21. FEDERAL BORROWING AND DEBT

Debt is the largest legally and contractually binding obligation of the Federal Government. At the end of 2023, the Government owed $26,236 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 $710 billion of interest on this debt.[1] At the same time, the Government also held financial assets, net of financial liabilities other than debt, of $2,508 billion. Therefore, debt held by the public net of financial assets was $23,728 billion.

The $26,236 billion debt held by the public at the end of 2023 represents an increase of $1,982 billion over the level at the end of 2022. This increase is the result of the $1,694 billion deficit in 2023 and other financing transactions (discussed in more detail below) that increased the need to borrow by $288 billion. Debt held by the public as a percent of Gross Domestic Product (GDP) grew from 97.0 percent of at the end of 2022 to 97.3 percent of GDP at the end of 2023. The deficit is estimated to increase to $1,859 billion in 2024 and then to fall to $1,781 billion in 2025. After 2025, the deficit is projected to somewhat decrease and then remain relatively stable at 4-5 percent of GDP. Debt held by the public is projected to grow to $28,156 billion (99.6 percent of GDP) at the end of 2024 and $29,984 billion (102.2 percent of GDP) at the end of 2025. After 2025, debt held by the public as a percent of GDP is projected to continue to gradually increase through 2029, and then remain around 106 percent of GDP. Debt net of financial assets is expected to grow to $25,587 billion (90.6 percent of GDP) at the end of 2024 and $27,370 billion (93.3 percent of GDP) at the end of 2025. After 2025, debt net of financial assets is projected to gradually increase and then to remain fairly stable at around 98 percent of GDP.

Trends in Debt Since World War II

Table 21–1 depicts trends in Federal debt held by the public from World War II to the present and estimates from the present through 2034. (It is supplemented for earlier years by Tables 7.1–7.3 in the Budget's *Historical Tables*, available as supplemental budget material.[2]) Federal debt peaked at 106.1 percent of GDP in 1946, just after the end of the war. From that point until the 1970s, Federal debt as a percentage of GDP decreased almost every year because of relatively small deficits, an expanding economy, and unanticipated inflation. 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 78.6 percent of GDP to 24.6 percent, and from 53.3 percent of credit market debt to 17.8 percent. Despite rising interest rates during this period, interest outlays became a smaller share of the budget and were roughly stable as a percentage of GDP.

Federal debt relative to GDP is a function of the Nation's fiscal policy as well as overall economic conditions. During the 1970s, large budget deficits emerged as spending grew faster than receipts and as the economy was disrupted by oil shocks and rising inflation. Federal debt relative to GDP and credit market debt stopped declining for several years in 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 reductions in domestic spending. The resulting deficits increased the debt to almost 48 percent of GDP by 1993. The ratio of Federal debt to credit market debt also rose during this period, 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 slowing by the mid-1990s. In addition to a growing economy, two major budget agreements were enacted in the 1990s, implementing revenue increases and spending reductions and significantly reducing deficits. The debt declined markedly relative to both GDP and total credit market debt, with the decline accelerating as budget surpluses emerged from 1998 to 2001. Debt fell from 47.9 percent of GDP in 1993 to 31.5 percent of GDP in 2001. Over that same period, debt fell from 26.1 percent of total credit market debt to 17.1 percent. 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 by a similar proportion.

The progress in reducing the debt burden stopped and then reversed course beginning in 2002. The attacks of September 11, 2001, a recession, two major wars, and tax cuts all contributed to increasing deficits, causing debt to rise, both in nominal terms and as a percentage of GDP. Following the recession that began in December 2007, the deficit increased rapidly in 2008 and 2009, as the Government intervened in the potential collapse of several major corporations and financial institutions as well as enacting a major stimulus bill. Additional tax cuts enacted in 2017 also contributed to higher deficits. Debt

[1] This is 2023 nominal interest on debt held by the public. For a discussion of real net interest, see the "Long-Term Budget Outlook" chapter of this volume.

[2] The *Historical Tables* are available at *https://whitehouse.gov/omb/historical-tables/*.

Table 21–1. TRENDS IN FEDERAL DEBT HELD BY THE PUBLIC AND INTEREST ON THE 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 [3]		Interest on the debt held by the public as a percent of [3]	
	Current dollars	FY 2023 dollars [1]	GDP	Credit market debt [2]	Current dollars	FY 2023 dollars [1]	Total outlays	GDP
1946	241.9	3,034.7	106.1	N/A	4.2	52.4	7.6	1.8
1950	219.0	2,220.6	78.6	53.3	4.8	49.1	11.4	1.7
1955	226.6	2,019.4	55.8	42.1	5.2	46.2	7.6	1.3
1960	236.8	1,870.3	44.3	33.1	7.8	61.7	8.5	1.5
1965	260.8	1,930.2	36.8	26.4	9.6	70.9	8.1	1.4
1970	283.2	1,746.7	27.1	20.3	15.4	94.8	7.9	1.5
1975	394.7	1,793.2	24.6	17.8	25.0	113.6	7.5	1.6
1980	711.9	2,248.8	25.5	18.4	62.8	198.2	10.6	2.2
1985	1,507.3	3,628.8	35.3	22.2	152.9	368.1	16.2	3.6
1990	2,411.6	4,987.9	40.9	22.4	202.4	418.6	16.2	3.4
1995	3,604.4	6,575.4	47.7	26.1	239.2	436.4	15.8	3.2
2000	3,409.8	5,732.8	33.7	18.5	232.8	391.5	13.0	2.3
2005	4,592.2	6,898.6	35.8	16.8	191.4	287.5	7.7	1.5
2010	9,018.9	12,278.1	60.6	24.8	228.2	310.6	6.6	1.5
2015	13,116.7	16,414.1	72.5	29.9	260.6	326.2	7.1	1.4
2016	14,167.6	17,589.0	76.4	30.9	283.8	352.4	7.4	1.5
2017	14,665.4	17,903.9	76.2	30.8	309.9	378.3	7.8	1.6
2018	15,749.6	18,810.2	77.6	31.3	371.4	443.6	9.0	1.8
2019	16,800.7	19,700.7	79.4	31.9	423.3	496.3	9.5	2.0
2020	21,016.7	24,328.0	99.8	35.6	387.4	448.5	5.9	1.8
2021	22,284.0	24,934.6	98.4	35.5	412.8	461.9	6.1	1.8
2022	24,253.4	25,364.5	97.0	36.1	533.6	558.1	8.5	2.1
2023	26,235.6	26,235.6	97.3	37.3	710.1	710.1	11.6	2.6
2024 estimate	28,156.2	27,243.1	99.6	N/A	959.4	934.5	13.8	3.4
2025 estimate	29,983.8	28,577.6	102.2	N/A	1,032.7	984.2	14.2	3.5
2026 estimate	31,639.4	29,540.7	103.6	N/A	1,082.5	1,010.7	14.6	3.5
2027 estimate	33,249.6	30,407.7	104.5	N/A	1,146.3	1,048.4	14.9	3.6
2028 estimate	34,892.1	31,257.2	105.3	N/A	1,212.2	1,085.9	15.0	3.7
2029 estimate	36,441.1	31,976.0	105.6	N/A	1,267.7	1,112.4	15.3	3.7
2030 estimate	38,139.4	32,781.9	106.0	N/A	1,321.6	1,136.0	15.0	3.7
2031 estimate	39,794.5	33,502.9	106.0	N/A	1,386.1	1,166.9	15.2	3.7
2032 estimate	41,502.0	34,223.4	105.9	N/A	1,438.8	1,186.5	15.1	3.7
2033 estimate	43,339.3	35,004.9	106.0	N/A	1,512.2	1,221.4	15.0	3.7
2034 estimate	45,055.7	35,642.4	105.6	N/A	1,574.6	1,245.6	15.3	3.7

N/A = Not available.

[1] Amounts in current dollars deflated by the GDP chain-type price index with fiscal year 2023 equal to 100.

[2] Total credit market debt owed by domestic nonfinancial sectors. 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).

as a percent of GDP grew from 35.2 percent at the end of 2007 to 79.4 percent in 2019. However, due to a decline in interest rates, despite the rising debt, net interest as a share of GDP dropped from 1.8 percent of GDP in 2007 to as low as 1.4 percent of GDP in 2015, before rising again to 2.0 percent by 2019.

As a result of the COVID-19 pandemic and the Government's actions to address the pandemic and support the economy, debt held by the public increased sharply in 2020, growing from 79.4 percent of GDP at the end of 2019 to 99.8 percent at the end of 2020. In 2021, a $1,567 billion decrease in the Department of the Treasury's operating cash balance offset a significant portion of the $2,775 billion deficit. Although debt held by the public continued to grow in dollar terms in 2021 and 2022, it fell as a percent of GDP, to 98.4 percent in 2021 and to 97.0 percent in 2022. In 2023, debt held by the public grew by $1,982 billion, to 97.3 percent of GDP.

In 2024, the deficit is projected to increase to $1,859 billion. As a result of the $1,859 billion deficit and $61 billion in borrowing due to other financing transactions (discussed in more detail below), debt held by the public is projected to grow to $28,156 billion, or 99.6 percent of GDP. The deficit is projected to fall to $1,781 billion in 2025, and debt held by the public is projected to grow to $29,984 billion, or 102.2 percent of GDP. As a percent of GDP, the deficit is projected to decrease in 2026 and then to remain at around 4-5 percent of GDP. Debt held by the public is expected to continue to grow in dollar terms but to roughly stabilize at around 106 percent of GDP beginning in 2029. Debt net of financial assets is estimated to increase to $25,587 billion, or 90.6 percent of GDP, at the end of 2024 and $27,370 billion, or 93.3 percent of GDP, at the end of 2025. Similar to debt held by the public, debt net of financial assets is projected to reach 98 percent of GDP by the end of 2030 and then remain relatively steady as a percent of GDP.

Debt Held by the Public and Gross Federal Debt

The Federal Government issues debt securities for two main purposes. First, it borrows from the public to provide for the Federal Government's financing needs, including both the deficit and the other transactions requiring financing, most notably disbursements for direct student loans and other Federal credit programs.[3] 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."[4]

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 investments 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. Borrowing from the public can thus affect the size and composition of assets held by the private sector and the amount of saving imported from abroad and increase the amount of future resources required to pay interest to the public on Federal debt. Borrowing from the public is therefore an important consideration in Federal fiscal policy. Borrowing from the public, however, is an incomplete measure of the Federal impact on credit markets. Different types of Federal activities can affect the credit markets in different ways. For example, under its direct loan programs, the Government uses borrowed funds to acquire financial assets that might 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.) By incorporating the change in direct loan and other financial assets, debt held by the public net of financial assets adds useful insight into the Government's financial condition.

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 over their spending. The interest on the debt that is credited to these funds accounts for the fact that some earmarked taxes and user fees will be spent at a later time than when the funds receive the monies. The debt securities are assets of those funds but are a liability of the general fund to the funds that hold the securities, and are a mechanism for crediting interest to those funds on their recorded balances. These balances generally provide the fund with authority to draw upon the 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 current 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. Issuing debt to a Government account is not a current transaction of the Government with the public; it is not financed by private savings and does not compete with the private sector for available funds in the credit market. While such issuance provides the account with assets—a binding claim against the Treasury— those assets are fully offset by the

[3] 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.

[4] 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 21–4, but also certain Government-guaranteed securities and the debt of the Government-sponsored enterprises listed in the supplemental materials to the "Credit and Insurance" chapter of this volume. (These supplemental materials are available at: *https://whitehouse.gov/omb/analytical-perspectives/*.)

Table 21–2. FEDERAL GOVERNMENT FINANCING AND DEBT

(In billions of dollars)

	Actual 2023	Estimate										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Financing:												
Unified budget deficit	1,693.7	1,859.4	1,781.0	1,546.6	1,510.3	1,572.9	1,482.9	1,640.5	1,613.9	1,671.0	1,801.4	1,676.5
Other transactions affecting borrowing from the public:												
Changes in financial assets and liabilities: [1]												
Change in Treasury operating cash balance	20.9	143.1	....	....	....	....	....	....	....	....	....	....
Net disbursements of credit financing accounts:												
Direct loan and Troubled Asset Relief Program (TARP) equity purchase accounts	259.2	-102.3	43.3	103.5	97.3	66.2	62.6	53.9	37.5	32.7	32.0	35.8
Guaranteed loan accounts	37.2	21.5	3.4	6.5	3.5	4.5	4.5	4.7	4.6	4.6	4.5	4.7
Subtotal, net disbursements	296.4	-80.7	46.7	110.0	100.8	70.7	67.1	58.6	42.1	37.2	36.5	40.4
Net purchases of non-Federal securities by the National Railroad Retirement Investment Trust	1.2	-1.1	-0.1	-1.0	-0.9	-0.9	-0.9	-0.8	-0.7	-0.8	-0.6	-0.5
Net change in other financial assets and liabilities [2]	-30.1	....	....	....	....	....	....	....	....	....	....	....
Subtotal, changes in financial assets and liabilities	288.4	61.3	46.6	109.0	99.9	69.8	66.1	57.8	41.3	36.5	35.9	39.9
Seigniorage on coins	....	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Total, other transactions affecting borrowing from the public	288.4	61.2	46.6	109.0	99.8	69.7	66.1	57.8	41.2	36.4	35.9	39.9
Total, requirement to borrow from the public (equals change in debt held by the public)	1,982.2	1,920.6	1,827.6	1,655.6	1,610.2	1,642.6	1,549.0	1,698.3	1,655.2	1,707.4	1,837.3	1,716.4
Changes in Debt Subject to Statutory Limitation:												
Change in debt held by the public	1,982.2	1,920.6	1,827.6	1,655.6	1,610.2	1,642.6	1,549.0	1,698.3	1,655.2	1,707.4	1,837.3	1,716.4
Change in debt held by Government accounts	168.2	198.3	160.9	287.5	137.8	30.7	155.1	49.2	33.1	-16.4	-135.5	-35.4
Less: change in debt not subject to limit and other adjustments	50.8	-0.6	-2.4	-1.8	-1.1	0.5	0.6	0.4	1.0	1.1	1.5	1.5
Total, change in debt subject to statutory limitation	2,201.2	2,118.3	1,986.1	1,941.3	1,746.9	1,673.8	1,704.6	1,747.9	1,689.3	1,692.1	1,703.3	1,682.6
Debt Subject to Statutory Limitation, End of Year:												
Debt issued by Treasury	32,968.4	35,085.7	37,071.4	39,012.2	40,758.2	42,431.1	44,135.1	45,882.8	47,572.0	49,264.0	50,966.9	52,648.9
Less: Treasury debt not subject to limitation (-) [3]	-6.0	-5.0	-4.6	-4.1	-3.2	-2.3	-1.7	-1.6	-1.5	-1.4	-1.0	-0.5
Agency debt subject to limitation	*	*	*	*	*	*	*	*	*	*	*	*
Adjustment for discount and premium [4]	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0
Total, debt subject to statutory limitation [5]	33,070.5	35,188.8	37,174.9	39,116.2	40,863.0	42,536.8	44,241.4	45,989.3	47,678.5	49,370.6	51,073.9	52,756.5
Debt Outstanding, End of Year:												
Gross Federal debt: [6]												
Debt issued by Treasury	32,986.4	35,085.7	37,071.4	39,012.2	40,758.2	42,431.1	44,135.1	45,882.8	47,572.0	49,264.0	50,966.9	52,648.9
Debt issued by other agencies	20.6	22.2	25.0	27.4	29.4	29.8	29.9	29.6	28.6	27.6	26.6	25.5
Total, gross Federal debt	32,989.0	35,107.9	37,096.4	39,039.6	40,787.5	42,460.9	44,164.9	45,912.4	47,600.6	49,291.6	50,993.4	52,674.5
As a percent of GDP	122.3%	124.3%	126.4%	127.8%	128.2%	128.2%	128.0%	127.6%	126.8%	125.8%	124.7%	123.5%
Held by:												
Debt held by Government accounts	6,753.4	6,951.7	7,112.7	7,400.2	7,538.0	7,568.7	7,723.8	7,773.0	7,806.1	7,789.6	7,654.2	7,618.8
Debt held by the public [7]	26,235.6	28,156.2	29,983.8	31,639.4	33,249.6	34,892.1	36,441.1	38,139.4	39,794.5	41,502.0	43,339.3	45,055.7
As a percent of GDP	97.3%	99.6%	102.2%	103.6%	104.5%	105.3%	105.6%	106.0%	106.0%	105.9%	106.0%	105.6%

*$50 million or less.

[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] Includes checks outstanding, 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.

[3] Consists primarily of debt issued 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] Legislation enacted June 3, 2023 (Public Law 118-5), temporarily suspends the debt limit through January 1, 2025.

[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 2023, the Federal Reserve Banks held $4,952.9 billion of Federal securities and the rest of the public held $21,282.7 billion. Debt held by the Federal Reserve Banks is not estimated for future years.

increased liability of the Treasury to pay the claims, which will ultimately be covered by the collection of revenues or by borrowing. Similarly, the current interest earned by the Government account on its Treasury securities does not need to be financed by other resources.

The debt held by Government accounts may differ from 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 necessarily represent the actuarial present value of estimated future benefits (or future benefits less taxes) for the current participants in the program; nor does it necessarily 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 88 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.[5]

The Budget uses a variety of information sources to analyze the condition of Social Security and Medicare, the Government's two largest social insurance 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 securities that these programs hold.

For all of these reasons, debt held by the public and debt held by the public net of financial assets are both better gauges of the effect of the budget on the credit markets than gross Federal debt.

Government Deficits or Surpluses and the Change in Debt

Table 21–2 summarizes Federal borrowing and debt from 2023 through 2034.[6] In 2023, the Government borrowed $1,982 billion, increasing the debt held by the public from $24,253 billion at the end of 2022 to $26,236 billion at the end of 2023. The debt held by Government accounts grew by $168 billion, and gross Federal debt increased by $2,150 billion to $32,989 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.[7] Table 21–2 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 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 the "Economic Assumptions" chapter of this volume.

The total or unified budget consists of two parts: the on-budget portion; and the off-budget Federal entities, which have been excluded from the budget by law. Under present law, the off-budget Federal entities are the two Social Security trust funds (Old-Age and Survivors Insurance and Disability Insurance) and the Postal Service Fund.[8] The on-budget and off-budget surpluses or deficits are added together to determine the Government's financing needs.

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. The other transactions affecting borrowing from the public are presented in Table 21–2 (where an increase in the need to borrow is represented by a positive sign, like the deficit).

In 2023 the deficit was $1,694 billion while these other factors increased the need to borrow by $288 billion, or 15 percent of total borrowing from the public. As a result, the Government borrowed $1,982 billion from the public. The other factors are estimated to increase borrowing by $61 billion (3 percent of total borrowing from the public) in 2024, and by $47 billion (3 percent) in 2025. In 2026–2034, these other factors are expected to increase borrowing by annual amounts ranging from $36 billion to $109 billion.

Three specific factors, presented in Table 21–2 and discussed below, have historically been especially important.

Change in Treasury operating cash balance.—In 2023, the operating cash balance increased by $21 billion, to $657 billion. The cash balance is projected to increase by $143 billion, to $800 billion, at the end of 2024. For prudent risk management purposes, Treasury seeks to maintain a cash balance at least equal to projected Government outflows, including maturing securities, over the following week, subject to a $150 billion floor. 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

[5] 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 Treasury in coordination with the Office of Management and Budget, and presented in more detail in the financial statements of the agencies administering those programs.

[6] For projections of the debt beyond 2034, see the "Long-Term Budget Outlook" chapter.

[7] 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-protected notes and bonds, the book value includes a periodic adjustment for inflation. Agency debt is generally recorded at par.

[8] For further explanation of the off-budget Federal entities, see the "Coverage of the Budget" chapter of this volume.

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),[9] the budgetary program account for each credit program records the estimated subsidy costs—the present value of estimated net losses—at the time when the direct or guaranteed loans are disbursed. The individual cash flows to and from the public associated with the loans or guarantees, such as the disbursement and repayment of loans, the default payments on loan guarantees, the collection of interest and fees, and so forth, are recorded in the credit program's non-budgetary financing account. Although the non-budgetary financing account's cash flows to and from the public are not included in the deficit (except for their impact on subsidy costs), they affect Treasury's net borrowing requirements.[10]

In addition to the transactions with the public, the financing accounts include several types of intragovernmental transactions. They receive payment from the credit program accounts for the subsidy costs of new direct loans and loan guarantees and for any upward reestimate of the costs of outstanding direct and guaranteed loans. They also receive interest from Treasury on balances of uninvested funds. The financing accounts pay any negative subsidy collections or downward reestimate of costs to budgetary receipt accounts and pay interest on borrowings from Treasury. The total net collections and gross disbursements 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, even though they do not represent budgetary costs, and therefore affect the requirement for borrowing from the public in the same way as the deficit.

The intragovernmental transactions of the credit program, financing, and downward reestimate receipt accounts do not affect Federal borrowing from the public. Although the deficit changes because of the budgetary account'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, receipts from the public collected by the financing account can be used to finance the payment of the Government's obligations, and therefore they reduce the requirement for Federal borrowing from the public in the same way as an increase in budgetary receipts.

Credit net financing disbursements increased borrowing by $296 billion in 2023. Credit financing accounts are projected to reduce borrowing by $81 billion in 2024 and increase borrowing by $47 billion in 2025. From 2026 to 2034, the credit financing accounts are expected to increase borrowing by amounts ranging from $37 billion to $110 billion.

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 2024, upward reestimates for Department of Education student loans and Small Business Administration COVID Economic Injury Disaster Loans are partially offset by downward reestimates for Federal Housing Administration (FHA) guarantees, resulting in a net upward reestimate of $89 billion. In 2023, there was a net upward reestimate of $17 billion.

Net purchases of non-Federal securities by the National Railroad Retirement Investment Trust (NRRIT).—This trust fund, which was established by the Railroad Retirement and Survivors' Improvement Act of 2001,[11] invests its assets primarily in private stocks and bonds. The Act required special treatment of the purchase or sale of non-Federal assets by the NRRIT trust fund, treating such purchases as a means of financing rather than as outlays. Therefore, the increased need to borrow from the public to finance NRRIT's purchases 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, unrealized gains and losses on NRRIT's portfolio are included in both the "other transactions" and, with the opposite sign, in NRRIT's net outlays in the deficit, for no net impact on borrowing from the public. In 2023, net increases, including purchases and gains, were $1.2 billion. A $1.1 billion net decrease is projected for 2024 and net annual decreases ranging from $0.1 billion to $1.0 billion are projected for 2025 and subsequent years.[12]

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 87 percent of the total Federal debt held by Government accounts at the end of 2023. Net investment may differ from the surplus due to changes in the amount of cash assets not currently invested. In 2023, there was a total trust fund surplus of $183 billion,[13] while trust fund investment in Federal securities grew by $191 billion. 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 21–5, available online.

[9] Title V of Public Law 93-344.

[10] FCRA (sec. 505(b)) requires that the financing accounts be non-budgetary. They are non-budgetary in concept because they do not measure cost. For additional discussion of credit programs, see the "Credit and Insurance" and "Budget Concepts" chapters of this volume.

[11] Title I of Public Law 107-90.

[12] The budget treatment of this fund is further discussed in the "Budget Concepts" chapter.

[13] For further discussion of trust funds, see the "Trust Funds and Federal Funds" chapter of this volume.

Table 21–3. DEBT HELD BY THE PUBLIC NET OF FINANCIAL ASSETS AND LIABILITIES

(Dollar amounts in billions)

	Actual	Estimate										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Debt Held by the Public:												
Debt held by the public	26,235.6	28,156.2	29,983.8	31,639.4	33,249.6	34,892.1	36,441.1	38,139.4	39,794.5	41,502.0	43,339.3	45,055.7
As a percent of GDP	97.3%	99.6%	102.2%	103.6%	104.5%	105.3%	105.6%	106.0%	106.0%	105.9%	106.0%	105.6%
Financial Assets Net of Liabilities:												
Treasury operating cash balance	656.9	800.0	800.0	800.0	800.0	800.0	800.0	800.0	800.0	800.0	800.0	800.0
Credit financing account balances:												
Direct loan and TARP equity purchase accounts	1,598.1	1,495.8	1,539.1	1,642.6	1,739.9	1,806.1	1,868.7	1,922.6	1,960.1	1,992.7	2,024.8	2,060.5
Guaranteed loan accounts	82.7	104.2	107.6	114.1	117.6	122.2	126.6	131.4	135.9	140.5	145.0	149.7
Subtotal, credit financing account balances	1,680.8	1,600.0	1,646.7	1,756.7	1,857.6	1,928.3	1,995.3	2,054.0	2,096.0	2,133.2	2,169.8	2,210.2
Government-sponsored enterprise stock [1]	240.4	240.4	240.4	240.4	240.4	240.4	240.4	240.4	240.4	240.4	240.4	240.4
Air carrier worker support warrants and notes [2]	12.4	12.3	10.9	10.3	9.8	9.3	8.9	4.9	0.2	0.2	....	....
Emergency capital investment fund securities	2.5	2.5	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4
Non-Federal securities held by NRRIT	23.8	22.7	22.7	21.7	20.8	19.8	18.9	18.1	17.4	16.6	16.0	15.6
Other assets net of liabilities	-108.9	-108.9	-108.9	-108.9	-108.9	-108.9	-108.9	-108.9	-108.9	-108.9	-108.9	-108.9
Total, financial assets net of liabilities	2,507.8	2,569.0	2,614.1	2,722.4	2,821.6	2,890.8	2,956.4	3,010.2	3,046.8	3,083.2	3,118.8	3,158.7
Debt Held by the Public Net of Financial Assets and Liabilities:												
Debt held by the public net of financial assets	23,727.8	25,587.2	27,369.7	28,917.0	30,427.9	32,001.3	33,484.7	35,129.2	36,747.8	38,418.8	40,220.5	41,897.0
As a percent of GDP	88.0%	90.6%	93.3%	94.6%	95.6%	96.6%	97.0%	97.6%	97.9%	98.1%	98.4%	98.2%

[1] Treasury's warrants to purchase 79.9 percent of the common stock of the enterprises expire after September 7, 2028. The warrants were valued at $4 billion at the end of 2023.

[2] Portions of the notes and warrants issued under the Air carrier worker support program (Payroll support program) are scheduled to expire in 2025, 2026, 2030, and 2031.

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 can be offset against debt held by the public and other financial liabilities to achieve a more complete understanding of the Government's financial condition. The acquisition of those financial assets represents a transaction with the credit markets, broadening those markets in a way that is analogous to the demand on credit markets that borrowing entails. For this reason, debt held by the public is also an incomplete measure of the impact of the Federal Government in the United States and international credit markets.

One transaction that can increase both borrowing and assets is an increase to the Treasury operating cash balance. When the Government borrows to increase the Treasury operating cash balance, that cash balance also 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 complete 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 loan. Similarly, when NRRIT increases its holdings of non-Federal securities, the borrowing to purchase those securities is offset by the value of the asset holdings.

The acquisition or disposition of Federal financial assets largely explains the difference between the deficit for a particular year and that year's increase in debt held by the public. Debt held by the public net of financial assets is a measure that is conceptually closer to the measurement of Federal deficits or surpluses; cumulative deficits and surpluses over time more closely equal the debt held by the public net of financial assets than they do the debt held by the public.

Table 21–3 presents debt held by the public net of the Government's financial assets and liabilities. Treasury debt is presented in the Budget at book value, with no adjustments for the change in economic value that results from fluctuations in interest rates. The balances of credit financing accounts are based on projections of future cash flows. For direct loan financing accounts, the balance generally represents the net present value of anticipated future inflows such as principal and interest payments from borrowers. For guaranteed loan financing accounts, the balance generally represents the net present value of anticipated future outflows, such as default claim payments net of recoveries, and other collections, such as program fees. NRRIT's holdings of non-Federal securities are marked to market on a monthly basis. Government-sponsored enterprise stock, Air carrier worker support warrants and notes, and Emergency capital investment fund securities are measured at market value.

Due largely to the growth of credit financing account balances, net financial assets increased by $304 billion, to $2,508 billion, in 2023. This $2,508 billion in net financial assets included a cash balance of $657 billion, net credit financing account balances of $1,681 billion, and other assets and liabilities that aggregated to a net asset of $170 billion. At the end of 2023, debt held by the public was $26,236 billion, or 97.3 percent of GDP. Therefore, debt held by the public net of financial assets was $23,728 billion, or 88.0 percent of GDP. As shown in Table 21–3, the value of the Government's net financial assets is projected to grow to $2,569 billion in 2024. The projected 2024 increase is due to the anticipated $143 billion increase in the cash balance, partly offset by the projected $81 billion decrease in net credit financing account balances. While debt held by the public is expected to increase from 97.3 percent to 99.6 percent of GDP during 2024, debt net of financial assets is expected to increase from 88.0 percent to 90.6 percent of GDP.

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 Federal employee salaries are paid after they have been earned. 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. 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 in coordination with the Office of Management and Budget (OMB).

Treasury Debt

Nearly all Federal debt is issued by the Department of the Treasury. Treasury meets most of the Federal Government's financing needs by issuing marketable securities to the public. These financing needs include both the change in debt held by the public and the refinancing—or rollover—of any outstanding debt that matures during the year. Treasury marketable debt is sold at public auctions on a regular schedule and, because it is very liquid, can be bought and sold on the secondary market at narrow bid-offer spreads. Treasury also sells to the public a relatively small amount of nonmarketable securities, such as savings bonds and State and Local Government Series (SLGS) securities.[14] Treasury nonmarketable debt cannot be bought or sold on the secondary market.

Treasury issues marketable securities in a wide range of maturities, and issues both nominal (non-inflation-protected) and inflation-protected securities. Treasury's marketable securities include:

Treasury Bills—Treasury bills have maturities of one year or less from their issue date. In addition to the regular auction calendar of bill issuance, Treasury issues cash management bills on an as-needed basis for various reasons such as to offset the seasonal patterns of the Government's receipts and outlays. In 2020, Treasury began issuing four different maturities of cash management bills on a weekly basis in relation to the financing needed due to the impacts of the COVID-19 pandemic and the Government's response. Treasury phased out three of the four maturities of these weekly cash management bills in 2021. In 2023, Treasury added the 17-week bill—the remaining of these four maturities—to its regular weekly auction calendar.

Treasury Notes—Treasury notes have maturities of more than one year and up to 10 years.

Treasury Bonds—Treasury bonds have maturities of more than 10 years. The longest-maturity securities issued by Treasury are 30-year bonds.

Treasury Inflation-Protected Securities (TIPS)—Treasury inflation-protected—or inflation-indexed—securities are coupon issues for which the par value of the security rises with inflation. The principal value is adjusted daily to reflect inflation as measured by changes in the Consumer Price Index (CPI-U-NSA, with a two-month lag). Although the principal value may be adjusted downward if inflation is negative, at maturity, the securities will be redeemed at the greater of their inflation-adjusted principal or par amount at original issue.

Floating Rate Securities—Floating rate securities have a fixed par value but bear interest rates that fluctuate based on movements in a specified benchmark market interest rate. Treasury's floating rate notes are benchmarked to the Treasury 13-week bill. Currently, Treasury is issuing floating rate securities with a maturity of two years.

Historically, the average maturity of outstanding debt issued by Treasury has been about five years. The average maturity of outstanding debt was 72 months at the end of 2023.

In addition to quarterly announcements about the overall auction calendar, Treasury publicly announces in advance the auction of each security. Individuals can participate directly in Treasury auctions or can purchase securities through brokers, dealers, and other financial institutions. Treasury accepts two types of auction bids: competitive and noncompetitive. In a competitive bid, the bidder specifies the yield. A significant portion of competitive bids are submitted by primary dealers, which are banks and securities brokerages that have been designated to trade in Treasury securities with the Federal Reserve System. In a noncompetitive bid, the bidder agrees to accept the yield determined by the auction.[15] At the close of the auction, Treasury accepts all eligible noncompetitive bids and then accepts competitive bids in

[14] Under the SLGS program, the Treasury offers special low-yield securities to State and local governments and other entities for temporary investment of proceeds of tax-exempt bonds.

[15] Noncompetitive bids cannot exceed $10 million per bidder.

ascending order beginning with the lowest yield bid until the offering amount is reached. All winning bidders receive the highest accepted yield bid.

Treasury marketable securities are highly liquid and actively traded on the secondary market, which enhances the demand for Treasuries at initial auction. The demand for Treasury securities is reflected in the ratio of bids received to bids accepted in Treasury auctions; the demand for the securities is substantially greater than the level of issuance. Because they are backed by the full faith and credit of the United States Government, Treasury marketable securities are considered to be credit "risk-free." Therefore, the Treasury yield curve is commonly used as a benchmark for a wide variety of purposes in the financial markets.

In May 2023, Treasury announced that in 2024 it would launch a buyback program, under which it will repurchase a small portion of outstanding marketable securities. Treasury is creating the buyback program for cash management and liquidity support purposes. Treasury previously conducted buybacks in 2000–2002, for purposes of managing the Federal debt during a time of budget surplus. Since 2015, Treasury has also conducted very small-scale buybacks once or twice annually to test its systems.

Whereas Treasury issuance of marketable debt is based on the Government's financing needs, Treasury's issuance of nonmarketable debt is based on the public's demand for the specific types of investments. Decreases in outstanding balances of nonmarketable debt, such as occurred in 2023, increase the need for marketable borrowing.[16]

Agency Debt

A few Federal agencies other than Treasury, shown in Table 21–4 (available online), sell or have sold debt securities to the public and, at times, to other Government accounts. At the end of 2023, agency debt was $20.6 billion, less than one-tenth of one percent of total Federal debt held by the public. Agency debt is estimated to grow to $22.2 billion at the end of 2024 and to $25.0 billion at the end of 2025.

The predominant agency borrower is the Tennessee Valley Authority (TVA), which had borrowings of $20.5 billion from the public as of the end of 2023, or over 99 percent of the total debt of all agencies other than Treasury. TVA issues debt primarily to finance capital projects.

TVA has traditionally financed its capital construction by selling bonds and notes to the public. Since 2000, it has also had available two types of alternative financing methods, lease financing obligations and prepayment obligations. Under the lease financing obligations method, TVA signs long-term contracts to lease some facilities and equipment. The lease payments under these contracts ultimately secure the repayment of third-party capital used to finance construction of the facility. TVA retains substantially all of the economic benefits and risks related to ownership of the assets.[17] At the end of 2023, lease financing obligations were $1.0 billion. Table 21–4 presents lease financing obligations separately from TVA bonds and notes to distinguish between the types of borrowing. As of the end of 2019, there are no outstanding obligations for prepayments.[18]

OMB determined that each of the two 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.[19] The budget presentation is consistent with the reporting of these obligations as liabilities on TVA's balance sheet under generally accepted accounting principles.

Although the Federal Housing Administration generally makes direct disbursements to the public for default claims on FHA-insured mortgages, it may also pay claims by issuing debentures. 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 a building for the Architect of the Capitol and subsequently exercised full control over the design, construction, and operation of the building. This arrangement is 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. This borrowing is scheduled to mature by the end of 2024.

Several Federal agencies borrow from the Bureau of the Fiscal Service (Fiscal Service) or the Federal Financing

[16] Detail on the marketable and nonmarketable securities issued by Treasury is found in the *Monthly Statement of the Public Debt,* published on a monthly basis by Treasury.

[17] 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.

[18] Under the prepayment obligations method, TVA's power distributors 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.

[19] This budgetary treatment differs from the treatment in the *Monthly Treasury Statement of Receipts and Outlays of the United States Government* (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 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 factors are: adjustments for the timing of the reporting of Federal debt held by NRRIT; and treatment of the Federal debt held by the Securities Investor Protection Corporation and the Public Company Accounting Oversight Board.

Bank (FFB), both within the Department of the Treasury. Agency borrowing from the FFB or the Fiscal Service is not included in gross Federal debt. It would be double counting to add together: (a) the agency borrowing from the Fiscal Service or FFB; and (b) the Treasury borrowing from the public that is needed to provide the Fiscal Service or 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 securities.

The total investment holdings of trust funds and other Government accounts increased by $168 billion in 2023. Net investment by Government accounts is estimated to be $198 billion in 2024 and $161 billion in 2025, as shown in Table 21–5. The holdings of Federal securities by Government accounts are estimated to grow to $7,113 billion by the end of 2025, or 19 percent of the gross Federal debt. The percentage is estimated to decrease gradually over the next 10 years.

The Government account holdings of Federal securities are concentrated among a few funds: the Social Security Old-Age and Survivors Insurance 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 two trust funds, the Military Retirement Fund and the Civil Service Retirement and Disability Fund (CSRDF), and two special funds, the Department of Defense Medicare-Eligible Retiree Health Care Fund (MERHCF) and the Postal Service Retiree Health Benefits Fund (PSRHBF). At the end of 2024, these Social Security, Medicare, and Federal employee retirement funds are estimated to own 88 percent of the total debt held by Government accounts. During 2023–2025, the Military Retirement Fund has a large surplus and is estimated to invest a total of $500 billion, 95 percent of total net investment by Government accounts. Some Government accounts are projected to have net disinvestment in Federal securities during 2023–2025.

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 are 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 21–5 at par value less unamortized discount. The only Government accounts that held zero-coupon bonds during 2023 are the Nuclear Waste Disposal Fund in the Department of Energy, the Military Retirement Fund, and the MERHCF. The unamortized discount on zero-coupon bonds held by these three funds was $22.6 billion at the end of 2023.

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 21–5 it is shown as a separate item at the end of the table and not distributed by account. The amount was $46.8 billion at the end of 2023.

Debt Held by the Federal Reserve

The Federal Reserve acquires marketable Treasury securities as part of its exercise of monetary policy. For purposes of the Budget and reporting by Treasury, the transactions of the Federal Reserve are considered to be non-budgetary, and accordingly the Federal Reserve's holdings of Treasury securities are included as part of debt held by the public.[20] Federal Reserve holdings were $4,953 billion (19 percent of debt held by the public) at the end of 2023. Over the last 10 years, the Federal Reserve holdings have averaged 19 percent of debt held by the public. The historical holdings of the Federal Reserve are presented in Table 7.1 in the Budget's *Historical Tables*. The Budget does not project Federal Reserve holdings for future years.

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 U.S. Government.

The third part of Table 21–2 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. The FFB has on occasion issued this debt to CSRDF in exchange for equal amounts of regular Treasury securities. The FFB securities have the same interest rates and maturities as the Treasury securities for which they were exchanged. Most recently, the FFB issued: $9 billion to the CSRDF on October 1, 2013, with maturity dates from June 30, 2015, through June 30, 2024; $3 billion of securities to the CSRDF on October 15, 2015, with maturity dates

[20] For further detail on the monetary policy activities of the Federal Reserve and the treatment of the Federal Reserve in the Budget, see the "Coverage of the Budget" chapter.

from June 30, 2026, through June 30, 2029; and $2 billion to the CSRDF on May 25, 2023, with maturity dates ranging from June 30, 2023, through June 30, 2035. The outstanding balance of FFB debt held by CSRDF was $5.5 billion at the end of 2023 and is projected to be $4.5 billion at the end of 2024.

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 $477 million at the end of 2023 and is projected to gradually decline over time.

The sole agency debt currently subject to the general limit, $209 thousand at the end of 2023, is certain debentures issued by the Federal Housing Administration.[21]

Some of the other agency debt, however, is subject to its own statutory limit. For example, TVA 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 of the adjustment was $108 billion at the end of 2023 compared with the total unamortized discount (less premium) of $199 billion on all Treasury securities.

Changes in the debt limit.—The statutory debt limit has been changed many times. Since 1960, the Congress has passed 88 separate acts to raise the limit, revise the definition, extend the duration of a temporary increase, or temporarily suspend the limit.[22]

Between 2013 and 2019, seven laws addressing the debt limit each provided for a temporary suspension followed by an increase in an amount equivalent to the debt that was issued during that suspension period in order to fund commitments requiring payment through the specified end date. The Bipartisan Budget Act of 2019[23] suspended the $21,988 billion debt ceiling from August 2, 2019, through July 31, 2021, and then raised the debt limit on August 1, 2021, by $6,414 billion to $28,401 billion. On October 14, 2021, enacted legislation[24] increased the dollar debt ceiling by $480 billion, to $28,881 billion. On December 16, 2021, enacted legislation[25] further increased the dollar debt ceiling by $2,500 billion, to $31,381 billion. The Government reached this $31,381 billion ceiling in January 2023. The Fiscal Responsibility Act of 2023,[26] enacted June 3, 2023, suspended the debt limit through January 1, 2025.

At many times in the past several decades, including 2019, 2021, and 2023, 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 to take "extraordinary measures" to meet the Government's obligation to pay its bills and invest its trust funds while remaining below the statutory limit.

One such extraordinary measure is the partial or full suspension of the daily reinvestment of the Thrift Savings Plan (TSP) Government Securities Investment Fund (G-Fund).[27] The Treasury 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 TSP G-Fund had an outstanding balance of $295 billion at the end of January 2024. The Treasury Secretary is also authorized to suspend investments in the CSRDF and to declare a debt issuance suspension period, which allows the redemption of a limited amount of securities held by the CSRDF. The Postal Accountability and Enhancement Act[28] provides that investments in the PSRHBF shall be made in the same manner as investments in the CSRDF.[29] Therefore, Treasury is able to take similar administrative actions with the PSRHBF. The law requires that when any such actions are taken with the G-Fund, the CSRDF, or the PSRHBF, the Treasury 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. The outstanding balance in the Exchange Stabilization Fund was $13 billion at the end of January 2024.

As the debt has neared the limit, including in 2019, 2021, and 2023, Treasury has also suspended the issuance of SLGS to reduce unanticipated fluctuations in the level of the debt. At times, Treasury has also adjusted the schedule for auctions of marketable securities.

In addition to these steps, Treasury has previously exchanged Treasury securities held by the CSRDF with borrowing by the FFB, which, as explained above, is not subject to the debt limit. This measure was most recently taken in May 2023.

The debt limit has always been increased prior to the exhaustion of Treasury's limited available administrative actions to continue to finance Government operations when the statutory ceiling has been reached. Failure to enact a debt limit increase before these actions were exhausted would have significant and long-term negative consequences. The Federal Government could be forced to delay or discontinue payments on its broad range of ob-

[21] At the end of 2023, there were also $18 million of FHA debentures not subject to limit.

[22] The Acts and the statutory limits since 1940 are listed in Table 7.3 of the Budget's *Historical Tables*.

[23] Public Law 116-37.

[24] Public Law 117-50.

[25] Public Law 117-73.

[26] Public Law 118-5.

[27] The TSP is a defined contribution pension plan for Federal employees. The G-Fund is one of several components of the TSP.

[28] Title VIII of Public Law 109-435.

[29] Both the CSRDF and the PSRHBF are administered by the Office of Personnel Management.

Table 21–6. FEDERAL FUNDS FINANCING AND CHANGE IN DEBT SUBJECT TO STATUTORY LIMIT
(In billions of dollars)

Description	Actual 2023	Estimate										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Change in Gross Federal Debt:												
Federal funds deficit	1,877.2	2,102.1	2,053.6	1,771.0	1,587.5	1,560.3	1,595.0	1,640.5	1,590.3	1,609.2	1,607.1	1,571.5
Other transactions affecting borrowing from the public -- Federal funds [1]	287.2	62.3	46.6	109.9	100.8	70.6	67.0	58.6	42.0	37.2	36.4	40.3
Increase (+) or decrease (-) in Federal debt held by Federal funds	17.5	35.2	50.3	62.7	60.2	42.9	42.6	48.8	56.3	45.1	58.6	69.4
Adjustments for trust fund surplus/deficit not invested/ disinvested in Federal securities [2]	8.6	-80.7	-162.0	-0.5	-0.5	-0.5	-0.5	-0.4	-0.4	-0.5	-0.3	-0.2
Change in unrealized discount on Federal debt held by Government accounts	-40.0	....	....	....	....	....	....	....	....	....	....	....
Total financing requirements	2,150.4	2,118.9	1,988.5	1,943.1	1,748.0	1,673.3	1,704.1	1,747.5	1,688.2	1,691.0	1,701.8	1,681.0
Change in Debt Subject to Limit:												
Change in gross Federal debt	2,150.4	2,118.9	1,988.5	1,943.1	1,748.0	1,673.3	1,704.1	1,747.5	1,688.2	1,691.0	1,701.8	1,681.0
Less: increase (+) or decrease (-) in Federal debt not subject to limit	0.8	0.6	2.4	1.8	1.1	-0.5	-0.6	-0.4	-1.0	-1.1	-1.5	-1.5
Less: change in adjustment for discount and premium [3]	-51.6	....	....	....	....	....	....	....	....	....	....	....
Total, change in debt subject to limit	2,201.2	2,118.3	1,986.1	1,941.3	1,746.9	1,673.8	1,704.6	1,747.9	1,689.3	1,692.1	1,703.3	1,682.6
Memorandum:												
Debt subject to statutory limit [4]	33,070.5	35,188.8	37,174.9	39,116.2	40,863.0	42,536.8	44,241.4	45,989.3	47,678.5	49,370.6	51,073.9	52,756.5

[1] Includes Federal fund transactions that correspond to those presented in Table 21–2, 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] Legislation enacted June 3, 2023 (Public Law 118-5), temporarily suspends the debt limit through January 1, 2025.

ligations, including Social Security and other payments to individuals, Medicaid and other grant payments to States, individual and corporate tax refunds, Federal employee salaries, payments to vendors and contractors, principal and interest payments on Treasury securities, and other obligations. If Treasury were unable to make timely interest payments or redeem securities, investors would cease to view Treasury securities as free of credit risk and Treasury's interest costs would increase. Because interest rates throughout the economy are benchmarked to the Treasury rates, interest rates for State and local governments, businesses, and individuals would also rise. Foreign investors would likely shift out of dollar-denominated assets, driving down the value of the dollar and further increasing interest rates on non-Federal, as well as Treasury, debt.

The debt subject to limit is estimated to increase to $35,189 billion by the end of 2024 and to $37,175 billion by the end of 2025. The Budget anticipates timely congressional action to address the statutory limit as necessary before exhaustion of Treasury's extraordinary measures.

Federal funds financing and the change in debt subject to limit.—The change in debt held by the public, as shown in Table 21–2, and the change in debt held by the public net of financial assets are 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 21–2. The change in debt held by Government accounts is equal to 9 percent of the estimated total 2024 increase in debt subject to limit.

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 dedicated by law for specified purposes, such as for paying Social Security benefits or making grants to State governments for highway construction.[30]

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

[30] For further discussion of the trust funds and Federal funds groups, see the "Trust Funds and Federal Funds" chapter.

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 21–6 derives the change in debt subject to limit. In 2023 the Federal funds deficit was $1,877 billion, and other factors increased financing requirements by $287 billion. In addition, special funds and revolving funds, which are part of the Federal funds group, invested a net of $18 billion in Treasury securities. Adjustments are also made for the difference between the trust fund surplus or deficit and the trust funds' investment or disinvestment in Federal securities (including the changes in NRRIT's investments in non-Federal securities) and for the change in unrealized discount on Federal debt held by Government accounts. As a net result of all these factors, $2,150 billion in financing was required, increasing gross Federal debt by that amount. Since Federal debt not subject to limit grew by $1 billion and the adjustment for discount and premium changed by $52 billion, the debt subject to limit increased by $2,201 billion, while debt held by the public increased by $1,982 billion.

Debt subject to limit is estimated to increase by $2,118 billion in 2024 and by $1,986 billion in 2025. The projected increases in the debt subject to limit are caused by the continued Federal funds deficit, supplemented by the other factors shown in Table 21–6. While debt held by the public increases by $18,820 billion from the end of 2023 through 2034, debt subject to limit increases by $19,686 billion.

Foreign Holdings of Federal Debt

Foreign holdings of Federal debt are presented in Table 21–7. 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 in the early 1970s, and then remained about 15–20 percent of total Federal debt until the mid-1990s. During 1995–97, growth in foreign holdings accelerated, reaching 33 percent by the end of 1997. From 2004 to 2019, foreign holdings of Federal debt generally represented around 40 percent or more of outstanding debt. Foreign holdings increased to 48 percent by the end of 2008 and then remained relatively stable through 2015.

After 2015, foreign holdings continued to grow in dollar terms but began to decline as a percent of total Federal debt held by the public. In 2023, foreign holdings were $7,604 billion, 29 percent of total debt held by the public.[31] The dollar increase in foreign holdings was about 18 percent of total Federal borrowing from the public in 2023 and 13 percent over the last five years. Changes in foreign holdings have been almost entirely due to decisions by foreign central banks, corporations, and individuals, rather than the direct marketing of these securities to foreign investors. All of the foreign holdings of Federal debt are denominated in dollars.

In 2023, foreign central banks and other foreign official institutions owned 49 percent of the foreign holdings of Federal debt; private investors owned the rest. At the end of 2023, the nations holding the largest shares of U.S. Federal debt were Japan, which held 14 percent of all foreign holdings, and China, which held 10 percent.

Foreign holdings of Federal debt are around 20–25 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.

Federal, Federally Guaranteed, and Other Federally Assisted Borrowing

The Government's effects on the credit markets arise not only from its own borrowing but also from the direct loans that it makes to the public and the provision of 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. The Government is also assisting borrowing by States through the Build America Bonds program, which subsidizes the interest that States pay on such borrowing. 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 are discussed in the "Credit and Insurance" chapter of this volume. Detailed data are presented in tables accompanying that chapter.

[31] The debt calculated by the Bureau of Economic Analysis is different, though similar in size, because of a different method of valuing securities.

Table 21–7. FOREIGN HOLDINGS OF FEDERAL DEBT

(Dollar amounts in billions)

Fiscal Year	Debt held by the public			Change in debt held by the public[2]	
	Total	Foreign[1]	Percentage foreign	Total	Foreign
1965	260.8	12.2	4.7	3.9	0.3
1970	283.2	14.0	4.9	5.1	3.7
1975	394.7	66.0	16.7	51.0	9.1
1980	711.9	126.4	17.8	71.6	1.3
1985	1,507.3	222.9	14.8	200.3	47.3
1990	2,411.6	463.8	19.2	220.8	72.0
1995	3,604.4	820.4	22.8	171.3	138.4
2000	3,409.8	1,038.8	30.5	-222.6	-242.6
2005	4,592.2	1,929.6	42.0	296.7	135.1
2010	9,018.9	4,316.0	47.9	1,474.2	745.4
2011	10,128.2	4,912.1	48.5	1,109.3	596.1
2012	11,281.1	5,476.1	48.5	1,152.9	564.0
2013	11,982.7	5,652.8	47.2	701.6	176.7
2014	12,779.9	6,069.2	47.5	797.2	416.4
2015	13,116.7	6,105.9	46.6	336.8	36.7
2016	14,167.6	6,155.9	43.5	1,050.9	50.0
2017	14,665.4	6,301.9	43.0	497.8	146.0
2018	15,749.6	6,225.9	39.5	1,084.1	-76.0
2019	16,800.7	6,923.5	41.2	1,051.1	697.6
2020	21,016.7	7,069.2	33.6	4,216.0	145.7
2021	22,284.0	7,570.9	34.0	1,267.4	501.7
2022	24,253.4	7,251.5	29.9	1,969.4	-319.4
2023	26,235.6	7,604.1	29.0	1,982.2	352.6

[1] Estimated by Treasury. 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.

[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.