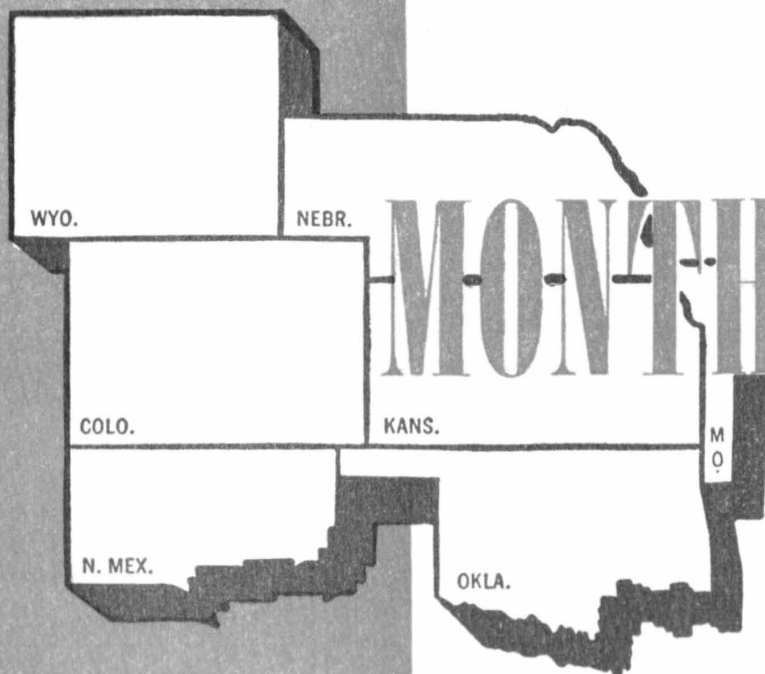


November 1956



MONTHLY REVIEW

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FEDERAL RESERVE BANK
OF KANSAS CITY

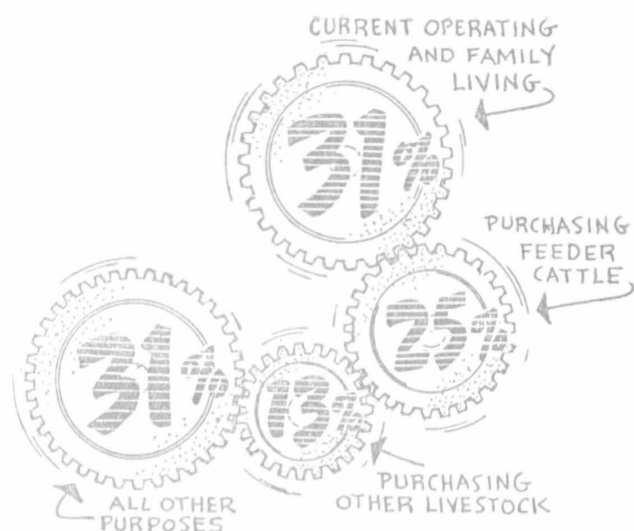
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Bank Lending to Farmers

A NUMBER OF MAJOR developments influencing the volume and characteristics of farm loans have been significant in recent years. Technological developments have caused the number of workers on farms to decline and the investment per worker to increase. Rapid increases in the use of specialized machinery and equipment, irrigation, fertilizer, improved feeding techniques, and numerous other developments have influenced the kinds and amounts of capital needed by farmers and, presumably, their uses of credit. In addition, cost-price relationships and drought in large areas have accentuated the adjustments farmers must make.

These trends have been influencing the size and number of farms, the resources needed on individual farms, and the resources needed for the industry as a whole. Changes of this significance in an industry obviously have an influence on the amount, kinds, and terms of credit that banks are called upon to extend. Such changes also are responsible for bankers varying their techniques in order to service the monetary and credit needs of modern agriculture most effectively.

In view of these developments, a study of loans made by the major agencies that finance



the agricultural industry was conducted as of June 30, 1956. The Federal Reserve System assumed responsibility for supervising the study of commercial banks. It was assisted by the American Bankers Association and the Federal Deposit Insurance Corporation. The subsequent analysis will be based on estimates for the Tenth Federal Reserve District that have been derived from data provided by a random sample of 189 insured commercial banks. Each of these banks reported detailed information on a sample of their farm loans.

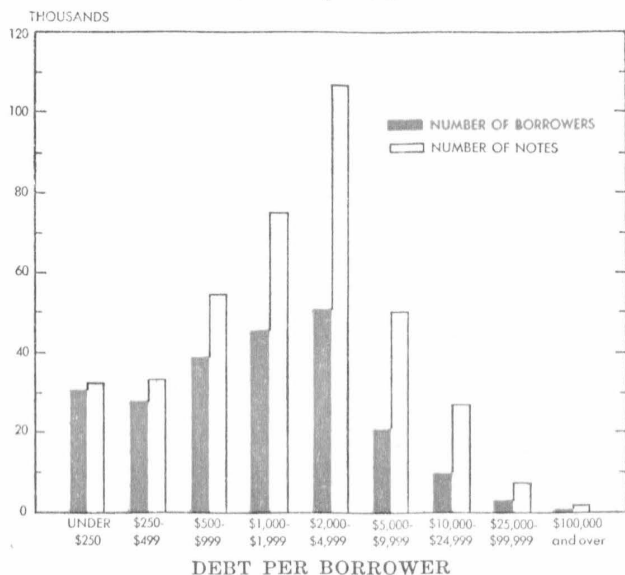
As of midyear 1956, commercial banks in the Tenth District had \$694 million of farm credit outstanding. Farm loans made by banks varied substantially by size, purpose, security, and characteristics of the individual borrower.

Size of Loans

Analysis of the data collected indicates that on June 30, 1956, commercial banks in the Tenth District held 390,368 notes made by 225,390 farm borrowers. This amounts to an average of 1 $\frac{3}{4}$ notes and \$3,080 worth of commercial bank credit for each borrower. An analysis of the data by outstanding bank debt per borrower category indicates there was substantial variation in the average amount

Bank Lending to Farmers

NUMBER OF BORROWERS AND NUMBER OF NOTES BY TOTAL OUTSTANDING BANK DEBT PER BORROWER (June 30, 1956)



of bank credit used per borrower. About 13 per cent of the borrowers had an outstanding bank debt of less than \$250. The average debt per borrower for this group was \$140. The group accounted for only slightly more than one half of 1 per cent of the total dollar volume of farm loans outstanding. At the other extreme, slightly more than one tenth of 1 per cent of the borrowers had an outstanding debt in excess of \$99,999 per borrower. The average debt per borrower was \$190,410 for this group, which accounted for about 9 per cent of the total dollar volume of loans outstanding. The largest number of farm borrowers were in the \$2,000-\$4,999 category. The average debt per borrower for this group was \$3,107, and this category accounted for 22 per cent of all borrowers and also for 22 per cent of the outstanding dollar volume of farm loans in the Tenth District.

As would be expected, borrowers with a large average debt tended to have more notes outstanding per borrower than did those with a small average debt. Borrowers with a debt

of \$250 or less had an average of 1.1 notes, while those with a debt of \$100,000 and over had an average of 8 notes. Borrowers with outstanding debts of \$2,000-\$4,999, making up the most prevalent group, had an average of 2.1 notes.

Size of note also varied substantially according to the chief purpose of the loan. Notes written for purchasing feeder livestock were the largest—averaging \$5,461 per note. Other major purposes and the average size loan for each were: to buy farm real estate, \$4,936; to consolidate or pay other debts, \$2,606; to purchase other livestock, \$2,501; to improve land and buildings, \$1,799; for purposes other than listed, \$1,601; to purchase machinery, trucks, etc., \$1,315; for current operating and family living, \$1,040; and for purchase of auto and other consumer durables, \$633.

Purpose and Maturity

A rapidly changing technology in agriculture would be expected to influence the pur-

MAJOR PURPOSE FOR WHICH BANK CREDIT WAS USED (Outstanding on June 30, 1956)

Major Purpose	Amount Outstanding	Per Cent of Total	Number of Notes	Average Size of Note
Current operating and family living	\$214,957,662	31.0	206,692	\$1,040
Purchase feeder livestock	175,058,139	25.2	32,054	5,461
Purchase other livestock	90,730,057	13.1	36,274	2,501
Purchase machinery, trucks, etc.	76,180,847	11.0	57,917	1,315
Purchase farm real estate	64,332,911	9.3	13,034	4,936
Consolidate or pay other debts	41,753,918	6.0	16,020	2,606
Improve land and buildings	14,973,264	2.1	8,323	1,799
Purchase auto or other consumer durables	10,375,178	1.5	16,382	633
Other	5,870,660	0.8	3,668	1,601
Total, all purposes	\$694,232,636	100.0	390,368	\$1,778

pose for which funds are borrowed as well as the quantity borrowed. Although comparable benchmark data from previous studies are not available for comparative uses, this survey was prepared to show the current amount of outstanding bank debt by major purpose. These data are useful as guides for determining the major credit requirements of agriculture and the relationships between purpose and other loan characteristics such as maturity.

Current operating or family living expenses accounted for 31 per cent of the dollar volume of bank loans to Tenth District farmers. Slightly more than 25 per cent of the volume was made for purchasing feeder livestock. Other major purposes for which farm credit was used were to purchase other livestock; purchase machinery, trucks, etc.; purchase farm real estate; consolidate or pay other debts; improve land and buildings; and finance other projects.

Number of notes outstanding was used in the preceding table rather than number of borrowers, since an individual borrower frequently had notes outstanding for more than one purpose. It is of interest to note that more than half of all bank notes outstanding to farmers were made to pay current operating and family living expenses. The average size of this type note, however, was relatively small. The only type of notes that were smaller in size, on an average, were those made for purchasing autos or other consumer durables.

The notes that averaged largest in size on June 30, 1956, were those made for purchasing feeder livestock. The face amount of notes written for this purpose averaged larger than those written for purchasing real estate. Although the number of notes for purchasing feeder livestock was relatively small, their large average size caused the amount of bank credit extended for this purpose to be relatively large.

The purpose for which farmers borrow money also tends to have a significant influence on the maturity of the note. Loans made for paying current operating and family living expenses and for purchasing feeder livestock tend to be short-term loans. Those made for purchasing farm real estate tend to be long-term loans, while those made for most other purposes may require intermediate-term financing.

About 68 per cent of the total volume of bank loans to farmers were written with maturities varying from demand notes to 7½ months. Approximately 18 per cent were written with maturities of 7½ months to 13½ months, 10 per cent with maturities from 13½ to 67 months, and 4 per cent with maturities in excess of 67 months.

Practically all of the notes written for purchase of feeder livestock and current operating and family living were written with maturities of one year or less. This is as would be expected, since income from financing this kind of loan practically always would be anticipated within a year. Since 56 per cent of the dollar volume of commercial bank loans to farmers were written for these purposes, commercial bank loans to farmers tend to have short-term maturities.

Notes written for purchasing farm real estate tended to have longer-term maturities. Only about a third of these notes were written with maturities of less than two years. Furthermore, almost all of the notes written for purchase of farm real estate with maturities of less than two years were not secured by farm real estate. This would indicate that these short-term loans to purchase farm real estate were made: (1) to individuals with substantial amounts of liquid assets; (2) as intermediate loans while other financing was being arranged; and (3) as temporary loans while other assets were being converted into cash.

Bank Lending to Farmers

Practically all of the two thirds of the dollar volume extended for purchase of farm real estate that was secured by farm real estate was written with maturities of more than two years.

About 16 per cent of the farm notes written for purposes other than purchase of feeder livestock, current operating and family living, and purchase of farm real estate had maturities of two years or more. This category would include most of the farm notes written for purposes which require intermediate-term credit. However, much of the credit extended in this category was extended as short-term credit. Banks frequently write farm notes with short-term maturities with the understanding that they will be renewed if the financing continues to be needed on the due date. In this connection, it is interesting to note that almost 50 per cent of all borrowers had been in debt continuously with the bank for at least 1½ years. It also should be noted that commercial banks, because of the way in which they are organized, tend to emphasize short-term financing rather than long-term financing. They frequently provide for the longer-term financing requirements of their customers by suggesting other agencies that are in a better position to do long-term financing.

Security

Financing institutions must emphasize safety in extending credit. Consequently, they usually require a financial statement and frequently ask for some type of security. In cases where the borrower has a good financial statement and is otherwise favorably known to the banker, credit often is extended without security. In most other instances, some type of security is required.

More than half of the notes written were secured by chattel mortgages. These notes averaged \$2,120 in size and accounted for 61

BANK LOANS TO FARMERS BY SECURITY
(Outstanding on June 30, 1956)

Type of Security	Dollar Volume Outstanding	Number of Notes	Average Size of Note
Unsecured	\$155,032,900	149,999	\$1,034
Endorsed or co-maker	17,741,670	15,952	1,112
Chattel mortgage	425,795,034	200,804	2,120
Real estate mortgage, no Government guarantee	74,286,589	16,903	4,395
Real estate mortgage with Government guarantee	6,246,768	2,254	2,771
Other security	15,129,675	4,462	3,391
Total	\$694,232,636	390,368	\$1,778

per cent of the dollar amount of all bank loans outstanding to farmers. A large number of farm notes also were written on an unsecured basis. They averaged \$1,034 in size and accounted for 22 per cent of the dollar amount of all bank loans outstanding to farmers. Loans secured by farm real estate accounted for 12 per cent of the outstanding dollar volume of all farm loans. The average size of note when secured by real estate without Government guarantee was \$4,395.

Net Worth

There was substantial variation in the net worth per borrower among the individuals that had bank loans outstanding at midyear. About 11½ per cent of the borrowers had net worths of less than \$3,000, while almost 4 per

BANK LOANS TO FARMERS BY NET WORTH
(Outstanding on June 30, 1956)

Net Worth of Borrower	Dollar Volume Outstanding	Number of Borrowers	Average Amount Per Borrower
Under \$3,000	\$ 20,659,447	25,812	\$ 800
\$3,000 - \$9,999	103,475,717	70,193	1,474
\$10,000 - \$24,999	145,606,422	64,712	2,250
\$25,000 - \$99,999	248,328,025	49,995	4,967
\$100,000 and over	172,313,555	8,529	20,203
Unknown	3,849,470	6,149	626
Total	\$694,232,636	225,390	\$ 3,080

cent had net worths of \$100,000 or more. The largest number of borrowers had net worths of from \$3,000 to \$9,999. Almost a third of the borrowers were classified in this net worth group. However, the largest amount of debt outstanding was held by the \$25,000 to \$99,999 net worth group. This is accounted for by the fact that borrowers in this net worth group were relatively numerous and, on an average, were using substantially more bank credit than were borrowers in the other groups where borrowers were more numerous.

Age of Borrower

Farm borrowers 45 years of age and over accounted for a major proportion of the dollar volume of bank loans outstanding to farmers. About half of all farm borrowers were in this age group. Since the average debt per borrower in this group was substantially larger than for any other age group except corporation farms, 56 per cent of the dollar volume of outstanding farm loans was accounted for by this age group. The age groups 35 - 44 and 25 - 34 also were important insofar as number and dollar volume were concerned. However, both the number of borrowers and average size of loan decreased with the lower age groups. Although the amount of bank loans to farmers under 25 years of age was relatively unimportant, several factors contribute to this situation. In a number of instances, borrowers under 25 had co-signers for their notes and in this case the age of the older signer was used in summarizing the data. Furthermore, the number of farmers in this age group is small. Those that are in this age group frequently borrow small amounts or borrow from their fathers.

It should be pointed out that net worth per borrower tends to be related to age. Farmers under 25 years of age have not had much of an opportunity to build up substantial net

BANK LOANS TO FARMERS BY AGE
(Outstanding on June 30, 1956)

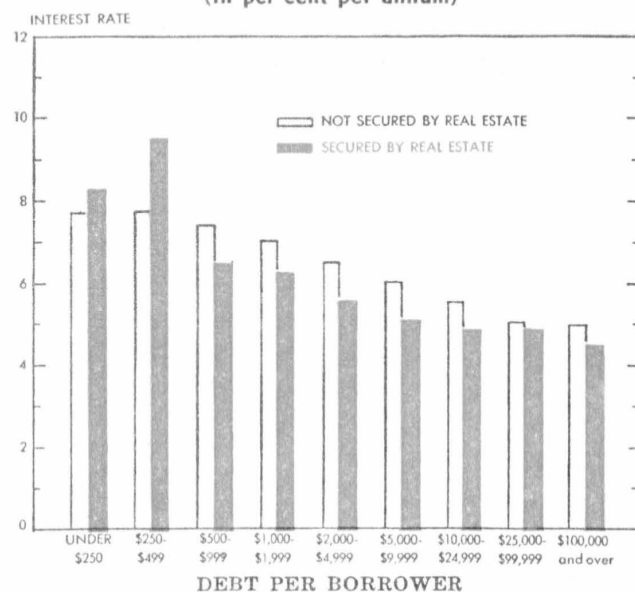
Age	Dollar Volume Outstanding	Number of Borrowers	Average Debt Per Borrower
Under 25	\$ 8,622,243	7,237	\$ 1,191
25 - 34	86,552,151	37,189	2,327
35 - 44	181,875,234	63,489	2,865
45 and over	391,557,236	111,120	3,524
Corporation farming	21,776,302	206	105,710
Unknown	3,849,470	6,149	626
Total	\$694,232,636	225,390	\$ 3,080

worths. Although a few farmers in this age group were listed as having a net worth of from \$25,000 to \$99,999, none were listed as having a net worth in excess of \$100,000. On the other hand, farmers 45 years of age and over accounted for about 82 per cent of the net worths of \$100,000 and over. Most of the remaining 18 per cent were in the 35 to 44 age group.

Interest Rates

The average interest rate charged for all loans made by banks was 6.11 per cent. Rates

INTEREST RATES FOR AGRICULTURAL LOANS
BY SIZE, JUNE 30, 1956
(In per cent per annum)



charged tend to vary with size of loan, security, method of repayment, purpose, the various characteristics of the individual borrower, availability of credit, and, perhaps, several other influences. The interest rate charged by commercial banks for loans secured by real estate averaged 5.18 per cent. Those not secured by real estate averaged 6.24 per cent.

Rates varied by size of note from an average high of 9.57 per cent for loans secured by real estate in the \$250-\$499 category to an average low of 4.5 per cent for loans secured by real estate in the \$100,000 and over category. The rates for loans not secured by real estate varied from an average high of 7.74 per cent for the \$250-\$499 category to an average low of 4.95 per cent for the \$100,000 and over group.

If the loans made by commercial banks are grouped by major purpose, the rates charged varied from a low of 5.08 per cent for loans made to purchase real estate to a high of 6.77 per cent for loans made for intermediate-term purposes. It should be noted that it is difficult to determine causes of variation in rates. For example, the rate on loans made to purchase real estate may be low because of size, security, and factors other than purpose.

Conclusions

Commercial banks in the Tenth District were providing slightly more than two and one half times as much credit to farmers in mid-1956 as they did at the time of a similar survey conducted in mid-1947. Although the number of notes outstanding to farmers as of mid-1956 was somewhat larger than in mid-1947, a major part of the increase in volume was accounted for by the increased average size of note. Comparisons on a per borrower basis cannot be made, since such data were not obtained in the 1947 survey.

Although it is difficult to make specific comparisons because of differences in the two surveys, it is apparent that commercial banks are continuing to write a major proportion of their farm loans as short-term loans. However, the fact that nearly 50 per cent of their customers had been in debt with the bank continuously for more than 1½ years, as of mid-1956, indicates that longer-term credit needs are being met by renewal of notes. Interest rates in mid-1956 were almost the same for nonreal-estate loans (6.2 per cent as compared with 6.1 per cent) as they were in mid-1947. For real-estate loans, rates averaged one half of 1 per cent higher in 1956 (5.2 per cent as compared with 4.7 per cent).



Federal Investment Funds

in the

Money Market

THE PAST 20 YEARS have witnessed rapid development of an important institutional buyer of Treasury securities—the U. S. Government Investment Accounts. At the end of fiscal 1936, U. S. Government Agencies and Trust Funds held \$1,959 million in Treasury issues, less than 6 per cent of the total outstanding. This figure had grown to over \$53 billion, almost 20 per cent of the total outstanding, by June 1956.

The old-age and survivors insurance (OASI) trust fund is now the largest of the accounts, holding more than \$22 billion in Government securities on June 30 of this year. Recent estimates indicate a prospective growth in this fund which appears to ensure continuing enlargement of the combined Investment Accounts during the remainder of the century. The 1955 annual report of the OASI Board of Trustees indicated that, under legislative provisions as of June 30, 1955, OASI reserves would reach \$99 billion by the year 2000 if intermediate-cost estimates were employed.

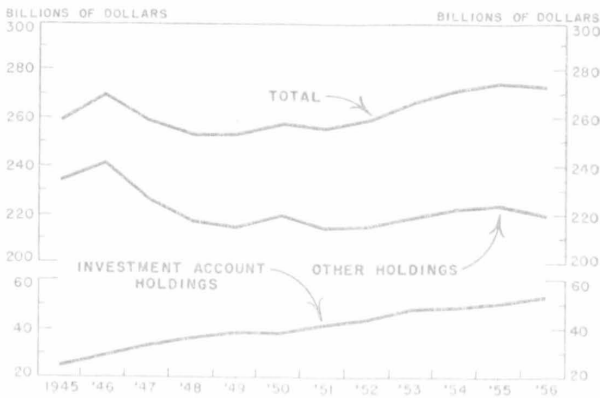
This figure reflects a favorable Congressional attitude towards the development of a sizable invested reserve fund, the income from which may be utilized to defray future liabilities under the OASI system. This is not the only method of providing for payment of benefits in the future. For example, Congress could elect to finance expanding benefit outlays en-

tirely through a gradual progression of contribution rates. And it must be recognized that Congressional policy governing the financial basis of the OASI system is subject to change. Barring fundamental changes of this character, the Federal Investment Funds may absorb a material proportion of the total supply of Federal debt obligations at least over the next four or five decades.

So rapid has been the growth of the Investment Accounts that the volume of Federal securities available for public ownership has declined since 1945, despite a post-World War II expansion in the total volume outstanding. Growth in the security holdings of the Investment Funds from June 1945 to June 1956 was more than twice the increase in the total supply of Federal securities. Future variations in Federal debt obligations available for public ownership will, of course, depend upon changes in the total Federal debt as well as upon growth in the Investment Funds. Nevertheless, assuming a given total volume of Federal debt issues, acquisitions by the Investment Accounts serve to reduce the supply in public hands.

With absorption of Government securities taking place on this scale, it is of interest to consider the possible impact of Investment Account transactions on the money and capital markets, particularly with respect to the struc-

FEDERAL SECURITIES OUTSTANDING



SOURCE: U. S. Treasury Department.

ture of interest rates on Treasury and other securities. Indicating the nature of these effects is the principal purpose of this article. This analysis requires that attention be given to such factors as the influence of Investment Account buying on the supply of money and bank reserves, the types of securities purchased for the Accounts, and the impact of growth in the Accounts on the volume of saving.

Structure and Past Growth of the Accounts

Preliminary to discussing the operations of the Investment Funds, it may be helpful to look at the general nature and relative sizes of the individual accounts and to indicate the source of growth in investments during recent years. Government security holdings of the individual accounts ranged from \$20.6 billion in the OASI trust fund on June 30, 1955, down to \$1,000 held by the U. S. Naval Academy museum fund on the same date. The bulk of the issues held is concentrated in eight accounts; the accompanying table itemizes the size of these eight at the end of selected fiscal years. Growth in the security holdings of these eight accounts has dominated the increased holdings of all Investment Funds over the

past 15 years, and since 1945, expansion of the OASI trust fund has accounted for 55 per cent of the increase in total holdings.

Most, but not all, of the funds available for investment are administered by the Secretary of the Treasury as managing trustee for the accounts. Virtually all of these funds are used to purchase obligations of the Treasury. A few of the accounts hold guaranteed securities of Federal agencies, although these have been a small and diminishing proportion of total investments in recent years, amounting to only \$12 million at the end of 1955. An insignificantly small volume of other securities also is held.

Most of these security holdings—such as those of the OASI, unemployment, and civil service retirement trust funds—represent investment of reserves accumulated for the payment of benefits, and are comparable in this respect to the reserves of an insurance company. Security holdings of some of the smaller trust accounts represent more or less permanent investments, the income from which is utilized to defray operating expenses of the institutions or persons for whom the fund was

FEDERAL SECURITY HOLDINGS OF GOVERNMENT AGENCIES AND ACCOUNTS (Par value in millions)

Funds and Accounts	June 30 1940	June 30 1945	June 30 1950	June 30 1955
Federal old-age and survivors insurance	\$1,738	\$6,546	\$12,639	\$20,579
Unemployment trust	1,710	7,307	7,413	8,443
Civil service retirement and disability	550	1,848	3,801	6,152
National service life insurance	—	3,187	5,342	5,346
Railroad retirement	79	501	2,058	3,486
Postal Savings System	1,218	2,575	3,038	1,997
Federal Deposit Insurance Corp.	346	835	1,276	1,711
Government life insurance	828	1,141	1,292	1,233
All other	622	990	969	1,591
Total	\$7,091	\$24,930	\$37,828	\$50,538

SOURCE: U. S. Treasury Department.

created. Holdings of a third group, those of Government agencies such as the Federal Deposit Insurance Corporation and the Federal home loan banks, reflect the investment of reserve balances to meet potential claims, and other funds not immediately employed elsewhere.

Types of Securities Purchased

The types of securities purchased for the major Investment Funds are controlled by legislative provisions which may be illustrated by reference to regulations governing investments for the two largest accounts, the OASI and unemployment trust funds.

In the Social Security Act Amendments of 1939, which established the OASI trust fund, the Secretary of the Treasury as managing trustee was instructed to purchase for the fund either Treasury issues or securities guaranteed by the United States. Public issues could be acquired either on original issue or in the market at prevailing prices. Alternatively, special obligations could be issued to the fund with a yield approximately equal to the average rate of interest on the entire interest-bearing Federal debt at the time of issuance. (Under the 1956 amendments to the Social Security Act, the yield on special issues will henceforth be determined by the average interest rate on marketable Treasury obligations with an original maturity of five years or more.) Special obligations, however, were to be issued to the fund only if the trustee determined that purchase of public issues was not in the public interest. Investments of the unemployment trust fund, the second largest account, may consist of either special or public issues, with the restriction that public issues purchased must provide an investment yield not less than the yield on special obligations. Special obligations issued to this fund have a yield approximately equal to the average rate

of interest on the Federal debt.

Regulations governing investment operations of the other Investment Accounts vary somewhat from those noted above. For the two largest accounts, however, it seems apparent that the Treasury has considerable flexibility in formulating investment policies. The decision to invest OASI reserves in special or public issues rests on questions of public interest. These are obviously complex questions which are open to a variety of possible interpretations. For the unemployment trust fund, the allocation of investible balances between special and public issues is also left to the discretion of the Treasury. The choice among types of public issues purchased for the unemployment trust fund is somewhat limited, being confined to issues with a yield equal to or greater than the average interest rate on the Federal debt. Investments of the OASI fund, on the other hand, are not circumscribed in this respect.

On June 30, 1955, the OASI trust fund held \$18.2 billion in special issues and \$2.3 billion in public obligations, all long-term marketable or convertible bonds. Holdings of public issues were quite stable over the previous seven years, while ownership of special obligations expanded \$10.5 billion. This distribution evidently indicates that large purchases of public issues have been regarded as contrary to the public interest. Securities held by the unemployment trust fund are also predominantly special issues (\$7.5 billion of the \$8.4 billion total held on June 30, 1955) and holdings of public issues divided between long-term marketable and convertible bonds. Net acquisitions of public issues totaled \$166 million in the seven years ending June 1955. The fact that public issues purchased for the OASI fund have been predominantly long-term marketable or convertible bonds suggests that a high income-

Federal Investment Funds

NET MARKET TRANSACTIONS IN FEDERAL SECURITIES FOR INVESTMENT ACCOUNTS HANDLED BY THE TREASURY (In millions of dollars; negative figures are net sales)

Month	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
January	+0.1	-0.2	+8.8	-6.6	+36.8	+22.1	+24.6	+7.0	+23.0	-1.3
February	-	+176.9	-1.8	+13.5	+261.2	+6.7	+8.8	-4.0	+77.2	-9.8
March	-4.7	+106.8	+5.1	+6.3	+482.7	+0.5	+12.9	-22.4	+18.9	+10.7
April	-61.3	-12.1	+1.5	+1.1	+8.4	+19.9	+36.2	-2.9	+29.9	+46.7
May	-338.6	-30.4	-54.7	-1.9	+11.4	+2.9	+35.9	+2.8	+56.2	+5.7
June	-359.2	+1.1	-88.4	+5.1	+3.5	+1.5	+20.1	-45.5	+22.5	+398.8
July	-609.1	+5.4	-0.1	+8.2	+0.2	+1.4	+7.9	-21.7	+74.8	+49.2
August	-308.1	+4.4	+3.8	-2.0	+4.7	+1.9	+0.4	-17.2	+20.3	
September	-123.1	+7.2	+4.6	+5.0	+2.8	+3.5	+38.4	-10.0	+11.8	
October	-14.1	+0.1	-1.7	+5.8	+8.4	+16.5	+17.0	+21.1	-30.7	
November	+221.0	-0.8	+11.5	+10.7	-3.6	+11.7	-1.1	+14.2	+7.9	
December	+696.4	-0.2	-0.1	+7.0	+29.0	+8.2	+0.6	+41.0	+234.8	

SOURCE: U. S. Treasury Department.

earning potential has been considered in formulating investment policies. This has not been the sole objective, however. The yield on the fund's assets could have been further increased by larger purchases of public issues similar to those held, while reducing the rate of acquisition of special obligations.

The distribution of security holdings noted above typifies the investment operations of all the Investment Funds combined. Holdings are predominantly special issues; public issues purchased consist chiefly of long-term marketable or convertible obligations. It is evident, therefore, that transactions of the Investment Accounts in marketable issues are normally on a moderate scale. The accompanying table, showing market transactions of Investment Accounts handled by the Treasury, illustrates this point, but it also provides notable exceptions to the rule. Unusually large sales of public issues occurred from May through September 1947. Purchases of marketable obligations exceeded the typical volume in November and December 1947, February and March 1948, February and March 1951, and more recently in December 1955 and June 1956. Transactions in marketable obligations

on a larger-than-usual scale may reflect a re-allocation of investible balances for the purpose of increasing the income-earning potential of a particular fund. They may also represent decisions of the Treasury with respect to broader aspects of debt management policy. Thus, sales of public issues from the Accounts during the middle of 1947 and purchases in late 1947 and early 1948—involving switches between special and public issues—were reported by the Secretary of the Treasury, in his annual report for fiscal 1949, to have been designed to influence the market prices of long-term Government bonds.

Money Supply, Bank Reserves, and Securities Outstanding

Security purchases by the Investment Accounts represent the employment of funds which are not immediately disbursed in the form of current expenditures. Receipts of the Accounts are derived from interest earned on investments as well as from contributions of employers and employees under the social insurance system. In either case, these receipts ultimately are derived from the public, since interest on investments represents funds

obtained from the public through general tax collections or borrowing. The greater part of the Investment Fund receipts are channeled through the Treasury's accounting system, becoming a part of the Treasury's general fund balance until such time as disbursements are made.

Since receipts of the Investment Accounts are chiefly checks drawn against privately held deposit balances, there is a shift of funds from privately owned deposits to Treasury deposits at the commercial banks. If, then, these funds are transferred by the Treasury to the Reserve banks, commercial bank reserves are also reduced. Disbursements from the Investment Accounts in the form of current expenditures and security purchases occur simultaneously, however. If receipts of the Accounts are matched by current expenditures or purchases of outstanding public marketable issues, funds are returned to the public and redeposited in banks as rapidly as they are collected. Thus, neither the supply of money nor the supply of bank reserves is altered. In this respect, Investment Account transactions are no different than other flows of funds through the Treasury involving tax collections and subsequent disbursements. It also is apparent that when outstanding public marketable issues are purchased by the Investment Funds, the supply available for public ownership is correspondingly reduced.

It may not be readily apparent that purchase of special obligations, or marketable obligations at original issue, has parallel effects on the money supply and on the volume of Federal debt issues in public hands. When such obligations are purchased for the Accounts, ear-marked funds are retained by the Treasury rather than returned to the public. As a consequence, the Treasury's cash borrowing requirements are smaller than if public issues had been acquired. Maturing public

issues may be allowed to run off rather than be refunded, or alternatively, the Treasury may raise less cash by new borrowing. The excess of Investment Account receipts over current expenditures in this case is returned to the public indirectly through a subsequent reduction in Treasury indebtedness to the public. This means, in addition, that the volume of securities available for public ownership also declines.

In summary, the growth of Investment Account security holdings has no effect on the money supply or bank reserves other than that created by temporary changes in the size or location of the Treasury's general fund balance. Therefore, security transactions by the Investment Funds should not be expected to provide a general easing or tightening of the money and capital markets, such as accompanies open market operations of the Federal Reserve banks. Securities available for public ownership are reduced immediately if the Investment Accounts purchase outstanding marketable issues, and ultimately through a reduction in Treasury borrowing from the public when special obligations, or marketable obligations at original issue, are acquired by the Accounts.

Private and Government Saving

Accumulated balances in the Investment Accounts, it was noted previously, represent an excess of receipts from the public over expenditures by the Accounts. Because disposable income available for spending and saving is thereby reduced, growth of the Investment Funds may to some degree decrease the volume of private saving in relation to disposable income. It is possible, in addition, that the provision of social insurance benefit payments during an individual's later years may also impair the motive for private saving.

Although the social security system has been

in operation for over 20 years, and reserve funds have increased greatly, experience has revealed little concerning the effect on private saving. To examine the question empirically is virtually impossible, since the impact of the social insurance system cannot readily be isolated from the many other factors influencing private saving habits over the past two decades. It may be observed, of course, that private saving has continued to increase as the economy has expanded, yet the rate of private saving might have been somewhat higher in the absence of the social security system.

It should be noted, however, that any decline in private saving created by growth of the Investment Funds tends to be offset by enlarged Government saving. Growing social insurance reserves are a part of the total volume of current saving. As these reserves are invested in Government securities, the volume of Treasury issues held by individual and institutional lenders is reduced, and the capacity of these investors to acquire other securities is increased. Loanable funds thus placed in the money and capital markets become a part of the total supply of current savings available to all borrowers. It is possible, therefore, that growth of the Investment Accounts may alter the form, but not the amount, of total saving, thereby leaving the over-all supply of loanable funds and the level of interest rates unchanged.

That part of total saving represented by the accumulation of social insurance reserves has a tendency to vary directly with the demand for loanable funds, so that purchases of Government obligations by the Investment Accounts are likely to be largest during periods in which heavy demands on the capital markets are depressing the prices of outstanding securities. Cyclical variations in the growth of the Investment Accounts are explained by the fact that receipts and benefit payments of

the two major trust funds—the OASI and unemployment trust funds—reflect activity levels prevailing in the economy. Receipts of both of these accounts are based on a percentage of payroll of covered persons, expanding as employment and income rise in the economy, and contracting in periods of recession. Benefit payments under the unemployment insurance system (and to a minor extent under the OASI system) are inversely correlated with the level of economic activity, rising as employment declines.

The Structure of Interest Rates

Apart from its impact on total saving and on the level of interest rates, growth of the Investment Funds may have the effect of altering the structure of yields on outstanding securities. Such an effect is suggested by the fact that Investment Account purchases reduce the supply of Treasury issues that would otherwise be available for public ownership. This argument is inconclusive, however, unless it can be shown that security acquisitions by the Accounts elevate the total demand for a given total supply of Federal debt issues.

Saving through the medium of increases in the size of the Investment Accounts initially creates a demand exclusively for Government securities. If this volume of saving had entered the market through private channels—for example, through purchases of life insurance policies or shares in savings and loan associations—it seems improbable that the institutions receiving the funds would have elected to place all of these funds in the Government securities market. Rather, it is more likely that these institutions would have added a variety of securities, both public and private issues, to their investment portfolios. For this reason, the growth of the Investment Funds, assuming an unchanged rate of total saving, may create a net increase in the demand for Gov-

ernment issues at the expense of a decline in the demand for other debt obligations. This argument implies that although the existence of growing Investment Accounts may not affect the over-all cost of credit, borrowing costs of the Treasury may decline relative to interest costs paid by other borrowers.

This influence on the structure of interest rates would be gradual, since yearly increases in the size of the Accounts are moderate. The quantitative significance for the structure of interest rates over the long run is, moreover, open to question. The absorption of Government securities by the Investment Funds has been very material in the past decade, yet the existence of an upward trend in the yield differential between Treasury and other securities is not clearly apparent. Of course, other factors may have been operating simultaneously to reduce this differential. However, it seems justifiable to conclude that acquisition of Government securities by the Accounts has not unduly affected the borrowing costs of the Treasury relative to other borrowers.

Another possibility is that Investment Account transactions may have at least temporary effects on the maturity structure of yields on Treasury issues. When Treasury securities acquired by the Accounts are predominantly special issues, there is not a disproportionately strong impact on prices in any particular sector of the Government securities market. When public marketable issues are acquired, on the other hand, price effects are immediately felt in that sector of the maturity spectrum in which purchases are made, and the yield curve in the Government securities market may be affected materially.

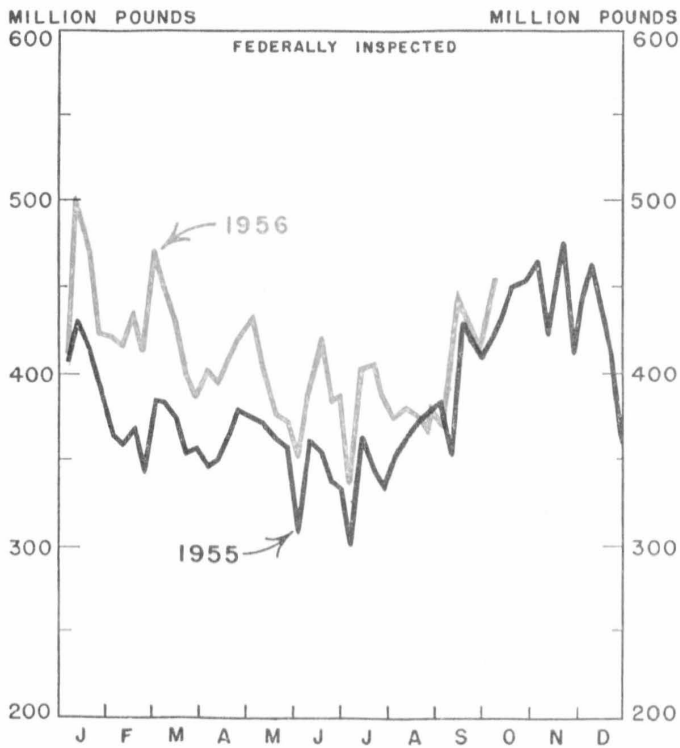
As indicated previously, marketable issues acquired by the Accounts usually have been long-term bonds, and the volume of market transactions is normally on a modest scale. However, regulations governing investment

policies of the Accounts are not such as to preclude sizable transactions in marketable issues, nor are acquisitions of Treasury securities strictly confined to long-term bonds. Within the past year, for example, the Investment Accounts have been active buyers of short-term issues. From June 30, 1955, through May 31, 1956, the Accounts acquired \$968 million in marketable issues. Of this total, all but \$2 million were in bills, certificates, and notes. These purchases included \$371 million for accounts handled by the Treasury and the remainder for other accounts. The Investment Funds were particularly active around the date of the December 1955 refunding of maturing notes and certificates. Holdings of the new issues on December 31 were about \$275 million more than the volume of the maturing issues held on October 31.

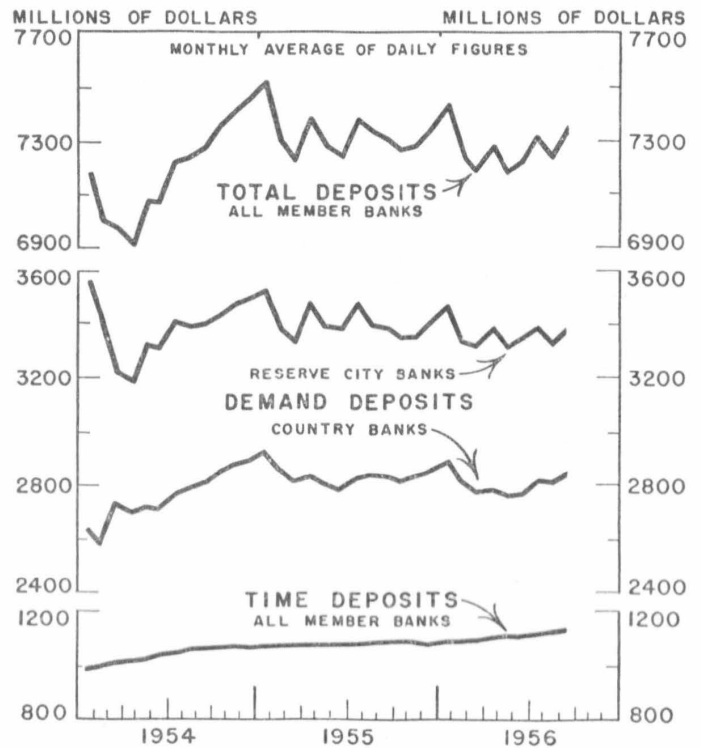
Summary

The prospective growth of the Federal Investment Funds indicates that they may continue to acquire a large volume of Government securities over the remainder of the century. Security purchases by the Accounts, unlike open market operations of the Federal Reserve banks, have only transitional effects on the privately held money supply and on bank reserves. The excess of current receipts over expenditures of the Accounts is part of the total volume of saving. These funds flow back into the money and capital markets and become a source of loanable funds to a variety of borrowers. While the concentration of Government securities in the hands of the Investment Accounts may to some degree affect the yield differential between Treasury and other securities, it is not clear that this influence is of material significance. Security purchases by the Accounts in any short time period, however, may have an impact on the maturity structure of interest rates on Treasury issues.

TOTAL RED MEAT PRODUCTION, BY WEEKS United States



MEMBER BANK DEPOSITS Tenth District



BANKING IN THE TENTH DISTRICT

District and States	Loans				Deposits			
	Reserve City Member Banks		Country Member Banks		Reserve City Member Banks		Country Member Banks	
	Aug. 1956	Sept. 1955	Aug. 1956	Sept. 1955	Aug. 1956	Sept. 1955	Aug. 1956	Sept. 1955
	September 1956 Percentage Change From							
Tenth F. R. Dist.	0	+7	0	+9	+1	+1	+1	+2
Colorado	0	+13	0	+2	0	-1	+3	0
Kansas	-3	0	0	+13	-2	-1	-1	+1
Missouri*	+1	+5	+1	+7	+1	0	+2	+4
Nebraska	-3	+2	+1	+1	+2	-2	0	-5
New Mexico*	**	**	0	+17	**	**	+2	+6
Oklahoma*	+1	+9	0	+14	+4	+7	+3	+8
Wyoming	**	**	0	+7	**	**	+2	+5

*Tenth District portion only.

**No reserve cities in this state.

PRICE INDEXES, UNITED STATES

Index	Sept. 1956	Aug. 1956	Sept. 1955
Consumer Price Index (1947-49=100)	117.1	116.8	114.9
Wholesale Price Index (1947-49=100)	115.3	114.7r	111.7
Prices Rec'd by Farmers (1910-14=100)	236	237	235
Prices Paid by Farmers (1910-14=100)	287	288	279

r Revised.

TENTH DISTRICT BUSINESS INDICATORS

District and Principal Metropolitan Areas	Value of Check Payments		Value of Department Store Sales		*Value of Residential Building Permits	
	Percentage change—1956 from 1955					
	Sept.	Year to date	Sept.	Year to date	Sept.	Year to date
Tenth F. R. Dist.	+1	+5	-1	+3	-18	-29
Denver	-1	+9	0	+7	+46	-37
Wichita	-5	-2	+1	+2	+23	-39
Kansas City	-4	+3	-6†	-2‡	-9‡	-12‡
Omaha	-6	+1	-4	-3	+66	+49
Okla. City	0	+8	-1	+5	-51	-39
Tulsa	+13	+10	+1	+4	-44	-27

*City only. †Kansas City, Mo., only. ‡Kansas City, Mo., and Kans.