

SPECIAL ANALYSIS C

BORROWING, DEBT, AND INVESTMENT

The major fiscal responsibilities of the Federal Government include not only taxation and expenditure but also:

- The borrowing of cash to meet current requirements not covered by receipts and to refinance maturing debt;
- The investment of balances that trust funds and other Government accounts do not currently need for outlays; and
- The provision of assistance, including Government guarantees, for certain non-Federal borrowing.

This analysis summarizes current developments in Federal borrowing. It also discusses the size and growth of the Federal debt and the interest on the Federal debt, agency investment in U.S. Government securities, the statutory debt limitation, and borrowing by Government-sponsored enterprises. The analysis concludes with a brief discussion of the trend in Federal and federally assisted borrowing and the relationship of this trend to total funds raised by nonfinancial sectors in the economy. Excluded from this analysis are other types of Federal liabilities such as accounts payable, obligations for undelivered orders, long-term contracts, insurance commitments, and the obligation for future payments of social security and military retirement.

Special Analysis E examines the related subject of Federal credit programs, including direct loans, loans by Government-sponsored enterprises, and Government-guaranteed loans. The factors discussed in both Special Analyses C and E are significant in appraising the impact on financial markets of the programs contained in the 1975 Federal budget.

BORROWING AND REPAYING DEBT

The Federal Government borrows for two principal reasons. First, it sells debt to the public in order to finance budget deficits. Second, it sells debt to the Government agencies that accumulate surpluses in separate funds, primarily trust funds, required by law to be invested in Federal securities. Most Federal debt has been issued by the Treasury and is called "public debt," but a small portion has been issued by certain Government agencies and is called "agency debt."¹

The gross Federal debt includes debt held by both the public and the agencies. Since Treasury borrowing from the agencies is an internal transaction between two funds both within the Government itself, only borrowing from the public affects the volume of securities sold

¹ The term "agency debt" is defined more narrowly in the budget than in the securities market, where it may include not only the debt of the Government agencies listed in table C-5 but also the debt of other issuers such as the Government-sponsored enterprises listed in table C-8.

in the financial markets, the size and composition of assets held by the private sector, and the taxes required to pay interest on the Federal debt.

Borrowing from the public—whether by the Treasury or by an agency—has a significant impact on financial markets and thereby on the economy, and it is consequently an important concern of Federal fiscal policy. For many purposes the borrowing from the public exclusive of the Federal Reserve System is even more important than borrowing from the public as a whole. Federal Reserve purchases of debt expand bank reserves and the money supply and thus have a markedly different effect on financial markets than do purchases by other sectors of the public. Moreover, almost all interest received by the Federal Reserve System is returned to the Treasury as a receipt, called a deposit of earnings, so the net cost to the Government of Federal Reserve purchases of debt is very small. However, the debt held by the public exclusive of the Federal Reserve System is not estimated in this analysis for future periods. Federal Reserve purchases and sales of debt are undertaken for monetary policy purposes and thus depend on future economic developments and on policy decisions not yet made.

Table C-1 summarizes Federal borrowing from 1973 through 1975. In 1973 the total Federal borrowing (net of the refunding of securities)—i.e., the rise in gross Federal debt—was \$31.1 billion. The borrowing from Government agencies was \$11.8 billion, and the borrowing from the public was \$19.3 billion. Of the amount borrowed from the public, \$3.8 billion was borrowed from the Federal Reserve System and \$15.5 billion was borrowed from other lenders, which

Table C-1. CHANGES IN FEDERAL DEBT (in millions of dollars)

Description	Increase or decrease (-)			Debt out- standing end 1975 estimate
	1973 actual	1974 estimate	1975 estimate	
Gross Federal debt:				
Public debt (issued by Treasury).....	30,881	16,319	19,797	493,433
Agency debt (issued by agencies).....	216	1,606	1,826	14,540
Gross Federal debt¹.....	31,097	17,924	21,623	507,973
Less debt held by Government agencies:				
Public debt.....	11,925	14,494	9,141	147,020
Agency debt.....	-104	-69	-18	1,909
Debt held by Government agencies.....	11,822	14,424	9,123	148,929
Total, debt held by the public.....	19,275	3,500	12,500	359,045
Composed of:				
Debt held by the Federal Reserve System.....	3,756	NA	NA	NA
Debt held by others.....	15,519	NA	NA	NA

NA= Not available.

¹ Excludes the \$825 million of special non-interest-bearing notes issued to the International Monetary Fund.

comprise commercial banks, foreign central banks, other financial institutions, and individuals. Borrowing from the public is expected to be \$3.5 billion in 1974 and \$12.5 billion in 1975. By the end of 1975 gross Federal debt is expected to be \$508.0 billion, with 71% held by the public (including the Federal Reserve System) and the remaining 29% by the agencies. Ninety-seven percent of the gross Federal debt will have been issued by the Treasury.

Until recently the Federal debt has been held almost entirely by domestic individuals and institutions. After World War II the public debt held in foreign balances and international accounts² tended to grow gradually and by the end of 1969 amounted to \$10 billion. However, due to international monetary developments, in 1970 the foreign and international holdings began to grow much faster, and by the end of 1973 they had risen to \$59 billion. Most of the public debt held abroad is owned by foreign central banks. The annual borrowing from abroad is shown below for 1968-73 in comparison with the annual borrowing from the domestic public, exclusive of the Federal Reserve System (in billions of dollars):

	1968	1969	1970	1971	1972	1973
Foreign and international ¹	-0.7	-0.4	3.7	17.9	17.3	10.2
Domestic (excluding Federal Reserve System).....	18.3	-12.6	-1.9	-6.3	-3.8	5.3
Total borrowing from the public (excluding Federal Reserve System).....	17.6	-13.0	1.8	11.6	13.5	15.5

¹ Public debt only, and exclusive of the special non-interest-bearing notes issued to the International Monetary Fund and international lending agencies.

As this table suggests, until 1970 the total borrowing from the public and the domestic borrowing from the public were about the same. In 1970, however, total borrowing was modestly larger than domestic borrowing; and in 1971 and 1972 Government borrowing from abroad was between \$17 billion and \$18 billion, which was several times higher than ever before. Consequently, despite the Government's very large borrowing from the public in 1971 and 1972, the amount of Federal debt held by the domestic public (exclusive of the Federal Reserve System) decreased in both these years. In 1973 the Government continued to borrow heavily, with about two-thirds of the additional debt being bought by foreign holders.

The Federal borrowing in 1973 is not fully comparable to the borrowing in other years. This is due to a procedural change made by the Treasury Department in October 1972, which had the effect of raising by about \$4.5 billion the trust fund holdings of public debt recorded at the end of each month. As a consequence, the gross Federal debt and the debt recorded as held by Government agencies were raised by about \$4.5 billion at the end of 1973 and will continue to be higher by this amount in subsequent years. In 1973, but in no other

² The estimates of Federal debt held in foreign balances and international accounts do not include agency debt, the holdings of which are believed to be small. The data on public debt were adjusted to exclude the special non-interest-bearing notes issued to the International Monetary Fund and international lending agencies. These notes are not part of the gross Federal debt.

year, the recorded gross Federal borrowing was thereby increased by about \$4.5 billion and total lending by Government agencies to the Treasury was similarly increased. The debt held by the public and the borrowing from the public are not affected by this procedural, nonrecurring change.

BORROWING AND GOVERNMENT DEFICITS

Table C-2 shows how borrowing from the public is related to the budget deficit. The deficit is financed either by borrowing from the public or by several other means. These other means of financing the budget deficit may be either positive, in which case they contribute to the financing of the deficit; or negative, in which case they, like the budget deficit, must themselves be financed. In 1973 the borrowing from the public was \$19.3 billion. The major part, \$14.3 billion, was used to finance the deficit. The remaining \$5.0 billion was used to finance the negative total for the other means of financing the deficit.

Table C-2. MEANS OF FINANCING THE FEDERAL BUDGET DEFICIT
(in millions of dollars)

	1973 actual	1974 estimate	1975 estimate
Budget deficit.....	14,301	4,660	9,445
Means of financing the deficit:			
Borrowing from the public.....	19,275	3,500	12,500
Other:			
Decrease or increase (—) in cash and monetary assets.....	—846	3,000	-----
Increase or decrease (—) in liabilities for:			
Checks outstanding, etc. ¹	—3,035	—126	—109
Deposit fund balances.....	—886	—672	—830
Seigniorage on coins.....	400	448	705
Outlays of off-budget Federal agencies (—) ²	—608	—2,709	—2,821
Increment on gold.....	-----	1,219	-----
Subtotal, means of financing other than borrowing from the public.....	—4,974	1,160	—3,055
Total, means of financing.....	14,301	4,660	9,445

¹ Besides checks outstanding, includes military payment certificates, accrued interest (less un-amortized discount) payable on public debt, and, as an offsetting change in assets, certain collections in transit.

² The off-budget Federal agencies consist of the Rural electrification and telephone revolving fund (as of May 12, 1973), Rural Telephone Bank (as of May 12, 1973), Environmental Financing Authority, Export-Import Bank, Postal Service (as of July 1, 1973), and Federal Financing Bank (for which data are not yet available).

The means of financing the budget deficit other than borrowing from the public are:

- A decrease in cash or monetary assets;
- An increase in monetary liabilities for checks outstanding, etc.;
- An increase in deposit fund balances, which are liabilities that arise when the Federal Government temporarily holds money in a deposit as an agent for someone else (such as State income taxes withheld from Federal employees' salaries and not yet paid to the States);
- Seigniorage, which is the face value of minted coins less the cost of their production;
- The outlays of the off-budget Federal agencies, which enter with a negative sign since they have to be financed by borrowing or other means in the same way as does a budget deficit; and
- The increment on gold, which is the increase in the value of gold assets of the United States in 1974 due to the change in the par value of the dollar authorized by section 2 of the Par Value Modification Act as amended by Public Law 93-110.

As the figures in table C-2 indicate, the extent to which the budget deficit can be financed by means other than borrowing from the public is limited. Consequently, the deficit and the borrowing from the public tend to be closely related.

Borrowing from the agencies is related to the surpluses of the trust funds, which, as shown in table C-6, own 92% of the Federal debt held by Government agencies. The relationship between borrowing from agencies and trust fund surpluses during 1973-75 can be seen by comparing the purchase of Federal debt by the agencies, given in table C-1, with the aggregate surplus of the trust funds. This was \$10.7 billion in 1973 and is expected to be \$13.5 billion in 1974 and \$8.4 billion in 1975. The comparison for 1973 needs to take into account that the recorded agency borrowing was raised by about \$4.5 billion due to the procedural change discussed above.

SIZE AND GROWTH OF FEDERAL DEBT

Gross Federal debt has risen substantially over most of the past four decades, from about \$16 billion in 1929 to \$468.4 billion at the end of 1973. Table C-3 presents the detail of this change since 1954 and shows that a sizable part of the increase is held in Federal Government accounts (primarily trust funds) rather than being owed to the public. From the end of 1954 to the end of 1973, gross Federal debt rose by 73% while Federal debt held by the public rose by 53%. Federal debt held by the public apart from the Federal Reserve System rose still less, by 34%—an annual compound rate of growth of 1.6% over the 19 years—because over this period the Federal Reserve System bought a large quantity of Federal debt in the market, thereby expanding the reserves of the banking system and providing for growth in the Nation's money stock.

Table C-3. COMPARISON OF TRENDS IN FEDERAL DEBT AND GROSS NATIONAL PRODUCT (in billions of dollars)

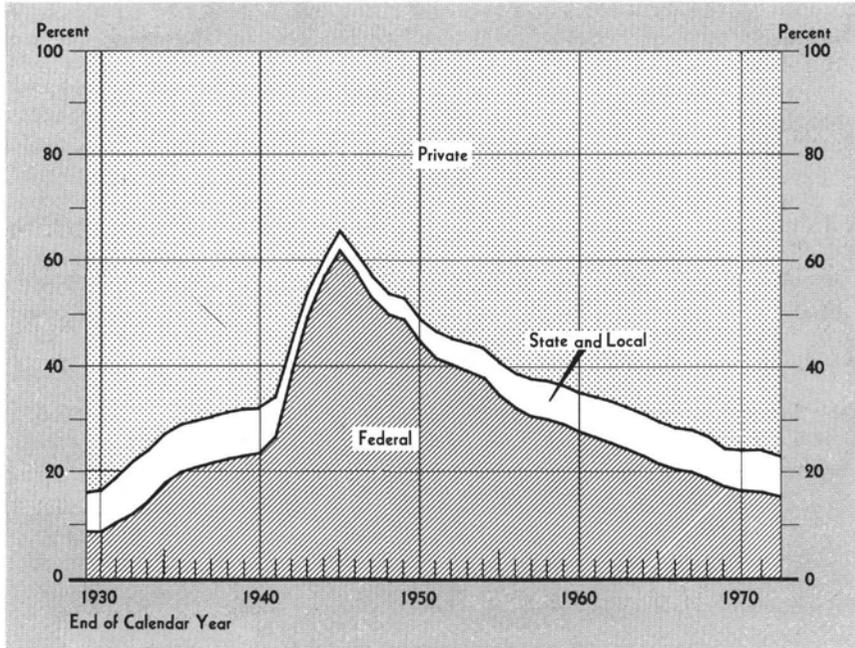
Fiscal year	Debt outstanding, end of year					GNP	Debt held by public as percent of GNP
	Gross Federal debt ¹	Federal Government accounts	Held by				
			The public				
			Total	Federal Reserve System	Other		
1954	270.8	46.3	224.5	25.0	199.5	362.1	62.0
1955	274.4	47.8	226.6	23.6	203.0	378.6	59.9
1956	272.8	50.5	222.2	23.8	198.5	409.4	54.3
1957	272.4	52.9	219.4	23.0	196.4	431.3	50.9
1958	279.7	53.3	226.4	25.4	200.9	440.3	51.4
1959	287.8	52.8	235.0	26.0	209.0	469.1	50.1
1960	290.9	53.7	237.2	26.5	210.7	495.2	47.9
1961	292.9	54.3	238.6	27.3	211.4	506.5	47.1
1962	303.3	54.9	248.4	29.7	218.7	542.1	45.8
1963	310.8	56.3	254.5	32.0	222.4	573.4	44.4
1964	316.8	59.2	257.6	34.8	222.8	612.2	42.1
1965	323.2	61.5	261.6	39.1	222.5	654.2	40.0
1966	329.5	64.8	264.7	42.2	222.5	721.2	36.7
1967	341.3	73.8	267.5	46.7	220.8	769.8	34.8
1968	369.8	79.1	290.6	52.2	238.4	826.0	35.2
1969	367.1	87.7	279.5	54.1	225.4	898.3	31.1
1970	382.6	97.7	284.9	57.7	227.2	954.6	29.8
1971	409.5	105.1	304.3	65.5	238.8	1,012.5	30.1
1972	437.3	113.6	323.8	71.4	252.3	1,100.0	29.4
1973 ²	468.4	125.4	343.0	75.2	267.9	1,220.0	28.1
1974 estimate ²	486.4	139.8	346.5	NA	NA	1,340.0	25.9
1975 estimate ²	508.0	148.9	359.0	NA	NA	1,455.0	24.7

NA= Not available.

¹ Excludes the special non-interest-bearing notes issued to the International Monetary Fund and international lending agencies. These notes are included in the Treasury figures for total outstanding Federal debt.

² The procedural change in the recording of trust fund holdings of public debt at the end of the month increased gross Federal debt and the debt held in Federal Government accounts by about \$4.5 billion at the end of 1973 and subsequent years.

During the depression of the 1930's and during World War II, Federal debt held by the public increased greatly, not only in absolute amount but also, as shown in the following chart, as a proportion of total net indebtedness: Federal, State and local, and private. Whereas Federal debt held by the public was only 9% of total net debt at the end of calendar year 1929, it had risen to 62% by the end of calendar year 1945. Federal borrowing was large during these years, particularly to finance World War II, and borrowing by other sectors was restricted by low incomes and poor credit-worthiness during the depression and by controls and scarcities during the war.

Percent Distribution of Net Indebtedness¹

¹ Federal net indebtedness is the Federal debt held by the public (including the Federal Reserve System). Private net indebtedness includes the debt of the Government-sponsored enterprises, which are federally chartered but privately owned.

Since 1945, however, private debt has increased as a proportion of total debt in every year but one, and in every single year the Federal debt held by the public (including the Federal Reserve System) has decreased as a proportion of the total. State and local government debt has risen in amount every year and has risen in proportion to total debt for the period as a whole. From the end of calendar year 1953 to the end of 1972, Federal debt held by the public rose 50%, State and local government debt rose 475%, and private debt rose 427%. By the end of calendar year 1972, Federal debt held by the public was only 15% of total debt. As a result of these trends, Federal debt and borrowing, although still significant, have become relatively much smaller influences in the financial markets.

During this same period the Federal debt has decreased relative to gross national product. As shown in table C-3, debt held by the public equaled 62% of gross national product at the end of 1954 but declined steadily to 30% by the end of 1970 and is expected to decline further to 25% by the end of 1975.

The interest cost of the debt may be more significant than the amount of the debt for some types of comparison designed to measure the importance of Federal indebtedness. Interest on the debt held by the public has risen much faster than the debt itself, due to a strong upward trend since World War II in the interest rates that must be paid on new borrowings and on refunded debt. Between 1954 and 1973 the Federal debt held by the public grew 53%, but, as shown in table C-4, the interest paid to the public more than tripled. For this period as a whole, interest payments to the public grew faster than gross national product. In the first 5 years, 1954-58, interest was equal to 1.40% of gross national product, whereas by the last 5 years, 1969-73, the proportion had risen moderately to 1.57%. On the other hand, the proportion of budget outlays devoted to paying interest on the debt held by the public did not show any trend over the period as a whole and fluctuated around an average of 7.7%.

Table C-4.—COMPARISON OF TRENDS IN INTEREST ON FEDERAL DEBT, GROSS NATIONAL PRODUCT, AND BUDGET OUTLAYS (in billions of dollars)

Fiscal year	Interest on the gross Federal debt					Interest on debt held by the public as a percent of	
	Total	Federal Government accounts	Paid to			GNP	Budget outlays ²
			The public				
			Total	Federal Reserve System ¹	Other		
1954.....	6.4	1.2	5.2	0.5	4.7	1.43	7.31
1955.....	6.4	1.2	5.2	0.4	4.8	1.37	7.56
1956.....	6.8	1.3	5.6	0.5	5.1	1.36	7.91
1957.....	7.3	1.4	5.9	0.7	5.3	1.38	7.74
1958.....	7.8	1.4	6.3	0.7	5.6	1.44	7.68
1959.....	7.8	1.4	6.4	0.8	5.6	1.37	6.96
1960.....	9.5	1.5	8.1	1.0	7.1	1.63	8.74
1961.....	9.3	1.5	7.8	1.0	6.8	1.54	7.97
1962.....	9.5	1.6	7.9	1.0	6.9	1.46	7.40
1963.....	10.3	1.6	8.7	1.1	7.6	1.51	7.78
1964.....	11.0	1.8	9.3	1.2	8.0	1.51	7.80
1965.....	11.8	1.9	9.8	1.4	8.4	1.50	8.31
1966.....	12.6	2.1	10.5	1.7	8.8	1.45	7.77
1967.....	14.2	2.5	11.7	2.0	9.7	1.52	7.39
1968.....	15.6	3.0	12.7	2.4	10.3	1.54	7.09
1969.....	17.7	3.5	14.2	2.9	11.3	1.58	7.68
1970.....	20.0	4.4	15.6	3.5	12.2	1.64	7.95
1971.....	21.6	5.3	16.4	3.7	12.6	1.62	7.74
1972.....	22.5	5.8	16.6	3.7	12.9	1.51	7.20
1973.....	24.8	6.3	18.5	3.8	14.7	1.52	7.51
1974 estimate.....	29.8	7.4	22.4	NA	NA	1.67	8.17
1975 estimate.....	31.3	8.1	23.2	NA	NA	1.59	7.62

NA= Not available.

¹ Estimated.

² Budget outlays for 1954-75 are given in the Budget, part 7, table 20.

Since the end of World War II the composition of the Federal debt has changed, with an increasingly large proportion of Federal securities having a relatively short maturity. One contributing factor was the statutory ceiling of 4¼% that has been maintained since 1918 on the interest rate which could be paid on Treasury bonds.³ Because long-term market rates have been higher than 4¼% in recent years, the ceiling prevented the Treasury from selling long-term obligations after 1965. The ceiling thereby tended to increase the gross dollar volume of debt refunded each year. Since 1965, the average maturity of Treasury marketable debt has declined from about 5 years to about 3 years. This restriction on Treasury borrowing was relaxed in March 1971 by a law that allowed the Treasury to issue up to \$10 billion of long-term bonds at interest rates above 4¼%. In July 1973 the restriction was relaxed further by exempting from this limit those bonds held by Government accounts and the Federal Reserve System. Since the change of law in 1971, Treasury has sold \$9.8 billion of bonds, including those bought by Government accounts and the Federal Reserve System. The interest rates have ranged upwards from 6.1% with an average of 6.7%.

BORROWING BY FEDERAL AGENCIES

A few Government agencies are authorized to sell their own debt instruments to the public and to other Government agencies and funds. This agency borrowing is part of the gross Federal debt. For those agencies included in the budget, the authorization to borrow is budget authority and the disbursement of such borrowed money is a budget outlay.

Net changes in outstanding agency debt were shown in total in table C-1 and are shown by agency in table C-5. In 1973 the new agency borrowing exceeded the repayment of agency debt by \$0.2 billion. In 1974 and 1975, net agency borrowing is expected to be \$1.6 billion and \$1.8 billion, respectively. The agency debt outstanding on June 30, 1975, is estimated to be \$14.5 billion, which is 3% of gross Federal debt.

By the end of 1975, \$4.3 billion of the agency debt, or over a quarter of the total, will consist of certificates of participation in pools of loans issued in prior years by the Government National Mortgage Association, as trustee on behalf of the Department of Agriculture, the Department of Health, Education, and Welfare, the Department of Housing and Urban Development, the Veterans Administration, and the Small Business Administration. The issuance of certificates of participation was discontinued after 1968.

Agency debt includes the borrowing of off-budget Federal agencies, which are wholly Government-owned corporations whose transactions are excluded from the budget totals. Those off-budget agencies that will have borrowed by the end of 1975 are the Export-Import Bank,

³ Until 1967, 5-year notes were the longest term security that could be issued without regard to this limitation. In 1967 the maximum maturity of notes was raised to 7 years.

Table C-5. AGENCY BORROWING ¹ (in millions of dollars)

Description	Increase or decrease (-) in debt			Debt out- standing end 1975 estimate
	1973 actual	1974 estimate	1975 estimate	
Borrowing from the public:				
Agriculture: Farmers Home Administration ²	-25	-----	-----	317
Defense	-83	-87	-95	1,110
Health, Education, and Welfare ²	-2	-----	-----	130
Housing and Urban Development:				
College housing loans ²	-32	-----	-----	304
Public facility loans ²	-3	-----	-----	94
Federal Housing Administration	-39	-*	-1	352
Housing for the elderly ²	-*	-----	-----	64
Government National Mortgage Association ²	-97	-65	-78	696
Veterans Administration ²	-246	-45	-32	677
Export-Import Bank	402	919	1,063	4,203
Postal Service	-----	475	500	1,225
Small Business Administration ²	-42	-----	-----	283
Tennessee Valley Authority	488	471	480	3,155
All other	-*	7	7	22
Total borrowing from the public	319	1,675	1,844	12,631
Borrowing from other funds:				
Agriculture: Farmers Home Administration ²	1	-----	-----	175
Defense	-21	-14	-14	164
Health, Education, and Welfare ²	*	-----	-----	68
Housing and Urban Development:				
College housing loans ²	1	-----	-----	163
Public facility loans ²	*	-----	-----	49
Federal Housing Administration	-3	-4	-4	49
Housing for the elderly ²	*	-----	-----	33
Government National Mortgage Association ²	3	-----	-----	500
Veterans Administration ²	3	-----	-----	546
Small Business Administration ²	1	-----	-----	161
Tennessee Valley Authority	-88	-51	-----	-----
Total borrowing from other funds	-104	-69	-18	1,909
Total agency borrowing ¹	216	1,606	1,826	14,540

*Less than \$500 thousand.

¹ Excludes agency borrowing from Treasury.² Certificates of participation in loans.

excluded by statute from the budget totals as of August 17, 1971; the Postal Service fund, excluded from the budget totals as of July 1, 1973, after the transition period provided in the Postal Reorganization Act; and the Federal Financing Bank (FFB), created off-budget as of December 29, 1973, for which borrowing estimates are not yet available.

The FFB was created under the Treasury Department to assist agency borrowing and Government-guaranteed borrowing and to coordinate these borrowings with Treasury debt management. It was given the authority to purchase agency debt and Government-guaranteed loans and, in turn, can finance its purchases of these obligations by selling its own debt instruments to the public. Since the FFB should be able to borrow from the public at lower interest rates than other agencies have to pay, this new procedure is expected to reduce the cost of agency borrowing activities. To the extent that this procedure is used, the FFB will serve as a conduit for agency borrowing, and FFB securities will replace the securities of other agencies in the market.

The Treasury provides capital to business-type Government enterprises both in the form of capital stock and in the form of "debt." This provision of "debt" is shown as "borrowing from Treasury" on the statements of financial condition for enterprises in the Budget Appendix. However, the equity and the "debt" instruments are the same in substance; and it would be double counting to add together the agency "borrowing" from the Treasury and the Treasury borrowing from the public that was necessary to provide the agencies with this capital. Therefore, agency "borrowing" from Treasury is excluded from figures on agency "borrowing" and "debt" in all other parts of the budget documents.

AGENCY INVESTMENT IN FEDERAL SECURITIES

Trust funds and some public enterprise funds accumulate cash in excess of current requirements in order to meet future claims and demands. Such cash surpluses are mostly invested in Treasury debt, or, to a very small extent, in agency debt. Purchases of these securities are not counted as budget outlays, and redemptions are not counted as budget receipts.

As shown in table C-6, net investment by trust funds and other Federal agencies in Government securities was \$11.8 billion in 1973. About \$4.5 billion was due to the procedural change mentioned earlier for the securities held by certain social insurance trust funds. Net investment is estimated to be \$14.4 billion in 1974 and \$9.1 billion in 1975. The total agency holdings of Federal securities will reach an estimated \$148.9 billion by June 30, 1975. This will constitute 29% of the gross Federal debt. Two major groups of trust funds—the social security funds and the Civil Service Commission funds—will account for 66% of total agency holdings, and all the trust funds together will account for 92%. Ninety-nine percent of the holdings will be Treasury debt, and the holdings of agency debt will decline by small amounts each year.

Table C-6. AGENCY INVESTMENT IN FEDERAL SECURITIES ¹
(in millions of dollars)

Description	Increase or decrease (-) in holdings			Holdings end 1975 estimate
	1973 actual	1974 estimate	1975 estimate	
Investment in public debt (issued by Treasury):				
Health, Education, and Welfare:				
Federal old-age and survivors ins. trust fund ¹	2,298	3,049	1,091	39,086
Federal disability insurance trust fund ¹	792	582	87	8,473
Federal hospital insurance trust fund.....	1,338	3,025	2,309	9,507
Federal supplementary medical ins. trust fund....	222	354	214	1,267
Housing and Urban Development:				
Federal Housing Administration.....	40	37	128	1,303
Government National Mortgage Association.....	277	287	238	1,402
Other.....	20	27	1	135
Labor: Unemployment trust fund.....	1,144	1,033	-410	11,579
Transportation: Highway trust fund.....	1,094	1,710	1,420	8,680
Treasury: Exchange stabilization fund.....	347	(²)	(²)	22,934
Veterans Administration:				
National service life insurance fund.....	272	209	214	6,850
Other trust funds.....	-27	-37	-36	618
Other.....	53	67	68	740
Civil Service Commission:				
Civil Service retirement and disability fund ¹	3,198	3,404	2,730	36,625
Other trust funds.....	139	214	252	1,934
Federal Deposit Insurance Corp.: Trust fund.....	537	558	565	6,759
Federal Home Loan Bank Board: FSLIC.....	258	334	344	3,586
Postal Service.....	-181	-385	-200	500
Railroad Retirement Board: Trust funds ¹	24	-62	16	4,513
Other trust funds.....	14	35	49	198
All other.....	65	50	61	330
Total investment in public debt.....	11,925	14,494	9,141	147,020
Investment in agency debt:				
Agriculture: CCC.....	-6	-6	-6	41
Health, Education, and Welfare:				
Federal old-age and survivors ins. trust fund.....				555
Federal hospital insurance trust fund.....				50
Housing and Urban Development:				
Federal Housing Administration.....	-9	-4	-4	189
Government National Mortgage Association.....	12	-54	-8	197
Veterans Administration: National service life insurance fund.....				
				310
Civil Service Commission: Civil Service retirement and disability fund.....				
				375
Federal Home Loan Bank Board: FSLIC.....	-2			142
Postal Service.....	-99	-5		
Railroad Retirement Board: Trust funds.....				50
Total investment in agency debt.....	-104	-69	-18	1,909
Total agency investment in Federal securities..	11,822	14,424	9,123	148,929

¹ The procedural change in the recording of trust fund holdings of public debt at the end of the month had the effect of raising by about \$4.5 billion the agency investment in 1973 and the agency holdings at the end of 1973 and each subsequent year. At the end of October 1972 the effect on specific trust fund holdings was: Federal old-age and survivors insurance trust fund, \$3,535 million; Federal disability insurance trust fund, \$418 million; Civil Service retirement and disability fund, \$360 million; and Railroad Retirement Board trust funds, \$225 million.

² The change in holdings is not estimated due to the uncertainties in foreign exchange, and the 1975 yearend holdings are taken to be the actual holdings at the end of 1973.

LIMITATIONS ON FEDERAL DEBT

Statutory limitations have customarily been placed on Federal debt. After enactment of the Second Liberty Bond Act in 1917, the limitation on the amount of debt developed in several steps from being an authorization of an amount for each specific issue to being an overall ceiling on the total amount of most outstanding Federal debt. The latter type of limitation has been in effect since 1941. The limit currently applies to the total of:

- All public debt issued by the Treasury since September 1917, whether held by the public or by the Government;
- Agency debt in the form of participation certificates issued during 1968 under the Participation Sales Act of 1966; and
- Other debt issued by Federal agencies (and the District of Columbia Armory Board) which, according to explicit statute, is fully guaranteed as to principal and interest by the United States.

The statutory limitation was \$450 billion from March 15, 1972, to October 31, 1972, and was increased to \$465 billion for the period beginning November 1, 1972, and ending November 30, 1973. This limit consisted of a permanent limit of \$400 billion and a temporary increase to that limit of \$65 billion. On November 30, 1973, the temporary increase of \$65 billion expired, and the level of the statutory limitation was reduced to the permanent limit of \$400 billion. On that date the outstanding debt subject to limit was \$65.0 billion more than the permanent limit. On December 3, 1973, a temporary increase of \$75.7 billion was enacted, which raised the statutory limitation to \$475.7 billion. This temporary limitation expires on June 30, 1974, after which the permanent limit of \$400 billion is scheduled to come into effect again.

The outstanding debt subject to limitation is shown in table C-7 and compared with the gross Federal debt and the Federal debt held by the public. The debt subject to limitation was \$459.1 billion at the end of 1973 and is expected to be \$475.4 billion and \$495.2 billion at the ends of 1974 and 1975, respectively. These amounts are substantially more than the permanent debt limit of \$400 billion. The debt subject to limitation equals about 98% of the gross Federal debt. Like the gross Federal debt, it was increased by about \$4.5 billion at the end of 1973 and each subsequent year due to the procedural change in the recording of trust fund holdings of public debt at the end of the month.

Table C-7. DEBT SUBJECT TO STATUTORY LIMITATION
(in millions of dollars)

Description	End of year		
	1973 actual	1974 estimate	1975 estimate
Federal debt held by the public	343,045	346,545	359,045
Add: Federal debt held by Government agencies	125,381	139,806	148,929
Gross Federal debt	468,426	486,350	507,973
Deduct:			
Public debt not subject to limitation	620	618	618
Agency debt not subject to general limitation:			
Department of Defense	1,484	1,382	1,274
Export-Import Bank	2,221	3,141	4,203
Postal Service	250	725	1,225
Tennessee Valley Authority	2,255	2,675	3,155
Participation certificates ¹	3,345	3,235	3,125
Other	8	15	22
Total Federal debt not subject to limitation	10,182	11,790	13,622
Federal debt subject to statutory limitation	458,244	474,560	494,351
Add:			
District of Columbia Stadium bonds	20	20	20
Special notes held by International Monetary Fund	825	825	825
Total debt subject to statutory limitation	459,089	475,405	495,196

¹ Certificates of participation issued by the Government National Mortgage Association as trustee for 5 departments and agencies (excluding certificates issued during 1966).

The Federal debt held by the public is projected to increase by \$3.5 billion in 1974 and by \$12.5 billion in 1975. The debt subject to statutory limitation is expected to rise by more: \$16.3 billion and \$19.8 billion in these 2 years, respectively. The greater growth in the debt subject to limitation is due primarily to the Government trust funds and other agencies investing in Federal debt. Their holdings are almost all subject to the statutory limitation, but they are not part of the debt held by the public.

Almost the only agency debt subject to the general statutory limitation is the participation certificates sold in 1968 and the debentures issued by the Federal Housing Administration. These two types of debt together make up only about one-eighth of total agency debt. However the other agency debt in most cases requires explicit statutory authorization. For example, the Postal Service is limited to \$2 billion of annual borrowing and \$10 billion of outstanding bonds.

FEDERALLY ASSISTED BORROWING

The impact of the Government on borrowing includes not only its own borrowing to finance Federal operations but also its assistance to certain borrowing by the public. Federally assisted borrowing is of two types: Borrowing by Government-sponsored enterprises,⁴ and Government-guaranteed borrowing by non-Federal borrowers.

Seven Government-sponsored enterprises, which are federally chartered but privately owned in full, borrow under Government auspices. The transactions of these enterprises are not included within the Federal budget, and their debt is not part of the gross Federal debt. These enterprises are essentially financial intermediaries, borrowing in the securities market and lending their borrowed funds for specifically authorized purposes either directly or by purchasing loans originated by the private group that they were established to assist.

The borrowing programs of all seven enterprises are subject to Federal supervision. In addition, they all consult the Treasury Department, either by law or by custom, in planning their market offerings. The Federal National Mortgage Association and the Federal home loan banks are required to obtain Treasury approval of the terms and timing of specific offerings. Four of the enterprises are systems of regional lending institutions that pool their borrowings. In addition to their Federal sponsorship, all of the established enterprises have a history of successful financial performance. Hence, despite the absence of Federal guarantees (except for the Student Loan Marketing Association), the obligations of these enterprises are sold at interest rates only slightly higher than the rates on Treasury issues.

As shown in table C-8, the net borrowing by these seven Government-sponsored enterprises totaled \$8.8 billion in 1973 and is expected to be \$13.6 billion in 1974 and \$1.3 billion in 1975. The large borrowing in 1973 and 1974 primarily reflects strong support for the housing market provided by the Federal home loan banks, the Federal National Mortgage Association, and the Federal Home Loan Mortgage Corporation. The small net borrowing estimated for 1975 is mostly due to the activity of the Federal home loan banks. They are expected to advance substantially less new credit than previously to their member savings institutions, and to have a substantial rise in the repayment of advances that they made in previous years. Special Analysis E discusses the lending by the Government-sponsored enterprises.

⁴ The off-budget Federal agencies are classified outside the budget totals but remain Government-owned and therefore are not classified as Government-sponsored. Their debt is included in gross Federal debt.

Table C-8. NET CHANGES IN DEBT OF GOVERNMENT-SPONSORED ENTERPRISES (in millions of dollars)

Description	Increase or decrease (-)			Debt out-standing end 1975 estimate
	1973 actual	1974 estimate	1975 estimate	
Health, Education, and Welfare: Student Loan Marketing Association.....		480	970	1,450
Housing and Urban Development: Federal National Mortgage Association.....	1,834	4,726	2,035	27,127
Farm Credit Administration:				
Banks for cooperatives.....	569	249	178	2,844
Federal intermediate credit banks.....	555	766	969	8,471
Federal land banks.....	1,518	1,423	1,497	12,042
Federal Home Loan Bank Board:				
Federal home loan banks.....	3,706	5,479	-5,182	¹ 10,212
Federal Home Loan Mortgage Corporation ²	618	486	800	3,519
Total.....	8,801	13,609	1,267	65,665

¹ Excludes \$300 million of loans to the Federal Home Loan Mortgage Corporation in order to prevent double-counting for the Government-sponsored enterprises as a whole.

² Figures exclude the sale of participation certificates (pass-through type) that offset the purchase of mortgage loans. These sales are treated by FHLMC as a sale of loan assets rather than as borrowing and therefore are not reflected as debt on its balance sheet. Net increases in outstanding participation certificates were \$267 and \$433 million in 1972 and 1973 and are estimated at \$920 and \$1,495 million in 1974 and 1975, with 1975 yearend outstandings of \$3,115 million.

The other type of federally assisted borrowing, Government-guaranteed borrowing, is supported by the programs of several Government agencies. The major part of Government-guaranteed debt consists of mortgages on residential property. As shown in table C-9, Government-guaranteed borrowing was \$15.2 billion in 1973 and is expected to be \$15.4 billion in 1974 and \$13.3 billion in 1975. Special Analysis E analyzes the guarantee programs in detail.

TOTAL FEDERAL AND FEDERALLY ASSISTED BORROWING

Table C-9 summarizes Federal and federally assisted borrowing from the public. Federal borrowing from the public is presented in total. Borrowing by Government-sponsored enterprises and Government-guaranteed borrowing are presented both in total and as net amounts, the latter having been adjusted in order to remove double counting in the derivation of total Federal and federally assisted borrowing from the public. By the end of 1975, the Federal debt held by the public is expected to be \$359.0 billion, and the total Federal and federally assisted debt held by the public is expected to be \$590.9 billion.

Table C-9. NET BORROWING FROM THE PUBLIC BY GOVERNMENT, GOVERNMENT-SPONSORED ENTERPRISES, AND GOVERNMENT-GUARANTEED BORROWERS (in billions of dollars)

Description	Borrowing or repayment (-)			Debt outstanding end 1975 estimate
	1973 actual	1974 estimate	1975 estimate	
Federal borrowing from the public ¹	19.3	3.5	12.5	359.0
Borrowing by Government-sponsored enterprises ²	8.8	13.6	1.3	65.7
Less: Increase in holding of Federal debt	-1.9	1.1	.6	4.5
Net Government-sponsored borrowing from public	10.7	12.5	.7	61.1
Government-guaranteed borrowing ³	15.2	15.4	13.3	202.8
Less: Change in Government-guaranteed loans held by Federal agencies or Government-sponsored enterprises:				
Federal National Mortgage Association	2.2	3.0	1.4	25.2
Government National Mortgage Association	-1.2	- .5	- .6	2.9
Environmental Financing Authority .....		.1	.2	.3
Export-Import Bank	- .2			
Student Loan Marketing Association .....		.5	1.0	1.4
Federal Home Loan Mortgage Corporation .....	.4	.3	.3	2.2
Net Government-guaranteed borrowing from public	14.0	12.0	11.0	170.7
Total, Federal and federally assisted borrowing from the public	44.0	28.1	24.2	590.9

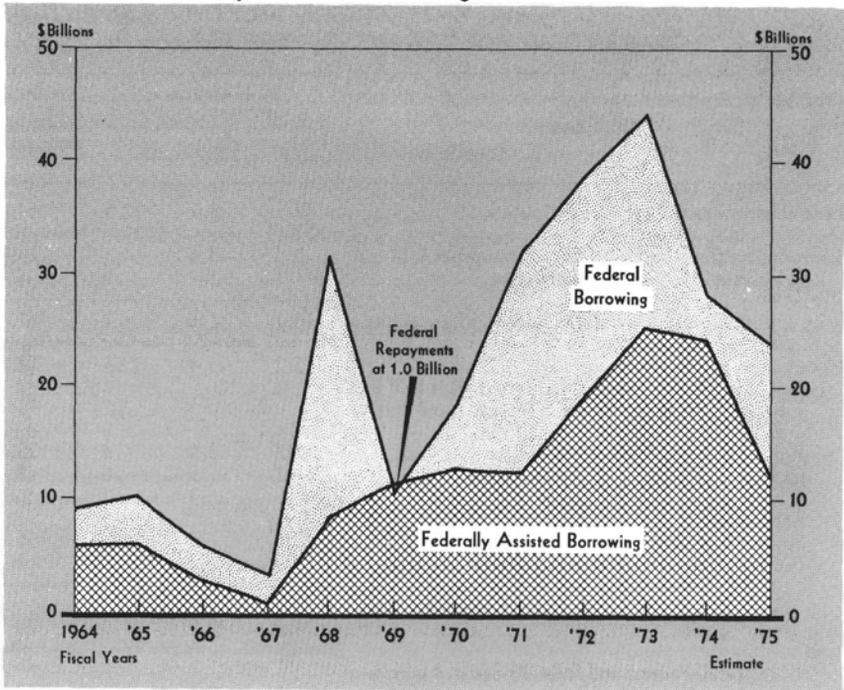
¹ See table C-1.

² See table C-8 for details and explanations.

³ The same as Government-guaranteed loans. See tables E-5 and E-8.

The following chart depicts the trends in Federal and federally assisted borrowing from the public between 1964 and 1975. The total Federal and federally assisted borrowing reached a peak at \$44.0 billion in 1973 and is expected to decline thereafter to \$28.1 billion in 1974 and \$24.2 billion in 1975. In 1974 the decline is due to a substantial decrease in Federal borrowing, while in 1975 the decline is dominated by a large drop in net Government-sponsored borrowing that exceeds the rise in Federal borrowing.

Federal and Federally Assisted Borrowing



As the chart shows, Federal and federally assisted borrowing is now substantially higher than in earlier years. Much of the increase parallels the growth in the economy and in the total funds raised by the nonfinancial sector through the sale of debt securities and other forms of borrowing and through the sale of corporate equities. However, to some extent the total Federal and federally assisted borrowing has increased as a proportion of the total funds raised. From 1960-67 to 1968-73, this proportion increased from 15% to 23%. Thus, despite the decreasing relative importance of Federal debt in total debt, Government programs since 1968 have influenced the allocation of funds raised in financial markets more than they did previously. Since 1968, however, this tendency has not increased.

SPECIAL ANALYSIS C

BORROWING, DEBT, AND INVESTMENT

The major fiscal responsibilities of the Federal Government include not only taxation and expenditure but also:

- The borrowing of cash to meet current requirements not covered by receipts and to refinance maturing debt;
- The investment of balances that trust funds and other Government accounts do not currently need for outlays; and
- The provision of assistance, including Government guarantees, for certain non-Federal borrowing.

This analysis summarizes current developments in Federal borrowing. It also discusses the size and growth of the Federal debt and the interest on the Federal debt, agency borrowing, agency investment in U.S. Government securities, the statutory debt limit, and borrowing by Government-sponsored enterprises. The analysis concludes with a brief discussion of the trend in Federal and federally assisted borrowing and the relationship of this trend to total funds raised by nonfinancial sectors in the economy. Excluded from this analysis are other types of Federal liabilities such as accounts payable, obligations for undelivered orders, long-term contracts, insurance commitments, and the obligation for future payments of social security and military retirement.

Special Analysis E examines the related subject of Federal credit programs, which include direct loans, loans by Government-sponsored enterprises, and Government-guaranteed loans. The factors discussed in both Special Analyses C and E are significant in appraising the impact on financial markets of the programs contained in the 1976 Federal budget.

BORROWING AND REPAYING DEBT

The Federal Government borrows for two principal reasons. First, it sells debt to the public in order to finance Federal deficits. Second, it sells debt to the Government agencies that accumulate surpluses in separate funds, primarily trust funds, required by law to be invested in Federal securities. Most Federal debt has been issued by the Treasury and is called "public debt," but a small portion has been issued by other Government agencies and is called "agency debt."¹

The gross Federal debt includes debt held by both the public and the agencies. Since Treasury borrowing from the agencies is an internal transaction between two funds both within the Government

¹ The term "agency debt" is defined more narrowly in the budget than in the securities market, where it may include not only the debt of the Government agencies listed in table C-5 but also the debt of other issuers such as the Government-sponsored enterprises listed in table C-8.

itself, only borrowing from the public affects the volume of securities sold in the financial markets, the size and composition of assets held by the private sector, and the taxes required to pay interest on the Federal debt.

Borrowing from the public—whether by the Treasury or by an agency—has a significant impact on financial markets and thereby on the economy, and is consequently an important concern of Federal fiscal policy. For most purposes borrowing from the Federal Reserve System should be distinguished from borrowing by the rest of the public. Federal Reserve purchases of debt are undertaken to carry out monetary policy, not to earn income, and affect the economy by means of expanding bank reserves and the money stock. They thus have a markedly different motivation and effect on financial markets than do purchases by other sectors of the public. The debt held outside the Federal Reserve System, in contrast, enters into investment portfolios of businesses and individuals and by this means affects interest rates, other financial conditions, and private wealth. Almost all interest received by the Federal Reserve System is returned to the Treasury as a receipt, called a deposit of earnings, so the net cost to the Government of Federal Reserve holdings of debt is very small. The debt held by the public exclusive of the Federal Reserve System is not estimated in this analysis for future years, despite its significance, because Federal Reserve open market operations depend on future economic developments and on policy decisions not yet made.

Table C-1 summarizes Federal borrowing from 1974 through 1976. In 1974 the total Federal borrowing (net of the refunding of securities)—i.e., the rise in gross Federal debt—was \$17.8 billion. The borrowing from Government agencies was \$14.8 billion, and the

Table C-1. CHANGES IN FEDERAL DEBT (in millions of dollars)

Description	Increase or decrease (-)			Debt outstanding, end 1976 estimate
	1974 actual	1975 estimate	1976 estimate	
Gross Federal debt:				
Treasury debt.....	16,918	52,796	67,570	594,600
Agency debt.....	903	-502	-186	11,325
Gross Federal debt.....	17,821	52,294	67,384	605,925
Less debt held by Government agencies:				
Treasury debt.....	14,821	8,865	3,902	150,973
Agency debt.....	-8	-71	-18	1,899
Debt held by Government agencies.....	14,813	8,794	3,884	152,872
Total debt held by the public.....	3,009	43,500	63,500	453,053
Composed of:				
Debt held by the Federal Reserve System.....	5,467	NA	NA	NA
Debt held by others.....	-2,458	NA	NA	NA

NA = Not available.

borrowing from the public was \$3.0 billion. Since the Federal Reserve System bought \$5.5 billion of Federal debt, which was more than the total Federal borrowing from the public, the Government paid back \$2.5 billion of debt held by other lenders—commercial banks, foreign central banks, other financial institutions, other businesses, and individuals. Borrowing from the public is expected to rise to \$43.5 billion in 1975 and \$63.5 billion in 1976. This increase is primarily because the current recession is automatically reducing tax receipts and raising unemployment benefits and because temporary tax cuts are proposed to stimulate the economy. By the end of 1976 gross Federal debt is expected to be \$605.9 billion, with 75% held by the public (including the Federal Reserve System) and the remainder by the agencies. Ninety-eight percent of the gross Federal debt will have been issued by the Treasury.

Until recent years the Federal debt was held almost entirely by domestic individuals and institutions. After World War II the debt held in foreign balances and international accounts tended to grow gradually and by the end of 1969 amounted to \$10 billion.² However, due to international monetary developments, in 1970 the foreign and international holdings began to grow much faster and by the end of 1974 they were \$57 billion. Most of the Treasury debt held abroad is owned by foreign central banks. The annual borrowing from abroad is shown below for 1969–74 in comparison with the annual borrowing from the domestic public, exclusive of the Federal Reserve System (in billions of dollars):

	1969	1970	1971	1972	1973	1974
Foreign and international.....	-0.4	3.7	17.9	17.3	10.2	-2.5
Domestic (excluding Federal Reserve System).....	-12.6	-1.9	-6.3	-3.8	5.3	*
Total borrowing from the public (excluding Federal Reserve System).....	<u>-13.0</u>	<u>1.8</u>	<u>11.6</u>	<u>13.5</u>	<u>15.5</u>	<u>-2.5</u>

* Less than \$50 million.

Until 1970, the total borrowing from the public and the domestic borrowing from the public were about the same. In 1970, however, total borrowing was modestly larger than domestic borrowing; and in 1971 and 1972, Government borrowing from abroad was between \$17 billion and \$18 billion, which was several times higher than ever before. Consequently, despite the Government's very large borrowing from the public in 1971 and 1972, the amount of Federal debt held by the domestic public (exclusive of the Federal Reserve System) decreased in both these years. The Government borrowing from abroad remained large in 1973, but in 1974 a small amount of the Government debt held abroad was repaid.

² The estimates of Federal debt held in foreign balances and international accounts do not include agency debt, the holdings of which are believed to be small. The data were adjusted to exclude the special non-interest-bearing notes issued to the International Monetary Fund and international lending agencies. These notes are not part of gross Federal debt.

BORROWING AND GOVERNMENT DEFICITS

Table C-2 shows how borrowing from the public is related to the Federal deficit. In previous years the budget deficit constituted practically the entire deficit of the Federal Government, but during 1974-76 the deficit of the off-budget Federal agencies is also significant. In 1974 the total Government deficit was \$6.1 billion. About half of this amount, \$3.0 billion, was financed by borrowing from the public, and the remaining \$3.1 billion was financed by other means. Some of these other means of financing the deficit can be either positive or negative. In years when these other means add up to a negative total, such as is estimated for 1976, then they must be financed by borrowing from the public just like the deficit itself.

Table C-2. MEANS OF FINANCING THE FEDERAL DEFICIT
(In millions of dollars)

Description	1974 actual	1975 estimate	1976 estimate
Budget surplus or deficit (—)	–3,460	–34,696	–51,852
Surplus or deficit (—) of off-budget Federal agencies ¹	–2,675	–13,931	–10,642
Total surplus or deficit (—)	–6,135	–48,627	–62,494
Means of financing other than borrowing from the public:			
Decrease or increase (—) in cash and monetary assets	2,519	3,147	–367
Increase or decrease (—) in liabilities for:			
Checks outstanding, etc. ²	–913	1,500	–1,500
Deposit fund balances	–19	–133	189
Seigniorage on coins	321	613	672
Increment on gold	1,219		
Total means of financing other than borrowing from the public	3,127	5,127	–1,006
Total requirements for borrowing from the public	–3,009	–43,500	–63,500
Change in debt held by the public	3,009	43,500	63,500

¹ The off-budget Federal agencies consist of the Rural Electrification and Telephone revolving fund, Rural Telephone Bank, Housing for the Elderly and Handicapped fund (as of September 1, 1974), Pension Benefit Guaranty Corporation, Environmental Financing Authority, Federal Financing Bank, Export-Import Bank, Postal Service, and United States Railway Association. Not all these agencies existed during the entire period.

² Besides checks outstanding, includes military payment certificates, accrued interest (less un-amortized discount) payable on Treasury debt, and, as an offsetting change in assets, certain collections in transit.

The means of financing a deficit other than borrowing from the public are:

- A decrease in cash or monetary assets;
- An increase in monetary liabilities for checks outstanding, etc.;
- An increase in deposit fund balances, which are liabilities that arise when the Federal Government temporarily holds money in a deposit as an agent for someone else (such as State income taxes withheld from Federal employees' salaries and not yet paid to the States);
- Seigniorage, which is the face value of minted coins less the cost of their production; and
- The increment on gold, which is the increase in the value of gold assets of the United States in 1974 due to the change in the par value of the dollar authorized by section 2 of the Par Value Modification Act as amended by Public Law 93-110.

As the figures in table C-2 indicate, the extent to which the deficit can be financed by means other than borrowing from the public is limited. Consequently, the total Government deficit and the borrowing from the public tend to be closely related.

Borrowing from the agencies largely depends on the surpluses of the trust funds, which, as shown in table C-6, own 93% of the Federal debt held by Government agencies. The relationship between borrowing from agencies and trust fund surpluses during 1974-76 can be seen by comparing the purchase of Federal debt by the agencies, given in table C-1, with the aggregate surplus of the trust funds. The trust fund surplus was \$14.0 billion in 1974 and is expected to be \$8.3 billion in 1975 and \$3.1 billion in 1976.

SIZE AND GROWTH OF FEDERAL DEBT

Gross Federal debt has risen substantially over most of the past four decades, from about \$16 billion in 1929 to \$486.2 billion at the end of 1974. Table C-3 presents the detail of this change since 1954 and shows that a sizable part of the increase is held in Federal Government accounts (primarily trust funds) rather than being owed to the public. From the end of 1954 to the end of 1974, gross Federal debt rose by 80% while Federal debt held by the public rose by 54%. Federal debt held by the public apart from the Federal Reserve System rose still less, by 33%—an annual compound rate of growth of 1.4% over the 20 years—because during this period the Federal Reserve System bought a large quantity of Federal debt in the market, thereby expanding the reserves of the banking system and providing for growth in the Nation's money stock.

Table C-3. COMPARISON OF TRENDS IN FEDERAL DEBT AND GROSS NATIONAL PRODUCT (in billions of dollars)

Fiscal year	Debt outstanding, end of year					GNP	Debt held by public as percent of GNP
	Gross Federal debt	Federal Government accounts	Held by				
			Total	Federal Reserve System	Other		
1954.....	270.8	46.3	224.5	25.0	199.5	362.1	62.0
1955.....	274.4	47.8	226.6	23.6	203.0	378.6	59.9
1956.....	272.8	50.5	222.2	23.8	198.5	409.4	54.3
1957.....	272.4	52.9	219.4	23.0	196.4	431.3	50.9
1958.....	279.7	53.3	226.4	25.4	200.9	440.3	51.4
1959.....	287.8	52.8	235.0	26.0	209.0	469.1	50.1
1960.....	290.9	53.7	237.2	26.5	210.7	495.2	47.9
1961.....	292.9	54.3	238.6	27.3	211.4	506.5	47.1
1962.....	303.3	54.9	248.4	29.7	218.7	542.1	45.8
1963.....	310.8	56.3	254.5	32.0	222.4	573.4	44.4
1964.....	316.8	59.2	257.6	34.8	222.8	612.2	42.1
1965.....	323.2	61.5	261.6	39.1	222.5	654.2	40.0
1966.....	329.5	64.8	264.7	42.2	222.5	721.2	36.7
1967.....	341.3	73.8	267.5	46.7	220.8	769.8	34.8
1968.....	369.8	79.1	290.6	52.2	238.4	826.0	35.2
1969 ¹	367.1	87.7	279.5	54.1	225.4	898.3	31.1
1970 ²	382.6	97.7	284.9	57.7	227.2	954.6	29.8
1971.....	409.5	105.1	304.3	65.5	238.8	1,012.1	30.1
1972.....	437.3	113.6	323.8	71.4	252.3	1,101.6	29.4
1973 ³	468.4	125.4	343.0	75.2	267.9	1,224.1	28.0
1974.....	486.2	140.2	346.1	80.6	265.4	1,348.9	25.7
1975 estimate.....	538.5	149.0	389.6	NA	NA	1,434.0	27.2
1976 estimate.....	605.9	152.9	453.1	NA	NA	1,596.0	28.4

NA=Not available.

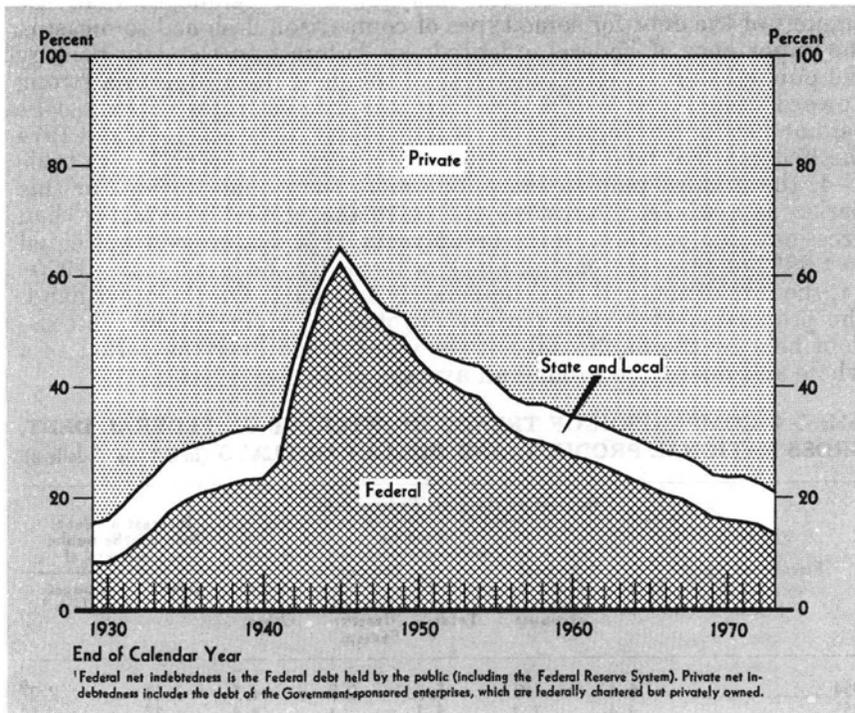
¹ During 1969, 3 Government-sponsored enterprises became completely privately owned, and their debt was removed from the totals for the Federal Government. At the dates of their conversion, gross Federal debt was reduced \$10.7 billion, debt held by Government accounts was reduced \$0.6 billion, and debt held by the public was reduced \$10.1 billion.

² Gross Federal debt and debt held by the public were increased \$1.6 billion due to a reclassification of certain certificates of interest as debt.

³ A procedural change in the recording of trust fund holdings of Treasury debt at the end of the month increased gross Federal debt and debt held in Government accounts by about \$4.5 billion.

During the depression of the 1930's and during World War II, Federal debt held by the public increased greatly, not only in absolute amount but also, as shown in the following chart, as a proportion of total net indebtedness: Federal, State and local, and private. Whereas Federal debt held by the public was only 9% of total net debt at the end of calendar year 1929, it had risen to 62% by the end of calendar year 1945. Federal borrowing was large during these years, particularly to finance World War II, and borrowing by other sectors was restricted by low incomes and poor credit-worthiness during the depression and by controls and scarcities during the war.

Percent Distribution of Net Indebtedness¹



Since 1945, however, private debt has increased as a proportion of total debt in every year, and in every year the Federal debt held by the public (including the Federal Reserve System) has decreased as a proportion of the total. State and local government debt has risen in amount every year and has risen in proportion to total debt for the period as a whole. From the end of calendar year 1953 to the end of 1973, Federal debt held by the public rose 54%, State and local government debt rose 510%, and private debt rose 515%. By the end of calendar year 1973, Federal debt held by the public was only 14% of total debt. As a result of these trends, Federal debt and borrowing, although still significant, have become relatively much smaller influences in the financial markets.

During the same period Federal debt has decreased relative to gross national product. As shown in table C-3, debt held by the public equaled 62% of gross national product at the end of 1954 but declined steadily to 26% by the end of 1974. Debt held by the public is, however, expected to rise as a proportion of gross national product in 1975 and 1976.

The interest cost of the debt may be more significant than the amount of the debt for some types of comparison designed to measure the importance of Federal indebtedness. Interest on the debt held by the public has risen much faster than the debt itself, due to a strong upward trend since World War II in the interest rates that must be paid on new borrowings and on refunded debt. Between 1954 and 1974 the Federal debt held by the public grew 54%, but, as shown in table C-4, the interest paid to the public more than quadrupled. For this period as a whole, interest payments to the public grew faster than gross national product. In the first 5 years, 1954-58, interest was equal to 1.39% of gross national product, whereas by the last 5 years, 1970-74, the proportion had risen moderately to 1.59%. On the other hand, the proportion of budget outlays devoted to paying interest on the debt held by the public did not show any trend over the period as a whole and fluctuated around an average of 7.7%.

Table C-4. COMPARISON OF TRENDS IN INTEREST ON FEDERAL DEBT, GROSS NATIONAL PRODUCT, AND BUDGET OUTLAYS (in billions of dollars)

Fiscal year	Interest on the gross Federal debt					Interest on debt held by the public as a percent of	
	Total	Paid to				GNP	Budget outlays ²
		Federal Government accounts	The public				
			Total	Federal Reserve System ¹	Other		
1954.....	6.4	1.3	5.2	0.5	4.7	1.43	7.29
1955.....	6.4	1.2	5.2	.4	4.8	1.37	7.56
1956.....	6.8	1.3	5.6	.5	5.1	1.36	7.90
1957.....	7.3	1.4	5.9	.7	5.3	1.37	7.73
1958.....	7.8	1.4	6.3	.7	5.6	1.44	7.68
1959.....	7.8	1.4	6.4	.8	5.6	1.37	6.96
1960.....	9.5	1.5	8.1	1.0	7.1	1.63	8.73
1961.....	9.3	1.5	7.8	1.0	6.8	1.54	7.96
1962.....	9.5	1.6	7.9	1.0	6.9	1.46	7.40
1963.....	10.3	1.6	8.7	1.1	7.6	1.51	7.78
1964.....	11.0	1.8	9.2	1.2	8.0	1.51	7.80
1965.....	11.8	2.0	9.8	1.4	8.4	1.50	8.29
1966.....	12.6	2.1	10.4	1.7	8.7	1.45	7.75
1967.....	14.2	2.6	11.6	2.0	9.6	1.51	7.36
1968.....	15.6	3.0	12.6	2.4	10.2	1.53	7.07
1969.....	17.7	3.5	14.1	2.9	11.2	1.57	7.66
1970.....	20.0	4.4	15.6	3.5	12.2	1.64	7.95
1971.....	21.6	5.3	16.3	3.7	12.6	1.61	7.73
1972.....	22.5	5.8	16.6	3.7	12.9	1.51	7.16
1973.....	24.8	6.3	18.5	4.3	14.2	1.51	7.51
1974.....	30.0	7.7	22.4	5.3	17.0	1.66	8.33
1975 estimate.....	33.7	8.9	24.7	NA	NA	1.73	7.89
1976 estimate.....	36.7	9.5	27.2	NA	NA	1.70	7.78

NA=Not available.

¹ Estimated as the average of calendar year figures. The 1974 estimate is tentative.

² Budget outlays for 1954-76 are given in the Budget, Part 9, table 20.

Since the end of World War II the composition of the Federal debt has changed, with an increasingly large proportion of Federal securities having a relatively short maturity. One contributing factor was the statutory ceiling of 4¼% that has been maintained since 1918 on

the interest rate that could be paid on Treasury bonds.³ Because long-term market rates exceeded 4¼%, the ceiling prevented the Treasury from selling long-term obligations after 1965. The ceiling thereby tended to increase the gross dollar volume of debt refunded each year. Since 1965, the average maturity of Treasury marketable debt has declined from about 5 years to about 3 years. This restriction on Treasury borrowing was relaxed in March 1971 by a law that allowed the Treasury to issue up to \$10 billion of long-term bonds at interest rates above 4¼%. In July 1973 the restriction was relaxed further by exempting from this limit those bonds held by Government accounts and the Federal Reserve System. Treasury now has \$12.7 billion of bonds outstanding that have been sold since the change of law in 1971, including bonds held by Government accounts and the Federal Reserve System. The effective interest rates have ranged upwards from 6.1% with an average of 7.1%.

BORROWING BY FEDERAL AGENCIES

A few Government agencies are authorized to sell their own debt instruments to the public and to other Government agencies and funds. This agency borrowing is part of the gross Federal debt. For those agencies included in the budget, the authorization to borrow is budget authority and the disbursement of such borrowed money is a budget outlay.

Agency debt includes the borrowings of off-budget Federal agencies, which are Government owned and controlled but whose transactions have been excluded from the budget totals under provisions of law. Those off-budget agencies that will have borrowed by the end of 1976 are the Export-Import Bank, the Postal Service, the Federal Financing Bank, and the United States Railway Association. Part of the debt of the Export-Import Bank and the Postal Service was issued before they were excluded from the budget. The debt of the Federal Financing Bank is classified by Treasury as public debt rather than agency debt.

The Federal Financing Bank (FFB) was created in December 1973 under the Treasury Department in order to assist agency borrowing and Government-guaranteed borrowing and to coordinate such borrowing with Treasury debt management. It was given the authority to purchase agency debt and Government-guaranteed loans directly from any Federal agency and, in turn, to finance its purchase of these obligations by selling its own debt instruments to the public or the Treasury. Since the FFB should be able to borrow from the public or the Treasury at lower interest rates than other agencies would have to pay in the market, this procedure is expected to reduce the cost of agency borrowing activities. To the extent that this procedure is used, the FFB will serve as a conduit for agency borrowing, and FFB or Treasury securities will replace the securities of other agencies in the market. Agency borrowing from the FFB is not included in gross Federal debt. It would be double counting to add together both the agency borrowing from the FFB and also the FFB borrowing from the public (or the FFB borrowing from Treasury and the Treasury borrowing from the public) that was necessary to provide the FFB with funds to lend to the agencies.

³ Until 1967, 5-year notes were the longest term security that could be issued without regard to this limitation. In 1967 the maximum maturity of notes was raised to 7 years.

Agency borrowing was shown in total in table C-1 and is shown by agency in table C-5. In 1974 the new agency borrowing exceeded the repayment of agency debt by \$0.9 billion. In 1975 and 1976, on the other hand, repayments are expected to exceed new borrowing by small amounts. The agency debt outstanding on June 30, 1976, is estimated to be \$11.3 billion, which is 2% of gross Federal debt.

Table C-5. AGENCY BORROWING (in millions of dollars)

Description	Increase or decrease (-) in debt			Debt out- standing, end 1976 estimate
	1974 actual	1975 estimate	1976 estimate	
Borrowing from the public:				
Agriculture: Farmers Home Administration ¹				317
Defense.....	-89	-105	-92	1,005
Health, Education, and Welfare ¹				130
Housing and Urban Development:				
College housing loans ¹				304
Public facility loans ¹				94
Federal Housing Administration.....	2	45	4	405
Housing for the elderly ¹				64
Government National Mortgage Association ¹	-65	-67	-39	668
Veterans Administration ¹	-45	-43	-41	625
Export-Import Bank.....	663	-301		2,583
Postal Service.....				250
Small Business Administration ¹				283
Tennessee Valley Authority.....	440	51		2,695
All other.....	5	-10	*	2
Total borrowing from the public.....	911	-431	-168	9,426
Borrowing from other funds:				
Agriculture: Farmers Home Administration ¹				175
Defense.....	-13	-10	-18	152
Health, Education, and Welfare ¹				68
Housing and Urban Development:				
College housing loans ¹				163
Public facility loans ¹				49
Federal Housing Administration.....	-6		*	52
Housing for the elderly ¹				33
Government National Mortgage Association ¹				500
Veterans Administration ¹				546
Export-Import Bank.....	10	-10		
Small Business Administration ¹				161
Tennessee Valley Authority.....	1	-51		
Total borrowing from other funds.....	-8	-71	-18	1,899
Total agency borrowing included in gross Federal debt.....	903	-502	-186	11,325
MEMORANDUM				
Borrowing from Federal Financing Bank:				
Tennessee Valley Authority.....		780	750	1,530
Export-Import Bank.....		1,607	1,421	3,027
Postal Service.....	500	500	1,550	2,550
United States Railway Association.....		100	444	544
Total agency borrowing from Federal Financing Bank.....	500	2,987	4,165	7,651

*Less than \$500 thousand.

¹ Certificates of participation in loans.

As shown in the memorandum section of table C-5, the FFB is having a profound effect on agency borrowing.⁴ Four agencies that would otherwise borrow in the market borrowed \$0.5 billion from the FFB in late 1974 and are expected to borrow \$3.0 billion in 1975 and \$4.2 billion in 1976. Consequently, almost no agency borrowing from the market is scheduled to take place in 1975 and 1976, and the amounts to be borrowed from the FFB are far larger than the net repayment of agency debt held by the public and other Government funds. If not for the FFB, the agency component of gross Federal debt would be \$7.7 billion higher at the end of 1976.

The FFB began financial operations in May 1974 and borrowed \$1.5 billion in 8-month securities from the public in July 1974. Its previous and subsequent borrowing, however, has all been from the Treasury, which can borrow from the public at lower interest rates than the FFB. No further FFB borrowing from the public is currently scheduled. Therefore, no amounts are presented for the FFB in the tables in this special analysis. The FFB has substantial authority to borrow from either the public or the Treasury. With the approval of the Secretary of the Treasury, the FFB is authorized to have outstanding at any one time up to \$15 billion of publicly issued debt and to borrow from the Treasury without a statutory limitation on the amount.

By the end of 1976, \$5.5 billion of agency debt, or almost half of the total, will be obligations of the agencies listed in table C-5 that are currently expected to conduct future borrowing from the FFB. A total of \$4.2 billion, or over a third of all agency debt, will consist of certificates of participation in pools of loans issued by the Government National Mortgage Association as trustee on behalf of several agencies, which are identified in table C-5. The issuance of certificates of participation was discontinued after 1968. A further \$1.0 billion of agency debt will be family housing mortgages assumed a number of years ago by the Department of Defense. The remaining agency debt, which is mostly for programs that will continue to borrow from the public, will constitute only 4% of the total—\$457 million of Federal Housing Administration debentures and \$8 million of other obligations.

⁴ FFB purchases of Government-guaranteed loans are shown in table C-9.

The Treasury provides capital to business-type Government enterprises both in the form of capital stock and in the form of "debt." The provision of "debt" is shown as "borrowing from Treasury" on the statements of financial condition for enterprises in the Budget Appendix. However, the equity and the "debt" instruments are the same in substance; and it would be double counting to add together the agency "borrowing" from the Treasury and the Treasury borrowing from the public that was necessary to provide the agencies with this capital. Therefore, agency "borrowing" from Treasury is excluded from figures on agency "borrowing" and "debt" in all other parts of the budget documents.

AGENCY INVESTMENT IN FEDERAL SECURITIES

Trust funds and some public enterprise funds accumulate cash in excess of current requirements in order to meet future claims and demands. Such cash surpluses are invested mostly in Treasury debt and, to a very small extent, in agency debt. Purchases of these securities are not counted as budget outlays, and redemptions are not counted as budget receipts.

As shown in table C-6, net investment by trust funds and other Federal agencies in Government securities was \$14.8 billion in 1974 and is expected to decline substantially to \$8.8 billion in 1975 and \$3.9 billion in 1976. The major cause of this decrease is the large rise in unemployment. Higher unemployment is substantially increasing the benefits paid by the unemployment trust fund and reducing the employment tax receipts of the social security trust funds.

Total agency holdings of Federal securities will reach an estimated \$152.9 billion by June 30, 1976. This will constitute 25% of the gross Federal debt. Two major groups of trust funds—the social security funds and the Civil Service Commission funds—will account for 70% of total agency holdings, and all the trust funds together will account for 93%. Ninety-nine percent of the holdings will be Treasury debt, and the holdings of agency debt will decline by small amounts each year.

Table C-6. AGENCY INVESTMENT IN FEDERAL SECURITIES
(In millions of dollars)

Description	Increase or decrease (-) in holdings			Holdings, end of 1976 estimate
	1974 actual	1975 estimate	1976 estimate	
Investment in Treasury debt:				
Health, Education, and Welfare:				
Federal old-age and survivors ins. trust fund.....	2,217	1,682	-19	38,826
Federal disability insurance trust fund.....	391	-216	-901	7,078
Federal hospital insurance trust fund.....	3,642	2,559	3,212	13,585
Federal supplementary medical ins. trust fund....	531	326	371	1,928
Housing and Urban Development:				
Federal Housing Administration.....	68	138	72	1,417
Government National Mortgage Association.....	191	245	218	1,531
Other.....	27	29	21	183
Labor: Unemployment trust fund.....	1,165	-3,297	-6,140	2,684
Transportation:				
Highway trust fund.....	2,049	1,786	1,657	11,043
Airport-Airway trust fund.....	878	1,034	31	1,943
Treasury: Exchange stabilization fund.....	-570	(1)	(1)	1 2,364
Veterans Administration:				
National service life insurance fund.....	178	156	178	6,940
Other trust funds.....	-1	1	-3	1,041
Other.....	31	33	33	350
Civil Service Commission:				
Civil Service retirement and disability fund.....	3,465	3,839	3,846	41,641
Other trust funds.....	204	311	357	2,339
Federal Deposit Insurance Corp.: Trust fund.....	225	530	872	7,263
Federal Home Loan Bank Board: FSLIC.....	378	299	321	3,904
Postal Service.....	-310	-515	-260	.....
Railroad Retirement Board: Trust funds.....	-60	-191	-35	4,272
Other trust funds.....	46	38	21	218
Other Federal funds.....	71	59	35	377
Other off-budget funds.....	4	20	15	46
Total investment in Treasury debt.....	14,821	8,865	3,902	150,973
Investment in agency debt:				
Agriculture: CCC.....	-6	-6	-6	35
Health, Education, and Welfare:				
Federal old-age and survivors insurance trust fund.....	.....	.....	.....	555
Federal hospital insurance trust fund.....	.....	.....	.....	50
Housing and Urban Development:				
Federal Housing Administration.....	-6	*	*	191
Government National Mortgage Association.....	-14	-42	-12	191
Veterans Administration: National service life insurance fund.....				
.....	.....	.....	.....	310
Civil Service Commission: Civil Service retirement and disability fund.....				
.....	.....	.....	.....	375
Federal Home Loan Bank Board: FSLIC.....	.....	.....	.....	142
Postal Service.....	18	-23	.....	.....
Railroad Retirement Board: Trust funds.....	.....	.....	.....	50
Total investment in agency debt.....	-8	-71	-18	1,899
Total agency investment in Federal securities..	14,813	8,794	3,884	152,872
MEMORANDUM				
Investment by Federal funds.....	741	754	682	8,322
Investment by trust funds.....	14,930	8,557	3,447	142,140
Investment by off-budget Federal agencies.....	-858	-518	-245	2,410

*Less than \$500 thousand.

¹ The change in holdings is not estimated due to the uncertainties in foreign exchange, and the 1976 yearend holdings are taken to be the actual holdings at the end of 1974.

LIMITATIONS ON FEDERAL DEBT

Statutory limitations have customarily been placed on Federal debt. After enactment of the Second Liberty Bond Act in 1917, the limitation on the amount of debt developed in several steps from being an authorization of an amount for each specific issue to being an overall ceiling on the total amount of most outstanding Federal debt. The latter type of limitation has been in effect since 1941. The limit currently applies to the total of:

- All public debt issued by the Treasury since September 1917, whether held by the public or by the Government;
- Special non-interest-bearing notes issued to the International Monetary Fund;
- Agency debt in the form of participation certificates issued during 1968 under the Participation Sales Act of 1966; and
- Other debt issued by Federal agencies (and the District of Columbia Armory Board) which, according to explicit statute, is fully guaranteed as to principal and interest by the United States.

The statutory limit was \$465 billion for the period beginning November 1, 1972, and ending November 30, 1973. This limit consisted of a permanent limit of \$400 billion and a temporary increase to that limit of \$65 billion. On November 30, 1973, the temporary increase of \$65 billion expired, and the level of the statutory limit fell to the permanent limit of \$400 billion. On that date the outstanding debt subject to limit was \$65.0 billion more than the statutory limit. On December 3, 1973, the statutory limit was temporarily raised to \$475.7 billion, and on June 30, 1974, it was temporarily raised to \$495 billion. The temporary increase to \$495 billion expires on March 31, 1975, after which the permanent limit of \$400 billion is scheduled to come into effect.

The outstanding debt subject to limit is shown in table C-7 and compared with the gross Federal debt and the Federal debt held by the public. The debt subject to limit was \$476.0 billion at the end of 1974 and is expected to rise to \$528.9 billion and \$596.4 billion at the end of 1975 and 1976, respectively. These amounts are substantially more than the permanent debt limit of \$400 billion. The debt subject to limit equals 98% of the gross Federal debt. As table C-7 shows, almost all of the difference is accounted for by agency debt not subject to the general limitation.

Table C-7. DEBT SUBJECT TO STATUTORY LIMIT (in millions of dollars)

Description	End of year		
	1974 actual	1975 estimate	1976 estimate
Federal debt held by the public.....	346,053	389,553	453,053
Add: Federal debt held by Government agencies.....	140,194	148,988	152,872
Gross Federal debt.....	486,247	538,541	605,925
Deduct:			
Treasury debt not subject to limit.....	617	610	610
Agency debt not subject to general limitation:			
Department of Defense.....	1,382	1,267	1,157
Tennessee Valley Authority.....	2,696	2,695	2,695
Export-Import Bank.....	2,894	2,583	2,583
Postal Service.....	250	250	250
Participation certificates ¹	3,235	3,125	3,045
Other.....	13	2	2
Total Federal debt not subject to limit.....	11,086	10,532	10,343
Federal debt subject to statutory limit.....	475,161	528,009	595,582
District of Columbia Army Board bonds.....	20	20	20
Special notes held by International Monetary Fund.....	825	825	825
Total debt subject to statutory limit.....	476,006	528,833	596,427

¹ Certificates of participation issued by the Government National Mortgage Association as trustee for five departments and agencies (excluding certificates issued during 1968).

The debt subject to statutory limit is expected to increase more than the debt held by the public in both 1975 and 1976: \$52.8 billion compared to \$43.5 billion in 1975, and \$67.6 billion compared to \$63.5 billion in 1976. The slower growth in the debt held by the public is due primarily to the surpluses of certain funds in the Federal budget—principally trust funds. Since these surpluses are largely invested in Federal debt, they reduce the debt held by the public. However, since the Federal debt acquired by these funds is almost entirely subject to the statutory debt limit, this investment does not reduce the amount of debt subject to limit.

Agency debt subject to the statutory limit is comprised almost exclusively of debentures issued by the Federal Housing Administration and participation certificates sold in 1968. These two categories together make up only about one-seventh of total agency debt. However, most other agency debt requires explicit statutory authorization, whether sold to the public, the Federal Financing Bank, or other Government funds. For example, the Postal Service is limited to \$2 billion of annual borrowing and \$10 billion of outstanding bonds.

FEDERALLY ASSISTED BORROWING

The impact of the Government on borrowing includes not only its own borrowing to finance Federal operations but also its assistance to certain borrowing by the public. Federally assisted borrowing is of two types: Borrowing by Government-sponsored enterprises, and Government-guaranteed borrowing by non-Federal borrowers.

Seven Government-sponsored enterprises, which are federally chartered but fully privately owned, borrow under Government auspices. The transactions of these enterprises are not included within the Federal budget, and their debt is not part of gross Federal debt. These enterprises are essentially financial intermediaries, borrowing in the securities market and lending their borrowed funds for specifically authorized purposes either directly or by purchasing loans originated within the private sector that they were established to assist.

The borrowing programs of all seven enterprises are subject to Federal supervision. In addition, they all consult the Treasury Department, either by law or by custom, in planning their market offerings. The Student Loan Marketing Association now plans to borrow exclusively from the Federal Financing Bank.⁵ The Federal National Mortgage Association and the Federal home loan banks are required to obtain Treasury approval of the terms and timing of specific offerings. Four of the enterprises are systems of regional lending institutions that pool their borrowings. In addition to their Federal sponsorship, all of the established enterprises have a history of successful financial performance. Hence, despite the absence of Federal guarantees (except for the Student Loan Marketing Association), the obligations of these enterprises are sold at interest rates only moderately higher than the rates on Treasury issues.

As shown in table C-8, the borrowing by these seven Government-sponsored enterprises totaled \$14.9 billion in 1974 and is expected to be \$14.2 billion in 1975 and \$8.1 billion in 1976. The borrowing in all three years primarily reflects support for the housing market provided by the Federal home loan banks, the Federal National Mortgage Association, and the Federal Home Loan Mortgage Corporation. The smaller borrowing estimated for 1976 is due to a reduction in the mortgage purchases and advances to savings institutions provided by these enterprises. Special Analysis E discusses lending by the Government-sponsored enterprises.

⁵ The securities of the other Government-sponsored enterprises are not Government guaranteed and therefore cannot be bought by the FFB.

Table C-8. NET CHANGES IN DEBT OF GOVERNMENT-SPONSORED ENTERPRISES (in millions of dollars)

Description	Increase or decrease (-)			Debt out- standing, end 1976 estimate
	1974 actual	1975 estimate	1976 estimate	
Health, Education, and Welfare: Student Loan Marketing Association.....	250	40	335	625
Housing and Urban Development: Federal National Mortgage Association.....	4,866	4,705	3,200	33,137
Farm Credit Administration:				
Banks for cooperatives.....	138	182	249	2,986
Federal intermediate credit banks.....	1,344	1,249	1,408	10,737
Federal land banks.....	2,043	2,120	1,985	15,270
Federal Home Loan Bank Board:				
Federal home loan banks.....	6,464	1,116	-2,495	15,300
Federal Home Loan Mortgage Corporation ¹	1,040	4,443	3,748	12,262
Total.....	16,145	13,855	8,430	90,317
Less increase in holdings of debt issued by Government-sponsored enterprises.....	1,253	-316	337	1,659
Total borrowing by Government-sponsored enterprises.....	14,892	14,171	8,093	88,658

¹ Figures include the sale of participation certificates (pass-through type) that offset the purchase of mortgage loans. These sales are treated by FHLMC as a sale of loan assets rather than as borrowing and therefore are not reflected as debt on its statement of financial condition in the Budget Appendix. Separate figures are given in table E-9.

The other type of federally assisted borrowing, Government-guaranteed borrowing, is defined as borrowing by individuals, private corporations, State and local governments, or foreign countries that is guaranteed by the United States Government. Government-guaranteed borrowing is the same as Government-guaranteed lending. The major part of Government-guaranteed debt consists of mortgages on residential property. As shown in table C-9, Government-guaranteed borrowing was \$10.1 billion in 1974 and is expected to rise to \$15.4 billion in 1975 and \$16.1 billion in 1976. Special Analysis E analyzes the various guarantee programs in detail.

TOTAL FEDERAL AND FEDERALLY ASSISTED BORROWING

Table C-9 summarizes Federal and federally assisted borrowing from the public. For the purpose of this table, Government-sponsored enterprises are excluded from the public and defined in the same sector as the Federal Government. Federal borrowing from the public is presented in total. Borrowing by Government-sponsored enterprises and Government-guaranteed borrowing are presented both in total and as net amounts, the latter having been adjusted in order to remove double counting in the derivation of total Federal and federally assisted borrowing from the public. Double counting would otherwise occur when one type of Federal or federally assisted debt is bought or sold by the Government or a Government-sponsored enterprise.

Table C-9. NET BORROWING FROM THE PUBLIC BY GOVERNMENT, GOVERNMENT-SPONSORED ENTERPRISES, AND GOVERNMENT-GUARANTEED BORROWERS (in billions of dollars)

Description	Borrowing or repayment (-)			Debt out- standing, end 1976 estimate
	1974 actual	1975 estimate	1976 estimate	
Federal borrowing from the public ¹	3.0	43.5	63.5	453.1
Borrowing by Government-sponsored enterprises ²	14.9	14.2	8.1	88.7
Less increase in holdings of Federal debt.....	—*	.4	*	1.1
Less increase in Government-sponsored debt held by Federal agencies.....	.1	.2	.3	.6
Net Government-sponsored borrowing from public.....	14.8	13.6	7.7	87.0
Government-guaranteed borrowing ³	10.1	15.4	16.1	215.5
Less increase in Government-guaranteed loans held by:				
Federal agencies:				
Federal Financing Bank.....	.1	10.6	5.8	16.5
Government National Mortgage Association.....	— .3	— .1	— .4	3.0
Environmental Financing Authority.....	—	.1	—	—
Government-sponsored enterprises:				
Student Loan Marketing Association.....	.1	.1	.3	.6
Federal National Mortgage Association.....	3.7	3.7	2.4	31.4
Federal Home Loan Mortgage Corporation.....	.2	.2	.3	2.4
Net Government-guaranteed borrowing from public.....	6.2	.8	7.7	161.7
Total Federal and federally assisted borrowing from the public.....	24.1	57.9	78.9	701.7

*Less than \$50 million.

¹ See table C-1.

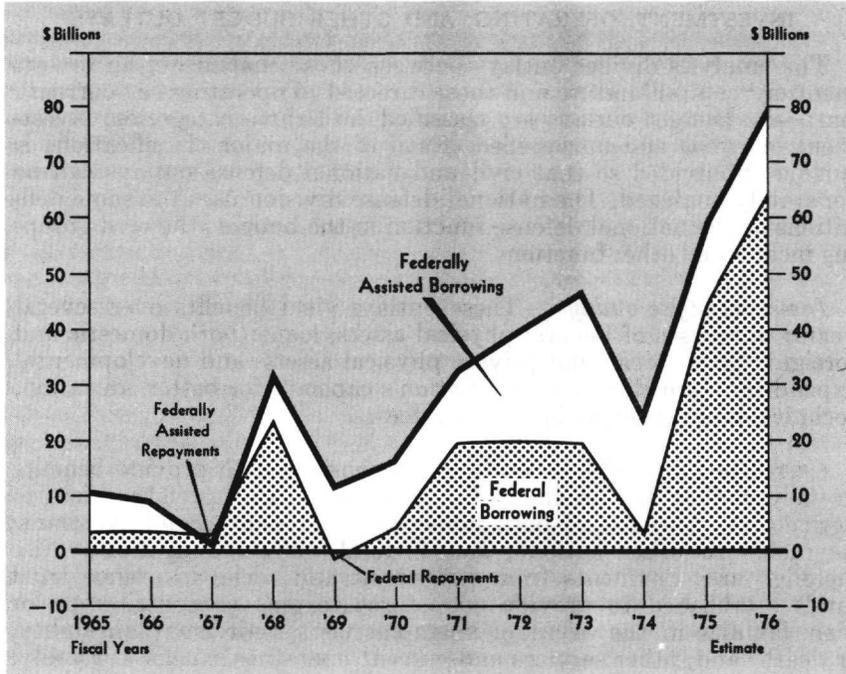
² See table C-8.

³ The same as Government-guaranteed loans. See table E-7.

Federal and federally assisted borrowing from the public in 1974 was composed mostly of Government-sponsored and Government-guaranteed borrowing, but in 1975 and 1976 the totals are made up predominantly of Federal borrowing from the public caused by large budget deficits. In addition, the Federal Financing Bank expects to acquire large amounts of Government-guaranteed debt in 1975 and 1976. Since the FFB finances these acquisitions through Federal borrowing, these transactions substitute Federal borrowing for Government-guaranteed borrowing in the market.

The following chart depicts the trends in Federal and federally assisted borrowing from the public between 1965 and 1976. Total Federal and federally assisted borrowing fell to \$24.1 billion in 1974 due mostly to a sharp drop in the Federal deficit. The levels expected for 1975 and 1976 are much the highest for any recent years during this period.

Federal and Federally Assisted Borrowing



As the chart shows, Federal and federally assisted borrowing is now substantially higher than a decade ago. Much of the increase parallels the growth in the economy and in the total funds raised by the nonfinancial sector through the sale of debt securities and other forms of borrowing and through the sale of corporate equities. However, to some extent the total Federal and federally assisted borrowing has increased as a proportion of the total funds raised. This proportion rose from 15% during 1960-67 to 22% during 1968-74. Thus, despite the decreasing share of Federal debt in total debt, Government programs since 1968 have influenced the allocation of funds raised in financial markets more than they did in the preceding years. During 1968-74 this proportion did not tend to increase further, although it may rise again during 1975 and 1976.

SPECIAL ANALYSIS C

BORROWING, DEBT, AND INVESTMENT

The major fiscal operations of the Federal Government include not only taxation and expenditure but also:

- The borrowing of cash to meet current requirements not covered by receipts and to refinance maturing debt;
- The investment of balances that trust funds and other Government accounts do not currently need for outlays; and
- The provision of assistance, including Government guarantees, for certain non-Federal borrowing.

This analysis summarizes current developments in Federal borrowing. It also discusses the size and growth of the Federal debt and the interest on the Federal debt, agency borrowing, agency investment in U.S. Government securities, the statutory debt limit, and borrowing by Government-sponsored enterprises. The analysis concludes with a brief discussion of the trend in Federal and federally assisted borrowing and the relationship of this trend to total funds raised by non-financial sectors in the economy. Excluded from this analysis are other types of Federal liabilities, which include accounts payable, obligations for undelivered orders, long-term contracts, insurance commitments, and the obligation for such future payments as social security, employee retirement, and veterans compensation.

Special Analysis E examines the related subject of Federal credit programs, which include direct loans, loans by Government-sponsored enterprises, and Government-guaranteed loans. The factors discussed in both Special Analyses C and E are significant in appraising the impact on financial markets of the programs contained in the 1977 Federal budget.

BORROWING AND REPAYING DEBT

The Federal Government borrows from two principal sources. First, it sells debt to the public, primarily in order to finance Federal deficits. Second, it sells debt to the Government agencies that accumulate surpluses in separate funds, primarily trust funds, required by law to be invested in Federal securities. Most Federal debt has been issued by the Treasury and is called "public debt," but a small portion has been issued by other Government agencies and is called "agency debt."¹

The gross Federal debt includes debt held by both the public and the agencies. Since Treasury borrowing from the agencies is an internal transaction between two funds both within the Government itself, only borrowing from the public affects the volume of securities sold in the financial markets and the taxes required to pay interest on the Federal debt.

¹ The term "agency debt" is defined more narrowly in the budget than in the securities market, where it may include not only the debt of the Government agencies listed in table C-5 but also the debt of other issuers such as the Government-sponsored enterprises listed in table C-8.

Borrowing from the public—whether by the Treasury or by an agency—has a significant impact on financial markets and the rest of the economy, and it is consequently an important concern of Federal fiscal policy. For most purposes borrowing from the Federal Reserve System should be distinguished from borrowing from the rest of the public. Federal Reserve purchases of debt are undertaken to carry out monetary policy, not to earn income, and affect the economy by expanding bank reserves and the money stock. They thus have a markedly different motivation and effect on financial markets than do purchases by other sectors of the public. The debt held outside the Federal Reserve System, in contrast, enters into investment portfolios of businesses and individuals and by this means affects interest rates, other financial conditions, and the size and composition of private assets. Almost all interest received by the Federal Reserve System is returned to the Treasury as receipts, called deposits of earnings, so the net cost to the Government of Federal Reserve holdings of debt is very small. The estimates in this analysis for the current and future years do not divide the debt held by the public between the Federal Reserve System and the rest of the public, despite the significance of this division, because the Federal Reserve's open market operations depend on future economic developments and on policy decisions not yet made.

Table C-1 summarizes Federal borrowing from 1975 through 1977. In 1975 the total Federal borrowing (net of the refunding of securities)—i.e., the rise in gross Federal debt—was \$57.9 billion. The borrowing from Government agencies was \$7.0 billion, and the bor-

Table C-1. FEDERAL BORROWING (in millions of dollars)

Description	Borrowing or repayment (-) of debt				Debt outstanding end 1977 estimate
	1975 actual	1976 estimate	TQ estimate	1977 estimate	
Gross Federal debt:					
Treasury debt ¹	58,953	90,000	18,912	67,601	709,701
Agency debt ²	-1,069	-200	-44	-1,229	9,810
Gross Federal debt ².....	57,884	89,800	18,868	66,372	719,511
Less debt held by Government agencies:					
Treasury debt.....	7,077	2,321	-1,129	13,021	159,496
Agency debt.....	-46	-22	-2	-149	1,769
Debt held by Government agencies....	7,031	2,299	-1,131	12,872	161,265
Total, debt held by the public ².....	50,853	87,500	20,000	53,500	558,246
Composed of:					
Debt held by the Federal Reserve System....	4,344	NA	NA	NA	NA
Debt held by others.....	46,509	NA	NA	NA	NA

NA=Not available.

¹ Includes \$9 million of Federal Financing Bank debt in 1975.

² Agency borrowing, gross Federal borrowing, and borrowing from the public in 1977 exclude the reclassification on October 1, 1976, of an estimated \$340 million of Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

rowing from the public was \$50.9 billion. Of the amount borrowed from the public, \$4.3 billion was borrowed from the Federal Reserve System and \$46.5 billion from the rest of the public—commercial banks, foreign central banks, other financial institutions and businesses, and individuals.

Borrowing from the public—after rising from \$3.0 billion in 1974 to \$50.9 billion in 1975—is expected to rise further to \$87.5 billion in 1976 and then fall to \$53.5 billion in 1977. The very large increase in borrowing in 1975 and 1976 has occurred primarily because the recession automatically reduced tax receipts and raised unemployment benefits and because tax reductions and some expenditure programs were enacted to stimulate the economy. The estimated decline in borrowing in 1977 is due to both the economic recovery and the President's proposed program of budget restraint. By the end of 1977 gross Federal debt is expected to be \$719.5 billion, with 78% held by the public (including the Federal Reserve System) and the remainder by the agencies. Ninety-nine percent of the gross Federal debt will have been issued by the Treasury.

Until recent years the Federal debt was held almost entirely by domestic individuals and institutions. After World War II the debt held in foreign balances and international accounts tended to grow gradually and at the end of 1969 amounted to \$10 billion.² However, due to international monetary developments, in 1970 the foreign and international holdings began to grow much faster, and by the end of 1975 they had risen to \$66 billion. Most of the Treasury debt held abroad is owned by foreign central banks. The annual borrowing from abroad is shown below for 1970–75 in comparison with the annual borrowing from the domestic public, exclusive of the Federal Reserve System (in billions of dollars):

	1970	1971	1972	1973	1974	1975
Foreign and international.....	3.7	17.9	17.3	10.2	-2.5	9.1
Domestic (excluding Federal Reserve System).....	-3.5	-6.3	-3.8	5.3	*	37.4
Total borrowing from the public (excluding Federal Reserve System).....	<u>.2</u>	<u>11.6</u>	<u>13.5</u>	<u>15.5</u>	<u>-2.5</u>	<u>46.5</u>

*Less than \$50 million.

Whereas before 1970 total borrowing from the public was nearly the same as borrowing from the domestic public, the table shows that since that time they have been quite different. During 1970–72, \$39 billion was borrowed from abroad while \$14 billion of debt held by the domestic public (exclusive of the Federal Reserve System) was redeemed. During most of 1973–75 borrowing from abroad remained large, though not predominant, accounting for over a quarter of Federal borrowing from the public (exclusive of the Federal Reserve System).

² The estimates of Federal debt held in foreign balances and international accounts do not include agency debt, the holdings of which are believed to be small. The data were adjusted to exclude the special non-interest-bearing notes issued to the International Monetary Fund and international lending agencies. These notes are not part of gross Federal debt.

BORROWING AND GOVERNMENT DEFICITS

Table C-2 shows how borrowing from the public is related to the Federal deficit. Until recent years the budget deficit constituted practically the entire deficit of the Federal Government, but during 1975-77 the deficit of the off-budget Federal agencies is also significant. In 1975 the total Government deficit was \$53.1 billion. The greater part of this amount, \$50.9 billion, was financed by borrowing from the public, and the remaining \$2.3 billion was financed by other means. Some of these other means of financing the deficit can be either positive or negative. In years when they add up to a negative total, such as is estimated for 1976, they, like the deficit itself, must be financed by borrowing from the public.

Table C-2. MEANS OF FINANCING THE FEDERAL DEFICIT

(In millions of dollars)

Description	1975 actual	1976 est.	TQ est.	1977 est.
Budget surplus or deficit (-).....	-43,604	-76,001	-16,077	-42,975
Surplus or deficit (-) of off-budget Federal agencies ¹	-9,544	-9,342	-4,040	-11,060
Total, surplus of deficit (-).....	-53,149	-85,343	-20,117	-54,035
Means of financing other than borrowing from the public:				
Decrease or increase (-) in cash and monetary assets.....	-273	-1,411	-----	-----
Increase or decrease (-) in liabilities for:				
Checks outstanding, etc. ²	1,362	167	131	422
Deposit fund balances.....	579	-1,585	-182	-591
Seigniorage on coins.....	626	672	168	704
Total, means of financing other than borrowing from the public.....	2,295	-2,157	117	535
Total, requirements for borrowing from the public.....	-50,853	-87,500	-20,000	-53,500
Reclassification of securities ³	-----	-----	-----	-340
Change in debt held by the public.....	50,853	87,500	20,000	53,840

¹ The off-budget Federal agencies consist of the Rural Electrification and Telephone revolving fund, Rural Telephone Bank, Housing for the Elderly or Handicapped fund (as of September 1, 1974), Pension Benefit Guaranty Corporation, Federal Financing Bank, Export-Import Bank (until October 1, 1976), Postal Service, certain activities of the United States Railway Association, and Energy Independence Authority.

² Besides checks outstanding, includes military payment certificates, accrued interest (less un-amortized discount) payable on Treasury debt, and, as an offsetting change in assets, certain collections in transit.

³ On October 1, 1976, Federal debt held by the public is estimated to increase by \$340 million due to a reclassification of Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

The means of financing a deficit other than borrowing from the public are:

- A decrease in cash or monetary assets;
- An increase in monetary liabilities for checks outstanding, etc.;
- An increase in deposit fund balances, which include the balances of the Exchange stabilization fund and liabilities that arise when the Federal Government temporarily holds money in deposit

as an agent for someone else (such as State income taxes withheld from Federal employees' salaries and not yet paid to the State); and

- Seigniorage, which is the face value of minted coins less the cost of their production.

As the figures in table C-2 indicate, the extent to which a large deficit can be financed by means other than borrowing from the public is very limited. Consequently, the total Government deficit and the borrowing from the public tend to be closely related.

Borrowing from the agencies largely depends on the surpluses of the trust funds, which own 93% of the Federal debt held by Government agencies. Agency investment in Federal securities and the total trust fund surplus during 1974-77 are compared in the table below (in billions of dollars):

	1974 actual	1975 actual	1976 estimate	TQ estimate	1977 estimate
Agency investment in Federal debt.....	14.8	7.0	2.3	-1.1	12.9
Total trust fund surplus or deficit (-)....	14.0	7.4	2.5	-1.1	12.5

As this table shows, the agency investment in Federal securities is similar in size to the total trust fund surplus throughout this period, and the yearly changes in level are likewise similar. The differences are accounted for by two factors. Certain agencies other than trust funds buy and sell Federal debt, as shown in table C-6, and the trust funds increase and decrease their open book balances.³

SIZE AND GROWTH OF FEDERAL DEBT

Gross Federal debt has risen substantially over most of the past four and a half decades, from about \$16 billion in 1929 to \$544.1 billion at the end of 1975. Table C-3 presents the detail of Federal debt since 1954 and shows that a sizable part of the increase is held in Federal Government accounts (primarily trust funds) rather than being owed to the public. From the end of 1954 to the end of 1975, gross Federal debt rose by 101% while Federal debt held by the public rose by 77%. Federal debt held by the public apart from the Federal Reserve System rose still less, by 56%—an annual compound rate of growth of 2.2% over the 21 years—because during this period the Federal Reserve System bought a large quantity of Federal debt in the market, thereby expanding the reserves of the banking system and providing for growth in the Nation's money stock.

During the depression of the 1930's and during World War II, Federal debt held by the public increased greatly, not only in absolute amount but also, as shown in the following chart, as a proportion of total net indebtedness: Federal, State and local, and private. Whereas Federal debt held by the public was only 9% of total net debt at the end of calendar year 1929, it had risen to 62% by the end of calendar year 1945. Federal borrowing was large during these years, particularly to finance World War II, and borrowing by other sectors was restricted by low incomes and poor credit-worthiness during the depression and by controls and scarcities during the war.

³ Open book balances comprise cash assets not currently invested. As shown in Special Analysis B, they are very small relative to trust fund holdings of Federal debt.

Table C-3. COMPARISON OF TRENDS IN FEDERAL DEBT AND GROSS NATIONAL PRODUCT (in billions of dollars)

Fiscal year	Debt outstanding, end of year					GNP	Debt held by public as percent of GNP
	Gross Federal debt	Federal Government accounts	Held by				
			Total	Federal Reserve System	Other		
1954.....	270.8	46.3	224.5	25.0	199.5	363.5	61.8
1955.....	274.4	47.8	226.6	23.6	203.0	381.0	59.5
1956.....	272.8	50.5	222.2	23.8	198.5	410.9	54.1
1957.....	272.4	52.9	219.4	23.0	196.4	433.3	50.6
1958.....	279.7	53.3	226.4	25.4	200.9	441.7	51.2
1959.....	287.8	52.8	235.0	26.0	209.0	471.3	49.9
1960.....	290.9	53.7	237.2	26.5	210.7	498.3	47.6
1961.....	292.9	54.3	238.6	27.3	211.4	509.0	46.9
1962.....	303.3	54.9	248.4	29.7	218.7	545.8	45.5
1963.....	310.8	56.3	254.5	32.0	222.4	577.1	44.1
1964.....	316.8	59.2	257.6	34.8	222.8	616.4	41.8
1965.....	323.2	61.5	261.6	39.1	222.5	658.0	39.8
1966.....	329.5	64.8	264.7	42.2	222.5	722.4	36.6
1967.....	341.3	73.8	267.5	46.7	220.8	773.5	34.6
1968.....	369.8	79.1	290.6	52.2	238.4	830.3	35.0
1969 ¹	367.1	87.7	279.5	54.1	225.4	904.2	30.9
1970 ²	382.6	97.7	284.9	57.7	227.2	960.2	29.7
1971.....	409.5	105.1	304.3	65.5	238.8	1,019.8	29.8
1972.....	437.3	113.6	323.8	71.4	252.3	1,111.8	29.1
1973 ³	468.4	125.4	343.0	75.2	267.9	1,238.4	27.7
1974.....	486.2	140.2	346.1	80.6	265.4	1,358.6	25.5
1975.....	544.1	147.2	396.9	85.0	311.9	1,440.0	27.6
1976 estimate.....	633.9	149.5	484.4	NA	NA	1,593.0	30.4
TQ estimate.....	652.8	148.4	504.4	NA	NA	NA	NA
1977 estimate ⁴	719.5	161.3	558.2	NA	NA	1,837.0	30.4

NA=Not available.

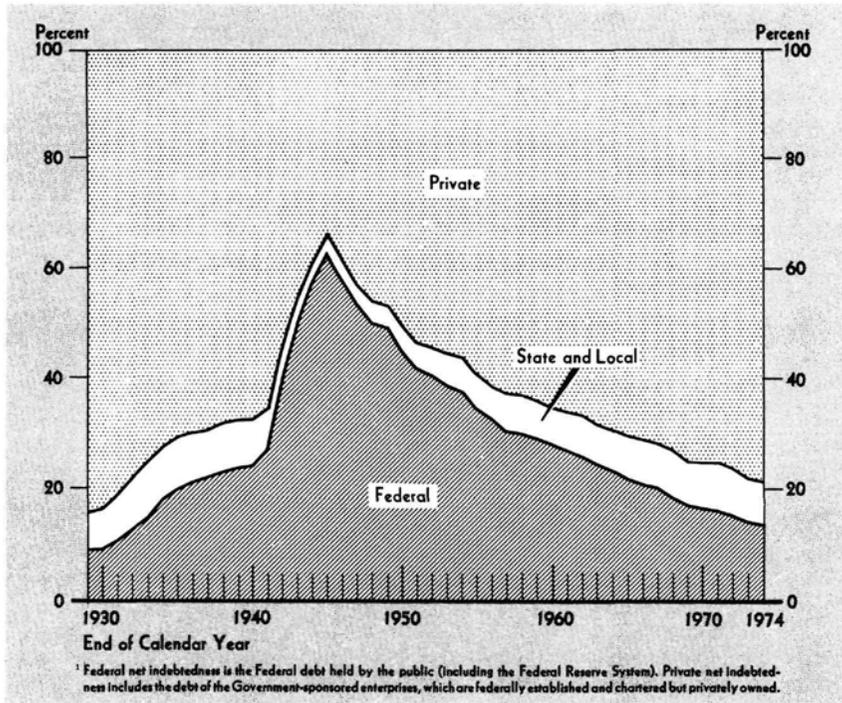
¹ During 1969, 3 Government-sponsored enterprises became completely privately owned, and their debt was removed from the totals for the Federal Government. At the dates of their conversion, gross Federal debt was reduced \$10.7 billion, debt held by Government accounts was reduced \$0.6 billion, and debt held by the public was reduced \$10.1 billion.

² Gross Federal debt and debt held by the public were increased \$1.6 billion due to a reclassification of the Commodity Credit Corporation certificates of interest from asset sales to debt.

³ A procedural change in the recording of trust fund holdings of Treasury debt at the end of the month increased gross Federal debt and debt held in Government accounts by about \$4.5 billion.

⁴ Gross Federal debt and debt held by the public are estimated to increase \$0.3 billion due to a reclassification of the Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

From 1945 to 1974, however, private debt increased as a proportion of total debt in every year, and in every year the Federal debt held by the public (including the Federal Reserve System) decreased as a proportion of the total. State and local government debt has risen in amount every year and has risen in proportion to total debt for the period as a whole. From the end of calendar year 1953 to the end of 1974, Federal debt held by the public rose 59%, State and local government debt rose 570%, and private debt rose 561%. By the end of calendar year 1974, Federal debt held by the public was only 13% of total debt. As a result of these trends, Federal debt and borrowing, although still significant, have become relatively much smaller influences in the financial markets. Complete data for calendar year 1975 are not yet available, but it is probable that the large Federal

Percent Distribution of Net Indebtedness¹

deficit caused Federal debt held by the public to rise as a percentage of total debt. This does not significantly affect the comparison of trends over three decades.

During the same period Federal debt has decreased relative to gross national product. As shown in table C-3, debt held by the public equaled 62% of gross national product at the end of 1954 but declined steadily to 25% by the end of 1974. In 1975, however, debt held by the public rose as a percentage of gross national product, and it is expected to rise further in 1976 before leveling off in 1977.

The interest cost of the debt may be more significant than the amount of the debt for some types of comparison designed to measure the importance of Federal indebtedness. Interest on the debt held by the public has risen much faster than the debt itself, due to a strong upward trend since World War II in the interest rates that must be paid on new borrowings and on refunded debt. Between 1954 and 1975 the Federal debt held by the public grew 77%, but, as shown in table C-4, the interest paid to the public more than quadrupled. For this period as a whole, interest payments to the public grew faster than gross national product. In the first 5 years, 1954-58, interest was equal to 1.39% of gross national product, whereas by the last 5 years, 1971-75, the proportion had risen moderately to 1.59%. On the other hand, the proportion of budget outlays devoted to paying interest on the debt held by the public did not show any trend over the period as a whole and fluctuated around an average of 7.7%. Interest as a percentage of both gross national product and budget outlays is expected to rise in 1976 and 1977.

Table C-4. COMPARISON OF TRENDS IN INTEREST ON FEDERAL DEBT (in billions of dollars)

Fiscal year	Interest on the gross Federal debt					Interest on debt held by the public as a percent of	
	Total	Federal Government accounts	Paid to			GNP	Budget outlays ²
			Total	Federal Reserve System ¹	Other		
1954.....	6.4	1.3	5.2	0.5	4.7	1.42	7.29
1955.....	6.4	1.2	5.2	.4	4.8	1.36	7.56
1956.....	6.8	1.3	5.6	.5	5.1	1.35	7.90
1957.....	7.3	1.4	5.9	.7	5.3	1.37	7.73
1958.....	7.8	1.4	6.3	.7	5.6	1.44	7.68
1959.....	7.8	1.4	6.4	.8	5.6	1.36	6.96
1960.....	9.5	1.5	8.1	1.0	7.1	1.62	8.73
1961.....	9.3	1.5	7.8	1.0	6.8	1.53	7.95
1962.....	9.5	1.6	7.9	1.0	6.9	1.45	7.40
1963.....	10.3	1.6	8.7	1.1	7.6	1.50	7.78
1964.....	11.0	1.8	9.2	1.2	8.0	1.50	7.80
1965.....	11.8	2.0	9.8	1.4	8.4	1.49	8.29
1966.....	12.6	2.1	10.4	1.7	8.7	1.44	7.75
1967.....	14.2	2.6	11.6	2.0	9.6	1.51	7.36
1968.....	15.6	3.0	12.6	2.4	10.2	1.52	7.07
1969.....	17.7	3.5	14.1	2.9	11.2	1.56	7.66
1970.....	20.0	4.4	15.6	3.5	12.2	1.63	7.95
1971.....	21.6	5.3	16.3	3.7	12.6	1.60	7.73
1972.....	22.5	5.8	16.6	3.7	12.9	1.49	7.16
1973.....	24.8	6.3	18.5	4.3	14.2	1.49	7.51
1974.....	30.0	7.7	22.4	5.5	16.9	1.65	8.33
1975.....	33.5	8.8	24.7	6.0	18.7	1.71	7.60
1976 estimate.....	38.4	9.2	29.2	NA	NA	1.83	7.81
TQ estimate.....	10.6	2.4	8.1	NA	NA	NA	8.31
1977 estimate.....	45.6	9.6	36.0	NA	NA	1.96	9.13

NA=Not available.

¹ Estimated as the average of calendar year figures. The 1975 estimate is tentative.² Budget outlays for 1954-77 are given in the Budget, part 8, table 22.

Since the end of World War II the composition of the Federal debt has changed, with an increasingly large proportion of Federal securities having a relatively short maturity. One contributing factor is the statutory ceiling of 4¼% that has been maintained since 1918 on the interest rate that could be paid on Treasury bonds.⁴ Because long-term market rates exceeded 4¼% after 1965, the ceiling eventually prevented the Treasury from selling long-term obligations. Since 1965 the average maturity of Treasury marketable debt has declined from about 5 years to about 3 years. This restriction on Treasury borrowing was relaxed in March 1971 by a law that allowed the Treasury to issue up to \$10 billion of long-term bonds at interest rates above 4¼%. In July 1973 the restriction was relaxed further by exempting from this limit those bonds held by Government accounts

⁴ Until 1967, 5-year notes were the longest term security that could be issued without regard to this limitation. In 1967 the maximum maturity of notes was raised to 7 years.

and the Federal Reserve System. Treasury now has \$18.7 billion of bonds outstanding that have been sold since the change of law in 1971, including bonds held by Government accounts and the Federal Reserve System. The effective interest rates have been 6.1% and higher with an average of 7.4%. The authority to sell bonds under this exception has now been used up.

BORROWING BY FEDERAL AGENCIES

A few Government agencies are authorized to sell their own debt instruments to the public and to other Government agencies and funds. This agency borrowing is part of the gross Federal debt. For those agencies included in the budget, the authorization to borrow is budget authority and the disbursement of such borrowed money is a budget outlay.

Agency debt includes the borrowings of off-budget Federal agencies, which are Government owned and controlled but whose transactions have been excluded from the budget totals under provisions of law. The agencies that have borrowed while off-budget consist of the Export-Import Bank, the Postal Service, the Federal Financing Bank, and the United States Railway Association. Part of the debt of the Export-Import Bank and the Postal Service was issued during periods when they were in the budget. The debt of the Federal Financing Bank is classified by Treasury as public debt rather than agency debt.

Agency borrowing was shown in total in table C-1 and is shown by agency in table C-5. In 1975 the repayment of agency debt exceeded new agency borrowing by \$1.1 billion. In 1976 and 1977 repayments are expected to exceed new borrowing by small amounts. The agency debt outstanding on September 30, 1977, is estimated to be \$9.8 billion, which is about 1% of gross Federal debt.

Agency debt will be increased by an estimated \$340 million on October 1, 1976, due to reclassifying as Federal debt the certificates of beneficial interest in pools of loans issued by the Export-Import Bank and classified up to that date as loan asset sales. Since this is a reclassification of existing securities, it does not constitute Federal borrowing. Therefore agency borrowing, borrowing from the public, and gross Federal borrowing in 1977 will be an estimated \$340 million less than the change in debt from the end of the transition quarter to the end of 1977. Certificates redeemed after the reclassification will show as repayment of Export-Import Bank debt in table C-5. The issuance of new certificates after the reclassification would be shown as borrowing, but the Export-Import Bank does not plan to sell more certificates of beneficial interest after that date.

A further classification change arises from the transfer of all assets and liabilities of certain expiring funds to the Revolving fund (liquidating programs) in the Department of Housing and Urban Development. Debt of \$143 million was transferred from the Public facility loan fund on April 1, 1975, and debt of \$467 million is scheduled to be transferred from the College housing fund on October 1, 1976. These transfers do not constitute borrowing by the Revolving fund (liquidating programs) or repayment of debt by the fund that expires.

Table C-5. AGENCY BORROWING¹ (in millions of dollars)

Description	Borrowing or repayment (-) of debt				Debt out-standing, end 1977 estimate
	1975 actual	1976 estimate	TQ estimate	1977 estimate	
Borrowing from the public:					
Agriculture: Farmers Home Admin. ²	-1	-----	-----	-25	291
Defense.....	-87	-92	-25	-98	900
Health, Education, and Welfare ²	-1	-----	-----	-4	125
Housing and Urban Development:					
College housing loans ^{2 3}	-1	-----	-----	-----	-----
Public facility loans ^{2 3}	-----	-----	-----	-----	-----
Federal Housing Administration.....	61	90	19	50	576
Housing for the elderly ²	*	-----	-----	-----	64
Gov. National Mortgage Association ²	-73	-41	-17	-99	545
Revolving fund (liquidating programs) ^{2 3}	*	-----	-----	-4	391
Veterans Administration ²	-44	-39	-18	-55	553
Export-Import Bank ⁴	-295	4	-----	-789	2,144
Postal Service.....	-----	-----	-----	-----	250
Small Business Administration ²	-1	-----	-----	-55	227
Tennessee Valley Authority.....	-570	-100	-----	-----	1,975
All other.....	-11	*	*	*	2
Total, borrowing from the public⁴.....	-1,023	-178	-41	-1,079	8,042
Borrowing from other funds:					
Agriculture: Farmers Home Admin. ²	1	-----	-----	-21	156
Defense.....	-19	-15	-2	-14	128
Health, Education, and Welfare ²	1	-----	-----	-3	65
Housing and Urban Development:					
College housing loans ^{2 3}	1	-----	-----	-----	-----
Public facility loans ^{2 3}	-----	-----	-----	-----	-----
Federal Housing Administration.....	18	-3	-----	-----	67
Housing for the elderly ²	*	-----	-----	-----	33
Gov. National Mortgage Association ²	4	-----	-----	-62	442
Revolving fund (liquidating programs) ^{2 3}	*	-----	-----	-4	211
Veterans Administration ²	4	-----	-----	-----	549
Export-Import Bank.....	-6	-4	-----	-----	-----
Small Business Administration ²	1	-----	-----	-46	117
Tennessee Valley Authority.....	-51	-----	-----	-----	-----
Total, borrowing from other funds.....	-46	-22	-2	-149	1,769
Total, agency borrowing included in gross Federal debt⁴.....	-1,069	-200	-44	-1,229	9,810
MEMORANDUM					
Borrowing from Federal Financing Bank:					
Tennessee Valley Authority.....	1,435	1,100	300	1,000	3,835
Export-Import Bank.....	4,049	1,437	393	2,028	7,908
Postal Service.....	1,000	1,280	500	1,398	4,678
United States Railway Association.....	34	-5	-1	-2	26
Total, agency borrowing from Federal Financing Bank.....	6,518	3,812	1,192	4,424	16,447

*Less than \$500 thousand.

¹ Excludes agency borrowing from Treasury.² Certificate of participation in loans issued by the Government National Mortgage Association on behalf of several agencies.³ The debt of the Public facility loan fund (\$143 million) was transferred to the Revolving fund (liquidating programs) on April 1, 1975, and the debt of the College housing fund (\$467 million) is scheduled to be transferred on October 1, 1976.⁴ Borrowing in 1977 does not include the reclassification on October 1, 1976, of an estimated \$340 million of Export-Import Bank certificates of beneficial interest as debt instead of loan asset sales.

The Federal Financing Bank (FFB) was created in December 1973 under the Treasury Department in order to assist and coordinate agency borrowing and Government-guaranteed borrowing and to reduce the cost to the Government of some of its borrowing activities. It was given the authority to purchase agency debt and Government-guaranteed obligations and, in turn, to finance these transactions by borrowing from the Treasury or the public. Since the FFB can borrow from the Treasury (or the public) at lower interest rates than other agencies would have to pay in the market, this procedure reduces the cost of agency borrowing activities. The FFB thus serves as a conduit for agency borrowing, and Treasury (or FFB) securities replace the securities of other agencies in the market. Agency borrowing from the FFB is not included in gross Federal debt. It would be double or triple counting to add together the agency borrowing from the FFB, the FFB borrowing from Treasury, and the Treasury borrowing from the public (or the FFB borrowing from the public) that was necessary to provide the FFB with funds to lend to the agencies.

The FFB began financial operations in May 1974 and borrowed \$1.5 billion in 8-month bills from the public in July 1974. All its other borrowing, however, has been from the Treasury, because Treasury can borrow from the public at slightly lower interest rates than FFB would have to pay. No further FFB borrowing from the public is planned. The FFB has substantial authority to borrow from either the Treasury or the public. With the approval of the Secretary of the Treasury, the FFB is authorized to borrow from the Treasury without a statutory limitation on the amount and also to have outstanding at any one time up to \$15 billion of publicly issued debt.

As shown in the memorandum section of table C-5, the FFB is having a profound effect on agency borrowing.⁵ Four agencies that would otherwise borrow mostly in the market borrowed \$6.5 billion from the FFB in 1975 and are expected to borrow \$3.8 billion in 1976 and \$4.4 billion in 1977. Because of this shift in the source of borrowing, almost no new agency borrowing from the market took place in 1975 or is scheduled to take place in 1976 and 1977. The change in agency debt outstanding is thus determined almost solely by the repayment of maturing debt and consequently is negative throughout the period. If FFB did not exist and if agency borrowing were the same, the agency component of gross Federal debt would be about \$14 billion higher at the end of 1977 than is now estimated and the Treasury component would be correspondingly lower.

By the end of 1977, \$4.4 billion of agency debt, or more than two-fifths of the total, will be obligations of the four agencies listed in table C-5 that plan to borrow in the future only from the FFB. A total of \$3.8 billion, or over a third of all agency debt, will consist of certificates of participation in pools of loans issued by the Government National Mortgage Association as trustee on behalf of several agencies, which are identified in table C-5. The issuance of these certificates of participation was discontinued after 1968. A further \$1.0 billion of agency debt will be family housing mortgages assumed a number of years ago by the Department of Defense. The remaining agency debt,

⁵ FFB purchases of Government-guaranteed obligations are shown in table C-9.

Table C-6. AGENCY INVESTMENT IN FEDERAL SECURITIES
(In millions of dollars)

Description	Increase or decrease (-) in holdings				Holdings, end of 1977 estimate
	1975 actual	1976 estimate	TQ estimate	1977 estimate	
Investment in Treasury debt:					
Health, Education, and Welfare:					
Federal old-age and survivors insurance trust fund.....	2,175	-1,881	-634	1,038	37,860
Federal disability insurance trust fund.....	-37	-1,131	-424	-240	6,362
Federal hospital insurance trust fund.....	1,897	1,476	583	2,435	14,205
Federal supplementary medical insurance trust fund.....	148	-295	-86	947	1,944
Housing and Urban Development:					
Federal Housing Administration.....	200	180	48	141	1,775
Government National Mortgage Association.....	249	222	28	-108	1,459
Other.....	8	31	5	23	200
Labor: Unemployment trust fund.....	-4,938	-1,800	-300	400	5,484
Transportation:					
Highway trust fund.....	1,937	-285	-20	200	9,430
Airport and Airway trust fund.....	1,058	366	5	109	2,416
Treasury: Exchange stabilization fund ¹	-913	-----	-----	-----	1,451
Veterans Administration:					
National service life ins. trust fund.....	111	210	117	326	7,369
Other trust funds.....	-6	6	8	14	1,065
Other.....	33	32	8	32	390
Civil Service Commission:					
Civil Service retirement and disability trust fund.....	4,276	4,494	-212	5,802	48,315
Other trust funds.....	359	421	107	467	3,026
Federal Deposit Insurance Corp.: Trust fund.....	404	618	73	842	7,798
Federal Home Loan Bank Board: FSLIC.....	316	311	84	338	4,333
Postal Service.....	-72	-583	-120	-----	-----
Railroad Retirement Board: Trust funds.....	-290	-209	-403	140	3,737
Other trust funds.....	50	26	16	24	275
Other Federal funds.....	82	102	-10	85	543
Other off-budget Federal agencies.....	31	11	-1	6	59
Total, investment in Treasury debt.....	7,077	2,321	-1,129	13,021	159,496
Investment in agency debt:					
Agriculture: CCC.....	-6	-6	-----	-6	29
Health, Education, and Welfare:					
Federal old-age and survivors insurance trust fund.....	-----	-----	-----	-----	555
Federal hospital insurance trust fund.....	-----	-----	-----	-----	50
Housing and Urban Development:					
Federal Housing Administration.....	*	*	*	*	192
Government National Mortgage Association.....	-21	-12	-2	-8	201
Veterans Administration: National service life insurance trust fund.....	-----	-----	-----	-75	235
Civil Service Commission: Civil Service retirement and disability trust fund.....	-----	-----	-----	-----	375
Federal Home Loan Bank Board: FSLIC.....	*	-----	-----	-10	132

See footnotes at end of table.

Table C-6. AGENCY INVESTMENT IN FEDERAL SECURITIES—Continued
(In millions of dollars)

Description	Increase or decrease (-) in holdings				Holdings end of 1977 estimate
	1975 actual	1975 estimate	TQ estimate	1977 estimate	
Postal Service.....	-19	-4	-----	-----	-----
Railroad Retirement Board: Trust funds.....	-----	-----	-----	-50	-----
Total, investment in agency debt...	-46	-22	-2	-149	1,769
Total, agency investment in Federal debt.....	7,031	2,299	-1,131	12,872	161,265
MEMORANDUM					
Investment by Federal funds.....	860	860	161	486	9,254
Investment by trust funds.....	7,144	2,015	-1,172	12,379	150,501
Investment by off-budget Federal agencies.....	-972	-576	-121	6	1,510

* Less than \$500 thousand.

¹ The change in holdings is not estimated due to the uncertainties in foreign exchange, and the estimated 1977 year-end holdings are taken to be the actual holdings at the end of 1975.

which is mostly for programs that will continue to borrow from the public, will constitute only 7% of the total—\$643 million of Federal Housing Administration debentures issued in payment of insurance claims and \$6 million of other obligations.

The Treasury provides capital to business-type Government enterprises both in the form of capital stock and in the form of debt. The provision of debt is shown as "borrowing from Treasury" on the statements of financial condition for enterprises in the Budget Appendix. However, the equity and the debt instruments are the same in substance; and it would be double counting to add together the agency borrowing from the Treasury and the Treasury borrowing from the public that was necessary to provide the agencies with this capital. Therefore, agency borrowing from Treasury is excluded from figures on agency borrowing and debt in all other parts of the budget documents.

AGENCY INVESTMENT IN FEDERAL SECURITIES

Trust funds and some public enterprise funds accumulate cash in excess of current requirements in order to meet future claims and demands. Such cash surpluses are invested mostly in Treasury debt and, to a very small extent, in agency debt. Purchases of these securities are not counted as budget outlays, and redemptions are not counted as budget receipts.

Net investment by trust funds and other Federal agencies declined sharply from \$14.8 billion in 1974 to \$7.0 billion in 1975 and, as shown in table C-6, is estimated to decline further to \$2.3 billion in 1976. In 1977 this decline is expected to be reversed, with agency investment rising to \$12.9 billion, which is near the 1974 level.

The major cause of the decrease in agency investment from 1974 to 1975 was the large rise in unemployment, which substantially increased the benefit payments of the unemployment trust fund and to some lesser extent reduced the employment tax receipts of the social

security trust funds. Disinvestment by the unemployment trust fund is considerably reduced in 1976, despite much higher outlays, because some State funds have disinvested entirely and the Labor Department will advance \$8.5 billion to the trust fund. However, the effect of the unemployment trust fund is estimated to be offset by several important factors, the largest of which is a sizable swing from investment to disinvestment by the old age, survivors, and disability insurance trust funds. The expected rise in agency investment in 1977 is caused in large measure by continued economic recovery, which reduces unemployment benefits and raises trust fund tax receipts, and by proposed legislation to increase taxes for the social security and unemployment trust funds by \$5.4 billion.

Total agency holdings of Federal securities will reach an estimated \$161.3 billion by September 30, 1977. This will constitute 22% of the gross Federal debt. Two major groups of trust funds—the social security funds and the Civil Service Commission funds—will account for 68% of total agency holdings, and all the trust funds together will account for 93%. Ninety-nine percent of the holdings will be Treasury debt, and the holdings of agency debt will continue to decline by small amounts each year.

LIMITATIONS ON FEDERAL DEBT

Statutory limitations have customarily been placed on Federal debt. Beginning with the enactment of the Second Liberty Bond Act in 1917, the limitation on the amount of debt developed in several steps from being an authorization of an amount for each specific issue to being an overall ceiling on the total amount of most outstanding Federal debt. The latter type of limitation has been in effect since 1941. The limit currently applies to the total of:

- Almost all public debt issued by the Treasury since September 1917, whether held by the public or by the Government;
- Agency debt in the form of participation certificates issued during 1968 under the Participation Sales Act of 1966; and
- Other debt issued by Federal agencies (and the District of Columbia Armory Board) which, according to explicit statute, is fully guaranteed as to principal and interest by the United States.

Until recently debt subject to limit also included \$825 million of special non-interest-bearing notes issued by the Treasury to the International Monetary Fund. These notes, while part of the debt subject to limit, were not part of gross Federal debt. On March 14, 1975, however, these notes were redeemed and replaced by a demand liability in the form of a letter of credit of equal value, which does not constitute any kind of debt. At one time special non-interest-bearing notes were also issued to various international lending organizations, but they were redeemed earlier. The redemption of these notes was in accordance with a recommendation of the President's Commission on Budget Concepts, which viewed them as representing an exchange of assets (in the case of the International Monetary Fund) or an unpaid obligation or contingent liability (in the case of the international lending organizations) rather than a payment that had been made and that in turn had increased the Government's debt.⁶

⁶ *Report of the President's Commission on Budget Concepts* (Washington: U.S. Government Printing Office, 1967), pp. 31-32 and 59.

The statutory limit on the Federal debt was \$495 billion from June 30, 1974, to February 19, 1975. This limit consisted of a permanent limit of \$400 billion and a temporary increase to that limit of \$95 billion. The \$495 billion limit was scheduled to last until March 31, 1975, but the Federal debt subject to limit increased faster than expected. Consequently on February 19, 1975, the statutory limit was temporarily raised to \$531 billion. It was temporarily raised further to \$577 billion on June 30 and to \$595 billion on November 14, 1975. The temporary increase to \$595 billion expires on March 15, 1976, after which a further increase will be necessary to permit the Federal Government to meet its obligations.

The outstanding debt subject to limit is shown in table C-7 and compared with the gross Federal debt and the Federal debt held by the public. The debt subject to limit was \$534.2 billion at the end of 1975 and is expected to rise to \$624.2 billion and \$710.4 billion at the end of 1976 and 1977, respectively. These amounts are substantially more than the permanent debt limit of \$400 billion. The debt subject to limit equals about 98% of the gross Federal debt. As table C-7 shows, almost all of the difference is accounted for by agency debt not subject to the general limitation.

Table C-7. DEBT SUBJECT TO STATUTORY LIMIT (in millions of dollars)

Description	End of year			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Federal debt held by the public	396, 906	484, 406	504, 406	558, 246
Federal debt held by Government agencies.....	147, 225	149, 525	148, 393	161, 265
Total, gross Federal debt.....	544, 131	633, 931	652, 799	719, 511
Deduct:				
Treasury debt not subject to limit ¹	624	614	614	614
Agency debt not subject to general limitation:				
Department of Defense.....	1, 276	1, 168	1, 140	1, 028
Tennessee Valley Authority.....	2, 075	1, 975	1, 975	1, 975
Export-Import Bank.....	2, 593	2, 593	2, 593	2, 144
Postal Service.....	250	250	250	250
Participation certificates ²	3, 125	3, 125	3, 125	3, 125
Coast Guard.....	2	2	2	2
Total, Federal debt not subject to limit	9, 945	9, 727	9, 700	9, 138
Federal debt subject to statutory limit.....	534, 186	624, 204	643, 099	710, 373
District of Columbia Army Board bonds.....	20	20	20	20
Total, debt subject to statutory limit.....	534, 207	624, 223	643, 119	710, 393

¹ Includes \$9 million of Federal Financing Bank debt in 1975.

² Certificates of participation in loans issued by the Government National Mortgage Association on behalf of several agencies (excluding certificates issued during 1968).

The debt subject to statutory limit is expected to increase more than the debt held by the public in both 1976 and 1977: \$90.0 billion compared to \$87.5 billion in 1976, and \$67.3 billion compared to \$53.8 billion in 1977. The slower growth in the debt held by the public is due primarily to the surpluses of certain funds in the Federal

budget—principally the trust funds. Because these surpluses are largely invested in Federal debt, they reduce the debt held by the public. However, since the Federal debt acquired by these funds is almost all subject to the statutory debt limit, this investment does not reduce the amount of debt subject to limit.

Agency debt subject to the statutory limit is comprised almost exclusively of debentures issued by the Federal Housing Administration and participation certificates sold in 1968. These two categories together make up only about one-seventh of total agency debt. However, most other agency debt is subject to special statutory limits. For example, the Postal Service is limited to \$2 billion of annual borrowing and \$10 billion of outstanding bonds.

FEDERALLY ASSISTED BORROWING

The impact of the Government on borrowing includes not only its own borrowing to finance Federal operations but also its assistance to certain borrowing by the public. Federally assisted borrowing is of two types: borrowing by Government-sponsored enterprises, and Government-guaranteed borrowing by non-Federal borrowers.

Seven Government-sponsored enterprises, which were federally established and chartered but are entirely privately owned, borrow under Government auspices. The transactions of these enterprises are not included within the Federal budget, and their debt is not part of gross Federal debt. These enterprises are essentially financial intermediaries, borrowing in the securities market and lending their borrowed funds for specifically authorized purposes either directly or by purchasing loans originated by the private group that they were established to assist.

The borrowing programs of all seven enterprises are subject to Federal supervision. In addition, they all consult the Treasury Department, either by law or by custom, in planning their market offerings. The Student Loan Marketing Association now borrows exclusively from the Federal Financing Bank.⁷ The Federal National Mortgage Association and the Federal home loan banks are required to obtain Treasury approval of the terms and timing of specific offerings. In addition to their Federal sponsorship, all of the enterprises have a history of successful financial performance. Hence, despite the absence of Federal guarantees, the obligations of these enterprises are sold at interest rates only moderately higher than the rates on Treasury issues.

As shown in table C-8, the borrowing of these seven Government-sponsored enterprises was \$11.9 billion in 1975 and is expected to be \$8.0 billion in 1976 and \$14.9 billion in 1977. These figures are calculated net of the borrowing by one Government-sponsored enterprise from another, a type of transaction that over this period consists primarily of the Federal Home Loan Mortgage Corporation borrowing from the Federal home loan banks or repaying its debt. During 1975-77, as in most years, borrowing largely reflects support for the housing

⁷ The securities of the other Government-sponsored enterprises are not Government guaranteed and therefore cannot be bought by the FFB.

market from the Federal home loan banks, Federal National Mortgage Association, and Federal Home Loan Mortgage Corporation. Nearly two-thirds of the debt outstanding at the end of 1977 will have been issued by these enterprises. The sharp rise in borrowing estimated for 1977 is due to a large rise in mortgage purchases and advances to savings institutions expected to be provided by these enterprises. Special Analysis E discusses lending by the Government-sponsored enterprises.

Table C-8. NET CHANGES IN DEBT OF GOVERNMENT-SPONSORED ENTERPRISES (in millions of dollars)

Description	Increase or decrease (-)				Debt out- standing end 1977 estimate
	1975 actual	1976 estimate	TQ estimate	1977 estimate	
Health, Education, and Welfare: Student Loan Marketing Association.....	-10	165	60	335	800
Housing and Urban Development: Federal National Mortgage Association.....	3,004	1,801	750	3,710	34,497
Farm Credit Administration:					
Banks for cooperatives.....	612	496	389	450	4,502
Federal intermediate credit banks.....	1,500	1,553	408	1,759	13,299
Federal land banks.....	3,000	2,399	695	2,618	19,876
Federal Home Loan Bank Board:					
Federal home loan banks.....	3,963	-754	1,545	2,048	23,483
Federal Home Loan Mortgage Corpora- tion ¹	2,229	2,280	491	3,155	12,226
Total.....	14,298	7,940	4,337	14,076	108,684
Less increase in holdings of debt issued by Government-sponsored enterprises..	2,379	-39	94	-854	3,275
Total, borrowing by Government- sponsored enterprises.....	11,919	7,978	4,243	14,929	105,409

¹ Figures include the sale of participation certificates, which in previous years were classified as a sale of loan assets rather than as borrowing in the statement of financial condition for the FHLMC in the Budget Appendix.

The other type of federally assisted borrowing, Government-guaranteed borrowing, is borrowing by individuals, private corporations, State and local governments, or foreign countries for which the United States Government guarantees the payment of principal and/or interest in whole or in part. Government-guaranteed borrowing is the same as Government-guaranteed lending. The major part of Government-guaranteed debt consists of mortgages on residential property. As shown in table C-9, Government-guaranteed borrowing was \$16.4 billion in 1975 and is expected to be \$18.0 billion in 1976 and \$13.2 billion in 1977. Special Analysis E presents detailed data on the guarantee programs.

TOTAL FEDERAL AND FEDERALLY ASSISTED BORROWING

Table C-9 summarizes Federal and federally assisted borrowing from the public. For the purpose of this table, Government-sponsored enterprises are excluded from the public and defined in the same

sector as the Federal Government. Federal borrowing from the public is presented in total. Borrowing by Government-sponsored enterprises and Government-guaranteed borrowing are presented both in total and as net amounts, the latter having been adjusted in order to remove double counting in the derivation of total Federal and federally assisted borrowing from the public. Double counting would otherwise occur when one type of Federal or federally assisted debt is bought or sold by a Government agency or a Government-sponsored enterprise.

Table C-9. NET BORROWING FROM THE PUBLIC BY GOVERNMENT, GOVERNMENT-SPONSORED ENTERPRISES, AND GOVERNMENT-GUARANTEED BORROWERS (in billions of dollars)

Description	Borrowing or repayment (-)				Debt out- standing end 1977 estimate
	1975 actual	1976 est.	TQ est.	1977 est.	
Federal borrowing from the public ^{1 2}	50.9	87.5	20.0	53.5	558.2
Borrowing by Government-sponsored enterprises ³	11.9	8.0	4.2	14.9	105.4
Less increase in holdings of Federal debt.....	2.3	-.5	*	*	2.5
Less increase in Government-sponsored debt held by Federal agencies:					
Federal Home Loan Bank Board.....	1.2	.3	-*	-.1	1.5
Federal Financing Bank.....	.1	.2	.1	.3	.8
Net Government-sponsored borrowing from the public.....	8.2	8.0	4.2	14.6	100.6
Government-guaranteed borrowing ⁴	16.4	18.0	3.7	13.2	235.1
Less increase in Government-guaranteed loans held by:					
Federal agencies:					
Federal Financing Bank.....	6.2	5.6	2.8	8.3	22.9
Government National Mortgage Corporation..	1.6	-2.0	-.1	-.1	2.8
Government-sponsored enterprises:					
Student Loan Marketing Association.....	.1	.2	.1	.3	.8
Federal National Mortgage Association.....	2.6	1.2	.5	2.4	32.0
Federal Home Loan Banks.....	.2	-*	*	*	.2
Federal Home Loan Mortgage Corporation....	.1	-.1	-*	-.1	1.7
Net Government-guaranteed borrowing from the public.....	5.7	13.1	.4	2.4	174.6
Total, Federal and federally assisted borrow- ing from the public.....	64.7	108.7	24.6	70.5	833.5

*Less than \$50 million.

¹ See table C-1.

² Borrowing in 1977 excludes the reclassification on October 1, 1976, of an estimated \$0.3 billion of Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

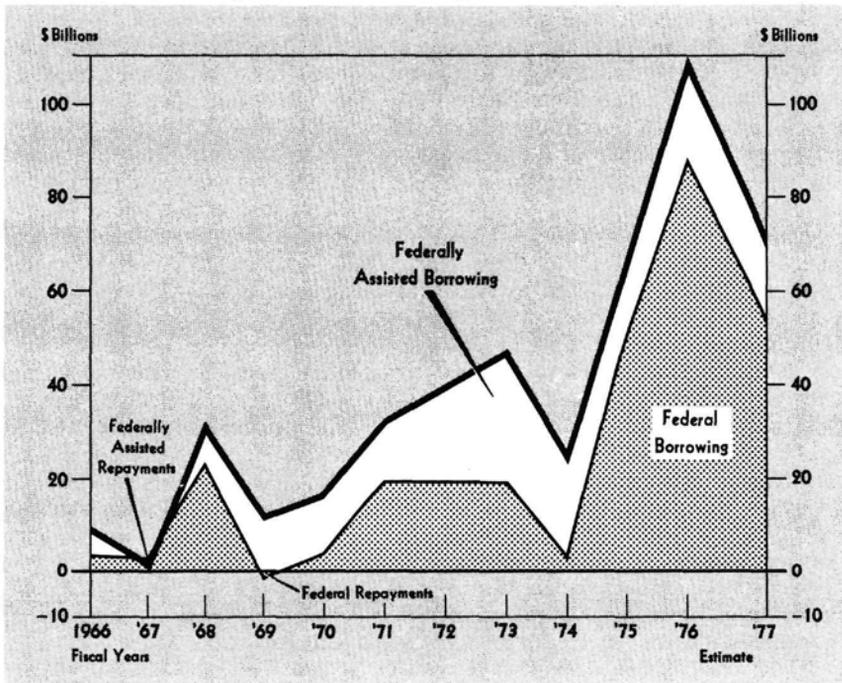
³ See table C-8.

⁴ The same as Government-guaranteed loans. See table E-7.

Federal and federally assisted borrowing from the public during 1975-77 is made up predominantly of Federal borrowing to finance the large budget deficits. In addition, the Federal Financing Bank expects to acquire almost half of the increase in Government-guaranteed obligations over this period. Since the FFB finances these acquisitions by borrowing from the Treasury, which in turn borrows from the public, these transactions substitute Federal borrowing for Government-guaranteed borrowing in the market.

The following chart depicts the trends in Federal and federally assisted borrowing from the public between 1966 and 1977. The series is volatile, and the recent and expected fluctuations are dominated by the Federal deficit. Total Federal and federally assisted borrowing fell to \$24.1 billion in 1974 because of a sharp drop in the Federal deficit and rose dramatically to \$64.7 billion in 1975 and to an estimated \$108.7 billion in 1976 because of large and rising deficits in these years. The total is expected to decrease significantly in 1977 as the Federal deficit falls again.

Federal and Federally Assisted Borrowing



As the chart shows, Federal and federally assisted borrowing is now substantially higher than a decade ago. Much of the increase parallels the growth in the economy and in the total funds raised by the non-financial sector through the sale of debt securities and other forms of borrowing and through the sale of corporate equities. However, although the existence of trends is difficult to discern because of the volatility of the series, to some extent the total Federal and federally assisted borrowing from the public seems to have increased as a proportion of the total funds raised. This proportion increased from 15% during 1960-67 to 22% during 1968-74 and to 36% in 1975. Thus, despite the generally decreasing share of Federal debt in total debt, Government programs since 1968 have influenced the allocation of funds raised in financial markets more than they did in the immediately preceding years. In 1975 the Government impact was unusually large, and the estimated totals for Federal and federally assisted borrowing imply that it will remain large relative to most years in 1976 and 1977.

SPECIAL ANALYSIS C

BORROWING, DEBT, AND INVESTMENT

The major fiscal operations of the Federal Government include not only taxation and expenditure but also:

- The borrowing of cash to meet current requirements not covered by receipts and to refinance maturing debt;
- The investment of balances that trust funds and other Government accounts do not currently need for outlays; and
- The provision of assistance, including Government guarantees, for certain non-Federal borrowing.

This analysis summarizes current developments in Federal borrowing. It also discusses the size and growth of the Federal debt and the interest on the Federal debt, agency borrowing, agency investment in U.S. Government securities, the statutory debt limit, and borrowing by Government-sponsored enterprises. The analysis concludes with a brief discussion of the trend in Federal and federally assisted borrowing and the relationship of this trend to the total funds raised by the non-financial sectors in the economy. Excluded from this analysis are other types of Federal liabilities, which include accounts payable, obligations for undelivered orders, long-term contracts, insurance commitments, and the obligation for such future payments as social security, employee retirement, and veterans compensation.¹

Special Analysis E examines the related subject of Federal credit programs, which include direct loans, Government-guaranteed loans, and loans by Government-sponsored enterprises. The factors discussed in both Special Analyses C and E are significant in appraising the impact on financial markets of the programs contained in the 1978 Federal budget.

BORROWING AND REPAYING DEBT

The Federal Government borrows from two principal sources. First, it sells debt to the public, including the Federal Reserve System, primarily in order to finance Federal deficits. Second, it sells debt to the Government agencies that accumulate surpluses in separate funds, primarily trust funds, required by law to be invested in Federal securities. Most Federal debt has been issued by the Treasury and is 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 an agency—has a significant impact on financial markets and the rest of the economy, and it is consequently an important concern of

¹ Information on many of these liabilities is contained in Department of the Treasury, Bureau of Government Financial Operations, "Statement of Liabilities and Other Financial Commitments of the United States Government."

² The term "agency debt" is defined more narrowly in the budget than in the securities market, where it may include not only the debt of the Government agencies listed in table C-5 but also the debt of the Government-sponsored enterprises listed in table C-8 and certain Government-guaranteed securities.

Federal fiscal policy. For most purposes, borrowing from the Federal Reserve System should be distinguished from borrowing from the rest of the public. Federal Reserve purchases of debt are undertaken to carry out monetary policy, not to earn income, and affect the economy by expanding bank reserves and the money stock. They thus have a markedly different motivation and effect on financial markets than do purchases by other sectors of the public. The debt held outside the Federal Reserve System, in contrast, enters into investment portfolios of businesses and individuals and by this means affects interest rates, other financial conditions, and the size and composition of private assets. Almost all interest received by the Federal Reserve System is returned to the Treasury as receipts, called deposits of earnings, so the net cost to the Government of Federal Reserve holdings of debt is very small. The estimates in this analysis for the current and future years do not divide the debt held by the public between the Federal Reserve System and the rest of the public, despite the significance of this division, because the Federal Reserve's open market operations depend on future economic developments and on policy decisions not yet made.

Table C-1 summarizes Federal borrowing from 1976 through 1978. In 1976 the total Federal borrowing (net of the refunding of securities)—i.e., the rise in gross Federal debt—was \$87.3 billion. The borrowing from Government agencies was \$4.3 billion, and the borrowing from the public was \$82.9 billion. Of the amount borrowed from the public, \$9.7 billion was borrowed from the Federal Reserve System and \$73.2 billion from the rest of the public—commercial banks, foreign central banks, other financial institutions and businesses, and individuals.

Table C-1. FEDERAL BORROWING

(in millions of dollars)

Description	Borrowing or repayment (-) of debt				Debt outstanding end 1978 estimate
	1976 actual	TQ actual	1977 estimate	1978 estimate	
Gross Federal debt:					
Treasury debt.....	87,244	14,269	71,734	69,642	776,078
Agency debt ¹	19	244	-1,388	-1,394	8,895
Gross Federal debt ¹.....	87,263	14,513	70,346	68,248	784,973
Less debt held by Government agencies:					
Treasury debt.....	4,328	-3,506	8,511	12,819	167,435
Agency debt.....	13	-7	-165	-71	1,712
Debt held by Government agencies...	4,341	-3,514	8,346	12,748	169,146
Total, debt held by the public ¹.....	82,922	18,027	62,000	55,500	615,827
Composed of:					
Debt held by the Federal Reserve System..	9,721	1,988	NA	NA	NA
Debt held by others.....	73,202	16,039	NA	NA	NA

NA = Not available.

¹ Agency borrowing, gross Federal borrowing, and borrowing from the public in 1976 exclude the retroactive reclassification as of July 1, 1975, of \$471 million of Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

Borrowing from the public—after rising from \$3.0 billion in 1974 to \$50.9 billion in 1975 and \$82.9 billion in 1976—is estimated to decline to \$62.0 billion in 1977 and \$55.5 billion in 1978. The exceptionally large borrowing in 1975 and 1976 occurred primarily because the recession automatically reduced tax receipts and raised unemployment benefits and because tax reductions and some expenditure programs were enacted to stimulate the economy. The estimated decline in borrowing in 1977 and 1978 is primarily due to the economic recovery. By the end of 1978 gross Federal debt is expected to be \$785.0 billion, with 78% held by the public (including the Federal Reserve System) and the remainder by the agencies. Almost all of the gross Federal debt will have been issued by the Treasury.

Until a few years ago the Federal debt was held almost entirely by individuals and institutions in the United States. After World War II the debt held in foreign balances and international accounts tended to grow gradually and at the end of 1969 amounted to \$10 billion.³ However, due to international monetary developments, the foreign and international holdings began to grow much faster in 1970, and by the end of the transition quarter they had risen to \$75 billion. Most of the Treasury debt held abroad is owned by foreign central banks. The annual borrowing from abroad since 1971 is shown below in comparison with the annual borrowing from the domestic public, exclusive of the Federal Reserve System (in billions of dollars):

	1970	1971	1972	1973	1974	1975	1976	TQ
Foreign and international.....	3.7	17.9	17.3	10.2	-2.5	9.1	3.8	4.8
Domestic (excluding Federal Reserve System).....	-3.5	-6.3	-3.8	5.3	*	37.4	69.4	11.2
Total borrowing from the public (excluding Federal Reserve System).....	.2	11.6	13.5	15.5	-2.5	46.5	73.2	16.0

*Less than \$50 million.

Whereas before 1970 total borrowing from the public was nearly the same as borrowing from the domestic public, the table shows that since that time they have sometimes been quite different. During 1970-73, \$49 billion was borrowed from abroad while \$8 billion of debt held by the domestic public (exclusive of the Federal Reserve System) was redeemed. Borrowing from abroad since 1973 has remained significant but not predominant, primarily because of the large size of the Government deficit.

BORROWING AND GOVERNMENT DEFICITS

Table C-2 shows how borrowing from the public is related to the Federal deficit. Until recent years the budget deficit constituted practically the entire deficit of the Federal Government, but the deficit of the off-budget Federal entities has now become significant. These entities are parts of the Federal Government that have been removed from the budget under provisions of law.

³ The estimates of Federal debt held in foreign balances and international accounts do not include agency debt, the holdings of which are believed to be small. The data were adjusted to exclude the special non-interest-bearing notes issued to the International Monetary Fund and international lending agencies. These notes are not part of gross Federal debt.

Table C-2. MEANS OF FINANCING THE FEDERAL DEFICIT

(In millions of dollars)

Description	1976 actual	TQ actual	1977 estimate	1978 estimate
Budget surplus or deficit (—).....	-66,461	-12,973	-57,198	-46,950
Deficit (—) of off-budget Federal entities ¹	-7,196	-1,767	-10,785	-9,156
Total, surplus or deficit (—).....	<u>-73,657</u>	<u>-14,740</u>	<u>-67,983</u>	<u>-56,107</u>
Means of financing other than borrowing from the public:				
Decrease or increase (—) in cash and monetary assets.....	-7,964	-2,860	5,714	-----
Increase or decrease (—) in liabilities for:				
Checks outstanding, etc. ²	-951	-546	-26	117
Deposit fund balances.....	-1,099	20	-153	-42
Seigniorage on coins.....	747	99	448	531
Total, means of financing other than borrowing from the public.....	<u>-9,265</u>	<u>-3,287</u>	<u>5,983</u>	<u>607</u>
Total, requirements for borrowing from the public.....	-82,922	-18,027	-62,000	-55,500
Reclassification of securities ³	-471	-----	-----	-----
Change in debt held by the public.....	<u>83,393</u>	<u>18,027</u>	<u>62,000</u>	<u>55,500</u>

¹ The off-budget Federal entities consist of the Rural Electrification and Telephone revolving fund, Rural Telephone Bank, Housing for the Elderly or Handicapped fund, Pension Benefit Guaranty Corporation, Exchange Stabilization fund, Federal Financing Bank, Postal Service, certain activities of the United States Railway Association, and Energy Independence Authority.

² Besides checks outstanding, includes military payment certificates, accrued interest (less unamortized discount) payable on Treasury debt, and, as an offsetting change in assets, certain collections in transit.

³ As of July 1, 1975, Federal debt held by the public increased by \$471 million due to a retroactive reclassification of Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

The Government deficit is financed either by borrowing from the public or by several other means. These other means of financing the deficit may be either positive, in which case they contribute to the financing of the deficit; or negative, in which case they, like the deficit, must themselves be financed by borrowing from the public. In 1976 the Government borrowed \$82.9 billion from the public. The major part, \$73.7 billion, was used to finance the Government deficit. The remainder was used to finance the other means of financing the deficit, which had a negative total amount. These other means were unusually large in absolute terms due to a sizeable accumulation of Treasury cash balances during the year. This accumulation of cash balances continued in the transition quarter but is planned to be reversed in 1977.

The means of financing a deficit other than borrowing from the public are:

- A decrease in cash or monetary assets;
- An increase in monetary liabilities for checks outstanding, etc.;
- An increase in deposit fund balances, which include amounts held by the Government as an agent for others (such as State income taxes withheld from Federal employees' salaries and not yet paid to the State) or amounts held in suspense temporarily before being refunded or paid into some other fund; and
- Seigniorage, which is the face value of minted coins less the cost of their production.

As the figures in table C-2 suggest, the extent to which a large deficit can be financed by means other than borrowing from the public is very limited. Consequently, the total Government deficit and the borrowing from the public tend to be closely related.

Borrowing from the agencies largely depends on the surpluses of the trust funds, which own 93% of the Federal debt held by Government agencies. Agency investment in Federal securities and the total trust fund surplus during 1975-78 are compared in the table below (in billions of dollars):

	1975 actual	1976 actual	TQ actual	1977 estimate	1978 estimate
Agency investment in Federal debt.....	7.0	4.3	-3.5	8.3	12.7
Total trust fund surplus or deficit (-).....	7.4	2.4	-2.0	8.5	13.5

As the table shows, the agency investment in Federal securities is similar in size to the total trust fund surplus throughout the period. The differences are accounted for by two factors. Certain agencies other than trust funds buy and sell Federal debt, as shown in table C-6, and the trust funds may increase or decrease their open book balances.⁴

SIZE AND GROWTH OF FEDERAL DEBT

Gross Federal debt has risen substantially over most of the past half century, from \$16 billion in 1929 to \$646.4 billion at the end of the transition quarter. Table C-3 presents the detail of Federal debt since 1954 and shows that a sizable part of the increase is held in Federal Government accounts (primarily trust funds) rather than being owed to the public. From the end of 1954 to the end of the transition quarter, gross Federal debt rose by 139% while Federal debt held by the public rose by 122%. Federal debt held by the public apart from the Federal Reserve System rose still less, by 101%—an annual compound rate of growth of 3.2% over the 22 years—because during this period the Federal Reserve System bought a large quantity of Federal debt in the market, thereby expanding the reserves of the banking system and providing for growth in the Nation's money stock.

⁴ Open book balances comprise cash assets not currently invested. As shown in Special Analysis B, they are very small relative to trust fund holdings of Federal debt.

Table C-3. COMPARISON OF TRENDS IN FEDERAL DEBT AND GROSS NATIONAL PRODUCT (in billions of dollars)

Fiscal year	Debt outstanding, end of year					GNP	Debt held by public as percent of GNP
	Gross Federal debt	Federal Government accounts	Held by				
			Total	Federal Reserve System	Other		
1954.....	270.8	46.3	224.5	25.0	199.5	363.6	61.7
1955.....	274.4	47.8	226.6	23.6	203.0	380.0	59.6
1956.....	272.8	50.5	222.2	23.8	198.5	411.0	54.1
1957.....	272.4	52.9	219.4	23.0	196.4	432.7	50.7
1958.....	279.7	53.3	226.4	25.4	200.9	442.1	51.2
1959.....	287.8	52.8	235.0	26.0	209.0	473.3	49.7
1960.....	290.9	53.7	237.2	26.5	210.7	497.3	47.7
1961.....	292.9	54.3	238.6	27.3	211.4	508.3	46.9
1962.....	303.3	54.9	248.4	29.7	218.7	546.9	45.4
1963.....	310.8	56.3	254.5	32.0	222.4	576.3	44.2
1964.....	316.8	59.2	257.6	34.8	222.8	616.2	41.8
1965.....	323.2	61.5	261.6	39.1	222.5	657.1	39.8
1966.....	329.5	64.8	264.7	42.2	222.5	721.2	36.7
1967.....	341.3	73.8	267.5	46.7	220.8	774.4	34.5
1968.....	369.8	79.1	290.6	52.2	238.4	829.9	35.0
1969 ¹	367.1	87.7	279.5	54.1	225.4	903.7	30.9
1970 ²	382.6	97.7	284.9	57.7	227.2	959.0	29.7
1971.....	409.5	105.1	304.3	65.5	238.8	1,019.3	29.9
1972.....	437.3	113.6	323.8	71.4	252.3	1,110.5	29.2
1973 ³	468.4	125.4	343.0	75.2	267.9	1,237.5	27.7
1974.....	486.2	140.2	346.1	80.6	265.4	1,360.9	25.4
1975.....	544.1	147.2	396.9	85.0	311.9	1,450.6	27.4
1976 ⁴	631.9	151.6	480.3	94.7	385.6	1,609.5	29.8
TQ.....	646.4	148.1	498.3	96.7	401.6	1,709.8	29.1
1977 estimate.....	716.7	156.4	560.3	NA	NA	1,827.6	30.7
1978 estimate.....	785.0	169.1	615.8	NA	NA	2,038.4	30.2

NA = Not available.

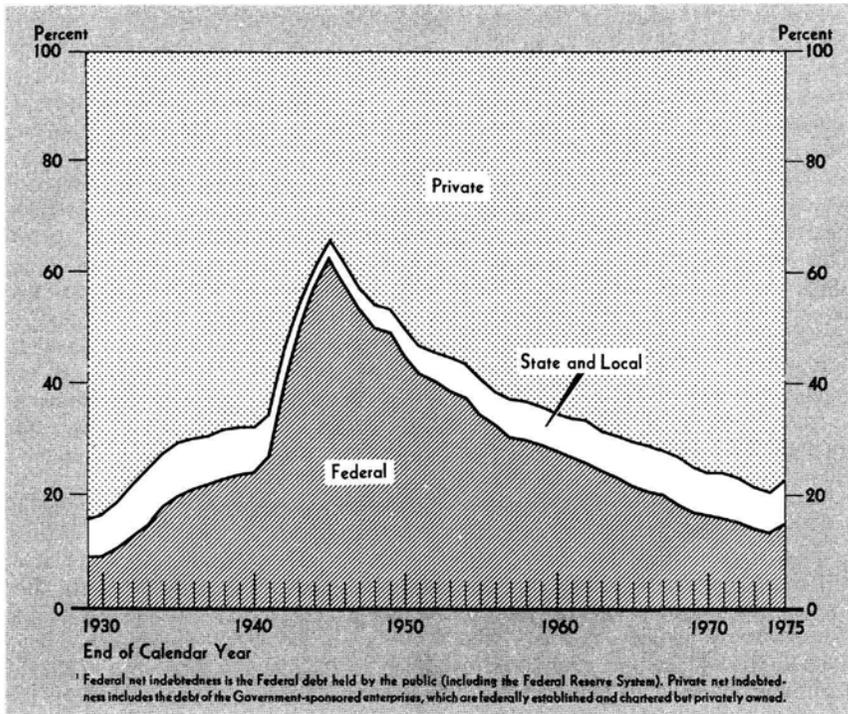
¹ During 1969, 3 Government-sponsored enterprises became completely privately owned, and their debt was removed from the totals for the Federal Government. At the dates of their conversion, gross Federal debt was reduced \$10.7 billion, debt held by Government accounts was reduced \$0.6 billion, and debt held by the public was reduced \$10.1 billion.

² Gross Federal debt and debt held by the public were increased \$1.6 billion due to a reclassification of the Commodity Credit Corporation certificates of interest from asset sales to debt.

³ A procedural change in the recording of trust fund holdings of Treasury debt at the end of the month increased gross Federal debt and debt held in Government accounts by about \$4.5 billion.

⁴ Gross Federal debt and debt held by the public increased \$0.5 billion due to a retroactive reclassification of the Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

During the depression of the 1930's and during World War II, Federal debt held by the public increased greatly, not only in absolute amount but also, as shown in the following chart, as a proportion of total net indebtedness: Federal, State and local, and private. Whereas Federal debt held by the public was only 9% of total net debt at the end of calendar year 1929, it had risen to 62% by the end of calendar year 1945. Federal borrowing was large during these years, particularly to finance World War II, and borrowing by other sectors was restricted by low incomes and poor credit-worthiness during the depression and by controls and scarcities during the war.

Percent Distribution of Net Indebtedness¹

From 1945 to 1974, however, private debt increased as a proportion of total debt in every year, and in every year the Federal debt held by the public decreased as a proportion of the total. This uninterrupted trend ended in calendar year 1975 because of the large Federal deficit caused by the recession. Federal debt held by the public rose as a percentage of total debt, and private debt fell. Complete data are not yet available for calendar year 1976, but it is likely that the large Federal deficit again caused Federal debt held by the public to rise as a percentage of total debt. As the chart shows, the recent rise in the proportion of Federal debt does not appreciably affect the comparison of trends over the last three decades. From the end of calendar year 1955 to the end of 1975, for example, Federal debt held by the public rose 94%, whereas State and local government debt rose 438% and private debt rose 491%. By the end of calendar year 1975, Federal debt held by the public was only 15% of total debt. As a result of these trends, Federal debt and borrowing, although still important, have become relatively much smaller influences in the financial markets.

During the same period Federal debt has decreased relative to gross national product. As shown in table C-3, debt held by the public equaled 62% of gross national product at the end of 1954 but declined steadily to 25% by the end of 1974. In 1975, however, debt held by the public rose as a percentage of gross national product, and it rose

further in 1976 and the transition quarter. The percentage is expected to rise further this year before starting to fall again in 1978.

The interest cost of the debt may be more significant than the amount of the debt for some types of comparison designed to measure the importance of Federal indebtedness. Interest on the debt held by the public has risen much faster than the debt itself, due to a strong upward trend since World War II in the interest rates that must be paid on new borrowings and on refunded debt. Between 1954 and 1976 the Federal debt held by the public doubled, but, as shown in table C-4, the interest paid to the public increased more than five times. For this period as a whole, interest payments to the public grew faster than gross national product. In the first 5 years, 1954-58, interest was equal to 1.39% of gross national product, whereas by the last 5 years, 1972-76, the proportion had risen moderately to 1.63%. On the other hand, the proportion of budget outlays devoted to paying interest on the debt held by the public did not show any trend over the period as a whole. It ranged between 7.0% and 8.7% with an average of 7.7%. Interest as a percentage of both gross national product and budget outlays—assuming continuation of current market interest rates—remains about the same in 1977 and 1978 as in 1976.

Since the end of World War II the composition of the Federal debt has changed, with an increasingly large proportion of Federal securities having a relatively short maturity. One contributing factor is the statutory ceiling of 4¼% that has been maintained since 1918 on the interest rate that could be paid on Treasury bonds. Because long-term market rates exceeded 4¼% after 1965, the ceiling eventually prevented the Treasury from selling long-term obligations. Since 1965 the average maturity of Treasury marketable debt has declined from about 5 years to less than 3 years. During the past year the average maturity stopped declining, however, and even lengthened slightly, due to exemptions from the statutory ceiling.

This restriction on Treasury borrowing has been relaxed in two ways. One method has been to increase the maximum maturity of notes, which are not subject to the interest rate ceiling. The maximum maturity was raised by law from 5 years to 7 years in 1967 and to 10 years in March 1976. As of November 1976, the amount of notes outstanding with a maturity more than 5 years was \$98.5 billion, of which \$14.7 billion had a maturity more than 7 years. The other method of relaxing the restriction has been to make exceptions to the interest rate ceiling on bonds. In 1971 Treasury was allowed by law to issue up to \$10 billion of bonds at interest rates above 4¼%. In 1973 those bonds held by Government accounts and the Federal Reserve System were exempted from the interest rate limit, and in March and June 1976 the amount of the exception was raised in two steps to \$17 billion. As of November 1976, \$22.8 billion of bonds outstanding had been sold since the change of law in 1971, including bonds held by Government accounts and the Federal Reserve System. The effective interest rates have ranged from 6.1% to 8.4% with an average of 7.5%.

Table C-4. COMPARISON OF TRENDS IN INTEREST ON FEDERAL DEBT (in billions of dollars)

Fiscal year	Interest on the gross Federal debt						Interest on debt held by the public as a percent of	
	Total	Federal Government accounts	Paid to			GNP	Budget outlays ²	
			The public					
			Total	Federal Reserve System ¹	Other			
1954	6.4	1.3	5.2	0.5	4.7	1.42	7.29	
1955	6.4	1.2	5.2	.4	4.8	1.36	7.56	
1956	6.8	1.3	5.6	.5	5.1	1.35	7.90	
1957	7.3	1.4	5.9	.7	5.3	1.37	7.73	
1958	7.8	1.4	6.3	.7	5.6	1.43	7.68	
1959	7.8	1.4	6.4	.8	5.6	1.35	6.96	
1960	9.5	1.5	8.1	1.0	7.1	1.62	8.73	
1961	9.3	1.5	7.8	1.0	6.8	1.53	7.96	
1962	9.5	1.6	7.9	1.0	6.9	1.45	7.40	
1963	10.3	1.6	8.7	1.1	7.6	1.50	7.78	
1964	11.0	1.8	9.2	1.2	8.0	1.50	7.80	
1965	11.8	2.0	9.8	1.4	8.4	1.49	8.29	
1966	12.6	2.1	10.4	1.7	8.7	1.45	7.75	
1967	14.2	2.6	11.6	2.0	9.6	1.50	7.36	
1968	15.6	3.0	12.6	2.4	10.2	1.52	7.07	
1969	17.6	3.5	14.1	2.9	11.2	1.56	7.66	
1970	20.0	4.4	15.6	3.5	12.2	1.63	7.95	
1971	21.6	5.3	16.3	3.7	12.6	1.60	7.73	
1972	22.5	5.8	16.6	3.7	12.9	1.50	7.16	
1973	24.8	6.3	18.5	4.3	14.2	1.50	7.49	
1974	30.0	7.7	22.4	5.5	16.9	1.64	8.29	
1975	33.5	8.8	24.7	6.1	18.6	1.70	7.56	
1976	37.7	9.0	28.7	5.7	23.0	1.79	7.84	
TQ	8.3	.6	7.6	NA	NA	1.79	8.07	
1977 estimate	42.7	9.5	33.2	NA	NA	1.82	8.07	
1978 estimate	45.2	10.1	35.2	NA	NA	1.73	7.99	

NA=Not available.

¹ Estimated as the average of calendar year figures. The 1976 estimate is tentative.² Budget outlays for 1954-78 are given in the Budget, Part 9, table 23.

BORROWING BY FEDERAL AGENCIES

A few Government agencies are authorized to sell their own debt instruments to the public and to other Government agencies and funds. This agency borrowing is part of the gross Federal debt. For those agencies included in the budget, the authorization to borrow is budget authority and the disbursement of such borrowed money is a budget outlay. Agency debt includes the borrowings of off-budget Federal entities, which are Government owned and controlled but whose transactions have been excluded from the budget totals under provisions of law.

Agency borrowing was shown in total in table C-1 and is shown by agency in table C-5. In 1976, the repayment of agency debt was approximately the same as new agency borrowing. In 1977 and 1978, repayments are expected to exceed new borrowing by small amounts. The agency debt outstanding on September 30, 1978, is estimated to be \$8.9 billion, which is about 1% of gross Federal debt.

Table C-5. AGENCY BORROWING¹ (in millions of dollars)

Description	Borrowing or repayment (-) of debt				Debt out- standing, end 1978 estimate
	1976 actual	TQ actual	1977 estimate	1978 estimate	
Borrowing from the public:					
Agriculture: Farmers Home Administration ²			-21	-76	219
Defense.....	-88	-32	-91	-93	812
Health, Education, and Welfare ²			-4	-9	116
Housing and Urban Development:					
College housing loans ^{2 3}			-1		
Federal Housing Administration.....	65	-2	40	50	569
Housing for elderly or handicapped ²				-4	60
Government National Mortgage Association ²	-41	-19	-106	-286	249
Revolving fund (liquidating programs) ^{2 3}			-3	-4	387
Veterans Administration ²	-39	-16	-54	-158	397
Export-Import Bank ⁴	109	421	-931	-724	1,936
Postal Service.....					250
Small Business Administration ²			-53	-19	210
Tennessee Valley Authority.....		-100			1,975
All other.....	*	*	*	*	2
Total, borrowing from the public⁴..	7	252	-1,223	-1,323	7,184
Borrowing from other funds:					
Agriculture: Farmers Home Administration ²			-20	-58	99
Defense.....	-16	-3	-22	-23	97
Health, Education, and Welfare ²			-4	-6	59
Housing and Urban Development:					
College housing loans ^{2 3}			-1		
Federal Housing Administration.....	29	-1	-8	-2	88
Housing for elderly or handicapped ²				-3	31
Government National Mortgage Association ²			-57	117	564
Revolving fund (liquidating programs) ^{2 3}			-3	-3	207
Veterans Administration ²				-79	470
Export-Import Bank.....		-4			
Small Business Administration ²			-51	-14	97
Total, borrowing from other funds..	13	-7	-165	-71	1,712
Total, agency borrowing included in gross Federal debt⁴.....	19	244	-1,388	-1,394	8,895
MEMORANDUM					
Borrowing from Federal Financing Bank:					
Export-Import Bank.....	936	-216	1,884	1,623	8,276
Tennessee Valley Authority.....	745	555	1,100	1,450	5,285
Postal Service.....	1,248	500	133	895	4,276
U.S. Railway Association.....	51	11	298		395
Total, agency borrowing from Federal Financing Bank.....	2,980	850	3,415	3,968	18,231

* Less than \$500 thousand.

¹ Excludes agency borrowing from Treasury.² Certificates of participation in loans issued by the Government National Mortgage Association on behalf of several agencies.³ The debt of the College housing fund (\$465 million) is scheduled to be transferred to the Revolving fund (liquidating programs) on Oct. 1, 1977.⁴ Borrowing in 1976 does not include the retroactive reclassification as of July 1, 1975, of \$471 million of Export-Import Bank certificates of beneficial interest as debt instead of loan asset sales.

Agency debt was retroactively increased by \$471 million as of July 1, 1975, due to reclassifying as Federal debt the certificates of beneficial interest in pools of loans issued by the Export-Import Bank and formerly classified as loan asset sales. Since this is a reclassification of existing securities, it does not constitute new Federal borrowing. Therefore agency borrowing, borrowing from the public, and gross Federal borrowing in 1976 are \$471 million less than the change in recorded debt from the end of 1975 to the end of 1976. Certificates redeemed after the reclassification show as repayment of Export-Import Bank debt in table C-5. The issuance of new certificates after the reclassification shows as borrowing, but the amount is small. The Export-Import Bank has not made new contracts to sell certificates of beneficial interest.

The retroactive reclassification took place in October 1976. At the same time, the Export-Import Bank's borrowings of \$150 million from Pefco (Private Export Funding Corporation) were also retroactively reclassified from loan asset sales to debt. Since the borrowing from Pefco was entirely during 1976 and the transition quarter, which are covered by the reclassification, the debt figures published in this budget are all consistent with the new classification.

A further adjustment within table C-5 arises from the transfer of all assets and liabilities of certain expiring funds to the Revolving fund (liquidating programs) in the Department of Housing and Urban Development. Debt of \$465 million is scheduled to be transferred from the College housing fund on October 1, 1977. This transfer does not constitute borrowing by the Revolving fund (liquidating programs) or repayment of debt by the fund that expires.

The Federal Financing Bank (FFB) was created in December 1973 under the Treasury Department as an off-budget Federal entity and began financial operations in May 1974. Its purposes were to assist and coordinate agency borrowing and Government-guaranteed borrowing and to reduce the cost to the Government of some of its borrowing activities. It was given the authority to purchase agency debt and Government-guaranteed obligations and, in turn, to finance these transactions by borrowing from the Treasury. With the approval of the Secretary of the Treasury, the FFB is authorized to borrow from the Treasury without a statutory limitation on the amount.⁵ Since the FFB can borrow from the Treasury at lower interest rates than other agencies would have to pay in the market, this procedure reduces the cost of agency borrowing. The FFB thus serves as a conduit for agency borrowing, and Treasury securities replace the securities of other agencies in the market. Agency borrowing from the FFB is not included in gross Federal debt. It would be triple counting to add together the agency borrowing from the FFB, the FFB borrowing from Treasury, and the Treasury borrowing from the public that was necessary to provide the FFB with funds to lend to the agencies.

As shown in the memorandum section of table C-5, the FFB is having a profound effect on agency borrowing.⁶ Four agencies that

⁵ The FFB also is authorized to have outstanding up to \$15 billion of publicly issued debt, which Treasury classifies as public debt. The FFB borrowed \$1.5 billion in 8-month bills from the public in July 1974. All of its other borrowing has been from Treasury, because Treasury can borrow from the public at slightly lower interest rates than FFB would have to pay. No further FFB borrowing from the public is planned.

⁶ FFB purchases of Government-guaranteed obligations are shown in table C-9.

would otherwise borrow mostly in the market borrowed \$3.0 billion from the FFB in 1976 and are expected to borrow \$3.4 billion in 1977 and \$4.0 billion in 1978. The only appreciable borrowing in the market by these agencies has arisen from special arrangements made by the Export-Import Bank. Because of this shift in the source of borrowing, very little new agency borrowing in the market took place in the last 2 years or is scheduled to take place in the future. The change in agency debt outstanding is thus determined almost solely by the repayment of maturing debt and consequently is very small or negative throughout the period. If FFB did not exist and if agency borrowing were the same, the agency component of gross Federal debt would be about \$16 billion higher at the end of 1978 than is now estimated and the Treasury component would be correspondingly lower.

By the end of 1978, \$4.2 billion of agency debt, or almost half of the total, will be obligations of the four agencies listed in table C-5 that plan to borrow in the future almost exclusively from the FFB. A total of \$3.2 billion, or a third of all agency debt, will consist of certificates of participation in pools of loans issued by the Government National Mortgage Association as trustee on behalf of several agencies, which are identified in table C-5. These certificates were not issued after 1968. A further \$0.9 billion of agency debt will be family housing mortgages assumed a number of years ago by the Department of Defense. The remaining agency debt, which is mostly for programs that will continue to borrow from the public, will constitute only 7% of the total—\$658 million of Federal Housing Administration debentures issued in payment of insurance claims for defaulted loans, and \$5 million of other obligations.

The Treasury provides capital to business-type Government enterprises both in the form of capital stock and in the form of debt. The provision of debt is shown as "borrowing from Treasury" on the statements of financial condition for enterprises in the Budget Appendix. However, the equity and the debt instruments are the same in substance; and it would be double counting to add together the agency borrowing from the Treasury and the Treasury borrowing from the public that was necessary to provide the agencies with this capital. Therefore, agency borrowing from Treasury is excluded from figures on agency borrowing and debt in all other parts of the budget documents.

AGENCY INVESTMENT IN FEDERAL SECURITIES

Trust funds and some public enterprise funds accumulate cash in excess of current requirements in order to meet future claims and demands. Such cash surpluses are invested mostly in Treasury debt and, to a very small extent, in agency debt. Purchases of these securities are not counted as budget outlays, and redemptions are not counted as budget receipts.

Net investment by trust funds and other Federal agencies declined from \$7.0 billion in 1975 to \$4.3 billion in 1976. As shown in table C-6, this decline is expected to be reversed in 1977, with agency investment rising to \$8.3 billion in that year and \$12.7 billion in 1978.

Agency investment in 1975, 1976, and the transition quarter was less than in the preceding years. The major cause of this decrease was the large rise in unemployment, which substantially increased the benefit payments of the unemployment trust fund and to some lesser extent reduced the employment tax receipts of the social security trust funds. Disinvestment by the unemployment trust fund was limited in 1976, because some State funds had disinvested entirely and the Labor Department advanced \$7.9 billion to the trust fund. However, at the same time, the old age, survivors, and disability insurance trust funds had a large shift from investment to disinvestment. The expected rise in agency investment in 1977 is caused in large measure by continued economic recovery, which reduces unemployment benefits and raises trust fund tax receipts. Recently enacted legislation increases taxes for the unemployment trust fund by \$1.4 billion in 1978 and \$3.9 billion in 1979; proposals in this budget would increase social security taxes by \$1.3 billion in 1978 and \$6.4 billion in 1979.

The face value of Treasury debt held in several Government accounts was reduced by \$184 million in the transition quarter due to the redemption of \$1.1 billion of "flower bonds." These are bonds with which individuals can pay estate taxes at par value, even though the market value of the bonds is well below par because interest rates are now much higher than when the bonds were issued. The Secretary of the Treasury may designate new issues of bonds as flower bonds but since 1963 has not done so. In earlier years not all bonds were flower bonds, but the bonds from that period still outstanding were all so designated. The flower bond provision is valuable to individuals and so reduces the market yield of these securities but is, of course, worth nothing for Government accounts. The purpose of the redemption was to increase the long-run income of these accounts. The bonds were redeemed at market value and replaced by bonds that had a face value that was \$184 million less but yield higher income.

Since Federal debt is measured at par value, this transaction reduced gross Federal debt, debt held in Government accounts, and debt subject to the statutory limit by \$184 million. The transaction increased outlays of the respective Government accounts by an identical \$184 million, because the difference between the par value and the market value of the bonds was treated as a loss. Outlays for the interest on the public debt were decreased by an equal amount (less the very small unamortized discount), which represented the "gain" from redeeming bonds at less than the par value at which they would otherwise have been redeemed eventually. Thus, budget outlays and the deficit were virtually unchanged. Government accounts still hold \$4.4 billion of flower bonds, and Treasury is considering further redemptions.

Total agency holdings of Federal securities will reach an estimated \$169.1 billion by September 30, 1978. This will constitute 22% of the gross Federal debt. Two major groups of trust funds—the social security funds and the Civil Service Commission funds—will account for 66% of total agency holdings, and all the trust funds together will account for 93%. Almost all of the holdings will be Treasury debt, and the holdings of agency debt will continue to decline by small amounts each year.

Table C-6. AGENCY INVESTMENT IN FEDERAL SECURITIES

(In millions of dollars)

Description	Increase or decrease (-) in holdings				Holdings, end of 1978 estimate
	1976 actual	TQ actual	1977 estimate	1978 estimate	
Investment in Treasury debt:					
Health, Education, and Welfare:					
Federal old-age and survivors insurance trust fund.....	-1,925	-913	-1,738	-2,268	32,494
Federal disability insurance trust fund.....	-1,227	-477	-1,936	66	4,583
Federal hospital insurance trust fund.....	1,181	67	227	3,222	14,408
Federal supplementary medical insurance trust fund.....	-148	14	892	1,064	3,200
Housing and Urban Development:					
Federal Housing Administration.....	118	-13	151	160	1,823
Government National Mortgage Association.....	261	27	-107	-357	1,140
Other.....	29	1	9	10	190
Labor: Unemployment trust fund.....	-2,373	104	300	3,900	9,114
Transportation:					
Highway trust fund.....	-505	-79	1,218	356	10,526
Airport and airway trust fund.....	593	183	522	403	3,637
Treasury: Exchange stabilization fund ¹	60	18	-----	-----	1,529
Veterans Administration:					
National service life insurance trust fund.....	215	25	371	303	7,630
Other trust funds.....	9	-3	21	20	1,084
Other.....	33	4	26	26	406
Civil Service Commission:					
Civil Service retirement and disability trust fund.....	4,828	-770	6,702	5,304	54,296
Other trust funds.....	426	15	480	449	3,400
Federal Deposit Insurance Corporation:					
Trust fund.....	470	-128	883	371	7,861
Federal Energy Administration.....	1,712	-1,712	-----	-----	-----
Federal Financing Bank.....	96	38	29	59	212
Federal Home Loan Bank Board: FSLIC.....	368	135	320	447	4,870
Postal Service.....	125	603	-151	-920	360
Railroad Retirement Board: Trust fund.....	-246	-660	100	23	3,426
Other trust funds.....	64	18	128	66	486
Other Federal funds.....	146	7	50	101	670
Other off-budget Federal entities.....	19	-1	13	16	89
Total, investment in Treasury debt.....	4,328	-3,506	8,511	12,819	167,435
Investment in agency debt:					
Agriculture: CCC.....	-6	-----	-6	-6	23
Health, Education, and Welfare:					
Federal old-age and survivors insurance trust fund.....	-----	-----	-----	-----	555
Federal hospital insurance trust fund.....	-----	-----	-----	-----	50
Housing and Urban Development:					
Federal Housing Administration.....	*	*	*	*	192
Government National Mortgage Association.....	19	-3	-24	-19	196
Veterans Administration: National service life insurance trust fund.....					
-----	-----	-----	-75	-----	235
Civil Service Commission: Civil service retirement and disability trust fund.....					
-----	-----	-----	-----	-----	375

See footnotes at end of table.

Table C-6. AGENCY INVESTMENT IN FEDERAL SECURITIES—Continued
(In millions of dollars)

Description	Increase or decrease (-) in holdings				Holdings, end of 1978 estimate
	1976 actual	TQ actual	1977 estimate	1978 estimate	
Federal Home Loan Bank Board: FSLIC.....	-----	-----	-10	-46	86
Postal Service.....	-----	-4	-----	-----	-----
Railroad Retirement Board: Trust fund.....	-----	-----	-50	-----	-----
Total, investment in agency debt...	13	-7	-165	-71	1,712
Total, agency investment in Federal debt.....	4,341	-3,514	8,346	12,748	169,146
MEMORANDUM					
Investment by Federal funds.....	2,680	-1,555	410	316	9,596
Investment by trust funds.....	1,361	-2,603	8,044	13,278	157,360
Investment by off-budget Federal entities..	300	644	-109	-846	2,190

* Less than \$500 thousand.

¹ The change in holdings is not estimated due to the uncertainties in foreign exchange, and the estimated 1978 year-end holdings are taken to be the actual holdings at the end of TQ.

LIMITATIONS ON FEDERAL DEBT

Statutory limitations have customarily been placed on Federal debt. Beginning with the enactment of the Second Liberty Bond Act in 1917, the limitation on the amount of debt developed in several steps from being an authorization of an amount for each specific issue to being an overall ceiling on the total amount of most outstanding Federal debt. The latter type of limitation has been in effect since 1917. The limit currently applies to the total of:

- Almost all public debt issued by the Treasury since September 1917, whether held by the public or by the Government;
- Agency debt in the form of participation certificates issued during 1968 under the Participation Sales Act of 1966; and
- Other debt issued by Federal agencies (and the District of Columbia Armory Board) that, according to explicit statute, is fully guaranteed as to principal and interest by the United States.

The debt subject to statutory limit includes virtually all Treasury debt and excludes the major part of agency debt. The small amount of Treasury debt not subject to statutory limit is shown in table C-7. Under proposed legislation the amount would be reduced during 1977 by writing off \$211 million of discontinued currencies, mostly silver certificates, that would be declared to have been destroyed or irretrievably lost. These currencies were included in Treasury debt when they were discontinued, and writing them off would be treated as a budget receipt.

Agency debt subject to this general statutory limit is now comprised exclusively of debentures issued by the Federal Housing Administration and participation certificates sold in 1968. These two categories together make up only about one-seventh of total agency debt. However, most other agency debt is subject to special statutory

limits. For example, the Postal Service is limited to \$2 billion of annual borrowing and \$10 billion of outstanding bonds.

All of the debt subject to the statutory limit is Federal debt except the small issue of District of Columbia Armory Board bonds. Until recently the debt subject to limit also included special non-interest-bearing notes issued by the Treasury to the International Monetary Fund or to various international lending organizations. These notes have all been redeemed and replaced by other instruments in accordance with a recommendation of the President's Commission on Budget Concepts. The Commission viewed these transactions as representing an exchange of assets (in the case of the International Monetary Fund) or an unpaid obligation or contingent liability (in the case of the international lending organizations) rather than a payment that had been made and that in turn had increased the Government's debt.⁷

The statutory limit on the Federal debt was \$577 billion from June 30, 1975, to November 13, 1975. This limit consisted of a permanent limit of \$400 billion and a temporary increase to that limit of \$177 billion. The statutory limit was increased to \$595 billion on November 14, 1975, and to \$627 billion on March 15, 1976. On June 30, 1976, new legislation provided that the debt limit would be increased successively to three temporary levels: \$636 billion on July 1, 1976; \$682 billion on October 1, 1976; and \$700 billion on April 1, 1977. The temporary increase to \$700 billion expires on September 30, 1977. According to the estimates in this budget, a further increase will be needed before then to permit the Federal Government to meet its obligations.

⁷ Report of the President's Commission on Budget Concepts (Washington: U.S. Government Printing Office, 1967), pp. 31-32 and 59.

Table C-7. DEBT SUBJECT TO STATUTORY LIMIT (in millions of dollars)

Description	End of year			
	1976 actual	TQ actual	1977 estimate	1978 estimate
Federal debt held by the public.....	480,300	498,327	560,327	615,827
Federal debt held by Government agencies.....	151,566	148,052	156,398	169,146
Total, gross Federal debt.....	631,866	646,379	716,725	784,973
Deduct:				
Treasury debt not subject to limit.....	613	613	402	402
Agency debt not subject to general limitation:				
Department of Defense.....	1,171	1,136	1,024	909
Export-Import Bank.....	3,174	3,591	2,661	1,936
Tennessee Valley Authority.....	2,075	1,975	1,975	1,975
Postal Service.....	250	250	250	250
Participation certificates ¹	3,045	3,010	2,633	2,031
Coast Guard.....	2	2	2	2
Total, Federal debt not subject to limit.....	10,330	10,578	8,947	7,505
Federal debt subject to statutory limit.....	621,535	635,802	707,779	777,469
District of Columbia Armory Board bonds.....	20	20	20	20
Total, debt subject to statutory limit.....	621,555	635,822	707,799	777,489

¹ Certificates of participation in loans issued by the Government National Mortgage Association on behalf of several agencies (excluding certificates issued during 1968).

The outstanding debt subject to limit is shown in table C-7 and compared with the gross Federal debt and the Federal debt held by the public. The debt subject to limit was \$621.6 billion at the end of 1976 and is expected to rise to \$707.8 billion and \$777.5 billion at the end of 1977 and 1978, respectively. These amounts are far more than the permanent debt limit of \$400 billion. The debt subject to limit equals about 99% of the gross Federal debt. As table C-7 shows, almost all of the difference is accounted for by agency debt not subject to the general limitation. Since the debt subject to limit is almost as large as gross Federal debt, it is much larger than the debt held by the public.

The debt subject to statutory limit is expected to increase more than the debt held by the public in both 1977 and 1978: \$72.0 billion compared to \$62.0 billion in 1977, and \$69.7 billion compared to \$55.5 billion in 1978. The slower growth in the debt held by the public is due primarily to the surpluses of certain funds in the Federal budget—principally the trust funds. These surpluses are largely invested in Federal debt, most of which is subject to the statutory debt limit. Agency investment in Federal debt thus reduces the growth in debt held by the public to an amount that is smaller than the growth in gross Federal debt; but it does not reduce the growth in debt subject to limit. The growth in debt subject to limit is about equal to the growth in gross Federal debt. Therefore, agency investment in Federal debt reduces the growth in debt held by the public to an amount that is smaller than the growth in debt subject to the statutory limit.

FEDERALLY ASSISTED BORROWING

The effect of the Government on borrowing includes not only its own borrowing to finance Federal operations but also its assistance to certain borrowing by the public. Federally assisted borrowing is of two types: borrowing by Government-sponsored enterprises, and Government-guaranteed borrowing by non-Federal borrowers.

The Government-sponsored enterprises were established and chartered by the Federal Government to perform specialized credit functions, but they are now entirely privately owned. The rule governing the budget treatment of these enterprises was established in 1967 in accordance with a recommendation by the President's Commission on Budget Concepts. The Commission, whose report led to the adoption of the unified budget, recommended that the budget exclude those Government-sponsored enterprises that are entirely privately owned.⁵ Therefore the transactions of these enterprises are not included within the Federal budget, and their debt is not part of gross Federal debt.

The seven Government-sponsored enterprises are essentially financial intermediaries, borrowing in the securities market and lending their borrowed funds for specifically authorized purposes either directly or by purchasing loans originated by the private group that they were established to assist. The borrowing programs of these enterprises are subject to Federal supervision. In addition, they all consult the Treasury Department, either by law or by custom, in planning their market offerings. The Student Loan Marketing Asso-

⁵ *Ibid.*, pp. 29-30.

ciation borrows exclusively from the Federal Financing Bank.⁹ The Federal National Mortgage Association and the Federal home loan banks are required to obtain Treasury approval of the terms and timing of specific offerings. In addition to their Federal sponsorship, all of the enterprises have a history of successful financial performance. Hence, despite the absence of Federal guarantees, the obligations of these enterprises are sold at interest rates only moderately higher than the rates on comparable Treasury issues.

As shown in table C-8, the borrowing of the Government-sponsored enterprises was \$5.3 billion in 1976 and is expected to be \$8.3 billion in 1977 and \$12.9 billion in 1978. In order to show the borrowing by this sector as a whole from the rest of the market, these figures are calculated net of the borrowing by one Government-sponsored enterprise from another. This type of transaction consists primarily of the Federal Home Loan Mortgage Corporation borrowing from the Federal home loan banks or repaying its debt. During 1976-77 less of the borrowing than usual is due to support for the housing market from the Federal home loan banks, Federal National Mortgage Association, and Federal Home Loan Mortgage Corporation. This is primarily because the advances provided by the Federal home loan banks to their member savings institutions were less than repayments in 1976 and, though rising sharply, will exceed repayments only moderately in 1977. Three-fifths of the debt outstanding at the end of 1978 will have been issued by these enterprises. Special Analysis E discusses lending by the Government-sponsored enterprises.

⁹ The securities of the other Government-sponsored enterprises are not guaranteed by the Federal Government and therefore cannot be bought by the FFB.

Table C-8. BORROWING BY GOVERNMENT-SPONSORED ENTERPRISES

(in millions of dollars)

Description	Increase or decrease (-)				Debt out- standing end 1978 estimate
	1976 actual	TQ actual	1977 estimate	1978 estimate	
Health, Education, and Welfare: Student Loan Marketing Association.....	160	5	85	110	600
Housing and Urban Development: Federal National Mortgage Association.....	1,626	823	1,764	1,875	34,324
Farm Credit Administration:					
Banks for cooperatives.....	1,007	-60	618	534	5,266
Federal intermediate credit banks.....	1,054	433	1,447	1,617	14,131
Federal land banks.....	2,121	569	2,649	2,795	22,298
Federal Home Loan Bank Board:					
Federal home loan banks.....	-1,975	-101	-89	3,877	22,356
Federal Home Loan Mortgage Corpora- tion ¹	1,355	-81	151	1,690	9,416
Total.....	5,348	1,588	6,625	12,497	108,391
Less increase in holdings of debt issued by Government-sponsored enterprises.....	47	-89	-1,694	-363	1,974
Total, borrowing by Government- sponsored enterprises.....	5,302	1,677	8,319	12,860	106,416

¹ Figures include the sale of participation certificates.

The other type of federally assisted borrowing, Government-guaranteed borrowing, consists of loans for which the Federal Government guarantees the payment of the principal and/or interest in whole or in part. Guaranteed (or insured) loans have diverse characteristics. The loans may be made to individuals, businesses, State and local governments, or foreign governments. The guaranteed obligation may be a loan made by a bank or other institutional lender, it may be a security sold in the capital market, or it may be a security sold to the Federal Financing Bank. Government-guaranteed borrowing is the same as Government-guaranteed lending.

Guaranteed loans include most loan assets sold by Federal agencies. Loan asset sales occur when an agency makes a direct loan and then sells it. A guarantee is usually attached. In some cases the agency sells the direct loans themselves, and in other cases the agency sells securities (sometimes called participation certificates or certificates of beneficial ownership) that are backed by loans that the agency continues to hold and service. Loan asset sales are offsets to the outlays of the agency that sells them, so they reduce the amount by which the direct loans of Federal agencies add to budget outlays. The certificates of beneficial ownership sold by the Farmers Home Administration and Rural electrification and telephone revolving fund are a type of loan asset and would be classified as Federal debt instead of guaranteed loans according to the recommendations of the President's Commission on Budget Concepts.¹⁰ However, according to statute the sale of these certificates is required to be treated as the sale of loan assets instead of Federal borrowing.

Loan guarantees are designed to allocate economic resources toward particular uses by providing credit at more favorable terms than would otherwise be available in the private market. The major use of guaranteed loans is to support housing, but in recent years guarantees have increasingly been used for other purposes. As shown in table C-9, Government-guaranteed borrowing net of repayments was \$16.2 billion in 1976 and is estimated as \$20.3 billion in 1977 and \$28.4 billion in 1978. Special Analysis E presents detailed data on guaranteed loans and loan asset sales.

TOTAL FEDERAL AND FEDERALLY ASSISTED BORROWING

Table C-9 summarizes Federal and federally assisted borrowing from the public. For the purposes of this table, Government-sponsored enterprises are excluded from the public and defined in the same sector as the Federal Government. Federal borrowing from the public is presented in total. Borrowing by Government-sponsored enterprises and Government-guaranteed borrowing are presented both in total and as net amounts, the latter having been adjusted in order to remove double counting in the derivation of total Federal and federally assisted borrowing from the public. Double counting would otherwise occur when a Federal agency or a Government-sponsored enterprise bought or sold Federal or federally assisted debt.

¹⁰ *Ibid.*, pp. 8, 47-48, and 54-55.

Table C-9. NET BORROWING FROM THE PUBLIC BY GOVERNMENT, GOVERNMENT-SPONSORED ENTERPRISES, AND GOVERNMENT-GUARANTEED BORROWERS (in billions of dollars)

Description	Borrowing or repayment (-)				Debt outstanding end 1978 estimate
	1976 actual	TQ actual	1977 est.	1978 est.	
Federal borrowing from the public ^{1 2}	82.9	18.0	62.0	55.5	615.8
Borrowing by Government-sponsored enterprises ³	5.3	1.7	8.3	12.9	106.4
Less increase in holdings of Federal debt.....	.2	.5	-1.1	-.1	2.5
Less increase in Government-sponsored debt held by Federal agencies:					
Federal Home Loan Bank Board.....	.3	—*	-1.1	—*	.4
Federal Financing Bank.....	.2	*	.1	.1	.6
Net Government-sponsored borrowing from the public.....	4.7	1.2	10.5	12.8	103.0
Government-guaranteed borrowing ⁴	16.2	2.7	20.3	28.4	268.6
Less increase in Government-guaranteed loans held by:					
Federal agencies:					
Federal Financing Bank.....	6.1	2.6	8.7	6.0	29.8
Government National Mortgage Corporation....	-1.0	.3	-7	-3	3.3
Government-sponsored enterprises:					
Student Loan Marketing Association.....	.2	—*	.1	.1	.6
Federal National Mortgage Association.....	.8	-1	1.0	1.5	31.1
Federal Home Loan Banks.....	—*	*	—*	*	.1
Federal Home Loan Mortgage Corporation....	-2	—*	-1	-1	1.4
Net Government-guaranteed borrowing from the public.....	10.3	-1	11.3	21.2	202.3
Total, Federal and federally assisted borrowing from the public.....	97.9	19.1	83.8	89.6	921.1

*Less than \$50 million.

¹ See table C-1.

² Borrowing in 1976 excludes the retroactive reclassification as of July 1, 1975, of \$0.5 billion of Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

³ See table C-8.

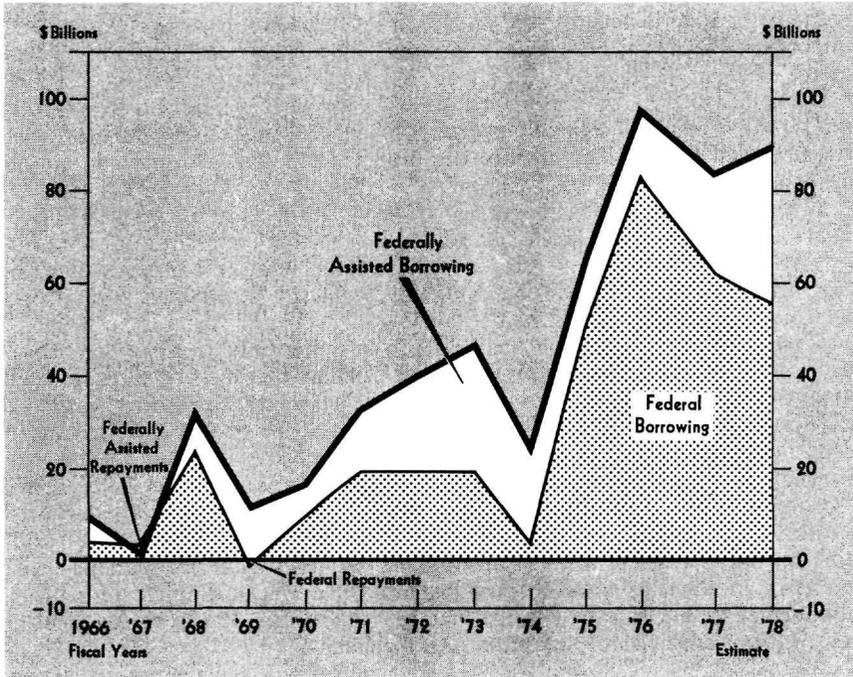
⁴ The same as Government-guaranteed lending. See table E-7.

Federal and federally assisted borrowing from the public during 1976-78 is made up predominantly of Federal borrowing to finance the large budget deficits. Federal borrowing also finances the Federal Financing Bank's purchases of guaranteed obligations (net of repayments), which are one-third of the total increase in guaranteed obligations outstanding. Since the FFB finances these acquisitions by borrowing from the Treasury, which in turn borrows from the public, these transactions substitute Federal borrowing for guaranteed borrowing in the market. As shown in table E-6 of Special Analysis E, the FFB expects to buy a smaller share, about one-sixth, of the gross new loans guaranteed (before repayments) in these years.

The following chart depicts the trends in Federal and federally assisted borrowing from the public between 1966 and 1978. The series is volatile, and the recent and expected fluctuations are dominated by the Federal deficit. Total Federal and federally assisted borrowing fell to \$24.1 billion in 1974 because of a sharp drop in the Federal deficit and rose dramatically to \$64.7 billion in 1975 and to \$97.9 billion in 1976 because of large and rising deficits in these years. The total is

expected to be a little less in 1977 and 1978 because of the falling Federal deficit. The size of federally assisted borrowing—both relative to Federal borrowing and in absolute size—is expected to rise in both these years.

Federal and Federally Assisted Borrowing



As the chart shows, Federal and federally assisted borrowing is now substantially higher than a decade ago. Much of the increase parallels the growth in the economy and in the total funds raised by the non-financial sector through the sale of debt securities and other forms of borrowing and through the sale of corporate equities. However, although the existence of trends is difficult to discern because of the volatility of the series, to some extent the total Federal and federally assisted borrowing from the public seems to have increased as a proportion of the total funds raised. This proportion increased from 12% during 1960-67 to 21% during 1968-74 and to 38% during 1975-76. Thus, Government programs since 1968 have influenced the allocation of funds raised in financial markets more than they did in the immediately preceding years. In 1975 and 1976 the Government impact was unusually large, and the estimated totals for Federal and federally assisted borrowing imply that it will remain large relative to most years in 1977 and 1978. Since the rest of the economy will be expanding, however, Federal and federally assisted borrowing will probably be a declining proportion of total funds raised in both these years.

SPECIAL ANALYSIS E

BORROWING, DEBT, AND INVESTMENT

The major fiscal operations of the Federal Government include not only taxation and expenditure but also:

- the borrowing of cash to meet current outlays not covered by receipts and to refinance maturing debt;
- the investment of balances that trust funds and other Government accounts do not currently need for outlays; and
- the provision of assistance, including guarantees, for certain private borrowing.

This analysis summarizes current developments in Federal borrowing. It also discusses the size and growth of the Federal debt and the interest on the Federal debt, agency borrowing, agency investment in U.S. Government securities, the statutory debt limit, borrowing by Government-sponsored enterprises, and Government-guaranteed borrowing. The analysis concludes with a brief discussion of the trend in Federal and federally assisted borrowing and the relationship of this trend to the total funds raised by the nonfinancial sector of the economy. Excluded from this analysis are other types of Federal liabilities, which include accounts payable, obligations for undelivered orders, long-term contracts, insurance commitments, and the obligation for such future payments as social security, employee retirement, and veterans compensation.¹

Special Analysis F examines the related subject of Federal credit programs, which include direct loans, guaranteed loans, and loans by Government-sponsored enterprises. The factors discussed in both Special Analyses E and F are significant in appraising the impact on financial markets of the programs contained in the 1979 Federal budget.

BORROWING AND REPAYING DEBT

The Federal Government borrows from two principal sources. First, it sells debt to the public, primarily in order to finance Federal deficits. Second, it sells debt to the Government agencies that accumulate surpluses in separate funds, primarily trust funds, required by law to be invested in Federal securities. Most Federal debt has been issued by the Treasury and is called "public debt," but a small portion has been issued by other Government agencies and is called "agency debt."²

Borrowing from the public includes borrowing from the Federal Reserve System as well as borrowing from commercial banks, foreign central banks, other financial institutions and businesses, and individuals. "Borrowing from the Federal Reserve System" does not ordinarily mean that the Treasury sells debt securities directly to the

¹ Information on many of these liabilities is contained in Department of the Treasury, Bureau of Government Financial Operations, "Statement of Liabilities and Other Financial Commitments of the United States Government."

² The term "agency debt" is defined more narrowly in the budget than in the securities market, where it may include not only the debt of the Government agencies listed in table E-5 but also the debt of the Government-sponsored enterprises listed in table E-9 and certain Government-guaranteed securities.

Federal Reserve. This occurs only in exceptional circumstances and then in amounts limited by statute. The Federal Reserve System instead buys debt securities in the open market.

Borrowing from the public—whether by the Treasury or by an agency—has a significant impact on financial markets and the rest of the economy, and it is consequently an important concern of Federal fiscal policy. For most purposes borrowing from the Federal Reserve System should be distinguished from borrowing from the rest of the public. Federal Reserve purchases of debt are undertaken to carry out monetary policy, not to earn income, and affect the economy by expanding bank reserves and the money stock. They thus have a markedly different motivation and effect on financial markets than do purchases by other sectors of the public. The debt held outside the Federal Reserve System enters into investment portfolios of businesses and individuals and by this means affects interest rates, other financial conditions, and the size and composition of private assets. Almost all interest received by the Federal Reserve System is returned to the Treasury as receipts, called deposits of earnings, so the net cost to the Government of Federal Reserve holdings of debt is very small. The estimates in this analysis for the current and future years do not divide the debt held by the public between the Federal Reserve System and the rest of the public, despite the significance of this division, because the Federal Reserve's open market operations depend on future economic developments and on policy decisions not yet made.

Table E-1 summarizes Federal borrowing from 1976 through 1979. In 1977 the total Federal borrowing (net of the refunding of securities)—that is, the rise in gross Federal debt—was \$62.8 billion. The borrowing from Government agencies was \$9.2 billion, and the borrowing from the public was \$53.5 billion. Of the increase in the debt held by the public, \$8.3 billion was purchased by the Federal Reserve System and \$45.2 billion by the rest of the public.

Borrowing from the public has fluctuated sharply. It rose steadily from \$3.0 billion in 1974 to \$82.9 billion in 1976 and then declined to \$53.5 billion in 1977. The exceptionally large borrowing in 1975 and 1976 occurred primarily because the recession automatically reduced tax receipts and raised unemployment benefits and because tax reductions and some expenditure programs were enacted to stimulate the economy. The decline in borrowing in 1977 resulted from economic recovery.

Borrowing from the public is estimated to rise to \$66.0 billion in 1978 and \$73.0 billion in 1979. This increased borrowing over the 1977 amount is due in large measure to further effects of the 1977 stimulus program and, in 1979, to the \$25 billion of tax reductions and reforms (excluding the energy program) proposed by the administration for that year. By the end of 1979 gross Federal debt is expected to be \$873.7 billion, with 79% held by the public (including the Federal Reserve System) and the remainder by the agencies. Almost all of the gross Federal debt will have been issued by the Treasury.

Table E-1. FEDERAL BORROWING (in millions of dollars)

Description	Borrowing or repayment (-) of debt				Debt out- standing end 1979 estimate
	1976 actual	1977 actual	1978 estimate	1979 estimate	
Gross Federal debt:					
Treasury debt.....	87,244	64,139	77,965	89,595	866,400
Agency debt ¹	19	-1,380	-1,520	-1,509	7,268
Gross Federal debt ¹	<u>87,263</u>	<u>62,759</u>	<u>76,445</u>	<u>88,086</u>	<u>873,668</u>
Less debt held by Government agencies:					
Treasury debt.....	4,328	9,385	10,776	15,116	181,382
Agency debt.....	13	-142	-331	-30	1,444
Debt held by Government agencies ..	<u>4,341</u>	<u>9,243</u>	<u>10,445</u>	<u>15,086</u>	<u>182,826</u>
Total, debt held by the public ¹	<u>82,922</u>	<u>53,516</u>	<u>66,000</u>	<u>73,000</u>	<u>690,843</u>
Composed of:					
Debt held by the Federal Reserve System ..	9,721	8,302	NA	NA	NA
Debt held by others.....	73,201	45,214	NA	NA	NA

NA=Not available.

¹ Agency borrowing, gross Federal borrowing, and borrowing from the public in 1976 exclude the retroactive reclassification as of July 1, 1977, of \$471 million of Export-Import Bank certificates of beneficial interest from loan assets to debt.

Until a few years ago the Federal debt was held almost entirely by individuals and institutions in the United States. After World War II the debt held in foreign balances and international accounts tended to grow gradually and by the end of 1969 amounted to \$10 billion.³ However, due to international monetary developments, the foreign and international holdings began to grow much faster in 1970, and by the end of 1977 they had risen to \$95 billion. Most of the Treasury debt held abroad is owned by foreign central banks. The annual borrowing from abroad since 1971 is shown below in comparison with the annual borrowing from the domestic public, exclusive of the Federal Reserve System (in billions of dollars):

	1970	1971	1972	1973	1974	1975	1976	1977
Foreign and international.....	3.8	17.8	17.3	10.3	-2.6	9.2	3.8	20.5
Domestic (excluding Federal Reserve System).....	-3.6	-6.2	-3.8	5.3	.1	37.3	69.5	24.7
Total borrowing from the public (excluding Federal Reserve System).....	<u>.2</u>	<u>11.6</u>	<u>13.5</u>	<u>15.5</u>	<u>-2.5</u>	<u>46.5</u>	<u>73.2</u>	<u>45.2</u>

Whereas before 1970 the total borrowing from the public was nearly the same as borrowing from the domestic public, this table shows that since that time they have sometimes been quite different. During 1970-73, \$49 billion was borrowed from abroad while \$8 billion of debt held by the domestic public (exclusive of the Federal Reserve

³ The estimates of Federal debt held in foreign balances and international accounts do not include agency debt, the holdings of which are believed to be small.

System) was repaid. In the next 3 years borrowing from abroad was relatively small, but in 1977, despite the large Federal deficit, borrowing from abroad was almost half of the total borrowing from the public (exclusive of the Federal Reserve System).

BORROWING AND GOVERNMENT DEFICITS

Table E-2 shows how borrowing from the public is related to the Federal deficit. Until a few years ago the budget deficit comprised practically the entire deficit of the Federal Government, but the deficit of the off-budget Federal entities has now become significant. These entities, such as the Federal Financing Bank and the Postal Service, are parts of the Federal Government that have been excluded from the budget under provisions of law.

The Government deficit is financed either by borrowing from the public or by several other means. These other means of financing the deficit may be either positive, in which case they finance part of the deficit; or negative, in which case they, like the deficit, must themselves be financed by borrowing from the public. In 1977 the total Government deficit was \$53.7 billion. Almost all of this amount, \$53.5 billion, was financed by borrowing from the public, and the remaining \$0.2 billion was financed by other means.

Table E-2. MEANS OF FINANCING THE FEDERAL DEFICIT

(In millions of dollars)

Description	1977 actual	1978 estimate	1979 estimate
Budget surplus or deficit (—)	–45,040	–61,847	–60,586
Deficit (—) of off-budget Federal entities ¹	–8,693	–11,514	–12,538
Total, surplus or deficit (—)	–53,733	–73,361	–73,124
Means of financing other than borrowing from the public:			
Decrease or increase (—) in cash and monetary assets	–2,209	7,104	—
Increase or decrease (—) in liabilities for:			
Checks outstanding, etc. ²	1,765	222	–142
Deposit fund balances	253	–518	–224
Seigniorage on coins	407	553	490
Total, means of financing other than borrowing from the public	217	7,361	124
Total, requirements for borrowing from the public	–53,516	–66,000	–73,000
Change in debt held by the public	53,516	66,000	73,000

¹ The off-budget Federal entities consist of the Rural electrification and telephone revolving fund, Rural telephone bank, Pension Benefit Guaranty Corporation, Exchange stabilization fund, Federal Financing Bank, Postal Service fund, and certain activities of the U.S. Railway Association.

² Besides checks outstanding, includes military payment certificates, accrued interest (less un-amortized discount) payable on Treasury debt, and, as an offsetting change in assets, certain collections in transit.

The means of financing a deficit other than borrowing from the public are:

- a decrease in cash or monetary assets;
- an increase in monetary liabilities for checks outstanding, etc.;

- an increase in deposit fund balances, which include amounts held by the Government as an agent for others (such as State income taxes withheld from Federal employees' salaries and not yet paid to the State) or amounts held in suspense temporarily before being refunded or paid into some other fund; and
- seigniorage, which is the face value of minted coins less the cost of their production.

Table E-2 explains an unusual relationship between the change in the budget deficit from 1978 to 1979 and the change in borrowing from the public. The budget deficit decreases by \$1.3 billion, whereas borrowing from the public increases by \$7.0 billion. To a small extent the rise in borrowing is due to a \$1.0 billion increase in the deficit of the off-budget Federal entities, but it is mostly caused by an estimated \$7.2 billion decrease in the means of financing other than borrowing from the public. In 1978 the other means of financing are unusually large because of a \$7.1 billion decrease in cash and monetary assets. A large amount of cash and monetary assets was held at the end of 1977, partly so that the Treasury could build up its operating funds before the expiration at the end of the year of the temporary increment to the statutory debt limit. In particular, the Treasury acquired \$2.5 billion of cash by issuing a special security directly to the Federal Reserve. The resources from the large cash balances at the end of 1977 are available to finance part of the 1978 deficit but have no counterpart in 1979.

Notwithstanding the effect that these other means of financing are estimated to have on the trend in borrowing from 1978 to 1979, even in 1978 these other means are small relative to borrowing from the public. The size of these other means of financing is limited by their own nature. Decreases in cash, for example, are necessarily limited by past accumulations, which themselves required financing when they were built up. Thus, the extent to which means other than borrowing can finance a deficit are limited in any year and tend to be still more limited over a longer period of time. The total Federal Government deficit is the principal determinant of borrowing from the public.

The sale of debt to Federal agencies largely depends on the surpluses of the trust funds, which own 92% of the Federal debt held by Government agencies. Agency investment in Federal securities and the total trust fund surplus during 1976-79 are compared in the table below (in billions of dollars):

	1976 actual	1977 actual	1978 estimate	1979 estimate
Agency investment in Federal debt.....	4.3	9.2	10.4	15.1
Total trust fund surplus or deficit (-).....	2.4	9.5	10.3	13.9

As the table shows, the agency investment in Federal securities is similar in size to the total trust fund surplus throughout the period. The differences are accounted for by two factors. Certain agencies other than trust funds buy and sell Federal debt, as shown in table E-6, and the trust funds may increase or decrease their open book balances.⁴

⁴ Open book balances comprise cash assets not currently invested. As shown in Special Analysis C, they are very small relative to trust fund holdings of Federal debt.

SIZE AND GROWTH OF FEDERAL DEBT

Gross Federal debt has risen substantially over most of the past half century, from \$16 billion in 1929 to \$709.1 billion at the end of 1977. Table E-3 presents the detail of Federal debt since 1954 and shows that a sizable part of the increase is held in Federal Government accounts (primarily trust funds) rather than being owed to the public. From the end of 1954 to the end of 1977, gross Federal debt rose by 162% while debt held by the public rose by 146%. Federal debt held by the public apart from the Federal Reserve System rose still less, by 124%—an annual compound rate of growth of 3.5% over the

Table E-3. COMPARISON OF TRENDS IN FEDERAL DEBT AND GROSS NATIONAL PRODUCT (in billions of dollars)

Fiscal year	Debt outstanding, end of year					GNP	Debt held by public as percent of GNP
	Gross Federal debt	Federal Government accounts	Held by				
			Total	Federal Reserve System	Other		
1954.....	270.8	46.3	224.5	25.0	199.5	363.6	61.7
1955.....	274.4	47.8	226.6	23.6	203.0	380.0	59.6
1956.....	272.8	50.5	222.2	23.8	198.5	411.0	54.1
1957.....	272.4	52.9	219.4	23.0	196.4	432.7	50.7
1958.....	279.7	53.3	226.4	25.4	200.9	442.1	51.2
1959.....	287.8	52.8	235.0	26.0	209.0	473.3	49.7
1960.....	290.9	53.7	237.2	26.5	210.7	497.3	47.7
1961.....	292.9	54.3	238.6	27.3	211.4	508.3	46.9
1962.....	303.3	54.9	248.4	29.7	218.7	546.9	45.4
1963.....	310.8	56.3	254.5	32.0	222.4	576.3	44.2
1964.....	316.8	59.2	257.6	34.8	222.8	616.2	41.8
1965.....	323.2	61.5	261.6	39.1	222.5	657.1	39.8
1966.....	329.5	64.8	264.7	42.2	222.5	721.1	36.7
1967.....	341.3	73.8	267.5	46.7	220.8	774.4	34.5
1968.....	369.8	79.1	290.6	52.2	238.4	829.9	35.0
1969 ¹	367.1	87.7	279.5	54.1	225.4	903.7	30.9
1970 ²	382.6	97.7	284.9	57.7	227.2	959.0	29.7
1971.....	409.5	105.1	304.3	65.5	238.8	1,019.3	29.9
1972.....	437.3	113.6	323.8	71.4	252.3	1,110.5	29.2
1973 ³	468.4	125.4	343.0	75.2	267.9	1,237.5	27.7
1974.....	486.2	140.2	346.1	80.6	265.4	1,359.2	25.5
1975.....	544.1	147.2	396.9	85.0	311.9	1,454.6	27.3
1976 ⁴	631.9	151.6	480.3	94.7	385.6	1,625.4	29.5
TQ.....	646.4	148.1	498.3	96.7	401.6	1,727.3	28.9
1977.....	709.1	157.3	551.8	105.0	446.8	1,838.0	30.0
1978 estimate.....	785.6	167.7	617.8	NA	NA	2,043.2	30.2
1979 estimate.....	873.7	182.8	690.8	NA	NA	2,274.6	30.4

NA=Not available.

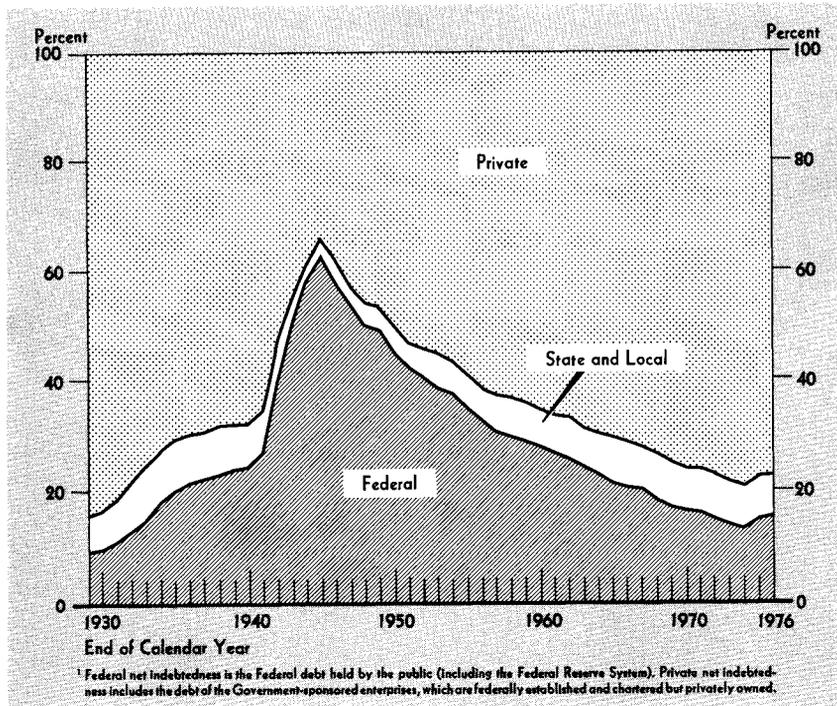
¹ During 1969, 3 Government-sponsored enterprises became completely privately owned, and their debt was removed from the totals for the Federal Government. At the dates of their conversion, gross Federal debt was reduced \$10.7 billion, debt held by Government accounts was reduced \$0.6 billion, and debt held by the public was reduced \$10.1 billion.

² Gross Federal debt and debt held by the public increased \$1.6 billion due to a reclassification of the Commodity Credit Corporation certificates of interest from loan assets to debt.

³ A procedural change in the recording of trust fund holdings of Treasury debt at the end of the month increased gross Federal debt and debt held in Government accounts by about \$4.5 billion.

⁴ Gross Federal debt and debt held by the public increased \$0.5 billion due to a retroactive reclassification of the Export-Import Bank certificates of beneficial interest from loan assets to debt.

Percent Distribution of Net Indebtedness¹



23 years—because during this period the Federal Reserve System bought a large quantity of Federal debt in the market, thereby expanding the reserves of the banking system and providing for growth in the Nation's money stock.

During the depression of the 1930's and during World War II, Federal debt held by the public increased greatly, not only in absolute amount but also, as shown in the above chart, as a proportion of total net indebtedness: Federal, State and local, and private. Whereas Federal debt held by the public was only 9% of total net debt at the end of calendar year 1929, it had risen to 62% by the end of calendar year 1945. Federal borrowing was large during these years, particularly to finance World War II, and borrowing by other sectors was restricted by low incomes and poor credit-worthiness during the depression and by controls and scarcities during the war.

From 1945 to 1974, however, private debt increased as a proportion of total debt in every year, and in every year the Federal debt held by the public decreased as a proportion of the total. This uninterrupted trend ended in calendar year 1975 because of the large Federal deficit caused by the recession. The large Federal deficit in 1976 caused Federal debt held by the public to rise as a percentage of total debt again in that year. As the chart shows, the recent rise in the proportion of Federal debt does not appreciably affect the comparison of trends over the last three decades. From the end of calendar year 1956 to the end of 1976, for example, Federal debt held by the public rose 130%,

whereas State and local government debt rose 431% and private debt rose 506%. By the end of calendar year 1976, Federal debt held by the public was 15% of total debt. As a result of these trends, Federal debt and borrowing, although still important, have become relatively much smaller influences in the financial market.

During the same period Federal debt has decreased relative to gross national product. As shown in table E-3, debt held by the public equaled 62% of gross national product at the end of 1954 but declined steadily to 25% by the end of 1974. In 1975, however, debt held by the public rose as a percentage of gross national product, and it has risen further since then. The percentage is estimated to rise slightly in 1978 and 1979.

The interest cost of the debt may be more significant than the amount of the debt for some types of comparison designed to measure the importance of Federal indebtedness. Interest on the debt held by the public has risen much faster than the debt itself, due to a strong upward trend since World War II in the interest rates paid on new borrowings and on refunded debt. Between 1954 and 1977 the Federal debt held by the public more than doubled, but, as shown in table E-4, the interest paid to the public increased by more than six times. For this period as a whole, interest payments to the public grew faster than gross national product. In the first 5 years, 1954-58, interest was equal to 1.4% of gross national product, whereas by the last 5 years, 1973-77, the proportion has risen moderately to 1.7%. On the other hand, the proportion of budget outlays devoted to paying interest on the debt held by the public did not show any trend over the period as a whole. It ranged between 7.0% and 8.7%, with an average of 7.7%. Interest as a percentage of both gross national product and budget outlays—assuming the market interest rates that prevailed when the budget estimates were made—is estimated to rise in 1978 and again in 1979.

Since the end of World War II, the composition of the Federal debt has changed, with an increasingly large proportion of marketable securities having a relatively short maturity. One contributing factor is the statutory ceiling of 4¼% that has been maintained since 1918 on the interest rate that can be paid on Treasury bonds. Because long-term market rates exceeded 4¼% after 1965, the ceiling eventually prevented the Treasury from selling long-term obligations.

This restriction on Treasury borrowing has been relaxed in two ways. One method has been to increase the maximum maturity of notes, which are not subject to the interest rate ceiling. The maximum maturity was raised by law from 5 years to 7 years in 1967 and to 10 years in 1976. As of December 31, 1977, the amount of notes outstanding with a maturity over 5 years was \$110.1 billion, of which \$17.1 billion had a maturity over 7 years. The other method of relaxing the restriction has been to allow limited amounts of bonds to be sold at interest rates above the ceiling. In 1971, Treasury was allowed by law to issue up to \$10 billion of bonds at interest rates above 4¼%. In 1973, those bonds held by Government accounts and the Federal Reserve System were exempted from the interest rate limit, and during 1976 the amount of the exception was raised in two steps to \$17 billion. In October 1977 the exception was raised further to \$27 billion. As of December 31, 1977, \$30.1 billion of bonds outstanding had been sold since the change of law in 1971, including

bonds held by Government accounts and the Federal Reserve System. The effective interest rates have ranged from 6.1% to 8.4%.

Notwithstanding the initial relaxations of the interest rate ceiling, the average maturity of Treasury debt decreased from about 5 years at the end of 1965 to about 2½ years at the end of 1976. Since then, however, as the restriction has been relaxed further by both methods, the average maturity has lengthened to almost 3 years.

Table E-4. COMPARISON OF TRENDS IN INTEREST
ON FEDERAL DEBT (in billions of dollars)

Fiscal year	Interest on the gross Federal debt					Interest on debt held by the public as a percent of	
	Total	Paid to				GNP	Budget outlays ²
		Federal Government accounts	The public				
			Total	Federal Reserve System ¹	Other		
1954.....	6.4	1.3	5.2	0.5	4.7	1.42	7.29
1955.....	6.4	1.2	5.2	.4	4.8	1.36	7.56
1956.....	6.8	1.3	5.6	.5	5.1	1.35	7.90
1957.....	7.3	1.4	5.9	.7	5.3	1.37	7.73
1958.....	7.8	1.4	6.3	.7	5.6	1.43	7.68
1959.....	7.8	1.4	6.4	.8	5.6	1.35	6.96
1960.....	9.5	1.5	8.1	1.0	7.1	1.62	8.73
1961.....	9.3	1.5	7.8	1.0	6.8	1.53	7.96
1962.....	9.5	1.6	7.9	1.0	6.9	1.45	7.40
1963.....	10.3	1.6	8.7	1.1	7.6	1.50	7.78
1964.....	11.0	1.8	9.2	1.2	8.0	1.50	7.80
1965.....	11.8	2.0	9.8	1.4	8.4	1.49	8.29
1966.....	12.6	2.1	10.4	1.7	8.7	1.45	7.75
1967.....	14.2	2.6	11.6	2.0	9.6	1.50	7.36
1968.....	15.6	3.0	12.6	2.4	10.2	1.52	7.07
1969.....	17.6	3.5	14.1	2.9	11.2	1.56	7.66
1970.....	20.0	4.4	15.6	3.5	12.2	1.63	7.95
1971.....	21.6	5.3	16.3	3.7	12.6	1.60	7.73
1972.....	22.5	5.8	16.6	3.7	12.9	1.50	7.16
1973.....	24.8	6.3	18.5	4.3	14.2	1.50	7.49
1974.....	30.0	7.7	22.4	5.5	16.9	1.64	8.29
1975.....	33.5	8.8	24.7	6.1	18.6	1.70	7.56
1976.....	37.7	9.0	28.7	6.3	22.5	1.77	7.86
TQ.....	8.3	.6	7.6	NA	NA	1.77	8.07
1977.....	42.6	9.6	33.0	6.3	26.7	1.80	8.21
1978 estimate.....	49.2	10.1	39.1	NA	NA	1.92	8.47
1979 estimate.....	55.9	10.7	45.2	NA	NA	1.99	9.04

NA = Not available.

¹ Estimated as the average of calendar year figures. The 1977 estimate is tentative

² Budget outlays for 1954-79 are published in the Budget, Part 9, table 21.

BORROWING BY FEDERAL AGENCIES

A few Government agencies are authorized to sell their own debt instruments to the public and to other Government agencies and funds. This agency borrowing is part of the gross Federal debt. The authorization to borrow is budget authority, and the disbursement of such borrowed money is an outlay. Agency debt includes the borrowings of the off-budget Federal entities.

Agency borrowing was shown in total in table E-1 and is shown by agency in table E-5. In all three years, the repayment of agency

Table E-5. AGENCY BORROWING ¹ (in millions of dollars)

Description	Borrowing or repayment (-) of debt			Debt outstand- ing end 1979 estimate
	1977 actual	1978 estimate	1979 estimate	
Borrowing from the public:				
Agriculture: Farmers Home Administration ²	-86	-48	-----	181
Defense.....	-103	-97	-104	691
Health, Education, and Welfare ²	-29	-5	-----	95
Housing and Urban Development:				
College housing loans ^{2 3}	-69	-1	-----	-----
Federal Housing Administration.....	-9	-11	35	494
Housing for elderly or handicapped ²	-15	-2	-----	47
Government National Mortgage Association ²	-38	-90	-64	450
Revolving fund (liquidating programs) ^{2 3}	-20	-2	-----	304
Transportation: Coast Guard.....	*	*	*	1
Veterans Administration ²	109	-122	-91	505
Export-Import Bank.....	-733	-799	-1,154	904
Postal Service.....	-----	-----	-----	250
Small Business Administration ²	-94	-12	-----	176
Tennessee Valley Authority.....	-150	-----	-100	1,725
Total, borrowing from the public.....	-1,238	-1,189	-1,479	5,825
Borrowing from other funds:				
Agriculture: Farmers Home Administration ²	45	-84	-----	137
Defense.....	-18	-19	-15	90
Health, Education, and Welfare ²	21	-9	-----	80
Housing and Urban Development:				
College housing loans ^{2 3}	66	-1	-----	-----
Federal Housing Administration.....	10	8	-9	108
Housing for elderly or handicapped ²	15	-3	-----	45
Government National Mortgage Association ²	-127	-82	-3	291
Revolving fund (liquidating programs) ^{2 3}	15	-4	-----	290
Veterans Administration ²	-162	-116	-4	267
Small Business Administration ²	-8	-20	-----	134
Total, borrowing from other funds.....	-142	-331	-30	1,444
Total, agency borrowing included in gross Federal debt.....	-1,380	-1,520	-1,509	7,268
MEMORANDUM				
Borrowing from Federal Financing Bank:				
Export-Import Bank.....	1,155	996	1,559	8,479
Tennessee Valley Authority.....	1,145	1,165	1,460	6,505
Postal Service.....	-1,067	933	246	3,360
United States Railway Association.....	214	79	-----	389
Total, agency borrowing from Federal Financ- ing Bank.....	1,447	3,173	3,265	18,733

*\$500 thousand or less.

¹ Excludes agency borrowing from Treasury.² Certificates of participation in loans issued by the Government National Mortgage Association on behalf of several agencies.³ The debt of the College housing fund (\$462 million) is scheduled to be transferred to the Revolving fund (liquidating programs) on Oct. 1, 1978.

debt exceeds new agency borrowing by about \$1.5 billion. The agency debt outstanding on September 30, 1979, is estimated to be \$7.3 billion, which is less than 1% of gross Federal debt.

As shown in the memorandum section of table E-5, the Federal Financing Bank (FFB) is having a profound effect on agency borrowing.⁵ The FFB was created in December 1973 under the Treasury Department as an off-budget Federal entity and began financial operations in May 1974. Its purposes were to assist and coordinate agency borrowing and guaranteed borrowing and to reduce the cost to the Government of some of its borrowing activities. It was given the authority to purchase agency debt and Government-guaranteed obligations and, in turn, to finance these transactions by borrowing from the Treasury. With the approval of the Secretary of the Treasury, the FFB is authorized to borrow from the Treasury without a statutory limitation on the amount.⁶ Since the FFB can borrow from the Treasury at lower interest rates than other agencies would have to pay in the market, this procedure reduces the cost of agency borrowing. The FFB thus serves as a conduit for agency borrowing, and Treasury securities replace the securities of other agencies in the market. Agency borrowing from the FFB is not included in gross Federal debt. It would be triple counting to add together the agency borrowing from the FFB, the FFB borrowing from Treasury, and the Treasury borrowing from the public that was necessary to provide the FFB with funds to lend to the agencies.

Four agencies that would otherwise borrow mostly in the market borrowed \$1.4 billion from the FFB in 1977 and are estimated to borrow \$3.2 billion in 1978 and \$3.3 billion in 1979. The only new borrowing in the market by these agencies has arisen from special arrangements made by the Export-Import Bank. Because borrowing from the FFB by these agencies has generally replaced borrowing from the public, almost no new agency borrowing in the market took place in the last 3 years or is scheduled to take place in the future. The change in agency debt outstanding is thus determined almost solely by the repayment of maturing debt and consequently is very small or negative throughout the period. If the FFB had not been created, the agency component of gross Federal debt would be substantially larger than it is now, though not by the exact amount that agencies have borrowed from the FFB. The Treasury component would be correspondingly smaller.

By the end of 1979, \$2.9 billion of agency debt, or two-fifths of the total, will be obligations of the four agencies listed in table E-5 that plan to borrow in the future almost exclusively from the FFB. A total of \$3.0 billion, or another two-fifths of all agency debt, will consist of certificates of participation in pools of loans issued by the Government

⁵ FFB purchases of guaranteed obligations are shown in table E-10.

⁶ The FFB also is authorized to have outstanding up to \$15 billion of publicly issued debt. Treasury classifies this as public debt rather than agency debt. The FFB borrowed \$1.5 billion in 8-month bills from the public in July 1974. All of its other borrowing has been from Treasury, because Treasury can borrow from the public at slightly lower interest rates than FFB would have to pay. No further borrowing from the public is planned.

National Mortgage Association as trustee on behalf of several agencies, which are identified in table E-5. These certificates have not been issued since 1968. A further \$0.8 billion of agency debt will be family housing mortgages assumed by the Defense Department under a program terminated more than a decade ago. The remaining agency debt, which is mostly for programs that will continue to borrow from the public, will constitute only 8% of the total—\$602 million of Federal Housing Administration debentures issued in payment of insurance claims for defaulted loans, and \$4 million of other obligations.

An adjustment within table E-5 arises from the transfer of all assets and liabilities of the College housing fund to the Revolving fund (liquidating programs) in the Department of Housing and Urban Development. Debt of \$462 million is scheduled to be transferred on October 1, 1978. This transfer does not constitute borrowing by the Revolving fund (liquidating programs) or repayment of debt by the College housing fund.

The Treasury provides capital to business-type Government enterprises both in the form of capital stock and in the form of debt. The provision of debt is shown as "borrowing from Treasury" on the statements of financial condition for enterprises in the Budget Appendix. However, the equity and the debt instruments are the same in substance; and it would be double counting to add together the agency borrowing from the Treasury and the Treasury borrowing from the public that was necessary to provide the agencies with this capital. Therefore, agency borrowing from Treasury is excluded from figures on agency borrowing and debt in all other parts of the budget documents.

AGENCY INVESTMENT IN FEDERAL SECURITIES

Trust funds and some public enterprise funds accumulate cash in excess of current requirements in order to meet future claims and demands. Such cash surpluses are invested mostly in Treasury debt and, to a very small extent, in agency debt. Purchases of these securities are not counted as budget outlays, and redemptions are not counted as budget receipts.

Net investment by trust funds and other Federal agencies fell from a peak of \$14.8 billion in 1974 to \$4.3 billion in 1976 and then rose to \$9.2 billion in 1977. As shown in table E-6, agency investment is expected to continue to rise, reaching \$10.4 billion in 1978 and \$15.1 billion in 1979.

The decrease in agency investment from 1974 to 1976 was primarily caused by two factors. The large rise in unemployment substantially increased the benefit payments of the unemployment insurance trust fund and to some lesser degree reduced the employment tax receipts of the unemployment and social security trust funds; and the social security trust funds had financial problems besides their reduced tax receipts. The rise in agency investment in 1977 was caused to a large extent by the continued economic recovery, which reduced unemployment benefits and raised trust fund tax receipts. A second important cause of the 1977 increase was the increased payments from the general fund to the Civil Service retirement and disability trust fund.

The further increase in agency investment estimated for 1978 and 1979 is caused in large measure by further declines in unemployment, by another large rise in the general fund payment to the Civil Service

Table E-6. AGENCY INVESTMENT IN FEDERAL SECURITIES
(In millions of dollars)

Description	Increase or decrease (-) in holdings			Holdings end of 1979 estimate
	1977 actual	1978 estimate	1979 estimate	
Investment in Treasury debt:				
Health, Education, and Welfare:				
Federal old-age and survivors insurance trust fund	-1,645	-4,706	-3,158	26,991
Federal disability insurance trust fund	-2,211	-349	229	4,123
Federal hospital insurance trust fund	-36	730	1,632	13,285
Federal supplementary medical insurance trust fund	988	1,344	661	4,237
Housing and Urban Development:				
Federal Housing Administration	161	139	149	1,960
Government National Mortgage Association	-95	-274	72	1,308
Other	44	17	20	253
Labor: Unemployment trust fund	1,073	3,600	5,200	14,787
Transportation:				
Highway trust fund	1,127	940	591	11,610
Airport and airway trust fund	534	407	183	3,836
Treasury:				
Exchange stabilization fund ¹	520	-----	-----	2,050
Federal Financing Bank	-86	107	98	243
Veterans Administration:				
National service life insurance trust fund	294	372	212	7,834
Other trust funds	12	29	4	1,089
Other	28	25	25	432
Civil Service Commission:				
Civil Service retirement and disability trust fund	6,931	6,861	7,078	63,161
Other trust funds	496	560	528	4,055
Federal Deposit Insurance Corp.: Trust fund	855	379	1,045	8,886
Federal Home Loan Bank Board: FSLIC	433	408	473	5,417
Postal Service	-160	129	230	1,630
Railroad Retirement Board: Trust fund	-121	-84	-378	2,720
Other Federal funds	81	45	109	754
Other trust funds	145	96	100	633
Other off-budget Federal entities	15	*	11	87
Total, investment in Treasury debt	9,385	10,776	15,116	181,382
Investment in agency debt:				
Agriculture: CCC	-6	-6	-6	17
Health, Education, and Welfare:				
Federal old-age and survivors insurance trust fund	-----	-----	-----	555
Federal hospital insurance trust fund	-----	-----	-----	50
Housing and Urban Development:				
Federal Housing Administration	*	-1	-4	186
Government National Mortgage Association	-1	-78	-14	145
Veterans Administration: National service life insurance trust fund	-75	-100	-----	135
Civil Service Commission: Civil Service retirement and disability trust fund	-----	-100	-----	275
Federal Home Loan Bank Board: FSLIC	-10	-46	-6	79
Railroad Retirement Board: Trust fund	-50	-----	-----	-----
Total, investment in agency debt	-142	-331	-30	1,444
Total, agency investment in Federal debt	9,243	10,445	15,086	182,826
MEMORANDUM				
Investment by Federal funds	636	229	818	10,553
Investment by trust funds	8,318	9,980	13,928	168,262
Investment by off-budget Federal entities	290	236	339	4,010

*\$500 thousand or less.

¹ The change in holdings is not estimated due to the uncertainties in foreign exchange, and the estimated 1979 year-end holdings are taken to be the actual holdings at the end of 1977.

retirement and disability trust fund, by increased deposits of State unemployment insurance taxes (which are included in Federal receipts), and by legislated Federal tax increases. Legislation enacted in 1976 is estimated to raise unemployment insurance trust fund receipts by \$1.5 billion in 1978 and \$3.1 billion in 1979, to be offset in 1979 by a \$0.6 billion tax-rate cut proposed by the administration. The recently enacted Social Security Amendments of 1977 are estimated to increase social security trust fund receipts by \$3.2 billion in 1979. Without these tax increases, total agency investment would not be estimated to change much in 1978 and 1979 from the 1977 level of \$9.2 billion.

Total agency holdings of Federal securities will reach an estimated \$182.8 billion by September 30, 1979. This will comprise 21% of the gross Federal debt. Two trust funds—the old age and survivors insurance trust fund and the Civil Service retirement and disability trust fund—will account for 50% of total agency holdings, and all the trust funds together will account for 92%. Almost all of the holdings will be Treasury debt, and the holdings of agency debt will continue to decline by small amounts each year.

LIMITATIONS ON FEDERAL DEBT

Statutory limitations have customarily been placed on Federal debt. Until World War I, the Congress ordinarily authorized a specific amount for each issue of debt. Beginning with the Second Liberty Bond Act in 1917, however, the limitation developed in several steps to become a ceiling on the total amount of most Federal debt outstanding. The latter type of limitation has been in effect since 1942. The limit currently applies to the total of:

- almost all public debt issued by the Treasury since September 1917, whether held by the public or by the Government;
- agency debt in the form of participation certificates issued during 1968 under the Participation Sales Act of 1966; and
- other debt issued by Federal agencies (and the District of Columbia Armory Board) that, according to explicit statute, is fully guaranteed as to principal and interest by the United States.

The debt subject to statutory limit⁷ includes virtually all Treasury debt. The small amount of Treasury debt not subject to limit is shown in table E-7. It consists almost entirely of currencies no longer being issued, such as silver certificates and national bank notes, which were generally reclassified as Treasury debt sometime after being discontinued.

The major part of agency debt is not subject to the general statutory limit. The only categories now included are the debentures issued by the Federal Housing Administration and the participation certificates sold in 1968. Together, these securities comprise less than one-quarter of all agency debt. However, most other agency debt is subject to special statutory limits. For example, the Postal Service is limited to \$2 billion of annual borrowing and \$10 billion of bonds outstanding.

⁷ The statutory debt limit is sometimes called the public debt limit. However, as explained in the text, the limit does not apply to all public debt and does apply to some debt other than public debt.

Table E-7. DEBT SUBJECT TO STATUTORY LIMIT (in millions of dollars)

Descriptions	End of year		
	1977 actual	1978 estimate	1979 estimate
Federal debt held by the public.....	551,843	617,843	690,843
Federal debt held by Government agencies.....	157,295	167,740	182,826
Total, gross Federal debt.....	709,138	785,583	873,668
Deduct:			
Treasury debt not subject to limit.....	611	611	611
Agency debt not subject to the general limit:			
Department of Defense.....	1,016	900	781
Export-Import Bank.....	2,858	2,059	904
Tennessee Valley Authority.....	1,825	1,825	1,725
Postal Service.....	250	250	250
Participation certificates ¹	2,633	2,031	1,869
Coast Guard.....	2	2	1
Total, Federal debt not subject to limit.....	9,195	7,677	6,142
Federal debt subject to statutory limit.....	699,943	777,906	867,527
District of Columbia Armory Board bonds.....	20	20	20
Total, debt subject to statutory limit.....	699,963	777,926	867,547

¹ Certificates of participation in loans issued by the Government National Mortgage Association on behalf of several agencies (excluding certificates issued during 1968).

The only other significant component of debt subject to limit is the small issue of stadium bonds sold by the District of Columbia Armory Board in 1960. Unlike the rest of the debt subject to limit discussed above, the stadium bonds are not part of the Federal debt.

Under legislation enacted earlier, the statutory limit on the Federal debt rose to \$682 billion on October 1, 1976, and to \$700 billion on April 1, 1977. This limit consisted of a permanent limit of \$400 billion, which has been in effect since 1971, and a temporary increment of \$300 billion. This temporary increment expired on September 30, 1977, without having been extended, so for a few days the Federal debt exceeded the statutory limit. During this period all sales of savings bonds and other new debt instruments were temporarily suspended. On October 4, 1977, new legislation temporarily raised the limit to \$752 billion. This increase expires on March 31, 1978, after which a further increase will be needed to permit the Federal Government to meet its obligations.

The outstanding debt subject to limit is shown in table E-7 and compared with the gross Federal debt and the Federal debt held by the public. The debt subject to limit was \$700.0 billion at the end of 1977 and is estimated to rise to \$867.5 billion by the end of 1979. These amounts are substantially more than the permanent limit of \$400 billion. As shown in table E-7, the debt subject to limit is much larger than the debt held by the public and is almost as large as the gross Federal debt. Almost all of the difference between gross Federal debt and debt subject to limit is accounted for by agency debt not subject to the general limitation.

FEDERAL FUNDS FINANCING AND THE CHANGE IN DEBT SUBJECT
TO STATUTORY LIMIT

The year-to-year change in debt subject to limit, unlike the change in debt held by the public, is not principally determined by the total Government deficit, that is, the sum of the budget deficit and the deficit of the off-budget Federal entities. The trust fund surplus or deficit, which makes up part of the budget surplus or deficit, has no essential effect. This is shown below in a discussion that is more technical than the rest of this special analysis.

The budget is divided into two major groups of funds: Federal funds and trust funds.⁸ The trust funds collect certain taxes and other receipts for specified purposes, such as the payment of social security and unemployment insurance benefits. The Federal funds comprise the rest of the budget. Their resources are derived mainly from taxes and borrowing and are used for the general purposes of the Government. The off-budget Federal entities make up a third group of fiscal operations, analogous to the Federal funds and trust funds groups. If the off-budget entities were included in the budget, almost all of them would be classified in the Federal funds group.

When the Federal funds have a deficit, that deficit must generally be financed by borrowing. This requirement is unaffected by whether or not trust funds have a surplus, since trust fund surpluses are mostly invested in Federal debt securities and this investment is a form of Federal funds borrowing. The Federal funds borrowing is almost exclusively done by the Treasury selling debt securities that are subject to the statutory limit. The deficits of the off-budget Federal entities are generally financed in the same way as the Federal funds deficit. Thus, the Federal funds deficit and the deficit of the off-budget Federal entities generally have to be financed by selling debt securities that are subject to the statutory limit.

Table E-8 shows in detail the relationship of the change in debt subject to limit to the Federal funds deficit and the deficit of the off-budget Federal entities. The sum of these deficits is an amount that has to be financed. Some relatively small portion may be financed by means other than borrowing, such as seigniorage and a decrease in those cash assets held by Federal funds and off-budget Federal entities (if the sum of these other means of financing is negative, then these other means must themselves be financed).⁹ Some small portion may be financed by decreasing investments in Federal debt. Another small portion may be financed by selling debt not subject to limit. The remainder of the amount to be financed, ordinarily comprising most of the total, must be financed by selling debt securities that are subject to the statutory limit. Thus, the deficits of the Federal funds and the off-budget Federal entities are shown to be the principal determinants of the change in debt subject to statutory limit.

The trust fund surplus does not have an explicit effect in table E-8. However, to the extent that trust fund surpluses are used to increase

⁸ Data for Federal funds and trust funds are presented in Special Analysis C, "Funds in the Budget."
⁹ The means of financing other than borrowing that are shown in table E-8 exclude amounts attributable to trust funds. It is not known how the trust fund open book balances are divided between cash and monetary assets and liabilities for checks outstanding, etc. In this table they are all assumed to be in liabilities for checks outstanding, etc.

Table E-8. FEDERAL FUNDS FINANCING AND CHANGE IN DEBT SUBJECT TO STATUTORY LIMIT (in billions of dollars)

Description	1977 actual	1978 estimate	1979 estimate
Federal funds surplus or deficit (-).....	-54,536	-72,147	-74,485
Deficit (-) of off-budget Federal entities.....	-8,693	-11,514	-12,538
Total, amount to be financed.....	-63,229	-83,661	-87,023
Means of financing other than borrowing:			
Decrease or increase (-) in cash and monetary assets.....	-2,209	7,104	-----
Increase or decrease (-) in liabilities for:			
Checks outstanding, etc.....	2,944	542	-171
Deposit fund balances.....	253	-518	-224
Seigniorage on coins.....	405	553	490
Total, means of financing other than borrowing.....	1,395	7,681	95
Decrease or increase (-) in Federal funds and off-budget entity investments in Federal debt.....	-925	-465	-1,158
Increase or decrease (-) in Federal funds and off-budget entity debt not subject to limit.....	-1,381	-1,518	-1,535
Total, requirements for borrowing subject to debt limit....	-64,142	-77,962	-89,621
Change in debt subject to limit.....	64,142	77,962	89,621

the trust fund holdings of open book balances instead of Federal debt securities, the debt subject to limit is reduced. The increase in open book balances is recorded as an increase in Federal funds liabilities for checks outstanding, etc., in table E-8. This increases the Federal funds means of financing other than borrowing, which in turn reduces the requirements for borrowing subject to the statutory limit. The trust fund open book balances do change from year to year, but they do not usually change a great deal. By law the trust fund surpluses must generally be invested in Federal debt, and during 1970-77 the increase in trust fund holdings of Federal debt equaled 93% of the cumulative trust fund surplus. Consequently, the effect of the trust fund surplus on debt subject to limit is minor.

Since the trust fund holdings of Federal debt are included almost entirely in debt subject to limit, but not in debt held by the public, the amount of debt held by the public is substantially less than the amount of debt subject to limit. Since the trust funds as a group usually have a surplus, the change in debt held by the public from one year to the next is usually less than the change in debt subject to limit. As can be calculated from table E-7, during 1978 and 1979 the debt subject to limit is estimated to increase by \$167.6 billion, whereas the debt held by the public is estimated to increase by \$139.0 billion.

The present analysis helps to show the difficulties in preventing the Federal debt from continuing to rise. Table E-2 showed that the Government would have to borrow from the public even if the budget were balanced, because it would have to finance the deficit of the off-budget Federal entities. Table E-8 shows that the debt subject to

statutory limit would continue to rise even if the budget had a surplus and that surplus was equal to the off-budget deficit. In order for the debt subject to limit not to rise, it would be necessary—as an approximation—for the Federal funds alone (apart from the trust funds) to have a surplus equal to the deficit of the off-budget Federal entities. The same approximate condition is necessary for the gross Federal debt not to rise.

FEDERALLY ASSISTED BORROWING

The effect of the Government on borrowing includes not only its own borrowing to finance Federal operations but also its assistance to certain borrowing by the public. Federally assisted borrowing is of two types: borrowing by Government-sponsored enterprises, and Government-guaranteed borrowing.

The Government-sponsored enterprises were established and chartered by the Federal Government to perform specialized credit functions, but they are now entirely privately owned. The rule governing the budget treatment of these enterprises was established in 1967 in accordance with a recommendation by the President's Commission on Budget Concepts. The Commission, whose report led to the adoption of the unified budget, recommended that the budget exclude those Government-sponsored enterprises that are entirely privately owned.¹⁰ Therefore the transactions of these enterprises are not included within the Federal budget, and their debt is not part of gross Federal debt.

The seven Government-sponsored credit enterprises are essentially financial intermediaries, borrowing in the securities market and lending their borrowed funds for specifically authorized purposes either directly or by purchasing loans originated by the private group that they were established to assist. The borrowing programs of these enterprises are subject to Federal supervision. In addition, they all consult the Treasury Department, either by law or by custom, in planning their market offerings. The Federal National Mortgage Association and the Federal home loan banks are required to obtain Treasury approval of the terms and timing of specific offerings. The Student Loan Marketing Association borrows exclusively from the Federal Financing Bank.¹¹ Besides their Federal sponsorship, all of the enterprises have a history of successful financial performance. Hence, despite the absence of Federal guarantees, the obligations of these enterprises are sold at interest rates only moderately higher than the rates on comparable Treasury issues.

As shown in table E-9, borrowing by the Government-sponsored enterprises was \$7.0 billion in 1977 and is estimated to be \$17.2 billion in 1978 and \$13.9 billion in 1979. In order to show the borrowing by this sector as a whole from the rest of the market, these figures are calculated net of the borrowing by one Government-sponsored enterprise from another. Most of this adjustment during 1977-79 is ac-

¹⁰ Report of the President's Commission on Budget Concepts (Washington: U.S. Government Printing Office, 1967), pp. 29-30.

¹¹ The Student Loan Marketing Association is the only Government-sponsored enterprise whose securities are guaranteed by the Federal Government and can therefore be bought by the FFB.

Table E-9. BORROWING BY GOVERNMENT-SPONSORED ENTERPRISES
(In millions of dollars)

Description	Borrowing or repayment (-)			Debt out- standing end 1979 estimate
	1977 actual	1978 estimate	1979 estimate	
Health, Education, and Welfare: Student Loan Mar- keting Association.....	105	95	130	735
Housing and Urban Development: Federal National Mortgage Association.....	807	2,095	372	33,959
Farm Credit Administration:				
Banks for cooperatives.....	864	726	583	6,288
Federal intermediate credit banks.....	1,589	1,825	2,082	16,562
Federal land banks.....	2,682	2,562	2,961	25,058
Federal Home Loan Bank Board:				
Federal home loan banks.....	-1,409	4,534	3,464	25,157
Federal Home Loan Mortgage Corporation.....	1,045	4,971	4,276	17,867
Total.....	5,683	16,807	13,868	125,627
Less increase in holdings of debt issued by Govern- ment-sponsored enterprises.....	-1,365	-413	-67	2,189
Total, borrowing by Government-sponsored enterprises.....	7,048	17,221	13,935	123,438

counted for by the Federal Home Loan Mortgage Corporation (FHLMC) repaying its debt to the Federal home loan banks.

During these years, as in most periods, borrowing by Government-sponsored enterprises will fluctuate. These fluctuations are dominated by the three enterprises that support the housing market. The year-to-year changes in borrowing by the Federal National Mortgage Association and FHLMC are largely accounted for by changes in their mortgage purchases. The fluctuation in borrowing by the Federal home loan banks is mostly due to fluctuations in its net advances (new advances less repayments) to its member savings institutions and to the FHLMC. The notable rise in borrowing by the Federal home loan banks in 1978 is estimated to occur because of sharp decreases in the repayment of past advances to savings institutions and to the FHLMC together with some increases in new advances to members and in its holdings of short-term securities. These three Government-sponsored enterprises together will have issued three-fifths of the debt outstanding at the end of 1979. Special Analysis F discusses lending by the Government-sponsored enterprises.

The other type of federally assisted borrowing, Government-guaranteed borrowing, consists of loans for which the Federal Government guarantees the payment of the principal and/or interest in whole or in part. Guaranteed (or insured) loans have diverse characteristics. The loans may be made to individuals, businesses, State and local governments, or foreign governments. The guaranteed obligation may be a loan made by a bank or other institutional lender, it may be a security sold in the capital market, or it may be a security sold to the

Federal Financing Bank. Government-guaranteed borrowing is the same as Government-guaranteed lending.

Guaranteed loans include most loan assets sold by Federal agencies. Loan asset sales occur when an agency makes a direct loan and then sells it. A guarantee by the selling agency is usually attached. In some cases the agency sells the direct loans themselves, and in other cases the agency sells securities (sometimes called participation certificates or certificates of beneficial ownership) that are backed by loans that the agency continues to hold and service. Loan asset sales are offsets to the outlays of the agency that sells them, so if the selling agency is in the budget they reduce the amount by which the direct loans of Federal agencies add to budget outlays. The certificates of beneficial ownership sold by the Farmers Home Administration and Rural electrification and telephone revolving fund are a type of loan asset and would be classified as Federal debt instead of guaranteed loans according to the recommendations of the President's Commission on Budget Concepts.¹² However, according to statute the sale of these certificates is required to be treated as the sale of loan assets instead of Federal borrowing. These certificates of beneficial ownership are sold almost exclusively to the FFB. Sales to the FFB during 1977-79 are shown below (in millions of dollars):

	1977 actual	1978 estimate	1979 estimate
Farmers Home Administration.....	4,965	6,575	7,180
Rural electrification and telephone revolving fund.....	---	455	720

Loan guarantees are designed to allocate economic resources toward particular uses by providing credit at more favorable terms than would otherwise be available in the private market. The major use of guaranteed loans is to support housing, but in recent years guarantees have increasingly been used for other purposes. As shown in table E-10, guaranteed borrowing net of repayments (but before purchases by Federal agencies or Government-sponsored enterprises) was \$20.5 billion in 1977 and is estimated to be \$27.0 billion in 1978 and \$34.5 billion in 1979. Special Analysis F presents detailed data on guaranteed loans and loan asset sales.

TOTAL FEDERAL AND FEDERALLY ASSISTED BORROWING

Table E-10 summarizes Federal and federally assisted borrowing from the public. Federal borrowing from the public is presented in total. Borrowing by Government-sponsored enterprises and guaranteed borrowing are presented both in total and as net amounts, the latter having been adjusted in order to remove double counting in the derivation of total Federal and federally assisted borrowing from the public. Double counting would otherwise occur when a Federal agency or a Government-sponsored enterprise bought or sold a Federal or federally assisted debt security.

Federal and federally assisted borrowing from the public during 1977-79 is made up predominantly of Federal borrowing to finance the large budget deficits. Federal borrowing also finances the Federal Financing Bank's purchases of guaranteed obligations (net of repayments), which are two-fifths of the total increase in guaranteed

¹² *Ibid.*, pp. 8, 47-48, and 54-55.

Table E-10. NET BORROWING FROM THE PUBLIC BY GOVERNMENT, GOVERNMENT-SPONSORED ENTERPRISES, AND GOVERNMENT-GUARANTEED BORROWERS (in billions of dollars)

Description	Borrowing or repayment (-)			Debt outstanding end 1979 estimate
	1977 actual	1978 estimate	1979 estimate	
Federal borrowing from the public ¹	53.5	66.0	73.0	690.8
Borrowing by Government-sponsored enterprises ²	7.0	17.2	13.9	123.4
Less increase in holdings of Federal debt.....	-2.9	.2	.1	1.0
Less increase in Government-sponsored debt held by Federal agencies:				
Federal Home Loan Bank Board.....	-1.5			
Federal Financing Bank.....	.1	.1	.1	.7
Net Government-sponsored borrowing from the public.....	11.4	16.9	13.7	121.7
Government-guaranteed borrowing ³	20.5	27.0	34.5	302.0
Less increase in Government-guaranteed loans held by:				
Federal agencies:				
Federal Financing Bank.....	8.1	10.7	12.6	46.4
Government National Mortgage Corporation.....	-1.0	-.1	-.2	3.0
Government-sponsored enterprises:				
Student Loan Marketing Association.....	.1	.1	.1	.8
Federal National Mortgage Association.....	-.5	.1	-1.1	27.0
Federal Home Loan Banks.....	-*	*	-*	.1
Federal Home Loan Mortgage Corporation.....	-.2	-.2	-.2	1.2
Net Government-guaranteed borrowing from the public.....	14.1	16.5	23.2	223.6
Total, Federal and federally assisted borrowing from the public.....	78.9	99.4	109.9	1,036.1

**\$50 million or less.

¹ See table E-1.

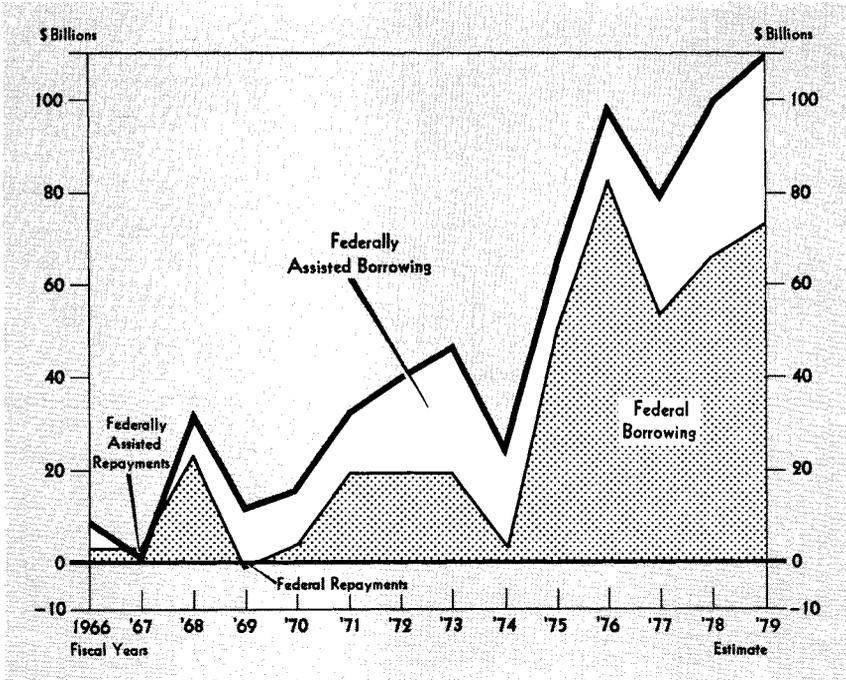
² See table E-9.

³ The same as Government-guaranteed lending. See table F-5.

obligations outstanding. Since the FFB finances these purchases by borrowing from the Treasury, which in turn borrows from the public, these transactions substitute Federal borrowing for guaranteed borrowing in the market. As shown in table F-5 of Special Analysis F, the FFB expects to buy a smaller share, about one-quarter, of the gross new loans guaranteed (before repayments) in these years.

The following chart depicts the trends in Federal and federally assisted borrowing from the public between 1966 and 1979. The series are volatile, and the recent and estimated fluctuations are dominated by the Federal deficit. Total Federal and federally assisted borrowing fell to \$24.1 billion in 1974 because of a sharp drop in the Federal deficit and then rose dramatically to \$97.9 billion in 1976 due to the large deficit in that year. The total fell to \$78.9 billion in 1977 but is estimated to rise considerably in 1978 and 1979 due to higher deficits than in 1977 and due to increases in both Government-sponsored borrowing and guaranteed borrowing from the public.

Federal and Federally Assisted Borrowing



As the chart shows, Federal and federally assisted borrowing is now substantially higher than a decade ago. Much of the increase parallels the growth in the economy and in the total funds raised by the non-financial sector through the sale of debt securities and other forms of borrowing and through the sale of corporate equities. However, although the existence of trends is difficult to discern because of the volatility of the series, to some extent the total Federal and federally assisted borrowing from the public seems to have increased as a proportion of the total funds raised. This proportion increased from 15% during 1960-67 to 21% during 1968-74 and to 33% in 1975-77. Thus, Government programs since 1968 have influenced the allocation of funds raised in financial markets more than they did in the immediately preceding years. During 1975-77 the Government impact was unusually large, and the estimated totals for Federal and federally assisted borrowing imply that it will remain large relative to most earlier years in 1978 and 1979.