begun to increase greatly since the later part of 2008, as the Government takes actions, such as implementing the Troubled Asset Relief Program, to address the challenges facing the Nation's financial markets and economy.[10]

Table 16–3 presents debt held by the public net of the Government's financial assets and liabilities, or "net debt." At the end of 2008, debt held by the public was $5,803 billion, or 40.8 percent of GDP. The Government held $505 billion in net financial assets, including a cash balance of $372 billion, net credit financing account balances of $153 billion,[11] and other assets and liabilities that aggregated

[8] For further discussion of these programs, see Chapter 7 of this volume, "Credit and Insurance."

[9] The budget treatment of this fund is further discussed in Chapter 25 of this volume, "The Budget System and Concepts."

[10] For more information on the specific actions that the Government is taking, see Chapter 7 of this volume, "Credit and Insurance."

[11] Consistent with the presentation in the *Monthly Treasury Statement of Receipts and Outlays of the United States Government* (*Monthly Treasury Statement*), Table 16-3 presents the net financial assets associated with direct and guaranteed loans in the financing accounts created

Table 16-3. DEBT HELD BY THE PUBLIC NET OF FINANCIAL ASSETS AND LIABILITIES
(Dollar amounts in billions)

	Actual 2008	Estimate 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Debt Held by the Public:												
Debt held by the public	5,802.7	8,531.4	9,881.9	10,873.1	11,468.4	12,027.1	12,594.8	13,158.6	13,835.0	14,535.4	15,241.2	16,027.0
As a percent of GDP	40.8%	59.9%	67.1%	70.1%	69.6%	68.7%	68.5%	68.5%	69.0%	69.4%	69.6%	70.1%
Financial Assets Net of Liabilities:												
Treasury operating cash balance	371.6	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
Credit financing account balances:												
Direct loan accounts	195.8	763.2	891.5	982.6	1,052.5	1,134.7	1,215.2	1,293.2	1,366.6	1,437.0	1,505.6	1,570.9
Guaranteed loan accounts	–42.4	–38.0	–43.4	–38.8	–31.8	–25.2	–18.7	–12.4	–7.1	–1.8	1.2	2.3
TARP equity purchase accounts	......	166.4	156.8	146.5	132.8	118.4	94.1	79.5	69.1	60.0	50.9	45.1
Financing accounts for potential additional financial stabilization efforts	......	459.9	440.1	418.4	394.5	368.2	339.3	307.5	272.5	234.0	191.6	140.4
Subtotal, credit financing account balances	153.4	1,351.4	1,445.0	1,508.6	1,548.0	1,596.1	1,629.8	1,667.8	1,701.1	1,729.2	1,749.4	1,758.7
Government-sponsored enterprise preferred stock	2.0	107.9	149.2	172.9	172.9	172.9	172.9	172.9	172.9	172.9	172.9	172.9
Non-Federal securities held by NRRIT	24.8	16.4	15.5	14.2	13.4	12.4	11.3	10.0	8.4	6.9	5.4	4.0
Other assets net of liabilities	–46.4	–46.4	–46.4	–46.4	–46.4	–46.4	–46.4	–46.4	–46.4	–46.4	–46.4	–46.4
Total, financial assets net of liabilities	505.4	1,499.4	1,633.3	1,719.4	1,758.0	1,805.0	1,837.6	1,874.3	1,906.0	1,932.7	1,951.4	1,959.3
Debt Held by the Public Net of Financial Assets and Liabilities:												
Debt held by the public net of financial assets	5,297.3	7,032.0	8,248.5	9,153.6	9,710.4	10,222.0	10,757.2	11,284.3	11,928.9	12,602.7	13,289.8	14,067.8
As a percent of GDP	37.2%	49.4%	56.0%	59.1%	59.0%	58.4%	58.5%	58.8%	59.5%	60.1%	60.7%	61.5%

to a net liability of $20 billion. Therefore, net debt was $5,297 billion, or 37.2 percent of GDP. As shown in Table 16–3, the value of the Government's net financial assets is projected to nearly triple in 2009, from $505 billion to $1,499 billion, due nearly entirely to the Government's credit market stabilization efforts. As a result of increasing Federal financial assets, while debt held by the public is expected to increase by more than 19 percent of GDP, from 40.8 percent to 59.9 percent, net debt is expected to increase by only 12 percent of GDP, from 37.2 percent to 49.4 percent.

Debt securities and other financial assets and liabilities do not encompass all the assets and liabilities of the Federal Government. For example, accounts payable occur in the normal course of buying goods and services; Social Security benefits are due and payable as of the end of the month but, according to statute, are paid during the next month; and liabilities for future pension and retiree health payments are incurred as part of the current compensation for the services performed by Federal civilian and military employees in producing Government outputs. Like debt securities sold in the credit market, these liabilities have their own distinctive effects on the economy. The Federal Government also has significant holdings of non-financial assets, such as land, mineral deposits, buildings, and equipment. A unique and important asset is the Government's sovereign power to tax. Federal assets and liabilities are analyzed within the broader conceptual framework of Federal resources and responsibilities in the "Stewardship" chapter of this volume. The different types of assets and liabilities are reported annually in the financial statements of Federal agencies and in the *Financial Report of the United States Government*, prepared by the Treasury Department.

under the Federal Credit Reform Act of 1990. Therefore, the figures differ by relatively small amounts from the figures in the "Stewardship" Chapter of this volume, which reflect all loans made or guaranteed by the Federal Government, including loans originated prior to implementation of the FCRA.

Agency Debt

Some Federal agencies, shown in Table 16–4, sell or have sold debt securities to the public and, at times, to other Government accounts. At one time, several other agencies issued debt securities, but this activity has declined significantly over time. Currently, new debt is issued only by the Tennessee Valley Authority (TVA) and the Federal Housing Administration (FHA); the remaining agencies are repaying existing borrowing. At the end of 2008, total agency debt remained nearly unchanged at the end-of–2007 level of $25.2 billion. Agency debt is less than one-half of one percent of Federal debt held by the public. Agencies are estimated to repay small amounts of debt in 2009 and 2010.

The predominant agency borrower is the TVA, which had borrowed $24.7 billion from the public as of the end of 2008, or 98 percent of the total debt of all agencies. TVA sells debt primarily to finance capital expenditures.

The TVA has traditionally financed its capital construction by selling bonds and notes to the public. Since 2000, it has also employed two types of alternative financing methods, lease/leaseback obligations and prepayment obligations. Under the lease/leaseback obligations method, TVA signs contracts to lease some facilities and equipment to private investors and simultaneously leases them back. It receives a lump sum for leasing out its assets, and then leases them back at fixed annual payments for a set

Table 16–4. AGENCY DEBT
(In millions of dollars)

	Borrowing or repayment (-) of debt			Debt end of 2010 estimate
	2008 actual	2009 estimate	2010 estimate	
Borrowing from the public:				
Housing and Urban Development:				
Federal Housing Administration	–16	-*	......	69
Architect of the Capitol	–2	–6	–5	139
National Archives	–11	–11	–13	180
Tennessee Valley Authority:				
Bonds and notes	173	–13	–107	22,554
Lease/leaseback obligations	–41	–41	–48	941
Prepayment obligations	–106	–105	–105	823
Total, borrowing from the public	–2	–177	–278	24,706
Borrowing from other funds:				
Tennessee Valley Authority	-*	......	......	6
Total, borrowing from other funds	-*	......	......	6
Total, agency borrowing	–2	–177	–278	24,712

* $500,000 or less.

number of years. TVA retains substantially all of the economic benefits and risks related to ownership of the assets.[12] Under the prepayment obligations method, TVA's power distributors may prepay a portion of the price of the power they plan to purchase in the future. In return, they obtain a discount on a specific quantity of the future power they buy from TVA. The quantity varies, depending on TVA's estimated cost of borrowing.

The Office of Management and Budget (OMB) determined that each of these alternative financing methods is a means of financing the acquisition of assets owned and used by the Government, or of refinancing debt previously incurred to finance such assets. They are equivalent in concept to other forms of borrowing from the public, although under different terms and conditions. The budget therefore records the upfront cash proceeds from these methods as borrowing from the public, not offsetting collections.[13] The obligations under these methods are reported as liabilities on TVA's balance sheet under generally accepted accounting principles. Table 16–4 presents these alternative financing methods separately from TVA bonds and notes to distinguish between the types of borrowing. At the end of 2008, obligations were $1.0 billion for lease/leasebacks and $1.0 billion for prepayments. Obligations for these two types of alternative financing are estimated to continue to decline as TVA fulfills the terms of the contracts.

The FHA has for many years issued both checks and debentures as means of paying claims to the public that arise from defaults on FHA-insured mortgages. Issuing debentures to pay the Government's bills is equivalent to selling securities to the public and then paying the bills by disbursing the cash borrowed, so the transaction is recorded as being simultaneously an outlay and borrowing. The debentures are therefore classified as agency debt.

A number of years ago, the Federal Government guaranteed the debt used to finance the construction of buildings for the National Archives and the Architect of the Capitol, and subsequently exercised full control over the design, construction, and operation of the buildings. These arrangements are equivalent to direct Federal construction financed by Federal borrowing. The construction expenditures and interest were therefore classified as Federal outlays, and the borrowing was classified as Federal agency borrowing from the public.

The amount of agency securities sold to the public has been reduced over time by borrowing from the Federal Financing Bank (FFB). The FFB is an entity within the Treasury Department, one of whose purposes is to substitute Treasury borrowing for agency borrowing from the public. It has the authority to purchase agency debt and finance these purchases by borrowing from the Treasury. Agency borrowing from the FFB is not included in gross Federal debt. It would be double counting to add

[12] This arrangement is at least as governmental as a "lease-purchase without substantial private risk." For further detail on the current budgetary treatment of lease-purchase without substantial private risk, see OMB Circular No. A–11, Appendix B.

[13] This budgetary treatment differs from the treatment in the *Monthly Treasury Statement* Table 6 Schedule C, and the *Combined Statement of Receipts, Outlays, and Balances of the United States Government* Schedule 3, both published by the Department of the Treasury. These two schedules, which present debt issued by agencies other than Treasury, exclude the TVA alternative financing arrangements. This difference in treatment is one factor causing minor differences between debt figures reported in the Budget and debt figures reported by Treasury. The other factor is adjustments for the timing of the reporting of Federal debt held by the National Railroad Retirement Investment Trust.

Table 16–5. DEBT HELD BY GOVERNMENT ACCOUNTS[1]
(In millions of dollars)

Description	Investment or Disinvestment (-) 2008 actual	2009 estimate	2010 estimate	Holdings end of 2010 estimate
Investment in Treasury debt:				
Legislative Branch: Payments to copyright owners	64	*	......	1,192
Energy:				
Nuclear waste disposal fund[1]	560	1,252	2,341	24,200
Uranium enrichment decontamination fund	87	148	325	5,183
Health and Human Services:				
Federal hospital insurance trust fund	–636	–11,322	–14,883	292,536
Federal supplementary medical insurance trust fund	19,842	5,416	–1,717	62,789
Vaccine injury compensation fund	42	130	134	2,932
Homeland Security:				
Aquatic resources trust fund	100	33	70	2,050
Oil spill liability trust fund	204	156	110	1,390
Housing and Urban Development:				
Federal Housing Administration mutual mortgage fund	–3,320	–9,752	1,710	11,043
Guarantees of mortgage-backed securities	512	267	381	9,919
Interior:				
Abandoned mine reclamation fund	66	–63	26	2,393
Bureau of Land Management permanent operating funds	–248	–120	–130	1,692
Environmental improvement and restoration fund	31	6	19	1,145
Justice: Assets forfeiture fund	278	217	175	2,000
Labor:				
Unemployment trust fund	–2,491	–44,432	–6,000	22,000
Pension Benefit Guaranty Corporation[1]	–1,375	1,323	–75	14,398
State: Foreign service retirement and disability trust fund	478	448	129	15,432
Transportation:				
Airport and airway trust fund	–257	–154	–601	6,919
Highway trust fund	607	–8,731	–1,835	2,245
Aviation insurance revolving fund	189	224	188	1,490
Treasury:				
Exchange stabilization fund	411	–827	1,080	17,100
Federal Financing Bank	30	463	1,259	1,752
Veterans Affairs:				
National service life insurance trust fund	–480	–582	–627	8,063
Veterans special life insurance fund	13	1	–9	1,991
Corps of Engineers: Harbor maintenance trust fund	782	401	442	5,340
Other Defense-Civil:				
Military retirement trust fund	25,717	54,951	52,193	323,093
Medicare-eligible retiree health care fund	20,534	18,644	19,965	151,335
Education benefits fund	309	106	87	1,908
Environmental Protection Agency:				
Leaking underground storage tank trust fund	228	227	199	3,591
Hazardous substance trust fund	141	141	135	3,160
International Assistance Programs:				
Overseas Private Investment Corporation	214	164	121	4,976
Office of Personnel Management:				
Civil service retirement and disability trust fund	27,186	34,219	33,904	796,973
Postal Service retiree health benefits fund	6,802	6,926	7,180	46,400
Employees life insurance fund	1,432	1,265	1,189	36,851
Employees health benefits fund	–327	–377	82	15,270
Social Security Administration:				
Federal old-age and survivors insurance trust fund[2]	182,389	148,061	150,218	2,448,930
Federal disability insurance trust fund[2]	2,657	–8,294	–12,089	196,104
District of Columbia: Federal pension fund	–7	168	135	3,942
Farm Credit System Insurance Corporation:				
Farm Credit System Insurance fund	249	388	458	3,458
Federal Communications Commission:				
Universal service fund	710	–*	......	5,741

Table 16–5. DEBT HELD BY GOVERNMENT ACCOUNTS[1]—Continued
(In millions of dollars)

Description	Investment or Disinvestment (–) 2008 actual	2009 estimate	2010 estimate	Holdings end of 2010 estimate
Federal Deposit Insurance Corporation:				
Federal deposit insurance fund	–17,578	–29,937	......	......
FSLIC resolution fund	137	34	48	3,402
National Credit Union Administration:				
Share insurance fund	107	–6,512	1,636	2,369
Postal Service fund[2]	626	–1,605	......	......
Railroad Retirement Board trust funds	–166	177	79	2,086
United States Enrichment Corporation fund	40	69	73	1,684
Other Federal funds	203	–326	135	3,679
Other trust funds	–5	63	60	4,086
Unrealized discount[1]	328	......	......	–1,830
Total, investment in Treasury debt[1]	267,417	153,056	238,320	4,574,402
Investment in agency debt:				
Railroad Retirement Board:				
National Railroad Retirement Investment Trust	–*	......	......	6
Total, investment in agency debt[1]	–*	......	......	6
Total, investment in Federal debt[1]	267,416	153,056	238,320	4,574,408
MEMORANDUM				
Investment by Federal funds (on-budget)	8,696	–17,241	37,050	320,493
Investment by Federal funds (off-budget)	626	–1,605	......	......
Investment by trust funds (on-budget)	72,719	32,135	63,141	1,610,711
Investment by trust funds (off-budget)	185,047	139,767	138,129	2,645,034
Unrealized discount[1]	328	......	......	–1,830

* $500 thousand or less.

[1] Debt held by Government accounts is measured at face value except for the Treasury zero-coupon bonds held by the Nuclear waste disposal fund and the Pension Benefit Guaranty Corporation (PBGC), which are recorded at market or redemption price; and the unrealized discount on Government account series, which is not distributed by account. Changes are not estimated in the unrealized discount. If recorded at face value, at the end of 2008 the debt figures would be $22.0 billion higher for the Nuclear waste disposal fund and $3.6 billion higher for PBGC than recorded in this table.

[2] Off-budget Federal entity.

together (a) the agency borrowing from the FFB and (b) the Treasury borrowing from the public that is needed to provide the FFB with the funds to lend to the agencies.

Debt Held by Government Accounts

Trust funds, and some special funds and public enterprise revolving funds, accumulate cash in excess of current needs in order to meet future obligations. These cash surpluses are generally invested in Treasury debt.

After increasing for several consecutive years, investment by trust funds and other Government accounts fell from $293 billion in 2007 to $267 billion in 2008, due in part to the effects of worsening economic and financial conditions on the collections and expenditures of Government accounts that invest in Treasury securities. Investment by Government accounts is estimated to be $153 billion in 2009 and $238 billion in 2010, as shown in Table 16–5. The holdings of Federal securities by Government accounts are estimated to grow to $4,574 billion by the end of 2010, or 32 percent of the gross Federal debt. The percentage is estimated to remain relatively stable over the next 10 years.

The large investment by Government accounts is concentrated among a few funds: the Social Security Old-Age and Survivors Insurance (OASI) and Disability Insurance trust funds; the Medicare Hospital Insurance and Supplementary Medical Insurance trust funds; and four Federal employee retirement funds. These Federal employee retirement funds include the military retirement trust fund, the special fund for uniformed services Medicare-eligible retiree health care, the Civil Service Retirement and Disability Fund (CSRDF), and a separate special fund for Postal Service retiree health benefits. At the end of 2010, these Social Security, Medicare, and Federal employee retirement funds are estimated to own 94 percent of the total debt held by Government accounts. During 2008–2010, the Social Security OASI fund has a large surplus and is estimated to invest a total of $481 billion, 73 percent of total net investment by Government accounts. Over this period, the military retirement trust fund is projected to invest $133 billion, another 20 percent of the total. As a result of the economic and financial challenges facing the Nation and other factors, some Government accounts reduce their investments in Federal securities during 2008–2010. During these years, the Unemployment Trust Fund's investments are expected to fall by $53 billion—about two thirds—and the Federal Deposit Insurance Fund is expected to entirely disinvest its holdings of Federal securities.

Technical note on measurement.—The Treasury securities held by Government accounts consist almost entirely of the Government account series. Most were issued at par value (face value), and the securities issued at a discount or premium were traditionally recorded at par in the OMB and Treasury reports on Federal debt. However, there are two kinds of exceptions.

First, Treasury issues zero-coupon bonds to a very few Government accounts. Because the purchase price is a small fraction of par value and the amounts are large, the holdings are recorded in Table 16–5 at par value less unamortized discount. The only two Government accounts that held zero-coupon bonds during the period of this table are the Nuclear Waste Disposal Fund in the Department of Energy and the Pension Benefit Guaranty Corporation (PBGC). The total unamortized discount on zero-coupon bonds was $25.6 billion at the end of 2008.

Second, Treasury subtracts the unrealized discount on other Government account series securities in calculating "net Federal securities held as investments of Government accounts." Unlike the discount recorded for zero-coupon bonds and debt held by the public, the unrealized discount is the discount at the time of issue and is not amortized over the term of the security. In Table 16–5 it is shown as a separate item at the end of the table and not distributed by account. The amount was $1.8 billion at the end of 2008.

Limitations on Federal Debt

Definition of debt subject to limit.—Statutory limitations have usually been placed on Federal debt. Until World War I, the Congress ordinarily authorized a specific amount of debt for each separate issue. Beginning with the Second Liberty Bond Act of 1917, however, the nature of the limitation was modified in several steps until it developed into a ceiling on the total amount of most Federal debt outstanding. This last type of limitation has been in effect since 1941. The limit currently applies to most debt issued by the Treasury since September 1917, whether held by the public or by Government accounts; and other debt issued by Federal agencies that, according to explicit statute, is guaranteed as to principal and interest by the United States Government.

The third part of Table 16–2 compares total Treasury debt with the amount of Federal debt that is subject to the limit. Nearly all Treasury debt is subject to the debt limit.

A large portion of the Treasury debt not subject to the general statutory limit was issued by the Federal Financing Bank. The FFB is authorized to have outstanding up to $15 billion of publicly issued debt. It issued $14 billion of securities to the Civil Service Retirement and Disability Fund on November 15, 2004, in exchange for an equal amount of regular Treasury securities. The FFB securities have the same interest rates and maturities as the regular Treasury securities for which they were exchanged. The securities mature on dates from June 30, 2009, through June 30, 2019.

The Housing and Economic Recovery Act of 2008 created a new type of debt not subject to limit. This debt, termed "Hope Bonds," is issued by Treasury to the Federal Financing Bank for the HOPE for homeowners program. Treasury issued $30 million in Hope Bonds in 2008. Outstanding Hope Bonds are projected be $0.5 billion at the end of 2009, $1.8 billion at the end of 2010, and $2.5 billion at the end of 2011, and then to increase by small amounts in subsequent years.

The other Treasury debt not subject to the general limit consists almost entirely of silver certificates and other currencies no longer being issued. It was $494 million at the end of 2008 and is projected to gradually decline over time.

The sole agency debt currently subject to the general limit, $51 million at the end of 2008, is certain debentures issued by the Federal Housing Administration.[14]

Some of the other agency debt, however, is subject to its own statutory limit. For example, the Tennessee Valley Authority is limited to $30 billion of bonds and notes outstanding.

The comparison between Treasury debt and debt subject to limit also includes an adjustment for measurement differences in the treatment of discounts and premiums. As explained earlier in this chapter, debt securities may be sold at a discount or premium, and the measurement of debt may take this into account rather than recording the face value of the securities. However, the measurement differs between gross Federal debt (and its components) and the statutory definition of debt subject to limit. An adjustment is needed to derive debt subject to limit (as defined by law) from Treasury debt. The amount is relatively small: $13.7 billion at the end of 2008 compared to the total unamortized discount (less premium) of $64.1 billion on all Treasury securities.

Changes in the debt limit.—The statutory debt limit has been changed many times. Since 1960, Congress has passed 76 separate acts to raise the limit, extend the duration of a temporary increase, or revise the definition.[15]

During the 1990s, the debt limit was increased three times by amounts large enough to last for two years or more. All three of these increases were enacted as part of a deficit reduction package or a plan to balance the budget and were intended to last a relatively long time: the Omnibus Budget Reconciliation Act of 1990; the Omnibus Budget Reconciliation Act of 1993; and the Balanced Budget Act of 1997. The 1997 increase lasted until 2002. Since 2002, the debt limit has been raised eight times.

In five instances of increases to the debt limit since 2002, the debt reached or neared the ceiling prior to the increase, and the ceiling was raised by an amount sufficient to last less than two years. The debt limit was increased to $6,400 billion on June 28, 2002, to $7,384 billion on May 27, 2003, to $8,184 billion on November 19, 2004, to $8,965 billion on March 20, 2006, and to $9,815 billion on September 29, 2007.

[14] At the end of 2008, $18 million of FHA debentures was not subject to limit.

[15] The Acts and the statutory limits since 1940 are listed in *Historical Tables, Budget of the United States Government, Fiscal Year 2010*, Table 7.3.

At many times in the past several decades, including 2002, 2003, 2004, and 2006, the Government has reached the statutory debt limit before an increase has been enacted. When this has occurred, it has been necessary for the Treasury Department to take administrative actions to meet the Government's obligation to pay its bills and invest its trust funds while remaining below the statutory limit. One such measure is the partial or full disinvestment of the Government Securities Investment Fund (G-fund). This fund is one component of the Thrift Savings Plan (TSP), a defined contribution pension plan for Federal employees. The Secretary has statutory authority to suspend investment of the G-fund in Treasury securities as needed to prevent the debt from exceeding the debt limit. Treasury determines each day the amount of investments that would allow the fund to be invested as fully as possible without exceeding the debt limit. The Treasury Secretary is also authorized to declare a debt issuance suspension period, which allows him or her to redeem a limited amount of securities held by the Civil Service Retirement and Disability Fund and stop investing its receipts. The law requires that when any such actions are taken with the TSP G-fund or the CSRDF, the Secretary is required to make the fund whole after the debt limit has been raised by restoring the forgone interest and investing the fund fully. Another measure for staying below the debt limit is disinvestment of the Exchange Stabilization Fund.

In addition to these steps, Treasury has previously replaced regular Treasury securities with borrowing by the FFB, which, as explained above, is not subject to the debt limit. This measure was most recently taken in November 2004, and the outstanding FFB securities will begin to mature in June 2009.

Because the September 29, 2007, increase was enacted before the limit was reached, it was not necessary to take any of these actions. However, prior to the enactment, on September 21, as the anticipated reaching of the limit approached, Treasury announced that it would discontinue the acceptance of subscriptions to the State and local government series of securities, beginning on September 27. On September 28, following Congressional passage of the debt limit increase, Treasury reinstated acceptance of these subscriptions.

Since July 2008, the debt limit has been increased three times, in each case before the Government approached the limit. In these three instances, the increase was included in a larger piece of legislation aimed at stabilizing the financial markets and restoring economic growth. The increases provided room under the statutory debt ceiling for the activities authorized by each piece of legislation. On July 30, 2008, the debt limit was increased by $800 billion, to $10,615 billion, as part of the Housing and Economic Recovery Act of 2008. On October 3, 2008, the Emergency Economic Stabilization Act of 2008 increased the debt limit by $700 billion, to $11,315 billion. On February 17, 2009, the American Recovery and Reinvestment Act of 2009 increased the statutory limit by

Table 16–6. FEDERAL FUNDS FINANCING AND CHANGE IN DEBT SUBJECT TO STATUTORY LIMIT
(In billions of dollars)

Description	Actual 2008	Estimate										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Change in Gross Federal Debt:												
Federal funds deficit (+)	724.6	1,977.8	1,437.1	1,130.1	818.9	795.5	805.7	805.7	897.1	920.8	933.8	986.5
Other transactions affecting borrowing from the public -- Federal funds [1]	316.1	895.8	93.0	63.0	38.8	47.4	33.0	37.3	32.6	27.4	19.5	8.5
Increase (+) or decrease (–) in Federal debt held by Federal funds	9.3	–18.8	37.0	25.8	35.1	32.6	72.3	83.8	51.8	45.8	47.8	49.0
Adjustments for trust fund surplus not invested in Federal securities [2]	–15.4	26.9	21.7	–1.3	–0.9	–1.0	–1.1	–1.3	–1.6	–1.4	–1.5	–1.4
Change in unrealized discount on Federal debt held by Government accounts	0.3	......	......	......	......	......	......	......	......	......	......	......
Total financing requirements	1,035.0	2,881.7	1,588.8	1,217.6	891.8	874.4	909.9	925.5	979.9	992.6	999.7	1,042.7
Change in Debt Subject to Limit:												
Change in gross Federal debt	1,035.0	2,881.7	1,588.8	1,217.6	891.8	874.4	909.9	925.5	979.9	992.6	999.7	1,042.7
Less: increase (+) or decrease (–) in Federal debt not subject to limit	*	–1.8	–0.7	–1.6	–1.6	–2.1	–1.3	–1.8	–1.7	–2.4	–2.2	–1.2
Less: change in adjustment for discount and premium [3]	–3.5	......	......	......	......	......	......	......	......	......	......	......
Total, change in debt subject to limit	1,038.5	2,883.5	1,589.5	1,219.1	893.5	876.5	911.2	927.3	981.6	995.0	1,001.8	1,043.9
ADDENDUM												
Debt subject to statutory limit [4]	9,959.8	12,843.3	14,432.9	15,652.0	16,545.5	17,422.0	18,333.2	19,260.5	20,242.1	21,237.1	22,238.9	23,282.8

* $50 million or less.

[1] Includes Federal fund transactions that correspond to those presented in Table 16-2, but that are for Federal funds alone with respect to the public and trust funds.

[2] Includes trust fund holdings in other cash assets and changes in the investments of the National Railroad Retirement Investment Trust in non-Federal securities.

[3] Consists of unamortized discount (less premium) on public issues of Treasury notes and bonds (other than zero-coupon bonds).

[4] The statutory debt limit is $12,104 billion.

$789 billion, to $12,104 billion. At the dates of enactment, the debt subject to limit was at least a few hundred billion dollars below the previous ceiling. Therefore, it was not necessary for Treasury to take any administrative actions to stay below the ceiling.

Methods of changing the debt limit.—The statutory limit is usually changed by normal legislative procedures. Under the rules adopted by the House of Representatives, it can also be changed as a consequence of the annual Congressional budget resolution, which is not itself a law. The budget resolution includes a provision specifying the appropriate level of the debt subject to limit at the end of each fiscal year. The rule provides that, when the budget resolution is adopted by both Houses of the Congress, the vote in the House of Representatives is deemed to have been a vote in favor of a Joint Resolution setting the statutory limit at the level specified in the budget resolution. The Joint Resolution is transmitted to the Senate for further action, where it may be amended to change the debt limit provision or in any other way. If it passes both Houses of the Congress, it is sent to the President for signature. The House of Representatives first adopted this rule for 1980, although it was not included in the rules for several years before 2003. The rule was last used for the 2007 debt limit increase.

Federal funds financing and the change in debt subject to limit.—The change in debt held by the public, as shown in Table 16–2, is determined primarily by the total Government deficit or surplus. The debt subject to limit, however, includes not only debt held by the public but also debt held by Government accounts. The change in debt subject to limit is therefore determined both by the factors that determine the total Government deficit or surplus and by the factors that determine the change in debt held by Government accounts. The effect of debt held by Government accounts on the total debt subject to limit can be seen in the second part of Table 16–2. The change in debt held by Government accounts results in 23 percent of the estimated total increase in debt subject to limit from 2009 through 2019.

The budget is composed of two groups of funds, Federal funds and trust funds. The Federal funds, in the main, are derived from tax receipts and borrowing and are used for the general purposes of the Government. The trust funds, on the other hand, are financed by taxes or other receipts earmarked by law for specified purposes, such as paying Social Security benefits or making grants to State governments for highway construction.[16]

A Federal funds deficit must generally be financed by borrowing, which can be done either by selling securities to the public or by issuing securities to Government accounts that are not within the Federal funds group. Federal funds borrowing consists almost entirely of Treasury securities that are subject to the statutory debt limit. Very little debt subject to statutory limit has been issued for reasons except to finance the Federal funds deficit. The change in debt subject to limit is therefore determined primarily by the Federal funds deficit, which is equal to the difference between the total Government deficit or surplus and the trust fund surplus. Trust fund surpluses are almost entirely invested in securities subject to the debt limit, and trust funds hold most of the debt held by Government accounts. The trust fund surplus reduces the total budget deficit or increases the total budget surplus, decreasing the need to borrow from the public or increasing the ability to repay borrowing from the public. When the trust fund surplus is invested in Federal securities, the debt held by Government accounts increases, offsetting the decrease in debt held by the public by an equal amount. Thus, there is no net effect on gross Federal debt.

Table 16–6 derives the change in debt subject to limit. In 2008 the Federal funds deficit was $725 billion, and other factors increased financing requirements by $316 billion. The rise in the Treasury operating cash balance increased financing requirements by $296 billion and the net financing disbursements of credit financing accounts increased financing requirements by $33 billion. These increases were partly offset by other factors, which reduced financing requirements by $13 billion. In addition, special funds and revolving funds, which are part of the Federal funds group, invested a net of $9 billion in Treasury securities. An adjustment is also made for the difference between the trust fund surplus and the trust funds' investment in Federal securities (including the changes in the National Railroad Retirement Investment Trust's investments in non-Federal securities). As a net result of all these factors, $1,035 billion in financing was required, increasing gross Federal debt by that amount. Since Federal debt not subject to limit increased by $37 million and the adjustment for discount and premium changed by $3.5 billion, the debt subject to limit increased by $1,039 billion, while debt held by the public increased by $768 billion.

The debt subject to limit is estimated to increase to $12,843 billion by the end of 2009, above the current limit of $12,104 billion. The estimated increases in the debt subject to limit are caused by the continued Federal funds deficit, supplemented by the other factors shown in Table 16–6. While debt held by the public increases by $6,792 billion from the end of 2008 through 2014, debt subject to limit increases by $8,373 billion.

Debt Held by Foreign Residents

During most of American history, the Federal debt was held almost entirely by individuals and institutions within the United States. In the late 1960s, foreign holdings were just over $10 billion, less than 5 percent of the total Federal debt held by the public. Foreign holdings began to grow significantly starting in 1970. This increase has been almost entirely due to decisions by foreign central banks, corporations, and individuals, rather than the direct marketing of these securities to foreign residents.

Foreign holdings of Federal debt are presented in Table 16–7. At the end of 2008, foreign holdings of Treasury debt were $2,802 billion, which was 48 percent of the total debt held by the public.[17] Foreign central banks owned 67 per-

[16] For further discussion of the trust funds and Federal funds groups, see Chapter 22 of this volume, "Trust Funds and Federal Funds."

[17] The debt calculated by the Bureau of Economic Analysis, Department of Commerce, is different,

cent of the Federal debt held by foreign residents; private investors owned nearly all the rest. The percentage held by foreign central banks is down from 69 percent at the end of 2007. All the Federal debt held by foreign residents is denominated in dollars.

Although the amount of Federal debt held by foreign residents has grown greatly over this period, the proportion that foreign residents own, after increasing abruptly in the very early 1970s, remained about 15–20 percent until the mid-1990s. During 1995–97, however, growth in foreign holdings accelerated and foreign holdings increased from 19 percent at the end of 1994 to 33 percent at the end of 1997. Federal debt held by foreign residents resumed growth in the early part of the current decade, increasing from 34 percent at the end of 2002 to 42 percent at the end of 2004. Foreign holdings increased to 44 percent in 2007 and 48 percent in 2008. The increase in foreign holdings was about 74 percent of total Federal borrowing from the public in 2008 and about 71 percent over the last five years.

Foreign holdings of Federal debt are around 15–20 percent of the foreign-owned assets in the United States, depending on the method of measuring total assets. The foreign purchases of Federal debt securities do not measure the full impact of the capital inflow from abroad on the market for Federal debt securities. The capital inflow supplies additional funds to the credit market generally, and thus affects the market for Federal debt. For example, the capital inflow includes deposits in U.S. financial intermediaries that themselves buy Federal debt.

though similar in size, because of a different method of valuing securities.

Table 16–7. FOREIGN HOLDINGS OF FEDERAL DEBT
(Dollar amounts in billions)

Fiscal Year	Debt held by the public			Change in debt held by the public	
	Total	Foreign [1]	Percentage foreign	Total [2]	Foreign [1]
1965	260.8	12.3	4.7	3.9	0.3
1970	283.2	14.0	5.0	5.1	3.8
1975	394.7	66.0	16.7	51.0	9.2
1980	711.9	121.7	17.1	71.6	1.4
1985	1,507.3	222.9	14.8	200.3	47.3
1990	2,411.6	463.8	19.2	220.8	72.0
1991	2,689.0	506.3	18.8	277.4	42.5
1992	2,999.7	562.8	18.8	310.7	56.5
1993	3,248.4	619.1	19.1	248.7	56.3
1994	3,433.1	682.0	19.9	184.7	62.9
1995	3,604.4	820.4	22.8	171.3	138.4
1996	3,734.1	993.4	26.6	129.7	173.0
1997	3,772.3	1,230.5	32.6	38.3	237.1
1998	3,721.1	1,224.2	32.9	–51.2	–6.3
1999	3,632.4	1,281.4	35.3	–88.7	57.2
2000	3,409.8	1,057.9	31.0	–222.6	–223.5
2001	3,319.6	1,005.5	30.3	–90.2	–52.3
2002	3,540.4	1,200.8	33.9	220.8	195.3
2003	3,913.4	1,454.2	37.2	373.0	253.4
2004	4,295.5	1,798.7	41.9	382.1	344.5
2005	4,592.2	1,930.6	42.0	296.7	131.9
2006	4,829.0	2,027.3	42.0	236.8	96.7
2007	5,035.1	2,237.2	44.4	206.2	209.9
2008	5,802.7	2,801.9	48.3	767.6	564.7

[1] Estimated by Treasury Department. These estimates exclude agency debt, the holdings of which are believed to be small. The data on foreign holdings are recorded by methods that are not fully comparable with the data on debt held by the public. Projections of foreign holdings are not available. The estimates include the effects of benchmark revisions in 1984, 1989, 1994, and March 2000, and annual June benchmark revisions for 2002-2008.

[2] Change in debt held by the public is defined as equal to the change in debt held by the public from the beginning of the year to the end of the year.

Federal, Federally Guaranteed, and Other Federally Assisted Borrowing

The effect of the Government on borrowing in the credit market arises not only from its own borrowing to finance Federal operations but also from its assistance to certain borrowing by the public. The Government guarantees various types of borrowing by individuals, businesses, and other non-Federal entities, thereby providing assistance to private credit markets. In addition, the Government has established private corporations—Government-sponsored enterprises—to provide financial intermediation for specified public purposes; it exempts the interest on most State and local government debt from income tax; it permits mortgage interest to be deducted in calculating taxable income; and it insures the deposits of banks and thrift institutions, which themselves make loans.

Federal credit programs and other forms of assistance, including the substantial Government efforts to support the credit markets during the recent financial turmoil, are discussed in Chapter 7 of this volume, "Credit and Insurance." Detailed data are presented in tables at the end of that chapter.