
FEDERAL BORROWING AND DEBT

13. FEDERAL BORROWING AND DEBT

Debt is the largest legally binding obligation of the Federal Government. At the end of 1997 the Government owed \$3,771 billion of principal to the people who had loaned it the money to pay for past deficits. The gross Federal debt, which also includes the securities held by trust funds and other Government accounts, was \$5,370 billion. This year the Government is estimated to pay around \$249 billion of interest to the public on its debt.

Although the present deficit is continuing to increase the amount of Federal debt held by the public, the Omnibus Budget Reconciliation Act of 1993 and the strong economic expansion have reduced the size of the deficit for five consecutive years, from \$290 billion in 1992 to \$22 billion in 1997. Due to a favorable economic outlook and the Balanced Budget Act of 1997, the Ad-

ministration estimates that the budget will be balanced in 1999. The small budget deficits and the surpluses beginning in 1999 will significantly decrease the debt held by the public as a percentage of the Nation's gross domestic product (GDP). Despite the fact that the budget runs a small surplus in 1999, borrowing from the public is estimated to be \$10 billion because of other factors besides the deficit that affect borrowing requirements. By 2001, however, debt repayment will begin as the surplus grows.

Trends in Federal Debt

Federal debt held by the public has increased five-fold since 1980, as shown in Table 13-1. In 1980 it was \$709.8 billion; by the end of 1997 it stood at \$3,771.1 billion. The data in this table are supplemented for earlier years by Tables 7.1-7.3 in *Historical*

Table 13-1. 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 percentage of:		Interest on debt held by the public as a percentage of: ³	
	Current dollars	FY 1992 dollars ¹	GDP	Credit market debt ²	Total outlays	GDP
1950	219.0	1,210.1	80.1	55.3	11.4	1.8
1955	226.6	1,097.4	57.3	43.3	7.6	1.3
1960	236.8	1,019.5	45.7	33.8	8.5	1.5
1965	260.8	1,049.0	38.0	26.9	8.1	1.4
1970	283.2	946.2	28.1	20.8	7.9	1.5
1975	394.7	969.5	25.4	18.4	7.5	1.6
1980	709.8	1,197.4	26.1	18.5	10.6	2.3
1981	785.3	1,206.0	25.8	18.5	12.0	2.7
1982	919.8	1,319.3	28.6	19.8	13.6	3.1
1983	1,131.6	1,551.4	33.1	21.9	13.8	3.3
1984	1,300.5	1,716.6	34.1	22.1	15.7	3.5
1985	1,499.9	1,913.9	36.6	22.3	16.2	3.7
1986	1,736.7	2,154.7	39.7	22.6	16.1	3.6
1987	1,888.7	2,277.4	41.0	22.3	16.0	3.5
1988	2,050.8	2,389.9	41.4	22.3	16.2	3.5
1989	2,189.9	2,448.4	40.9	22.0	16.5	3.5
1990	2,410.7	2,588.0	42.4	22.6	16.2	3.6
1991	2,688.1	2,767.0	45.9	24.1	16.2	3.7
1992	2,998.8	2,998.8	48.8	25.6	15.5	3.5
1993	3,247.5	3,163.9	50.2	26.5	14.9	3.2
1994	3,432.1	3,265.0	50.1	26.6	14.4	3.1
1995	3,603.4	3,342.0	50.1	26.5	15.8	3.3
1996	3,733.0	3,384.1	49.6	26.1	15.8	3.3
1997	3,771.1	3,345.0	47.3	25.2	15.7	3.1
1998 estimate	3,796.8	3,305.0	45.5	.....	15.0	3.0
1999 estimate	3,807.3	3,249.1	43.8	.....	14.3	2.9
2000 estimate	3,811.7	3,186.0	42.1	.....	13.6	2.7
2001 estimate	3,798.3	3,106.5	40.2	.....	13.1	2.5
2002 estimate	3,722.1	2,978.6	37.7	.....	12.6	2.4
2003 estimate	3,652.1	2,859.7	35.3	.....	11.7	2.2

¹Debt in current dollars deflated by the GDP chain-type price index with fiscal year 1992 equal to 100.

²Total credit market debt owed by domestic nonfinancial sectors, modified 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.

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

Tables, which is published as a separate volume of the budget.

After the end of World War II, Federal debt peaked at 109 percent of GDP in 1946. From then until the 1970s, Federal debt grew gradually, but, due to inflation, it declined in real terms. Because of an expanding economy as well as inflation, Federal debt as a percentage of GDP decreased almost every year. With households borrowing heavily to buy homes and consumer durables, and with businesses borrowing heavily to buy plant and equipment, Federal debt also decreased almost every year as a percentage of the total credit market debt outstanding. The cumulative effect was impressive. From 1950 to 1975, debt held by the public declined from 80.1 percent of GDP to 25.4 percent, and from 55.3 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.

During the 1970s, large budget deficits emerged as the economy was disrupted by oil shocks and inflation. The nominal amount of Federal debt more than doubled, and, despite high inflation, the real value of Federal debt increased by a fourth. Federal debt relative to GDP and credit market debt stopped declining after the middle of the decade.

The growth of Federal debt held by the public accelerated during the early 1980s due to very large budget deficits. Since the deficits continued to be large until recently, debt continued to grow substantially. With inflation reduced, the rapid growth in nominal debt meant a rapid growth in real debt as well. The ratio of Federal debt to GDP rose from 26.1 percent in 1980 to 50.2 percent in 1993, the highest ratio since the mid-1950s. The ratio of Federal debt to credit market debt also rose, though to a much lesser extent, from 18.5 percent to 26.5 percent. Interest outlays on debt held by the public, calculated as a percentage of both total Federal outlays and GDP, increased by about two-fifths.

The growth of Federal debt held by the public has been decelerating more recently, and in 1997 it increased only 1.0 percent, the smallest rate since 1974. The amount outstanding has been declining since 1994 relative to both GDP and total credit market debt. Table 13-1 shows that debt as a percentage of GDP is estimated to decline significantly more in the next few years, falling from 47.3 percent in 1997 to 35.3 percent in 2003. The improvement in the last few years reflects the deficit reduction package enacted by the Omnibus Budget Reconciliation Act of 1993 and the long economic expansion. The further estimated improvement reflects the Balanced Budget Act of 1997 and the expectation that economic growth will continue at a steady pace without inflation for the foreseeable future.¹ Interest outlays on the debt held by the public are estimated to decline substantially relative to both total outlays and GDP over the next few years.

¹ Chapter 1 of this volume, "Economic Assumptions," reviews recent economic developments and explains the economic assumptions for this budget.

Debt Held by the Public, Gross Federal Debt, and Liabilities Other Than Debt

The Federal Government issues debt securities for two principal purposes. First, it borrows from the public in order to finance the Federal deficit. Second, it issues debt to 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 formally 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, has a significant impact on the economy. Borrowing from the public is normally a good approximation to the Federal demand on credit markets. Even if the proceeds are used productively for tangible or intangible investment, 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.³ Federal borrowing thereby competes with the borrowing of other sectors for financial resources in the credit market and affects interest rates. Borrowing from the public moreover affects the size and composition of assets held by the private sector and the perceived wealth of the public. It also affects the amount of taxes required to pay interest to the public on Federal debt. Borrowing from the public is therefore an important concern of Federal fiscal policy.⁴

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 and other collections compared to their spending. These balances can be used in later years for future payments to the public. The interest on the debt compensates these funds—and the members of the public who pay earmarked taxes or user fees into these funds—for spending some of their collections at a later time than when they receive it. Public policy

²The term "agency debt" is defined more narrowly in the budget than in the securities market, where it includes not only the debt of the Federal agencies listed in Table 13-3 but also the debt of the Government-sponsored enterprises listed in Table 8-10 at the end of Chapter 8 and certain Government-guaranteed securities.

³The Federal sector of the national income and product accounts provides a better measure of the deficit for analyzing the effect of Federal fiscal policy on national saving than the budget deficit or Federal borrowing from the public. The Federal sector and its differences from the budget are discussed in chapter 18 of this volume, "National Income and Product Accounts." Also see chapter 6 of this volume, Part IV, the section on the analysis of saving and investment.

⁴Debt held by the public was measured until 1988 as the par value (or face value) of the security, which is the principal amount due at maturity. The only exception was savings bonds. However, most Treasury securities are sold at a discount from par, and some are sold at a premium. Treasury debt held by the public is now measured as the sales price plus the amortized discount (or less the amortized premium). At the time of sale, the value equals the sales price. Subsequently, the value equals the sales price plus the amount of the discount that has been amortized up to that time. In equivalent terms, the measured value of the debt equals par less the unamortized discount. (For a security sold at a premium, the definition is symmetrical.) Agency debt, except for zero-coupon certificates, is recorded at par. For further analysis of these concepts, see Special Analysis E, "Borrowing and Debt," in *Special Analyses, Budget of the United States Government, Fiscal Year 1990*, pp. E-5 to E-8, although some of the practices it describes have been changed. In 1997 Treasury began to sell a new type of instrument, inflation-protected securities. The recorded value of these securities includes a periodic adjustment for inflation.

Table 13-2. FEDERAL GOVERNMENT FINANCING AND DEBT¹
(In billions of dollars)

	1997 Actual	Estimate					
		1998	1999	2000	2001	2002	2003
Financing:							
Surplus or deficit (-)	-21.9	-10.0	9.5	8.5	28.2	89.7	82.8
(On-budget)	-103.3	-106.3	-95.7	-104.9	-94.1	-44.6	-62.8
(Off-budget)	81.4	96.3	105.3	113.5	122.3	134.4	145.5
Means of financing other than borrowing from the public:							
Changes in: ²							
Treasury operating cash balance	0.6	3.6	.....	.....	.....	.....	.....
Checks outstanding, etc. ³	4.0	-2.2	-4.5	.....	.....	.....	.....
Deposit fund balances	-0.4	-1.6	-*	.....	.....	.....	.....
Seigniorage on coins	0.5	0.4	0.7	0.7	0.7	0.7	0.7
Less: Net financing disbursements:							
Direct loan financing accounts	-21.0	-15.0	-15.4	-13.2	-15.4	-14.1	-13.4
Guaranteed loan financing accounts	0.1	-0.9	-0.7	-0.5	-0.1	-0.1	-0.1
Total, means of financing other than borrowing from the public	-16.2	-15.7	-20.0	-13.0	-14.8	-13.5	-12.8
Total, requirement for borrowing from the public	-38.2	-25.7	-10.5	-4.4	13.4	76.2	70.0
Change in debt held by the public	38.2	25.7	10.5	4.4	-13.4	-76.2	-70.0
Debt Outstanding, End of Year:							
Gross Federal debt:							
Debt issued by Treasury	5,336.5	5,514.5	5,710.1	5,888.7	6,052.9	6,178.8	6,313.4
Debt issued by other agencies	33.2	29.1	28.0	27.1	26.0	24.9	22.8
Total, gross Federal debt	5,369.7	5,543.6	5,738.1	5,915.7	6,078.9	6,203.7	6,336.2
Held by:							
Government accounts	1,598.6	1,746.8	1,930.8	2,104.0	2,280.6	2,481.6	2,684.1
The public	3,771.1	3,796.8	3,807.3	3,811.7	3,798.3	3,722.1	3,652.1
Federal Reserve Banks	424.5	.....	.....	.....	.....	.....	.....
Other	3,346.6	.....	.....	.....	.....	.....	.....
Debt Subject to Statutory Limitation, End of Year:							
Debt issued by Treasury	5,336.5	5,514.5	5,710.1	5,888.7	6,052.9	6,178.8	6,313.4
Less: Treasury debt not subject to limitation ⁴	-15.5	-15.5	-15.5	-15.5	-15.5	-15.5	-15.5
Agency debt subject to limitation	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Adjustment for discount and premium ⁵	6.6	6.6	6.6	6.6	6.6	6.6	6.6
Total, debt subject to statutory limitation ⁶	5,327.6	5,505.6	5,701.2	5,879.8	6,044.0	6,169.9	6,304.5

* \$50 million or less.

¹ Treasury securities held by the public and zero-coupon bonds held by Government accounts are almost entirely measured at sales price plus amortized discount or less amortized premium. Agency debt is almost entirely measured at face value. Treasury securities in the Government account series are measured at face value less unrealized discount (if any).

² A decrease in the Treasury operating cash balance (which is an asset) would be a means of financing the deficit and therefore has a positive sign. An increase in checks outstanding or deposit fund balances (which are liabilities) would also be a means of financing the deficit and therefore would also have a positive sign.

³ Besides checks outstanding, includes accrued interest payable on Treasury debt, miscellaneous liability accounts, allocations of special drawing rights, and, as an offset, cash and monetary assets other than the Treasury operating cash balance, miscellaneous asset accounts, and profit on sale of gold.

⁴ Consists primarily of Federal Financing Bank debt.

⁵ Consists 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.

⁶ The statutory debt limit is \$5,950 billion.

may deliberately run surpluses and accumulate 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 economic effects of borrowing from the public. It is an internal transaction between two accounts, both within the Government itself. It is not a current transaction of the Government with the public; it 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 claim on the U.S. Treasury; and it does not represent the estimated amount of the account's future transactions with 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 expected future benefits. The future transactions of Federal social insurance and employee retirement programs, which own over four-fifths of the debt held by

Government accounts, are important in their own right and need to be considered separately. This can be done through information published in actuarial and financial reports for these programs.⁵ Debt held by the public is therefore a better concept than gross Federal debt for analyzing the effect of the budget on the economy.

Debt securities do not encompass all the liabilities of the Federal Government. For example, accounts payable occur in the normal course of buying goods and services; social security benefits are due as of the end of the month but, according to statute, are payable as of the beginning of the next month; loan guarantee liabilities are incurred when the Government guarantees the payment of interest and principal on private

⁵ A summary of actuarial estimates for many of these programs is prepared annually by the Financial Management Service, Department of the Treasury, in "Statement of Liabilities and Other Financial Commitments of the United States Government." The estimates in that report are not, however, all comparable with one another in concept or actuarial assumptions. Extensive actuarial analysis of the social security and medicare programs are published in the annual reports of the boards of trustees of these funds.

loans; and liabilities for future pension 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. Federal liabilities are analyzed within the broader conceptual framework of Federal resources and responsibilities in chapter 2 of this volume, "Stewardship: Toward a Federal Balance Sheet."⁶ The different types of liabilities are reported annually in the financial statements of the major Federal agencies and in the *Consolidated Financial Statements of the United States Government*.⁷

Borrowing and Government Deficits

Table 13-2 summarizes Federal borrowing and debt from 1997 through 2003. In 1997 the borrowing from the public was \$38.2 billion, and Federal debt held by the public increased to \$3,771.1 billion. The issuance of debt to Government accounts was \$149.6 billion, and gross Federal debt increased to \$5,369.7 billion. In 1999, despite the fact that the budget runs a small surplus, borrowing from the public is estimated to be \$10.5 billion. This is because of other factors besides the deficit that affect borrowing requirements. By 2001, however, debt repayment will begin as the surplus grows.

Borrowing from the public depends both on the Federal Government's expenditure programs and tax laws and on economic conditions. The sensitivity of the budget to economic conditions is analyzed in chapter 1 of this volume.

Debt held by the public.—Table 13-2 shows the relationship between borrowing from the public and the Federal surplus or deficit. The total surplus or deficit of the Federal Government includes not only the on-budget surplus or deficit but also the surplus or deficit 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.⁸ Since social security had a large surplus in 1997 and is estimated to continue having large surpluses over the next few years, the off-budget surplus reduces the requirement for Treasury to borrow from the public by a substantial amount.

The Government's need to borrow from the public, or its ability to repay debt, depends on the size of the surplus or deficit and on several other factors such as the net financing disbursements of credit programs and changes in the level of cash balances held by the Treasury. As shown in Table 13-2, these other factors—

which are formally called "means of financing other than borrowing from the public"—can either increase or decrease the Government's borrowing requirements. (An increase in the borrowing requirement is indicated by a negative sign, like the deficit; a decrease is indicated by a positive sign, like the surplus.) In 1997 the deficit was \$21.9 billion and the other financing requirements were \$16.2 billion, so the Government had to borrow \$38.2 billion from the public. In 1999 the surplus is estimated to be \$9.5 billion and the other financing requirements are estimated to be \$20.0 billion, which will result in the Government borrowing \$10.5 billion from the public. In 2001 and later years, the estimated surplus is larger than the other financing requirements, which will enable the Government to repay some of the debt held by the public.

When the deficit or surplus is large, it is usually a good approximation to say that "the deficit is financed by borrowing from the public" or that "the surplus is used to repay debt held by the public." Over the last 10 years, the cumulative deficit was \$1,840 billion and the increase in debt held by the public was \$1,882 billion—nearly equal amounts. When the deficit or surplus is small, however, as in 1997 through 2001, the other factors that affect borrowing may account for a large proportion of the change in Federal debt held by the public.

Many of these other factors are small in most years compared to borrowing from the public, even when the deficit or surplus is relatively small. This is because they are limited by their own nature. Decreases in cash balances, for example, are inherently limited by past accumulations, which themselves required financing when they were built up.

However, a new and larger factor that affects borrowing was created by the Federal Credit Reform Act of 1990. 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 or guaranteed loans are disbursed. The cash flows to and from the public resulting from these loans and guarantees are not costs to the Government above and beyond 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.⁹ The net cash flows of the financing accounts, including intragovernmental transactions as well as transactions with the public, are called "net financing disbursements." They are defined in the same way as the "outlays" of a budgetary account and therefore affect the requirements for borrowing from the public in the same way as the deficit or surplus.

The net financing disbursements are partly due to intragovernmental transactions with budgetary accounts (the receipt of subsidy payment and the receipt

⁶The balance sheet in chapter 2 consolidates the Federal Reserve System with the rest of the Government, unlike the budget. As a result, the "debt held by the public" reported in that chapter, unlike the amounts reports in this chapter and elsewhere, is net of the Federal debt held by the Federal Reserve Banks.

⁷The *Consolidated Financial Statements* are published annually by the Financial Management Service, Department of the Treasury.

⁸For further explanation of the off-budget Federal entities, see chapter 21, "Off-Budget Federal Entities and Non-Budgetary Activities."

⁹The Federal Credit Reform Act of 1990 (sec. 505(b)) requires that the financing accounts be non-budgetary. As explained in chapter 21, "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 24 of this volume, "Budget System and Concepts and Glossary," and the other references cited in chapter 21.

or payment of interest) and partly due to transactions with the public (disbursement and repayment of loans, receipt of interest and fees, payment of default claims, and so forth). An intragovernmental transaction affects the surplus or deficit and the net financing disbursements in equal amounts but with opposite signs, so there is no combined effect on Federal borrowing from the public. 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 for cash payments to the public. Financing account receipts from the public can be used to finance the payment of the Government's obligations and therefore reduce the requirement for Federal borrowing from the public in the same way as an increase in budget receipts.

The financing accounts initially either increased or decreased borrowing requirements by a very small amount, but beginning in 1995 the effect began to get large. They added \$4.1 billion to borrowing requirements in 1995, \$11.7 billion in 1996, and \$20.9 billion in 1997, and they are estimated to add about \$14–16 billion every year over the budget horizon. The expansion was mainly because of the growth of the direct student loan program. Since direct loans require cash disbursements equal to the full amount of the loans when the loans are made, Federal borrowing requirements are initially increased. Federal borrowing requirements are reduced when the loans are repaid. The temporary, very large net financing disbursements in

1997 were due to the direct loans made to finance the sales of various portions of the radio spectrum.

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 94 percent of the total Federal debt held by Government accounts at the end of 1997. In 1999, for example, the total trust fund surplus is estimated to be \$171.0 billion, and Government accounts are estimated to invest \$184.1 billion in Federal securities. The difference is because some other accounts hold Federal debt and because the trust funds may change the amount of their cash assets not currently invested. The amounts of debt held in major accounts and the annual investments are shown in Table 13–4.

Agency Debt

Several Federal agencies, shown in Table 13–3, sell debt securities to the public and to other Government accounts. During 1997, agencies repaid \$1.4 billion of debt held by the public. Agency debt is only one percent of Federal debt held by the public.

The reason for issuing agency debt differs considerably from one agency to another. The predominant agency borrower from the public is the Tennessee Valley Authority, which had \$24.2 billion of securities outstanding at the end of 1997, or 93 percent of all agency debt held by the public. TVA debt was primarily sold to finance capital expenditures and to refund other is-

Table 13–3. AGENCY DEBT

(In millions of dollars)

	Borrowing or repayment (-) of debt			Debt end of 1999 estimate
	1997 actual	1998 estimate	1999 estimate	
Borrowing from the public:				
Housing and Urban Development:				
Federal Housing Administration	-14	—*	.....	68
Interior .....	.....	.....	.....	13
Small Business Administration:				
Participation certificates: Section 505 development company .....	.....	.....	.....	7
Architect of the Capitol	-2	-2	-2	175
Farm Credit System Financial Assistance Corporation .....	.....	.....	.....	1,261
Federal Communications Commission:				
Universal Service Fund ¹	-4	.....	.....	.....
Federal Deposit Insurance Corporation:				
FSLIC Resolution Fund	-32	-95	.....	.....
National Archives	-4	-5	-5	276
Tennessee Valley Authority	-1,297	-848	-965	22,373
Total, borrowing from the public	-1,352	-950	-972	24,174
Borrowing from other funds:				
Postal Service Fund ²	-508	-3,181	-83	634
Tennessee Valley Authority ² .....	.....	.....	.....	3,200
Total, borrowing from other funds	-508	-3,181	-83	3,834
Total, agency borrowing	-1,861	-4,130	-1,055	28,008

* \$50 million or less.

¹ The Universal Service fund borrowed \$4 million in 1996 and repaid the full amount in 1997. This transaction was not previously classified as agency borrowing.

² The Postal Service and TVA debt held by other funds is the result of the FFB swapping Postal Service and TVA securities with the Civil Service Retirement and Disability trust fund during 1996 in exchange for Treasury securities having an equal present value. See the narrative for further explanation.

sues of its existing debt. TVA debt held by other funds was primarily issued for the same reason.

The Federal Housing Administration, on the other hand, 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 borrowing from the public and then paying the bills by disbursing the cash borrowed, so the transaction is recorded as being simultaneously an outlay and a borrowing. The notes are therefore classified as agency debt. The borrowing by FHA and other agencies that have engaged in similar transactions is thus inherent in the way that their programs operate.¹⁰

The Universal Service fund has borrowed temporarily to meet operating needs. Under the Telecommunications Act of 1996, carriers that provide interstate telecommunications services are required to contribute funds, as prescribed by the Federal Communications Commission (FCC), to the preservation and advancement of universal service. The contributions are used to provide services eligible for universal service support as prescribed by the FCC. During 1996, \$4 million more was spent than collected, so the Universal Service fund borrowed \$4 million to pay the difference. It repaid this amount in 1997 and does not estimate future borrowing. These amounts were not previously recorded in the budget, but the debt in 1996 and the borrowing in 1996 and 1997 have been retroactively revised to include them.

Some types of lease-purchase contracts are equivalent to direct Federal construction financed by Federal borrowing. Several 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 has exercised full control over the design, construction, and operation of the buildings. The construction expenditures and interest were therefore classified as Federal outlays, and the borrowing was classified as Federal agency borrowing from the public. The securities used to finance the construction of the building for the Architect of the Capitol were zero-coupon certificates, for which the sales price was about one-fourth of par value. As an exception to the normal treatment of agency debt, but like Treasury zero-coupon bonds, the value of these certificates is measured as the sales price plus the amortized discount. The interest is accrued as an outlay.

The proper budgetary treatment of lease-purchases was further examined in connection with the Budget Enforcement Act of 1990. Several changes were made. Among other decisions, it was determined that outlays for a lease-purchase in which the Government assumes substantial risk will be recorded in an amount equal to the asset cost over the period during which the contractor constructs, manufactures, or purchases the asset; if the asset already exists, the outlays will be

recorded when the contract is signed. Agency borrowing will be recorded each year to the extent of these outlays. The agency debt will subsequently be redeemed over the lease payment period by a portion of the annual lease payments. This rule was effective starting in 1991. However, no lease-purchase agreements in which the Government assumes substantial risk have yet been authorized or are estimated for 1998 or 1999. The budgetary treatment was reviewed in connection with the Balanced Budget Act of 1997. Some clarifications were made but no substantive changes from existing practice.

The amount of agency securities sold to the public has been reduced 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 together (a) the agency borrowing from the FFB and (b) the Treasury borrowing from the public that was needed to provide the FFB with the funds to lend to the agencies.

The debt of the agencies that borrow from the FFB is not subject to the statutory debt limitation. This enabled Treasury to raise additional cash to avoid default during the dispute with Congress over the budget and the debt limit two years ago. On February 14, 1996, FFB swapped most of its holdings of TVA and Postal Service debt to the Civil Service Retirement and Disability trust fund (CSRDF) in exchange for Treasury securities. The Treasury securities, which were subject to the debt limit, were canceled in an exchange that took place between the FFB and the Treasury immediately afterwards. This reduced the amount of debt subject to limit, which allowed Treasury to sell to the public more securities that are subject to the debt limit.

The TVA and Postal Service securities acquired by CSRDF are included in gross Federal debt shown in Table 13-2, are included in Table 13-3 as amounts that agencies borrowed from other funds, and are included in Table 13-4 as agency debt held by Government accounts. Including debt held by Government accounts in gross Federal debt is not double counting, because Treasury did not have to borrow from the public in order for these accounts to buy the securities. Moreover, the TVA and Postal Service securities acquired by CSRDF replaced Treasury securities, which had been counted in gross Federal debt. It is assumed for purposes of the budget estimates that CSRDF will hold the agency debt until maturity (or call date), at which time the principal repayments will be invested in Treasury securities.¹¹

¹⁰The debt securities of the FSLIC Resolution fund and Department of the Interior were also issued as a means of paying specified bills. The budgetary treatment of these and similar securities is further explained in Special Analysis E of the 1989 *Budget*, pp. E-25 to E-26; and Special Analysis E of the 1988 *Budget*, pp. E-27 to E-28.

¹¹For further discussion of the debt limit dispute and the swap of securities between the FFB and CSRDF, see *Analytical Perspectives, Budget of the United States Government, Fiscal Year 1998*, pp. 222 and 225.

Debt Held by Government Accounts

Trust funds, and some public enterprise revolving funds and special funds, accumulate cash in excess of current requirements in order to meet future obligations. These cash surpluses are invested mostly in Treasury debt and, to a very small extent, in agency debt.

Investment by trust funds and other Government accounts was around \$10 billion per year in the early 1980s. Primarily due to the Social Security Amendments of 1983, an expanding economy, and the creation of the military retirement trust fund, annual investment has risen greatly since then. It was \$149.6 billion in 1997, as shown in Table 13-4, and it is estimated to rise to \$184.1 billion in 1999. The holdings of Federal securities by Government accounts grow to \$1,930.8 billion by the end of 1999, or 34 percent of the gross Federal debt. This percentage is estimated to rise further in the following years as the budget surpluses reduce the debt held by the public.

The large investment by Government accounts is concentrated among a few trust funds. The two social security trust funds—old-age and survivors insurance and disability insurance—have a large combined surplus and invest an increasing total amount each year: \$285.5 billion during 1997-99, which constitutes 59 percent of the total estimated investment by Government accounts.

In addition to these two funds, the largest current investor is the civil service retirement and disability trust fund. It accounts for 19 percent of the total investment by Government accounts during 1997-99, and the military retirement trust fund accounts for 4 percent. Altogether, the investment of social security and these two retirement funds comprises 83 percent of the investment by all Government accounts during this period. At the end of 1999, they are estimated to own 75 percent of the total debt held by Government accounts. The hospital insurance trust fund, which invested heavily in the past, disinvested in 1997 and is estimated to disinvest lesser amounts in 1998 and 1999.

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 have traditionally been recorded at par in the OMB and Treasury reports on Federal debt. However, there have recently been two exceptions. First, in 1991 Treasury began to issue zero-coupon bonds to the Pension Benefit Guaranty Corporation (PBGC). Because the purchase price was a small fraction of par value and the amounts were large, the PBGC holdings were recorded at purchase price plus amortized discount. These securities were redeemed during 1994.

Second, in September 1993 Treasury also began to subtract 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 PBGC or for debt held by the public, this discount is the amount at the time of issue and is not amortized over the term of the security. In Table 13-4 it is shown as a separate item at the end of the table and not distributed by account.

Limitations on Federal Debt

Definition of debt subject to limit.—Statutory limitations have normally 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. The latter 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 lower part of Table 13-2 compares total Treasury debt with the amount of Federal debt that is subject to the limit. Most of the Treasury debt not subject to limit was issued by the FFB (Federal Financing Bank). It is authorized to have outstanding up to \$15 billion of publicly issued debt, and this amount was issued several years ago to the Civil Service Retirement and Disability trust fund. The remaining Treasury debt not subject to limit consists almost entirely of silver certificates and other currencies no longer being issued.

The sole type of agency debt currently subject to the general limit is the debentures issued by the Federal Housing Administration, which were only \$68 million at the end of 1997. 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 securities outstanding (including its debt to the FFB, the Treasury, and other Government accounts).

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 elsewhere 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 treatment 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, and this adjustment is defined in footnote 5 to Table 13-2. The amount is relatively small: \$6.6 billion at the end of 1997 compared to the total discount (less premium) of \$76.6 billion on all Treasury securities.

Methods of changing the debt limit.—The statutory debt limit has frequently been changed. Since

Table 13-4. DEBT HELD BY GOVERNMENT ACCOUNTS¹
(In millions of dollars)

Description	Investment or disinvestment (-)			Holdings end of 1999 estimate
	1997 actual	1998 estimate	1999 estimate	
Investment in Treasury debt:				
Energy: Nuclear waste disposal fund	938	805	938	7,992
Health and Human Services:				
Federal old-age and survivors insurance trust fund ²	68,041	85,623	93,392	746,460
Federal disability insurance trust fund ²	13,462	12,281	12,719	88,562
Federal hospital insurance trust fund	-9,184	-5,631	-3,095	107,895
Federal supplementary medical insurance trust fund	7,289	5,040	540	40,044
Housing and Urban Development:				
Federal Housing Administration mutual mortgage fund	5,737	2,100	2,564	18,131
Other HUD	621	-65	348	5,841
Interior:				
Outer Continental Shelf deposit funds	122	-1,616	-10	70
Abandoned Mine Reclamation fund	128	149	127	1,831
Labor:				
Unemployment trust fund	8,031	8,783	7,750	78,456
Pension Benefit Guaranty Corporation	1,227	1,285	1,247	10,292
State: Foreign Service retirement and disability trust fund	582	613	639	10,230
Transportation:				
Highway trust fund	1,157	1,172	14,808	38,321
Airport and airway trust fund	-1,322	2,988	4,866	14,214
Oil spill liability trust fund	-18	-26	255	1,397
Treasury: Exchange stabilization fund	3,607	-4,342	5,889	17,007
Veterans Affairs:				
National service life insurance trust fund	16	-88	-171	11,764
Other trust funds	19	-7	1	1,732
Federal funds	-8	-15	-16	532
Defense-Civil: Military retirement trust fund	9,134	5,911	6,301	138,234
Environmental Protection Agency:				
Hazardous substance trust fund	-498	-478	1,299	6,698
Leaking underground storage tank trust fund	*	94	213	1,407
International Assistance Programs:				
Overseas Private Investment Corporation	249	118	183	2,837
Office of Personnel Management:				
Civil Service retirement and disability trust fund ³	28,961	32,649	29,253	476,306
Employees life insurance fund	1,077	1,100	1,145	20,283
Employees health benefits fund	-1,396	-102	-55	6,630
Federal Deposit Insurance Corporation:				
Bank Insurance fund	4,143	2,017	945	29,291
FSLIC Resolution fund	1,112	227	208	2,241
Savings Association Insurance fund	4,589	256	321	9,842
National Credit Union Administration: Share insurance fund	188	166	201	4,039
Postal Service fund ²	*	-360	.....	500
Railroad Retirement Board trust funds	2,117	186	176	19,601
Tennessee Valley Authority	-951	.....	.....	.....
Other Federal funds	1,470	77	516	7,151
Other trust funds	817	485	642	8,164
Unrealized discount ¹	-1,357	.....	.....	-7,000
Total, investment in Treasury debt	150,101	151,395	184,139	1,926,995
Investment in agency debt:				
Office of Personnel Management:				
Civil Service retirement and disability trust fund ³	-508	-3,181	-83	3,834
Total, investment in agency debt	-508	-3,181	-83	3,834
Total, investment in Federal debt¹	149,593	148,214	184,056	1,930,829
MEMORANDUM				
Investment by Federal funds (on-budget)	23,051	2,778	13,471	117,027
Investment by Federal funds (off-budget)	*	-360	.....	500
Investment by trust funds (on-budget)	46,274	49,507	64,484	985,210
Investment by trust funds (off-budget)	81,503	97,905	106,111	835,022
Investment by deposit funds ⁴	122	-1,616	-10	70
Unrealized discount ¹	-1,357	.....	.....	-7,000

* \$50 million or less.

¹ Debt held by Government accounts is measured at face value except for the unrealized discount on Government account series securities, which is not distributed by account. Changes in the unrealized discount are not estimated.

² Off-budget Federal entity.

³ The investment in agency debt is the result of the FFB swapping Postal Service and TVA securities with the Civil Service Retirement and Disability trust fund during 1996 in exchange for Treasury securities having an equal present value. See the narrative in the section on agency debt for further explanation.

⁴ Only those deposit funds classified as Government accounts.

1960, Congress has passed 68 separate acts to raise the limit, extend the duration of a temporary increase, or revise the definition.

The statutory limit can be changed by normal legislative procedures. 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 rules of the House of Representatives provide 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. It may be amended in the Senate 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 his signature. This method directly relates the decision on the debt limit to the decisions on the Federal deficit and other factors that determine the change in the debt subject to limit. Both methods have been used numerous times.

Recent changes in the debt limit.—Major increases in the debt limit were enacted as part of the deficit reduction packages in the Omnibus Budget Reconciliation Acts of 1990 and 1993. Both changes in law were preceded by one or more temporary increases in the limit before agreement was reached on the debt and the deficit reduction measures together. Both increases in the debt limit were large enough to last over two years without a further change in law, the longest times without an increase since the period from 1946 to 1954.

The debt again approached the limit in 1995, and the limit again became part of the larger issue of deficit reduction. During an extended period of dispute between the President and the Congress, the Treasury Department took a number of administrative actions to keep within the limit and the Congress passed two acts providing temporary exemptions from the limit. In March 1996, although agreement had not been reached on deficit reduction, Congress passed the Contract with America Advancement Act of 1996, one provision of which increased the debt limit from \$4,900 billion to \$5,500 billion. The President signed the bill into law on March 29.

During 1997, unlike 1996, the President and the Congress reached agreement on a plan to balance the budget. This included a sufficient increase in the debt limit to accommodate Government finances for longer than possible under the limit enacted in the previous year, even though the amount of debt at that time was considerably under the limit. As a result, the Balanced Budget Act of 1997, which the President signed into law on August 5, 1997, increased the debt limit to \$5,950 billion.

Federal funds financing and the change in debt subject to limit.—The change in debt held by the public, as shown in Table 13–2, 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 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 collections earmarked by law for specified purposes, such as paying social security benefits or grants to State governments for highway construction.¹²

A Federal funds deficit must generally be financed by borrowing, 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 the Treasury issuing securities that are subject to the statutory debt limit. Trust fund surpluses are almost entirely invested in these securities, and trust funds hold most of the debt held by Government accounts. The change in debt subject to limit is therefore determined primarily by the Federal funds deficit, which is equal to the arithmetic sum of the total Government deficit and the trust fund surplus.

Table 13–5 derives the change in debt subject to limit. In 1999 the Federal funds deficit is estimated to be \$161.5 billion, and other factors increase the requirement to borrow subject to limit by \$34.1 billion. The largest other factor is the direct loan financing accounts. As explained in an earlier section, their net financing disbursements are excluded from the budget by law because they do not represent a cost to the Government, but they have to be financed and they are currently sizable. The next largest factor is investment in Treasury securities by revolving funds and special funds in the Federal funds group. As a result of all these factors, the debt subject to limit is estimated to increase by \$195.6 billion, which is \$185.1 billion more than the increase in debt held by the public.

The budget deficit or surplus equals the sum of the Federal funds deficit or surplus and the trust fund deficit or surplus. The trust fund surplus is currently large, as it has been for a number of years, and is estimated to grow through 2003. The Federal funds, in contrast, as shown in Table 13–5, continue to have a deficit of more than \$100 billion every year over this period. Mainly because of the Federal funds deficit, the increase in debt subject to limit is more than the increase in debt held by the public during 1997–2000, as can be seen by comparing the annual increase in debt sub-

¹² For further discussion of the trust funds and Federal funds groups, see chapter 17, "Trust Funds and Federal Funds."

Table 13-5. FEDERAL FUNDS FINANCING AND CHANGE IN DEBT SUBJECT TO STATUTORY LIMIT
(In billions of dollars)

Description	1997 actual	Estimate					
		1998	1999	2000	2001	2002	2003
Federal funds surplus or deficit (-)	-147.9	-158.7	-161.5	-164.6	-148.4	-111.3	-119.7
(On-budget)	-148.0	-156.9	-160.6	-162.2	-147.9	-112.1	-121.4
(Off-budget)	*	-1.7	-0.8	-2.4	-0.5	0.8	1.7
Means of financing other than borrowing:							
Change in: ¹							
Treasury operating cash balance	0.6	3.6	.....	.....	.....	.....	.....
Checks outstanding, etc. ²	2.2	-0.9	-4.1	.....	.....	.....	.....
Deposit fund balances ³	-0.4	-1.6	-*	.....	.....	.....	.....
Seigniorage on coins	0.5	0.4	0.7	0.7	0.7	0.7	0.7
Less: Net financing disbursements:							
Direct loan financing accounts	-21.0	-15.0	-15.4	-13.2	-15.4	-14.1	-13.4
Guaranteed loan financing accounts	0.1	-0.9	-0.7	-0.5	-0.1	-0.1	-0.1
Total, means of financing other than borrowing	-18.0	-14.4	-19.6	-13.0	-14.8	-13.5	-12.8
Decrease or increase (-) in Federal debt held by Federal funds and deposit funds ⁴	-23.2	-0.8	-13.5	.....	.....	.....	.....
Increase or decrease (-) in Federal debt not subject to limit	-1.9	-4.1	-1.1	-0.9	-1.1	-1.1	-2.1
Total, requirement for Federal funds borrowing subject to debt limit	-190.9	-178.0	-195.6	-178.5	-164.3	-125.9	-134.6
Adjustment for change in discount or premium ⁵	-0.5	.....	.....	.....	.....	.....	.....
Increase in debt subject to limit	190.4	178.0	195.6	178.5	164.3	125.9	134.6
ADDENDUM							
Debt subject to statutory limit ⁶	5,327.6	5,505.6	5,701.2	5,879.8	6,044.0	6,169.9	6,304.5

*\$50 million or less.

¹A decrease in the Treasury operating cash balance (which is an asset) would be a means of financing the deficit and therefore has a positive sign. An increase in checks outstanding or deposit fund balances (which are liabilities) would also be a means of financing the deficit and would therefore also have a positive sign.

²Besides checks outstanding, includes accrued interest payable on Treasury debt, miscellaneous liability accounts, allocations of special drawing rights, and, as an offset, cash and monetary assets other than the Treasury operating cash balance, miscellaneous asset accounts, and profit on sale of gold.

³Does not include investment in Federal debt securities by deposit funds classified as part of the public.

⁴Only those deposit funds classified as Government accounts.

⁵Consists 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.

⁶The statutory debt limit is \$5,950 billion.

ject to limit in Table 13-5 with the annual increase in debt held by the public in Table 13-2; and the debt subject to limit continues to increase during 2001-2003, even though the budget is in surplus and some debt held by the public is being repaid. In 2003, for example, when the budget has an \$82.8 billion surplus and the debt held by the public decreases by \$70.0 billion, the debt subject to limit increases by \$134.6 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, as shown in Table 13-6, foreign holdings were just over \$10.0 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 primarily due to foreign decisions, both official and private, rather than the direct marketing of these securities to foreign residents. At the end of fiscal year 1997 foreign holdings of Treasury debt were \$1,282 billion, which was 34 percent of the total debt held by the public. Foreign central banks owned 48 percent of the Federal debt held by foreign residents; private investors owned nearly all the rest. All the Federal debt held by foreign residents is denominated in dollars.

Although the amount of debt held by foreigners grew greatly over this period, the proportion they own did not change much from 1972 until 1995. In 1995 and 1996, however, foreign holdings increased by nearly \$200 billion each year, which was more than the total Federal borrowing from the public. In 1997 foreign holdings increased by \$252 billion, which was much more than the total borrowing from the public of \$38 billion.¹³ As a result, the Federal debt held by individuals and institutions within the United States decreased in absolute amount over the last three years, especially in 1997, when it decreased by \$214 billion; and the percentage of Federal debt held by foreign residents grew from 19 percent at the end of 1994 to 34 percent at the end of 1997.

Foreign holdings of Federal debt are almost one-fourth of the foreign-owned assets in the U.S. 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, which affect the market for Federal debt. For example, the capital inflow includes deposits in U.S. financial intermediaries that themselves buy Federal debt.

¹³The amounts reported by the Bureau of Economic Analysis, Department of Commerce, were different, but similarly large, due to a different method of valuing the securities.

Table 13–6. FOREIGN HOLDINGS OF FEDERAL DEBT
(Dollar amounts in billions)

Fiscal year	Debt held by the public			Borrowing from the public			Interest on debt held by the public		
	Total	Foreign ¹	Percent- age foreign	Total ²	Foreign ¹	Percent- age foreign	Total ³	Foreign ⁴	Percent- age foreign
1965	260.8	12.3	4.7	3.9	0.3	6.4	9.6	0.5	4.9
1966	263.7	11.6	4.4	2.9	-0.7	n.a.	10.1	0.5	5.1
1967	266.6	11.4	4.3	2.9	-0.2	n.a.	11.1	0.6	5.1
1968	289.5	10.7	3.7	22.9	-0.7	n.a.	11.9	0.7	5.6
1969	278.1	10.3	3.7	-1.3	-0.4	n.a.	13.5	0.7	5.3
1970	283.2	14.0	5.0	3.5	3.8	107.2	15.4	0.8	5.5
1971	303.0	31.8	10.5	19.8	17.8	89.8	16.2	1.3	7.9
1972	322.4	49.2	15.2	19.3	17.3	89.5	16.8	2.4	14.2
1973	340.9	59.4	17.4	18.5	10.3	55.3	18.7	3.2	17.2
1974	343.7	56.8	16.5	2.8	-2.6	n.a.	22.7	4.1	17.9
1975	394.7	66.0	16.7	51.0	9.2	18.0	25.0	4.5	18.2
1976	477.4	69.8	14.6	82.2	3.8	4.6	29.3	4.4	15.1
TQ	495.5	74.6	15.1	18.1	4.9	26.9	7.8	1.2	14.9
1977	549.1	95.5	17.4	53.6	20.9	39.0	33.8	5.1	15.0
1978	607.1	121.0	19.9	58.0	25.4	43.5	40.2	7.9	19.5
1979 ⁵	640.3	120.3	18.8	33.2	-0.7	n.a.	49.9	10.7	21.5
1980	709.8	121.7	17.1	69.5	1.4	2.0	62.8	11.0	17.5
1981	785.3	130.7	16.6	75.5	9.0	12.0	81.7	16.4	20.1
1982	919.8	140.6	15.3	134.4	9.9	7.4	101.2	18.7	18.5
1983	1,131.6	160.1	14.1	211.8	19.5	9.2	111.6	19.2	17.2
1984	1,300.5	175.5	13.5	168.9	15.4	9.1	133.5	20.3	15.2
1985 ⁵	1,499.9	222.9	14.9	199.4	47.4	n.a.	152.9	23.0	15.1
1986	1,736.7	265.5	15.3	236.8	42.7	18.0	159.3	24.2	15.2
1987	1,888.7	279.5	14.8	152.0	14.0	9.2	160.4	25.7	16.0
1988	2,050.8	345.9	16.9	162.1	66.4	40.9	172.3	29.9	17.4
1989	2,189.9	394.9	18.0	139.1	49.0	35.2	189.0	37.1	19.6
1990 ⁵	2,410.7	440.3	18.3	220.8	45.4	n.a.	202.4	40.3	19.9
1991	2,688.1	477.3	17.8	277.4	37.0	13.3	214.8	42.0	19.5
1992	2,998.8	535.2	17.8	310.7	57.9	18.6	214.5	40.5	18.9
1993	3,247.5	591.3	18.2	247.4	56.1	22.7	210.2	41.1	19.6
1994	3,432.1	655.8	19.1	184.6	64.5	34.8	210.6	44.5	21.1
1995	3,603.4	848.4	23.5	171.3	192.6	112.4	239.2	58.3	24.4
1996	3,733.0	1,030.1	27.6	129.6	181.7	140.2	246.6	67.7	27.4
1997	3,771.0	1,282.5	34.0	38.2	252.4	561.0	250.8	87.3	34.8

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 not recorded by methods that are strictly comparable with the data on debt held by the public. Projections are not available.

² Borrowing from the public is defined as equal to the change in debt held by the public from the beginning of the year to the end, except to the extent that the amount of debt is changed by reclassification.

³ Estimated as interest on the public debt less "interest received by trust funds" (subfunction 901 less subfunctions 902 and 903). Does not include the comparatively small amount of interest on agency debt or the offsets for other interest on public debt received by Government accounts (revolving funds and special funds).

⁴ Estimated by Bureau of Economic Analysis, Department of Commerce. These estimates include small amounts of interest from other sources, including the debt of Government-sponsored enterprises, which are not part of the Federal Government.

⁵ Benchmark revisions reduced the estimated foreign holdings of Federal debt as of December 1978 and increased the estimated foreign holdings as of December 1984 and December 1989. As a result, the data on foreign holdings in different time periods are not strictly comparable, and the "borrowing" from foreign residents in 1979, 1985, and 1989 reflects the benchmark revision as well as the net purchases of Federal debt securities.

n.a. = Not applicable due to negative numbers or benchmark revision.

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. Federally assisted borrowing is of two principal types: Government-guaranteed borrowing, which is another term for guaranteed lending, and borrowing by Government-sponsored enterprises (GSEs). The Federal Government also exempts the interest on most State and local government debt from income tax; and it insures the deposits of banks and thrift institutions, which themselves make loans.

Federal credit assistance is discussed in Chapter 8, "Underwriting Federal Credit and Insurance." Detailed

data are presented in tables at the end of that chapter. Table 13–7 brings together the totals of Federal and federally assisted borrowing and lending and shows the trends since 1965 in terms of both dollar amounts and, more significantly, as percentages of total credit market borrowing or lending by domestic nonfinancial sectors. The Federal and federally assisted lending is recorded at the principal amount. It does not measure the degree of subsidy provided by the credit assistance, nor does it indicate the extent to which the credit assistance changed the allocation of financial and real resources. The estimates for GSE borrowing in 1998 and 1999 were developed by the GSEs based on certain assumptions but are subject to periodic review and revision and do not represent official GSE forecasts of future activity.

The Federal borrowing participation rate trended strongly upward from the 1960s to the early 1990s, though with cyclical variation. Much of the increase in the 1980s was due to higher GSE borrowing as well as Federal deficits. Since 1992, the Federal borrowing participation rate has declined, reaching 33 percent in

1997, despite large guaranteed borrowing in some years. The Federal lending participation rate has been smaller and more stable over time than the borrowing participation rate, primarily because in most years Federal direct loans have been much smaller than Federal borrowing.

Table 13-7. FEDERAL AND FEDERALLY ASSISTED PARTICIPATION IN THE CREDIT MARKET

(Dollar amounts in billions)

	Actual												Estimates	
	1965	1970	1975	1980	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999
Total net borrowing in credit market ¹	66.7	88.0	169.2	336.8	823.3	716.0	525.1	576.4	600.1	709.0	701.0	631.7	.....	.....
Federal borrowing from the public	3.9	3.5	51.0	69.5	199.4	220.8	310.7	247.4	184.7	171.3	129.6	38.2	25.7	10.5
Guaranteed borrowing	5.0	7.8	8.6	31.6	21.6	40.7	19.7	-2.0	38.7	26.2	89.9	57.8	88.1	85.4
Government-sponsored enterprise borrowing ²	1.2	4.9	5.3	21.4	57.9	115.4	150.8	169.3	121.1	125.7	141.5	112.8	198.1	172.2
Total, Federal and federally assisted borrowing	10.1	16.2	65.0	122.5	278.9	376.9	481.2	414.7	344.5	323.2	361.1	208.7	311.9	268.1
Federal borrowing participation rate (percent)	15.1	18.4	38.2	36.4	33.9	52.6	91.6	71.9	57.4	45.6	51.5	33.0	.....	.....
Total net lending in credit market ¹	66.7	88.0	169.2	336.8	823.3	716.0	525.1	576.4	600.1	709.0	701.0	631.7	.....	.....
Direct loans	2.0	3.0	12.7	24.2	28.0	2.8	7.0	-1.7	-0.8	1.6	4.0	12.8	5.5	6.9
Guaranteed loans	5.0	7.8	8.6	31.6	21.6	40.7	19.7	-2.0	38.7	26.2	89.9	57.8	88.1	85.4
Government-sponsored enterprise loans ²	1.4	5.2	5.5	24.1	60.7	90.0	145.2	162.3	125.3	68.2	161.2	107.9	200.9	155.5
Total, Federal and federally assisted lending	8.3	15.9	26.9	79.9	110.3	133.5	171.9	158.6	163.2	90.4	255.1	178.4	294.5	247.7
Federal lending participation rate (percent)	12.4	18.1	15.9	23.7	13.4	18.9	32.7	27.5	27.2	12.8	36.4	28.2	.....	.....

¹Total net borrowing (or lending) in credit market by domestic nonfinancial sectors, excluding equities. Credit market borrowing (lending) is the acquisition (loan) of funds other than equities through formal credit channels. Financial sectors are omitted from the series used in this table to avoid double counting, since financial intermediaries borrow in the credit market primarily in order to finance lending in the credit market. Equities, trade credit, security credit, and other sources of funds are also excluded from this series. Source: Federal Reserve Board flow of funds accounts. Projections are not available.

²Most Government-sponsored enterprises (GSEs) are financial intermediaries. GSE borrowing (lending) is nevertheless compared with total credit market borrowing (lending) by nonfinancial sectors, because GSE borrowing (lending) is a proxy for the borrowing (lending) by nonfinancial sectors that the GSEs assist through intermediation. The GSEs assist the ultimate nonfinancial borrower by purchasing its loans from the initial, direct lender or by other methods, which they finance by issuing securities themselves in the credit market. Borrowing and lending include mortgage-backed securities, because the GSEs assist nonfinancial borrowers through this type of intermediation as well as by types of intermediation that involve financial instruments recognized on the GSEs' balance sheets. The data for this table are adjusted, with some degree of approximation, to remove double counting in calculating a consolidated total for Federal and federally assisted borrowing (lending): GSE borrowing and lending are calculated net of transactions between components of GSEs and transactions in guaranteed loans; GSE borrowing is also calculated net of borrowing from other GSEs and purchases of Federal debt securities.