FEDERAL BORROWING AND DEBT

12. FEDERAL BORROWING AND DEBT

Debt is the largest legally binding obligation of the Federal Government. At the end of 1996 the Government owed $3,733 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 $5,182 billion. This year the Government is estimated to pay around $253 billion of interest to the public on its debt.

The present deficit is continuing to increase the amount of Federal debt held by the public. However, the Omnibus Budget Reconciliation Act of 1993 and the strong economic expansion have reduced the size of the deficit for four consecutive years, and the Administration is proposing steps to meet its goal of balancing the budget by 2002. The reduction in the deficit over the next few years will lower the growth of the debt further and will decrease debt held by the public as a percentage of the Nation's gross domestic product (GDP).

Trends in Federal Debt

Federal debt held by the public has increased fivefold since 1980, as shown in Table 12–1. In 1980 it was $709.8 billion; by the end of 1996 it stood at $3,733.0 billion. The data in this table are supplemented for earlier years by Tables 7.1–7.3 in *Historical Tables,* which is published as a separate volume of the budget.

TABLE 12–1. TRENDS IN FEDERAL DEBT HELD BY THE PUBLIC

(Dollar amounts in billions)

Fiscal year	Debt held by the public		Debt held by the public as a percent of:		Interest on debt held by the public as a percent of: [4]	
	Current dollars	CY 1992 dollars [1]	GDP [2]	Credit market debt [3]	Total outlays	GDP
1950	219.0	1,232.5	80.3	55.3	11.4	1.8
1955	226.6	1,128.0	57.3	43.3	7.6	1.3
1960	236.8	1,022.6	45.7	33.8	8.5	1.5
1965	260.8	1,052.4	38.0	26.9	8.1	1.4
1970	283.2	947.9	28.1	20.8	7.9	1.5
1975	394.7	974.1	25.4	18.4	7.5	1.6
1980	709.8	1,203.9	26.1	18.4	10.6	2.3
1981	785.3	1,213.1	25.8	18.5	12.0	2.7
1982	919.8	1,327.1	28.6	19.8	13.6	3.1
1983	1,131.6	1,560.6	33.1	21.9	13.8	3.3
1984	1,300.5	1,727.3	34.1	22.1	15.7	3.5
1985	1,499.9	1,925.4	36.6	22.3	16.2	3.7
1986	1,736.7	2,168.4	39.7	22.6	16.1	3.6
1987	1,888.7	2,292.1	41.0	22.3	16.0	3.5
1988	2,050.8	2,405.3	41.4	22.3	16.2	3.5
1989	2,189.9	2,464.4	40.9	22.0	16.5	3.5
1990	2,410.7	2,603.9	42.4	22.5	16.2	3.6
1991	2,688.1	2,784.8	45.9	24.0	16.2	3.7
1992	2,998.8	3,018.2	48.8	25.5	15.5	3.5
1993	3,247.5	3,184.4	50.2	26.4	14.9	3.2
1994	3,432.1	3,288.7	50.2	26.5	14.4	3.1
1995	3,603.4	3,370.5	50.1	26.3	15.8	3.3
1996	3,733.0	3,415.3	49.9	25.9	15.8	3.3
1997 estimate	3,875.8	3,460.5	49.3	....	15.5	3.2
1998 estimate	4,021.4	3,499.6	48.9	....	15.2	3.1
1999 estimate	4,159.4	3,527.6	48.3	....	14.7	3.0
2000 estimate	4,269.0	3,527.2	47.2	....	14.1	2.8
2001 estimate	4,328.0	3,485.5	45.6	....	13.7	2.7
2002 estimate	4,333.1	3,401.2	43.5	....	13.2	2.5

[1] Debt in current dollars deflated by the GDP chain-type price index with calendar year 1992 equal to 100. For 1950 and 1955, the index is not available from the recent comprehensive revision of the national income and product accounts. The index to 1950 and 1955 was extapolated using the unrevised implicit GDP deflator.

[2] GDP for 1950 and 1955 was extrapolated using the unrevised GDP.

[3] Total 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 both borrow and lend in the credit market. Source: Federal Reserve Board flow of funds accounts. Projections are not available.

[4] Interest 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).

At the end of World War II, Federal debt was more than 100 percent of GDP. From then until the 1970s, Federal debt grew gradually, but, due to inflation, it declined significantly 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 80.3 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 have continued to be large, debt has continued to grow substantially, although the rate of increase has been slowed. With inflation reduced, the rapid growth in nominal debt has 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 18.4 percent to 26.4 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.

Federal debt held by the public increased more slowly in 1994 than in any year since 1979, and it increased more slowly still in 1995 and 1996. By 1996 it had declined slightly relative to both GDP and total credit market debt. Table 12–1 shows that debt as a percentage of GDP is estimated to decline further from 49.9 percent in 1996 to 43.5 percent in 2002. The recent improvement reflects the deficit reduction package enacted by the Omnibus Budget Reconciliation Act of 1993 and the continuing economic expansion. The further improvement to 2002 reflects the Administration’s proposal for a balanced budget and the expectation that economic growth will continue at a moderate pace for the foreseeable future.[1] Interest outlays on the debt held by the public are estimated to decline 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 therefore 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

[2] The 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 12–3 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.

[3] The Federal sector of the national income and product accounts is a better measure of the deficit for analyzing the effect of Federal fiscal policy on national saving than is 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.

[4] Debt 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. Treasury has announced that in early 1997 it will begin to sell a new type of instrument, inflation-protected securities. The measured value of these securities will include a periodic adjustment for inflation.

Table 12–2. FEDERAL GOVERNMENT FINANCING AND DEBT [1]

(In billions of dollars)

	1996 Actual	Estimate					
		1997	1998	1999	2000	2001	2002
Financing:							
Surplus or deficit (–)	**–107.3**	**–125.6**	**–120.6**	**–117.4**	**–87.1**	**–36.1**	**17.0**
(On-budget)	–174.3	–199.5	–197.0	–204.7	–183.3	–139.2	–92.5
(Off-budget)	67.0	73.9	76.4	87.3	96.2	103.1	109.5
Means of financing other than borrowing from the public:							
Changes in: [2]							
Treasury operating cash balance	–6.3	4.2	....	....	....	....	....
Checks outstanding, etc. [3]	–3.9	–*	–1.4	....	....	....	....
Deposit fund balances	–1.0	0.7	–2.6	....	....	....	....
Seigniorage on coins	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Less: Net financing disbursements:							
Direct loan financing accounts	–13.0	–22.6	–21.9	–21.9	–23.8	–24.4	–24.0
Guaranteed loan financing accounts	1.3	–0.2	0.4	0.6	0.7	0.9	1.2
Total, means of financing other than borrowing from the public	**–22.3**	**–17.2**	**–24.9**	**–20.7**	**–22.4**	**–22.8**	**–22.1**
Total, requirement for borrowing from the public	–129.6	–142.8	–145.6	–138.1	–109.6	–59.0	–5.2
Change in debt held by the public	**129.6**	**142.8**	**145.6**	**138.1**	**109.6**	**59.0**	**5.2**
Debt Outstanding, End of Year:							
Gross Federal debt:							
Debt issued by Treasury	5,146.9	5,420.4	5,706.3	5,983.1	6,243.0	6,456.6	6,624.3
Debt issued by other agencies	35.1	33.3	29.9	29.5	29.0	28.7	28.2
Total, gross Federal debt	5,181.9	5,453.7	5,736.2	6,012.6	6,272.0	6,485.2	6,652.5
Held by:							
Government accounts	1,449.0	1,577.9	1,714.8	1,853.2	2,003.0	2,157.2	2,319.4
The public	**3,733.0**	**3,875.8**	**4,021.4**	**4,159.4**	**4,269.0**	**4,328.0**	**4,333.1**
Federal Reserve Banks	390.9	....	....	....	....	....	....
Other	3,342.0	....	....	....	....	....	....
Debt Subject to Statutory Limitation, End of Year:							
Debt issued by Treasury	5,146.9	5,420.4	5,706.3	5,983.1	6,243.0	6,456.6	6,624.3
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]	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Total, debt subject to statutory limitation [6]	**5,137.2**	**5,410.7**	**5,696.6**	**5,973.4**	**6,233.3**	**6,446.9**	**6,614.7**

* $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 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 $5,500 billion.

into these funds—for spending some of their collections at a later time than when they receive it. Public policy 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; 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.[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 assumed when the Government guarantees the payment of interest and principal on private loans; and liabilities for future pension payments are incurred as part of the compensation for the current 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 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 12–2 summarizes Federal borrowing and debt from 1996 through 2002. In 1996 the borrowing from the public was $129.6 billion, and Federal debt held by the public increased to $3,733.0 billion. The issuance of debt to Government accounts was $131.3 billion, and gross Federal debt increased to $5,181.9 billion. Borrowing from the public is estimated to be a little higher during the next three years, due to slightly higher deficits and more loan disbursements, and then to decline substantially as the budget approaches balance in 2002.

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 12–2 shows the relationship between borrowing from the public and the Federal deficit. The total deficit of the Federal Government includes not only the on-budget 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 1996 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 total Federal deficit is financed either by borrowing from the public or by the other means shown in Table 12–2, such as a decrease in Treasury's cash balance. In 1996 these other accounts added up to a negative amount, –$22.3 billion, which increased the need to borrow from the public. In some past years, the net amount of these items was positive and reduced the Government's borrowing requirements.

Many of these other means of financing are normally small relative to borrowing from the public. 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 "other means of financing" 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 do not represent costs to the Government above and beyond those costs already included in budget outlays. They are therefore non-budgetary in nature and are recorded as transactions of the financing account for each credit program.[9]

The "net financing disbursements" of a financing account are defined in the same way as the "outlays" of a budgetary account and may be either positive or negative. They are positive if the gross disbursements by the account—whether to the public or to a budgetary account—exceed the collections from both of these sources; they are negative if the collections exceed the gross disbursements. If the net financing disbursements are positive, they must be paid in cash and thus increase the requirement for Treasury borrowing; if the net financing disbursements are negative, they provide cash to the Treasury that can be used to pay the Government's bills in the same way as tax receipts, borrowing, or any other cash collection. The financing accounts are therefore a means of financing the Government, positive or negative, just like the other means listed in Table 12–2. A positive amount of net financing disbursements is shown in the table by the financing account having a negative sign, like the deficit, because it adds to the requirement for borrowing from the public.

The financing accounts initially had a very small effect on borrowing requirements, but beginning in 1995

[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.

[6] The 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.

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

[8] For further explanation of the off-budget Federal entities, see Chapter 21, "Off-Budget Federal Entities."

[9] The 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," 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.

the effect began to get large. They added $4.1 billion to borrowing requirements in 1995, $11.7 billion in 1996, and are estimated to add a little over $20 billion in 1997 and the subsequent years in the budget horizon. This is mainly because of the growth of the direct student loan program under current law. Beginning last year, eligible educational institutions could select either the direct lending or the guaranteed lending program for their students. 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.

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 95 percent of the total Federal debt held by Government accounts at the end of 1996. In 1998, for example, the total trust fund surplus is estimated to be $133.9 billion, and Government accounts are estimated to invest $136.9 billion in Federal securities. The small 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 held in major accounts and the annual investments are shown in Table 12–4.

Agency Debt

Several Federal agencies, shown in Table 12–3, sell debt securities to the public and to other Government accounts. During 1996, agencies borrowed $0.4 billion from 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 $25.5 billion of securities outstanding at the end of 1996, or 93 percent of all agency debt held by the public. TVA debt was primarily sold to finance capital expenditures and to refund other issues of its existing debt.

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]

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

[10] The 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.

Table 12–3. AGENCY DEBT

(In millions of dollars)

	Borrowing or repayment (–) of debt			Debt end of 1998 estimate
	1996 actual	1997 estimate	1998 estimate	
Borrowing from the public:				
Housing and Urban Development:				
Federal Housing Administration	12	1	....	83
Interior	....	....	....	13
Small Business Administration:				
Participation certificates: SBIC and section 505 development company	–67	....	....	7
Architect of the Capitol	–1	–2	–2	177
Farm Credit System Financial Assistance Corporation	....	....	....	1,261
Federal Deposit Insurance Corporation:				
FSLIC Resolution Fund	–32	–31	–95	....
National Archives	–4	–4	–5	281
Tennessee Valley Authority	523	–1,232	–100	24,151
Total, borrowing from the public	**431**	**–1,268**	**–202**	**25,975**
Borrowing from other funds:				
Housing and Urban Development:				
Federal Housing Administration	–16	....	....	....
Postal Service Fund [1]	4,406	–508	–3,181	717
Tennessee Valley Authority [1]	3,200	....	....	3,200
Total, borrowing from other funds	**7,590**	**–508**	**–3,181**	**3,917**
Total, agency borrowing	**8,021**	**–1,776**	**–3,382**	**29,892**

[1] The ''borrowing from other funds'' by the Postal Service Fund and TVA in 1996 was the result of the FFB swapping Postal Service and TVA securities with the Civil Service Retirement and Disability trust fund in exchange for Treasury securities having an equal present value. The amount of Postal Service securities exchanged (in terms of face value) was $4,665 million, of which $258 million was repaid later in 1996 to arrive at the estimated net borrowing of $4,406 million. See the narrative for further explanation.

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 1997 or 1998.

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.

As explained in a later section of this chapter, 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 a year 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 12–2 and are included in Table 12–3 as amounts borrowed from other funds. Including debt held by Government accounts in gross Federal debt is not double counting, because Treasury does 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.

The swap between FFB and CSRDF was equal in present value terms, measuring how much the securities were worth to CSRDF at the time of the exchange, but the face value of the Treasury and agency securities differed: $7.9 billion of agency securities at face value were swapped for $8.6 billion of Treasury securities at face value. Agency securities such as those held by CSRDF and Treasury securities of the type held by CSRDF are recorded at face value—rather than at the current amount of their discounted or present value—in calculating gross Federal debt and the other debt series shown in this chapter. Therefore, agency debt increased by $7.9 billion, Treasury debt decreased by $8.6 billion, and gross Federal debt decreased by $0.7 billion. (The Postal Service redeemed some of its securities later in 1996, so the tables in this chapter show a net increase in agency debt of $7.6 billion.) CSRDF is protected by various provisions from default risk on its agency debt securities. It is assumed for purposes of the estimates in the budget that CSRDF will hold the agency debt until maturity (or call date), at which time the principal repayments will be invested in Treasury securities.

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 $131.3 billion in 1996, as shown in Table 12–4, and it is estimated to be about the same in 1997 and 1998. The holdings of Federal securities by Government accounts are estimated to rise to $1,714.8 billion by the end of 1998, or 30 percent of the gross Federal debt. This percentage is estimated to rise further in the following years as the budget moves toward balance and borrowing from the public declines.

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: $222.7 billion during 1996–98, which constitutes 56 percent

Table 12–4. DEBT HELD BY GOVERNMENT ACCOUNTS [1]

(In millions of dollars)

Description	Investment or disinvestment (–) 1996 actual	1997 estimate	1998 estimate	Holdings end of 1998 estimate
Investment in Treasury debt:				
Overseas Private Investment Corporation	188	181	166	2,634
Defense-Civil: Military retirement trust fund	3,926	8,385	6,926	132,199
Energy: Nuclear waste disposal fund	629	802	843	6,956
Health and Human Services:				
Federal old-age and survivors insurance trust fund [2]	51,457	64,581	71,089	635,073
Federal disability insurance trust fund [2]	14,875	11,351	9,370	70,821
Federal hospital insurance trust fund	–4,059	–10,553	2,113	117,365
Federal supplementary medical insurance trust fund	13,662	3,112	1,171	31,458
Housing and Urban Development:				
Federal Housing Administration mutual mortgage fund	1,057	3,431	797	11,958
Other HUD	512	589	584	6,110
Interior:				
Outer Continental Shelf deposit funds	138	50	–1,575	50
Abandoned Mine Reclamation fund	111	148	117	1,691
Labor:				
Unemployment trust fund	6,751	5,777	6,860	66,530
Pension Benefit Guaranty Corporation	801	1,250	1,263	9,045
State: Foreign Service retirement and disability trust fund	596	620	652	9,668
Transportation:				
Highway trust fund	2,652	3,185	3,377	27,746
Airport and airway trust fund	–3,463	118	–128	7,672
Oil spill liability trust fund	3	–39	235	1,381
Treasury: Exchange stabilization fund	9,453	566	248	12,667
Veterans Affairs:				
National service life insurance trust fund	53	–93	–122	11,792
Other trust funds	31	7	3	1,729
Federal funds	3	–12	–12	547
Environmental Protection Agency:				
Hazardous substance trust fund	195	1,506	–606	7,276
Leaking underground storage tank trust fund	37	12	83	1,194
Office of Personnel Management:				
Civil Service retirement and disability trust fund [3]	19,317	28,996	32,618	447,057
Employees life insurance fund	1,122	1,042	1,231	19,235
Employees health benefits fund	294	–1,020	–126	7,037
Federal Deposit Insurance Corporation:				
Bank Insurance fund	1,169	3,201	1,182	26,569
FSLIC Resolution fund	167	688	118	1,500
Savings Association Insurance fund	1,077	4,499	405	9,580
National Credit Union Administration: Share insurance fund	181	162	168	3,815
Postal Service fund [2]	–389	240	–600	500
Railroad Retirement Board trust funds	2,682	–2,470	555	15,207
Tennessee Valley Authority	–291	–951	....	....
Other Federal funds	717	–264	515	5,339
Other trust funds	406	346	560	7,126
Unrealized discount [1]	–2,324	....	....	–5,643
Total, investment in Treasury debt [1]	**123,731**	**129,444**	**140,080**	**1,710,884**
Investment in agency debt:				
Housing and Urban Development:				
Government National Mortgage Association	–16	....	....	....
Office of Personnel Management:				
Civil Service retirement and disability trust fund [3]	7,606	–508	–3,181	3,917
Total, investment in agency debt	**7,590**	**–508**	**–3,181**	**3,917**
Total, investment in Federal debt [1]	**131,321**	**128,936**	**136,899**	**1,714,801**
MEMORANDUM				
Investment by Federal funds (on-budget)	15,757	14,291	6,394	98,411
Investment by Federal funds (off-budget)	–389	240	–600	500
Investment by trust funds (on-budget)	51,809	38,423	52,221	915,589
Investment by trust funds (off-budget)	66,331	75,932	80,459	705,894
Investment by deposit funds [4]	138	50	–1,575	50
Unrealized discount [1]	–2,324	....	....	–5,643

[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 FFB swapped Treasury securities with the Civil Service Retirement and Disability trust fund (CSRDF) in 1996 in exchange for securities having an equal present value. The result is shown in this table as an investment in agency debt and a reduction of investment in Treasury debt for CSRDF. CSRDF acquired agency securities having a face value of $7,865 million, of which $258 million was redeemed later in 1996 for an estimated net investment during the year of $7,606 million. See narrative in the section on agency debt for further explanation.

[4] Only those deposit funds classified as Government accounts.

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 21 percent of the total investment by Government accounts during 1996–98, and the military retirement trust fund accounts for 5 percent. Altogether, the investment of social security and these two retirement funds comprises 82 percent of the investment by all Government accounts during this period. At the end of 1998, they are estimated to own 75 percent of the total holdings by Government accounts. The hospital insurance trust fund, which invested heavily in the past, disinvested in 1996 and is estimated to disinvest more in 1997. Under Administration proposals, it will have a small surplus and invest again beginning in 1998.

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 12–4 it is shown as a separate item at the end of the table and not distributed by account. The data for 1989–92 were revised retroactively for this change.

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 12–2 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 $82 million at the end of 1996. 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 specified in footnote 5 to Table 12–2. The amount is relatively small: $5.8 billion at the end of 1996 compared to the total discount (less premium) of $77.9 billion recognized on Treasury securities.

Methods of changing the debt limit.—The statutory debt limit has frequently been changed. Since 1960, Congress has passed 67 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. Both increases in the debt limit were large enough to last over two years without a further change in law, the longest periods 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. The Congressional Budget Resolution instructed the Ways and Means and the Finance Committees to submit provisions for the reconciliation bill that would increase the limit from $4,900 billion to $5,500 billion.

As the debt came close to the limit in October and November 1995 without a budget agreement, the Treasury Department took several actions to control debt and cash more tightly in order to stay under the limit. It reduced or postponed auctions, suspended the issuance of State and local government series securities, and suspended "foreign add-ons" to Treasury bills and notes (additional amounts issued to Federal Reserve Banks as agents for foreign and international monetary authorities). Congress passed a bill raising the debt limit temporarily, but the President vetoed it on November 13. It would have limited the Treasury's powers to manage Federal debt to avoid default, and it would have reduced the limit by $100 billion (to $4,800 billion) when the temporary increase expired on December 13.

By November 15, 1995, the debt subject to limit was virtually at the limit and Treasury was obligated to make large cash payments. On that date, the Secretary of Treasury announced two steps to avoid default. He authorized the redemption of $39.8 billion of Treasury securities held by the Civil Service Retirement and Disability trust fund (CSRDF), and he authorized not reinvesting the $21.5 billion of Treasury securities held by the "G-fund" portion of the Thrift Savings Fund (the Federal Employees Retirement System's Government Securities Investment Trust). This provided $61.3 billion of additional borrowing authority. The law requires that at the end of a "debt limit suspension period" both funds are to be made whole with respect to lost interest and principal, so the beneficiaries of these funds do not suffer any losses.

The disagreement over how to reduce the deficit continued. Congress passed a budget reconciliation bill in December that included a provision increasing the debt limit to $5,500 billion, but the bill included many provisions unacceptable to the President and he vetoed it. On December 29, Treasury was unable to issue securities to the CSRDF to invest the $14.0 billion of interest payments that it received from the general fund and the FFB. In January 1996, Treasury announced three further steps that it subsequently took on February 14. The Secretary authorized the redemption of $6.4 billion of additional Treasury securities from CSRDF; the reinvestment of Treasury securities held by the Exchange Stabilization Fund (about $3.9 billion) was suspended; and agency securities held by the Federal Financing Bank were swapped for an equivalent amount of Treasury securities held by CSRDF. As explained in the section of this chapter on agency debt, the latter step reduced the debt subject to limit by $8.6 billion.

These steps were not enough, however, to ensure the timely payment of social security benefits and other amounts payable at the beginning of March, and the Secretary of Treasury said he had no other options that were both legal and prudent. Congress passed an act temporarily exempting from limit an amount of Treasury securities equal to the monthly social security benefits payable in March 1996, with the exemption expiring at the earlier of an increase in the debt limit or March 15, 1996. The President signed the bill into law on February 8, the amount of the social security benefits was $29.0 billion, and $29.0 billion of cash management bills were sold under this authority later in that month. The social security benefits and other amounts payable at the beginning of March were paid.

Congress passed another debt limit act in early March, which temporarily extended this exemption and exempted from limit certain obligations issued to trust funds and other accounts to which the Secretary of Treasury issues obligations. (The latter exemption was based on the deposits made to those funds and on the obligations held by those funds that matured during the period.) Both exemptions expired at the earlier of an increase in the debt limit or March 30. The President signed the bill into law on March 12. Under this authority, Treasury issued $58.2 billion of securities to trust funds and other accounts. Treasury was able to invest trust fund receipts as they were received, to reinvest the Exchange Stabilization Fund and the G-fund portion of the Thrift Savings Fund, and to completely invest the interest payments that CSRDF had received on December 29.

On March 28, 1996, 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. This enabled Treasury to raise cash to pay its bills by borrowing from the public in the following days. On the same day as the President signed the Act, Treasury reinvested CSRDF for the securities that had been redeemed and restored to the G-fund the interest it had temporarily lost. (The interest temporarily lost by CSRDF due to early redemptions was restored on the next payment date for interest on those securities.)

Federal funds financing and the change in debt subject to limit.—The change in debt held by the public, as shown in Table 12–2, is determined principally by the total Government deficit. 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 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.[11]

A Federal funds deficit must generally be financed by borrowing, either by selling securities to the public or by issuing securities to Government accounts. 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 principally by the Federal funds deficit, which is equal to the arithmetic sum of the total Government deficit and the trust fund surplus.

Table 12–5 derives the change in debt subject to limit. In 1998 the Federal funds deficit is estimated to be $254.5 billion, and other factors increase the requirement to borrow subject to limit by $31.3 billion. The largest other factor is the direct loan financing accounts. As explained in an earlier section, their 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 and growing. As a result, the debt subject to limit is estimated to increase by $285.9 billion, which is $140.3 billion more than the increase in debt held by the public.

As long as the trust fund surplus is large, the Federal funds deficit will be much larger than the total Government deficit; and the increase in debt subject to limit will be much larger than the increase in debt held by the public. The trust fund surplus is currently large and is estimated to grow through 2002, so the debt limit will have to be increased in the future by much more than needed to finance the total Government deficit. This can be seen by comparing the annual increase in debt subject to limit in Table 12–5 with the annual deficit and the annual increase in debt held by the public in Table 12–2. The increase in debt subject to limit is more than $100 billion higher every year. In 2002, when the budget has a $17.0 billion surplus and the debt held by the public increases by $5.2 billion, the debt subject to limit increases by $167.8 billion.

[11] For further discussion of the trust funds and Federal funds groups, see Chapter 17, "Trust Funds and Federal Funds."

Table 12–5. FEDERAL FUNDS FINANCING AND CHANGE IN DEBT SUBJECT TO STATUTORY LIMIT

(In billions of dollars)

Description	1996 actual	Estimate					
		1997	1998	1999	2000	2001	2002
Federal funds surplus or deficit (–)	**–221.9**	**–242.2**	**–254.5**	**–255.8**	**–237.0**	**–190.3**	**–145.2**
(On-budget)	–222.6	–240.3	–250.4	–254.9	–237.2	–192.1	–146.5
(Off-budget)	0.6	–2.0	–4.1	–0.9	0.2	1.8	1.3
Means of financing other than borrowing:							
Change in: [1]							
Treasury operating cash balance	–6.3	4.2	....	....	....	....	....
Checks outstanding, etc. [2]	–7.4	2.3	–0.2	....	....	....	....
Deposit fund balances [3]	–1.0	0.7	–2.6	....	....	....	....
Seigniorage on coins	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Less: Net financing disbursements:							
Direct loan financing accounts	–13.0	–22.6	–21.9	–21.9	–23.8	–24.4	–24.0
Guaranteed loan financing accounts	1.3	–0.2	0.4	0.6	0.7	0.9	1.2
Total, means of financing other than borrowing	**–25.8**	**–14.9**	**–23.7**	**–20.7**	**–22.4**	**–22.8**	**–22.1**
Decrease or increase (–) in Federal debt held by Federal funds and deposit funds [4]	–15.5	–14.6	–4.2	....	....	....	....
Increase or decrease (–) in Federal debt not subject to limit	8.0	–1.8	–3.4	–0.4	–0.5	–0.4	–0.5
Total, requirement for Federal funds borrowing subject to debt limit	**–255.2**	**–273.5**	**–285.9**	**–276.8**	**–259.9**	**–213.6**	**–167.8**
Adjustment for change in discount or premium [5]	–2.7	....	....	....	....	....	....
Increase in debt subject to limit	**252.6**	**273.5**	**285.9**	**276.8**	**259.9**	**213.6**	**167.8**
ADDENDUM							
Debt subject to statutory limit [6]	5,137.2	5,410.7	5,696.6	5,973.4	6,233.3	6,446.9	6,614.7

[1] 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 also have a positive sign.
[2] 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.
[3] Does not include investment in Federal debt securities by deposit funds classified as part of the public.
[4] Only those deposit funds classified as Government accounts.
[5] Consists of unamortized discount (less primium) 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 $5,500 billion.

Table 12–6. 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]	Percentage foreign	Total [2]	Foreign [1]	Percentage foreign	Total [3]	Foreign [4]	Percentage 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	1,027.7	27.5	129.6	179.3	138.4	246.6	67.7	27.4

[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 interest on public debt received by other 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.

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 12–6, 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 1996 foreign holdings of Treasury debt were $1,027.7 billion, which was 27.5 percent of the total debt held by the public. Foreign central banks owned 54 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 has grown greatly since the early 1980s, the proportion they own did not change much during this period until 1995. In 1995 and 1996, however, foreign holdings increased by $192.6 billion and $179.3 billion,[12] respectively, which was more than the total Federal borrowing from the public. As a result, the percentage of Federal debt held by foreign residents grew from 19.1 percent at the end of 1994 to 27.5 percent at the end of 1996.

Foreign holdings of Federal debt are almost one-fourth of the foreign-owned assets in the U.S., and for-

[12] The 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.

eign purchases of Federal debt securities are normally only a moderate part of the gross capital inflow from abroad. 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.

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 12–7 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 1997 and 1998 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 and early 1990s was due to higher GSE borrowing as well as Federal deficits. Since 1992, the Federal borrowing participation rate has declined, falling to a little under 50 percent in 1995 and 1996. The Federal lending participation rate has been smaller and more stable over time than the borrowing participation rate, because Federal direct loans are much smaller than Federal borrowing.

Table 12–7. FEDERAL PARTICIPATION IN THE CREDIT MARKET

(Dollar amounts in billions)

	Actual												Estimates	
	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total net borrowing in credit market [1]	66.7	88.0	169.2	336.9	819.2	722.5	504.7	539.7	576.2	624.7	733.5	706.0	....	....
Federal borrowing from the public	3.9	3.5	51.0	69.5	199.4	220.8	277.4	310.7	247.4	184.7	171.3	129.6	142.8	145.6
Guaranteed borrowing	5.0	7.8	8.6	31.6	21.6	40.7	22.1	19.7	–2.0	38.7	26.2	89.9	55.4	49.2
Government-sponsored enterprise borrowing [2]	1.2	4.9	5.3	21.4	57.9	115.4	124.6	150.8	169.3	121.3	133.9	117.6	178.2	186.0
Total, Federal and federally assisted borrowing	10.1	16.2	65.0	122.5	278.9	376.9	424.1	481.2	414.7	344.7	331.4	337.1	376.4	380.8
Federal borrowing participation rate (percent)	**15.1**	**18.4**	**38.2**	**36.4**	**34.0**	**52.2**	**84.0**	**89.2**	**72.0**	**55.2**	**45.2**	**47.8**	....	....
Total net lending in credit market [1]	66.7	88.0	169.2	336.9	819.2	722.5	504.7	539.7	576.2	624.7	733.5	706.0	....	....
Direct loans	2.0	3.0	12.7	24.2	28.0	2.8	–7.5	7.0	–1.7	–0.8	1.6	4.0	18.0	15.7
Guaranteed loans	5.0	7.8	8.6	31.6	21.6	40.7	22.1	19.7	–2.0	38.7	26.2	89.9	55.4	49.2
Government-sponsored enterprise loans [2]	1.4	5.2	5.5	24.1	60.7	90.0	90.7	145.2	162.3	125.3	68.2	135.8	160.5	187.8
Total, Federal and federally assisted lending	8.3	15.9	26.9	79.9	110.3	133.5	105.3	171.9	158.6	163.2	96.0	229.7	233.9	252.7
Federal lending participation rate (percent)	**12.4**	**18.1**	**15.9**	**23.7**	**13.3**	**18.5**	**20.9**	**31.9**	**27.5**	**26.1**	**13.1**	**32.5**	....	....

[1] Total net borrowing (or lending) in credit market by domestic nonfinancial sectors excluding equities. Financial sectors are omitted to avoid double counting, since financial intermediaries both borrow and lend in the credit market. Source: Federal Reserve Board flow of funds accounts. Projections are not available.

[2] Most Government-sponsored enterprises (GSEs) are financial intermediaries. GSE borrowing (lending) is nevertheless compared with total credit market borrowing (lending), because GSE borrowing (lending) is a proxy for the borrowing (lending) by nonfinancial sectors that is intermediated by GSEs. It assists the utlimate nonfinancial borrower (lender) whose loans are purchased or otherwise financed by GSEs. Data are adjusted, with some degree of approximation, to remove double counting: GSE borrowing and lending are calculated net of transactions with Federal agencies, transactions between GSEs, transactions between components of GSEs, and transactions in guaranteed loans. Borrowing and lending include mortgage-backed security programs.