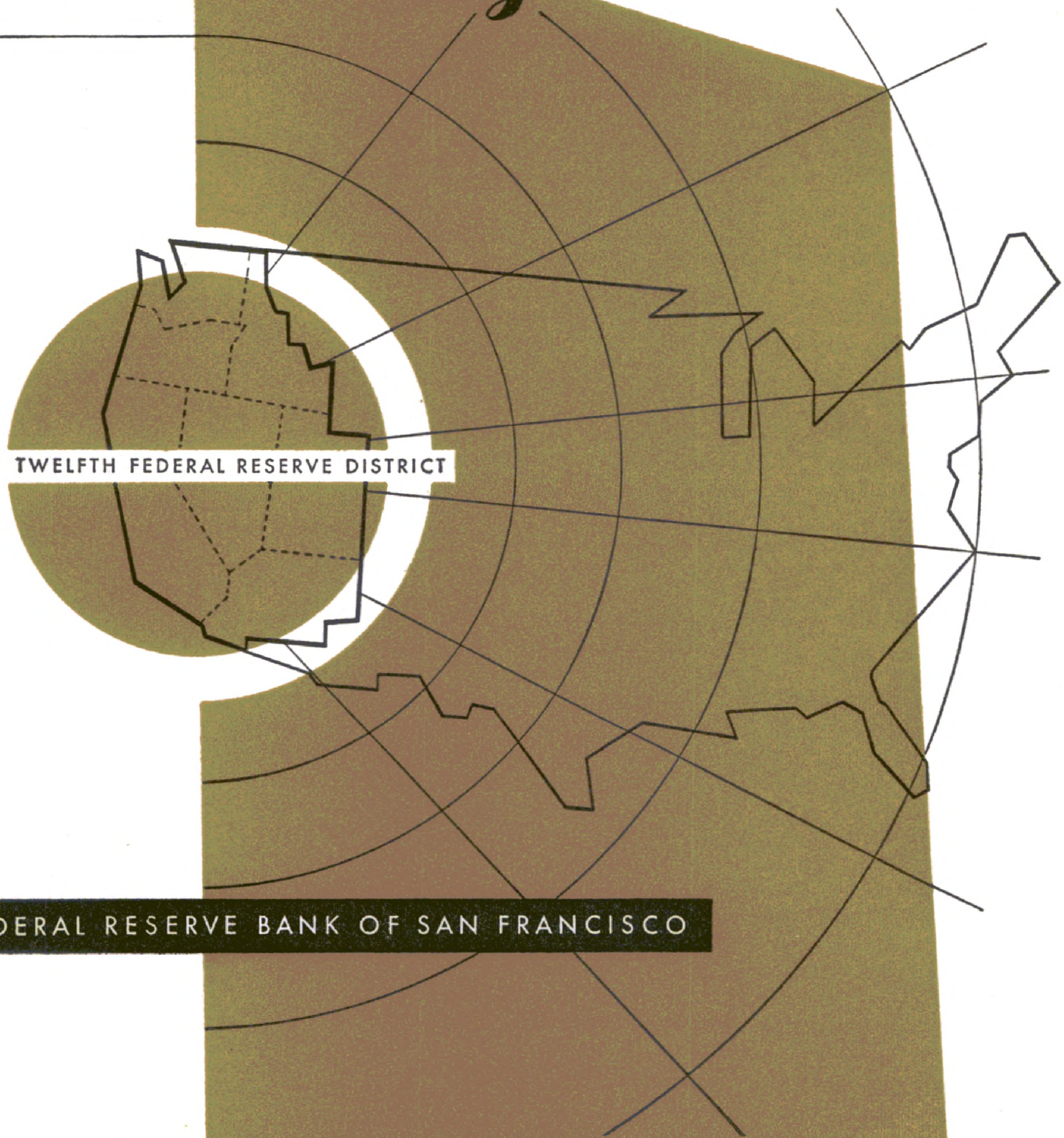
Monthly Review



June 1957

CREDIT DEMAND LUSTY IN 1957

THE money and capital markets have remained relatively tight so far this year even though the rate of growth in over-all business activity has slowed down. This situation appears to present something of a paradox, since it might seem reasonable to conclude that a slowing down in the rate of growth of business activity would probably be accompanied by some easing in credit conditions as well. Some light on this seeming paradox is cast by the more detailed examination which this article undertakes.

The relatively small amount of borrowing in total consumer and mortgage credit categories and in other types of bank loans has been rather widely discussed and publicized. Perhaps not quite so generally realized is the fact that the demand for funds by the United States Treasury and the raising of new capital by corporations and state and local governments have been of unusually large size, particularly in the first quarter. Owing entirely to the demand in these latter two categories, the total amount of loans in the first quarter in all five of the categories named was approximately $1.7 billion larger this year than last.

Although the total demand seemed to moderate in the second quarter as a whole, both the money and capital markets remained under pressure and interest rates in both markets rose rather sharply in the second half of May and early June. The rise in short-term rates reflected in part the effect of the Treasury's having to raise $1.5 billion in new cash late in May. Market reports indicated that long-term rates on both Federal and other types of securities rose primarily from pressure originating in the corporate and municipal securities market. Although the volume of new issues sold in April and May was below the level of the first quarter, the prospects of continued large demand in the capital market have contributed to the recent increases in rates.

A brief review of each of the principal types of demand for funds will provide a better understanding of the particular factors that have been responsible for the large over-all demand that has existed this year.

Treasury and Capital Market Borrowings Up

Treasury's first-quarter requirements unusually large

Because of the concentration of tax receipts in the first quarter of the calendar year, the Treasury typically is able to reduce its outstanding debt considerably from the peak that develops toward the end of the fourth quarter each year. Largely as a consequence of a rather rapid rise in defense expenditures in the early months of this year, the Treasury was able to reduce its gross debt outstanding by only $1.6 billion during the first quarter, in contrast with a decrease of $4.5 billion in the corresponding period of 1956. In other words, this year holders of Government securities received $2.9 billion less in cash from redemptions, thereby limiting the funds which they had available from this source for new investment. In addition, there were changes in the composition of debt ownership, resulting from the cashing in of Savings Bonds, the demands for dollar exchange of the International Monetary Fund, and the demand for cash by holders of maturing securities which forced the Treasury to raise additional funds in the short-term money market. In both relative and absolute terms this was a large change from last year.

Funds raised in capital market set first-quarter record

The $5.2 billion of new capital raised through the sale of securities of corporations and of state and local governments during the first three months of this year was the largest quarterly volume on record and $1.5 billion larger than a year ago. Corporate securities accounted for $3.5 billion of the total, which was an all-time quarterly high and two-thirds more than in the corresponding period of 1956. This record volume no doubt reflects the higher level of expenditures this year upon plant and equipment, which typically require considerable financing through the capital market. Such expenditures were estimated to be at a record high of nearly $37 billion (seasonally adjusted annual rate) in the first quarter of this year, which is $4 billion larger than in the corresponding period a year ago.

Manufacturing companies accounted for over one-third of all corporate offerings in the first quarter, and their volume of $1.3 billion was twice that of a year ago. Nearly all groups of manufacturing industries shared in this marked increase in security sales, with the primary metals and the petroleum and petroleum refining groups having the largest percentage increases. The textile industry was the only group in the manufacturing sector that had a significant decline in security sales from a year ago.

Electric, gas, and water utilities accounted for nearly another third of the corporate security sales in the first quarter, with a total volume of $1 billion. Communication companies were third in importance with net proceeds amounting to $432 million.

The financial and real estate category was the only major industrial group which had a decline in security sales from the first quarter of a year ago, with most of the decrease reflecting smaller offerings by sales and consumer finance companies. Their smaller need for funds this year stems from the first-quarter decline of $45 million in their outstanding instalment credit compared with an increase of $166 million last year. A lower level of residential construction this year has no doubt contributed to the smaller demand for capital funds by real estate firms.

The $1.7 billion of municipal securities sold in the first quarter of this year was $260 million more than a year ago and the largest amount since the fourth quarter of 1955. These sales reflect the continuing growth in state and local spending as the public need for community facilities of all types expands. The need for schools, highways, sanitary facilities, and many other types of public construction is so pressing that there is little opposition to proceeding with such programs. This is affirmed by the voter approval of $2.6 billion in municipal issues throughout the nation last November, the largest amount on record for a general election. These facts indicate that municipal securities are likely to be offered in substantial volume for many months to come.

Other Demands for Funds Less This Year

All the other major categories of demand for funds as indicated by the volume of loans showed reductions in the first quarter from a year ago, but the declines only partly offset the $4.4 billion increase arising from the Treasury's needs and the sales of corporate and municipal securities.

Slower growth in mortgage loans

Total real estate mortgages outstanding increased $2.6 billion during the first quarter, which was substantially less than the growth in the same quarter in 1955 or 1956 and $750 million below the increase during the fourth quarter of last year. The trend in housing starts on a seasonally adjusted basis has been generally downward since the spring of 1955, although there has been some increase since March 1957. Because of the important role played by FHA and VA loans with their fixed contractual interest rates, the mortgage market has been somewhat more adversely affected by the change in credit conditions than have those security and loan markets in which interest rates may respond more readily to changing demand and supply conditions.

Greater decline in consumer credit outstanding

Total consumer credit outstanding typically declines in the early part of the year as charge accounts are reduced from their Christmas season peak, and some reduction in that portion of consumer credit used to finance instalment purchases often occurs as well. Total consumer credit outstanding dropped $1.4 billion in the first quarter of this year compared with $900 million a year ago. Contributing to the drop this year was a decline of $300 million in instalment credit in contrast to an increase of $100 million last year. Part of this latter difference was attributable to a somewhat smaller proportion of credit sales to total sales of automobiles this year. While total extensions of consumer instalment credit were high in the first quarter of this year, repayments were also high as a consequence of the large increases in consumer credit during the last two or more years.

Bank loans decline during first quarter

Bank loans, excluding real estate and consumer loans which were included in those broad categories already discussed, declined $600 million in the first quarter of this year compared with an increase of $700 million a year ago. Most of the difference between the two periods was accounted for by commercial and industrial loans. Their increase of $1.3 billion in the first quarter of last year was exceptionally large and exceeded the growth in the corresponding period of this year by $900 million. Commercial and industrial loans frequently decline in the first quarter of the year, and consequently the $400 million increase during that period this year reflected a substantial demand for business loans even though it was much smaller than the unusually large increase of last year. The first-quarter increase in business loans was more than offset, however, by declines of $700 million in bank loans for purchasing or carrying securities and $400 million in miscellaneous loans.

One of the important uses of bank loans to business is to finance inventories. Businessmen increased their investment in inventories (after adjustment of book values to reflect changes in physical inventories) by $4 billion in the first quarter of 1956, and a significant proportion of the large increase in bank business loans during that period was probably used to finance those larger inventories. In the first quarter of this year, by contrast, investment in inventories declined by $1.2 billion, which was no doubt partly responsible for the much smaller expansion in business loans.

Owing to seasonal factors affecting their operations, food processors, commodity dealers, and wholesale and retail firms typically reduce their outstanding loans at banks in the first quarter of the year. The drop of $679 million in their loans this year at a sample of banks which regularly report larger loans by industry was more than three times as large as a year ago, but roughly only 20 percent larger than in the same period of the three years preceding 1956. Sales finance companies increased their borrowing from banks during the first quarter of this year compared with a decrease a year ago. However, they raised considerably less new capital through security sales this year than in 1956. But the combined total of their new funds raised through security sales and bank loans was larger this year than last, even though their holdings of installment loans declined slightly in the first quarter of this year compared with a small increase a year ago. All other groups of classified borrowers, except the construction industry, increased their bank borrowing during the first quarter of this year, but by smaller amounts than in 1956.

Second-Quarter Credit Demands Smaller Than in 1956

Although the total demand for funds continued to be large in April and May, it diminished somewhat and reflected, in part at least, the leveling off in business activity that has occurred. Nevertheless, the volume of demand for long-term funds in the first five months of this year, relative to the supply, was so large that it tended to build up a cumulative pressure in the capital market. In particular, the Treasury's need to raise cash by the sale of a new issue in late May created pressure in the money market. Consequently, both short- and long-term rates rose rather sharply in the last half of May and the early part of June.

The Treasury's financial needs

In contrast with the experience in the first quarter, the Treasury's demand for funds in April and May was smaller than it had been a year ago. During those two months the total gross debt of the Treasury increased $400 million in 1956 and $200 million this year. If special issues held by Government investment accounts are excluded, then the demand was $300 million less this year, which means that the demand on the money market was smaller by that amount this year.

This view of the matter does not, however, highlight the truly significant difference in the Treasury's position this year and last during the period from late March through May. The much higher rate of redemption of Savings Bonds this year compared with last, coupled with a rather rapid rise in defense expenditures so far this year, has required the Treasury to resort more often to the sale of public marketable issues to maintain its cash balance. During March, April, and May last year the Treasury did not have to sell marketable issues to raise new cash. This year the situation has been quite different. Late in March $3.4 billion of new issues were sold for cash, and $1.5 billion more were sold in late May.[1] Moreover, on the refunding of more than $4 billion of issues in the early part of May, the holders of more than a fourth of the total demanded cash, which was an extremely high attrition rate. These factors forced the Treasury to make sales of marketable securities to raise new cash and placed much more pressure on the money market than occurred a year ago, even though the over-all debt position of the Treasury resulted in a somewhat curtailed need for funds compared with April and May of last year.

Smaller increase in consumer instalment credit and bank loans

The $259 million increase in consumer instalment credit during April (latest data available) was less than that in the same month of 1955 and 1956. It was, however, $219 million larger than the increase in March of this year. The growth from March to April was concentrated in automobile paper and personal loans. Total consumer credit increased $512 million during April, which was the first monthly gain this year and was $51 million larger than the growth in April last year. However, the greater growth this year was concentrated in charge accounts and no doubt reflects the fact that Easter came on April 1 last year and April 21 this year.

Bank loans and sales of corporate and municipal securities in April and May behaved in a manner similar to that in the first quarter, that is, the growth in bank loans was less and the sale of securities was greater than in the corresponding period of 1956. The $300 million expansion in total loans of commercial banks during April was only half as large as the increase a year ago. In the four weeks ending May 29, total loans of weekly reporting member banks dropped $698 million compared with a decline of $53 million in the corresponding period of 1956. Business loans accounted for roughly half the decline in May of this year and loans on securities contributed most of the remainder. The $369 million decline in business loans was about $100 million larger than a year ago, and loans on securities increased last year. During April and May the growth in bank loans to wholesale and retail concerns, construction firms, metal and metal products producers, public utility and transportation firms, and sales finance companies was considerably less than a year ago, while petroleum, coal, and chemical producers borrowed substantially more.

Second-quarter security sales estimated to be below first-quarter volume

The volume of corporate securities sold in April and May to raise new capital was considerably below the $3.5 billion first-quarter level, which is the largest quarter on record. However, it is estimated that sales in June will rise substantially to $1.4 billion and produce a quarterly total of $3.1 billion, which exceeds the sales in any quarter of 1955 and 1956. Municipal security sales reached their peak so far this year in April when $750 million were sold. Although estimated sales of $425 million in June will be the lowest monthly volume in the first half of the year, if realized they will bring a quarterly total nearly as large as the $1,750 million sold in the first quarter of this year, which was the largest volume since the last quarter of 1955.

If the estimates for corporate and municipal security sales in June are realized, then the demand for funds from the capital market in the second quarter will total $4.8 billion, which is $400 million less than in the first quarter but $400 million more than in the second quarter of 1956.

Data for total real estate mortgages outstanding are available only quarterly, but it is a certainty that the growth in the second quarter of this year will be less than a year ago and may be less than the $2.6 billion increase in the first quarter of this year. Changes in the volume of mortgages outstanding tend to lag behind changes in housing starts. Housing starts in the first four months of this year were significantly

[1] Furthermore, as this article goes to press, the Treasury has just announced a new issue of $3 billion of Tax Anticipation Bills to be sold at the end of June.

below the level of the closing months of 1956. Therefore, it is likely that the volume of mortgages outstanding will grow more slowly in the second than in the first quarter of this year.

This brief review indicates that the over-all demand for funds, although larger in the first quarter of this year than in the same period last year, was probably somewhat smaller in the second quarter of 1957 than in the second quarter of 1956.

Yields on short- and long-term securities have risen sharply

Market reports indicate that the pressure of corporate and municipal security offerings upon the supply of funds became particularly noticeable beginning with the second half of May. Consequently, yields rose rather sharply during that period. These developments also spread to the market for long-term Government securities. In addition, the Treasury's need for funds late in May contributed significantly to pressures in the short-term money market. The market yield on 90-day Treasury bills rose above 3.25 percent in late May and early June, whereas it had been below 3 percent in the first half of May. The new issue of Treasury bills dated June 6 carried a rate of 3.374 percent, the highest since the banking holiday period of 1933. The rate on the succeeding issue dropped to 3.256 percent, then jumped to 3.404 percent the following week. The yield on Government securities in the 3-5 year bracket was about 3.64 percent in early June compared with about 3.5 percent in the first half of May.

Reserve position of banks tighter in second quarter

Owing to the effect of seasonal factors, the reserve position of banks was easier in the first than in the second quarter of this year. The return flow of currency after the holiday season typically adds to bank reserves in the early part of each year. Required reserves also generally decline as deposits drop off following the year-end peak. The Federal Reserve System usually attempts to offset a considerable part of the effect of these seasonal factors through sale of securities in the open market so that the reserve position of banks will not be unduly easy in that one portion of the year. The offsetting effects this year, particularly in January, were less than a year ago, largely because the return flow of currency and the decline in deposits was greater than had been anticipated. Member banks had free reserves in January, that is, their excess reserves were larger than their borrowings from Federal Reserve Banks. In February, the reserve position shifted to one of net borrowed reserves, which means that member bank borrowing exceeded excess reserves, thereby restoring the type of reserve situation that had prevailed since August 1955. Net borrowed reserves increased further in March.

The various pressures in the money and capital markets kept the reserve position of member banks fairly tight during April, May, and early June. During this period member bank borrowing from Federal Reserve Banks exceeded the excess reserves of member banks by amounts ranging from a high of about $700 million on a weekly average basis to a low of about $300 million, with the average for the entire period lying a little below the $500 million level. The Federal Reserve System confined its open market operations during this period to relatively small amounts, sometimes adding to reserves and sometimes diminishing them in an effort to stabilize bank reserves without otherwise influencing money markets.

In summary, the magnitude of the demand for funds so far this year seems to provide more convincing evidence of the continued strength of inflationary pressures than do various other indicators of over-all economic activity, such as trends in employment and industrial production. Moreover, the diminished demand for bank loans, real estate mortgages, and consumer credit may have tended to divert attention from the increased needs of the Treasury and the larger sales of corporate and municipal securities. Although the total demand for funds was somewhat smaller in April and May than it had been during the first quarter, there was increased pressure upon the available supply in late May and early June and interest rates rose sharply as a consequence. The greater evidence of inflationary pressures in the financial markets than in the markets for goods and services suggests that somewhat closer attention than usual to the diverse trends in the financial markets may be rewarding at present in short-range forecasting for the economy.

Commercial Bank Financing of Intermediate-term Farm Investments

ARE intermediate-term loans important to the bankers and the farmers of the Twelfth District? They are, if number of loans is any criterion. Although they are small in average amount, there were over 111,000 of these loans outstanding at Twelfth District banks in mid-1956, and the outstanding balances totalled $213 million.

For the purposes of this article, intermediate-term farm credit may be defined on the basis of the major purpose for which the loan was made. The words "intermediate-term farm credit" suggest a period of time or a maturity period, and we might also define the term as including all farm credit with a maturity period in excess of one year, except credit to purchase farm real estate. Practically all of the farm credit extended by commercial banks in the intermediate maturity zone (approximately one to five years maturity) is included, however, in loans made for the following purposes: the purchase of machinery, consumer durables, and livestock (other than feeder livestock), and the improvement of land and buildings. These are the purposes, therefore, used as the criteria for classifying intermediate-term farm credit in this article.

The common denominator of such loans is that the items purchased have a useful life of several years. Indeed, one of the problems associated with the financing of intermediate-term investments is that of permitting the borrower a repayment period that is related to the useful life of the investment. Loans made for the purchase of machinery or consumer durables are undoubtedly familiar ideas to the readers of this article, and because the useful life of these items extends over a period of several years, they fall within the intermediate-term time period. Loans to finance the purchase of livestock such as milch cows, pigs, sheep, chickens, and all animals or insects which the farmer may need money to purchase to grow for a profit, with the single exception of "feeder" livestock, are also classified as intermediate term, because their useful life also extends over a period of several years.

Feeder livestock, on the other hand, are those animals bought up by certain farmers in quantity and fed grain for three to four months or longer until they are "finished," that is, grown and fattened to the point where, when slaughtered, they will make acceptable steaks and roasts for the table of the meat-eating consumer. Feeder livestock loans are not included in the intermediate-term category because of their generally short maturities.

Land can be "improved" by grading and contouring in preparation for irrigation—a process which may cost several times the price of the unimproved land. It may also need clearing of trees, rocks, or brush; sub-soiling, which sometimes involves plowing with special equipment to a depth of six feet or more; and, more rarely, reclamation from the sea or tidal flats, construction of access roads, etc. It is generally considered proper that such loans should be liquidated over a period somewhat longer than "short-term," and yet these loans are of such a nature as not to require the longer-term mortgage financing generally associated with real estate security.

Intermediate-term credit is not a new requirement of the American farmer. Operators of certain types of farms, such as dairy farms, have relied quite heavily on intermediate-term credit. The importance of this type of credit, however, has increased with changes in agricultural production techniques and the pronounced shifts in consumer preference for various agricultural products that have taken place in recent years.

Consumption of wheat per person, for instance, has been declining, and synthetic fibers have been making substantial dents in markets served almost exclusively by cotton not too many years ago. Such changes prompt some producers to shift to more profitable crops, and intermediate-term credit is often needed during the transition period. Intermediate credit is also used to finance the rising level of farm mechanization which is associated with the declining number of workers on our farms. The approximate doubling of the dollar volume of these loans held by commercial banks between 1947 and 1956 indicates the continuing interest of District banks in intermediate-term bank credit. This rate of growth is roughly comparable to that of bank financing for other agricultural purposes.

The extent of intermediate-term financing by banks varies between sections of the country, as do the terms under which the credit is extended. This is partly a result of differences in banking practices as well as geographical differences in the rate of farm mechanization and shifts in farm production. Even within a bank's service area the use of intermediate credit by one farmer may be quite different from that of his neighbor because of differences in the type of farm operated. This article points out some of these differences and ventures an explanation as to why they exist. The data were obtained from the survey of commercial bank lending to farmers conducted in mid-1956 by the Federal Reserve System. This is the third article prepared from the results of this survey in the Twelfth District.[1]

Intermediate-term loans small and numerous

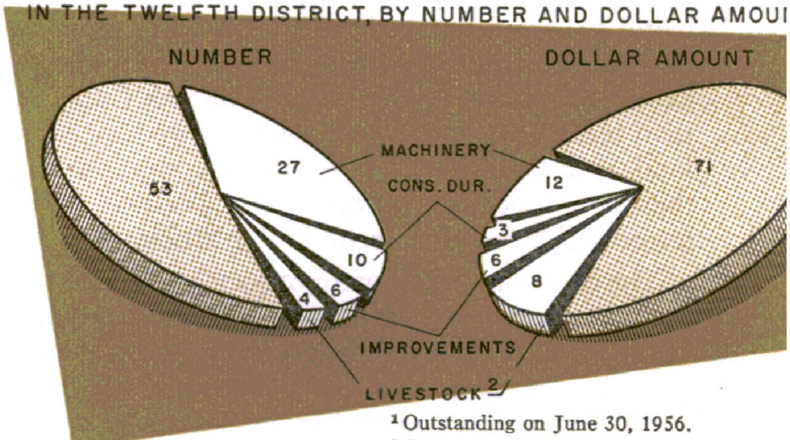
Almost half the farm loans held by District commercial banks in mid-1956 were for intermediate-term investment purposes, as indicated in Chart 1. These loans, however, accounted for less than a third of the dollar volume outstanding. Hence, the average size was considerably smaller than for other types of bank loans to farmers.

As shown in Table 1, there was considerable variation in the average outstanding balance on loans in the District among the various intermediate-term investment purposes. The outstanding balances on livestock loans averaged close to $7,000 while, at the other extreme, loans for purchase of consumer durables averaged less than $900. This wide difference results in part from the generally higher net worth of borrowers financing purchases of livestock. About 85 percent of the number of livestock loans were to farmers with a net worth of $10,000 or more, whereas only a little more than half of the outstanding loans for purchase of consumer durables were made to these borrowers.

In terms of number, loans for purchase of machinery accounted for more than half of the loans, followed by those for purchase of consumer durables. The importance of machinery loans is emphasized when we realize that roughly one of every four farm loans held by District banks was made for this purpose, as indicated in Chart 1. Other types of intermediate-term loans, although less numerous than machinery loans, also accounted for a sizable portion of all farm loans held by District banks.

Chart 1

INTERMEDIATE-TERM LOANS AS A PERCENTAG[E] OF ALL FARM LOANS OUTSTANDING[1]
IN THE TWELFTH DISTRICT, BY NUMBER AND DOLLAR AMOU[NT]



[1] Outstanding on June 30, 1956.
[2] Other than feeder livestock.

The average outstanding balance on notes in the Twelfth District was considerably larger than in the country as a whole for each intermediate-term investment purpose. This reflects the greater average net worth of farm borrowers

[1] Earlier articles in the series were: "Twelfth District Bank Loans to Farmers," *Monthly Review* (November 1956), pp. 140-146 and "Financing of Farmers' Current Expenses by Twelfth District Commercial Banks," *Monthly Review* (January 1957), pp. 4-10.

TABLE 1

FARM LOANS FOR INTERMEDIATE-TERM INVESTMENT PURPOSES
HELD BY COMMERCIAL BANKS, TWELFTH DISTRICT AND UNITED STATES
(outstanding on June 30, 1956)

	Twelfth District					United States				
Purpose	Amount (in millions of dollars)	Percent of total	Number (in thousands)	Percent of total	Average size (in dollars)	Amount (in millions of dollars)	Percent of total	Number (in thousands)	Percent of total	Average size (in dollars)
Purchase of machinery....	$ 90.7	42.7%	63.0	56.8%	$1,440	$ 781.4	46.3%	722.8	54.5%	$1,081
Purchase of other livestock[1]	58.9	27.7	8.6	7.7	6,854	447.2	26.5	234.0	17.7	1,911
Improvement of land and buildings	43.3	20.4	15.3	13.8	2,837	318.6	18.9	153.4	11.6	2,077
Purchase of consumer durables	19.8	9.3	24.2	21.8	821	138.0	8.2	215.2	16.2	641
Total	$212.7	100.0%	111.0	100.0%	$1,917	$1,685.2	100.0%	1,325.4	100.0%	$1,271

[1] Other than feeder livestock.
Note: Because of rounding, figures may not add to totals.

in the District. Moreover, the agricultural loan portfolios of District banks contained a higher proportion of these loans than did those of banks in the country as a whole, reflecting the relatively large number of loans in District banks' portfolios for purchase of machinery and consumer durables. In this District almost one of every two farm loans outstanding was for intermediate-term investment purposes, compared with one of three nationally.

Such items as automobiles, trucks, farm equipment, farm improvements, and livestock may have a productive life of several years. If the useful life of the investment item is a consideration in determining repayment periods, the maturity of notes extended by banks for such purposes should be for a longer time period than current expense loans. This turns out to be the case in this District as only 35 percent of the loans for intermediate-term investment purposes were due on demand or in a period of one year or less compared with 96 percent of the loans for current expense purposes. There are two ways by which the repayment period may be geared to the useful life of such investments. One method is to write the original note for longer maturity periods, and another is to renew short-term notes periodically.

Longer maturities on original notes

In the District the repayment periods on the original note were generally longer than in the country as a whole. Only a third of the intermediate-term bank loans outstanding nationally had maturity periods in excess of one year, compared with two-thirds of the loans in the District. As indicated in Chart 2 the demand and short-term notes were quite large, and so were the notes written to mature over a period of several years. The smallest notes were those written with maturities of somewhat longer than one year. This variation was due to the comparatively heavy lending for purchase of livestock on a demand or short-term note basis. The average size of these loans was considerably larger than for other purposes. Loans for the purpose of improving land and buildings were also quite large, and it was this type of loan which was concentrated in the maturity periods of over two years. The maturity period of somewhat more than a year, on the other hand, was quite common for loans to purchase consumer durables, and the average size of these loans was smaller.

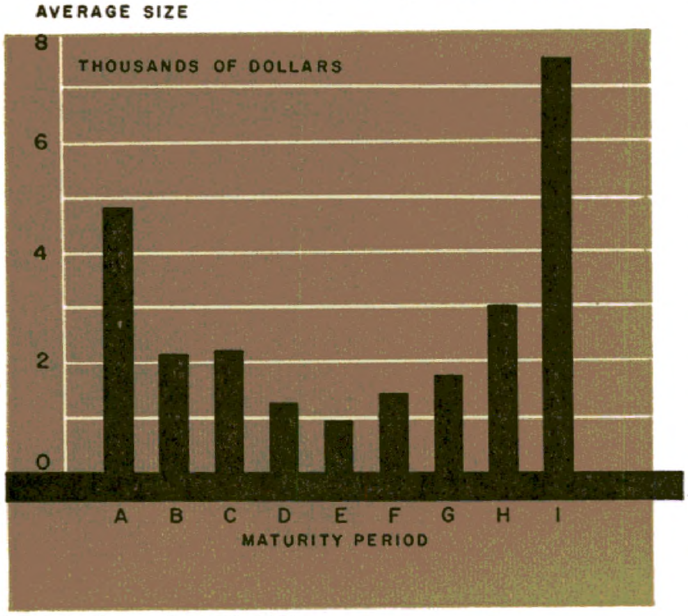
Number of renewals small

Associated with the longer maturity periods offered on intermediate-term loans, this District showed a lower level of renewals than in the country as a whole. Only 11 percent of the outstanding notes in the District had been renewed compared with about 30 percent nationally. Of the renewals in the District, fewer were planned than were unplanned. This also is different from the national pattern, in which planned renewals were much more important in terms of number than the renewal of notes on an unplanned basis.

The bulk of the planned renewals were written to mature in less than one year, and they were most common on loans for the purpose of purchasing livestock. Over a fourth of these notes were renewed on a planned basis. The practice of renewing was most common for the operators of extremely large farms, with almost half of the livestock loans to these borrowers renewed on this basis.

CHART 2

AVERAGE OUTSTANDING BALANCE ON INTERMEDIATE-TERM LOANS[1] IN THE TWELFTH DISTRICT, BY MATURITY



[1] Outstanding on June 30, 1956.

Note: Maturity period groupings are as follows: A) Demand; B) Under 6 months; C) 6-12 months; D) 15 months; E) 18 months; F) 2 years; G) 3 years; H) 4-5 years; I) Over 5 years. Loans with maturities not listed are classed under the nearest figure shown—for example, 5-month and 7-month loans are included in "6 months."

The rate of unplanned renewals on machinery loans was relatively high for the very large and the very small farmers. This suggests that mechanization can progress too rapidly in some cases and that it is possible for either the very large or the very small farmer to overestimate his financial ability to meet scheduled repayments on machinery investments.

Longer-term and larger notes secured by real estate

As the maturity period lengthened, there was a shift to a more permanent type of security with the use of real estate becoming increasingly common. For loans with a maturity of six months or less, only about 2 percent were secured by real estate. Over 90 percent of the notes with maturity of over five years, however, were secured by real estate.

There was considerable variation in the use of real estate for security depending on the purpose of the investment. As might be expected, it was the most usual collateral for loans made for improvement of land or buildings and was infrequently used to secure loans made for other purposes. Undoubtedly, size of loan is also related to the use of real estate as security. Nevertheless, purpose seemed to be the more important factor.

Note size and net worth of borrower correlated

As might be expected the larger the net worth of the borrower, the larger the size of note and also the greater the number of his notes held by the bank. It was also more common for the wealthier farmers to have loans outstanding for purposes other than intermediate-term investment. In general, however, those farmers who did borrow for intermediate-term investment had few loans outstanding for other purposes such as current expense. Over 80 percent of the farmers with intermediate-term credit had no bank loans outstanding for other purposes. It is surprising that so many farm borrowers, as this survey seems to indicate, would restrict their bank borrowing only to the intermediate type loans. Perhaps loans of this type held by banks reflect to a greater extent the business relations between banks and merchants and dealers than between banks and farm borrowers since notes of this type were purchased heavily by banks from merchants and dealers. The dealer, for example, is likely to sell a note to a bank other than the one that the borrower customarily deals with, in which case the bank would report no other loan to the customer. There is no offset for this provided in the survey.

Credit variations and type of farm

Three of every five farmers with outstanding loan balances in mid-1956 had at least one loan outstanding for intermediate-term investment purposes. However, Table 2 shows that there were differences in the relative importance of this credit that were associated with the type of farm operated by the borrower. These differences are associated with variations in the pattern of income obtained by operators of different types of farms. For instance, in the case of dairy farms, the flow of income from the sale of milk is quite regular throughout the year. About three-fourths of the operators of this type of farm who utilized bank credit had at least one loan outstanding for intermediate-term investment purposes. Operators of cash grain farms, on the other hand, receive the bulk of their income in a short period of time and probably have a greater need for bank financing for other purposes, particularly for operating expenses. Hence a smaller proportion of these borrowers, 52 percent, have loans outstanding for intermediate-term investment purposes.

An analysis of intermediate-term loans by tenure of borrower indicates that lending was heaviest to owner-operators of farms, with few loans to tenant farmers except those who operated cotton farms. Loans to these tenant cotton farmers accounted for 30 percent of the outstanding loan volume to all cotton farmers, compared with less than 18 percent for tenant operators of other types of farms. The relatively large size of the loans to the tenant cotton farmers suggests that they are operators of large farms.

Many purchased loans

In a number of cases no information was obtained about the borrower. Apparently the bulk of the notes had been purchased from machinery dealers, thereby reducing the necessity for reporting a great deal of detailed information about the farm borrower. This conclusion is suggested by the net worth data, which indicate that 90 percent of the loans for which the age of the borrower was not reported also contained no information concerning the borrower's net worth.

Purchase of intermediate-term investment notes was a common practice of District banks, whereas in the nation as a whole direct loans to the farmer were more usual. This suggests that banks in the District are more active in the secondary financing of agricultural borrowers, particularly for the smaller loans, than banks in other areas. Presumably a large number of these loans were for the purchase of automobiles and consumer durables. Where the loans were large, however, they were generally made direct to the farmer. In terms of the dollar volume outstanding, direct loans were more important than purchased loans, accounting for more than 60 percent of the total.

District interest rates higher than in nation

The average interest rate on all intermediate-term investment loans in the District was 7.1 percent. This is somewhat higher than the national average rate of 6.7 percent and higher than for other types of farm loans in the District.[1] Interest rates declined with increases in the original size of the note both in the District and in

[1] On p. 144 of the November 1956 issue of the *Monthly Review*, it is incorrectly stated that "interest rates in the District averaged lower than in the country as a whole...." Actually, interest rates in the District averaged higher than in the country as a whole on loans secured by real estate—5.5 per cent in the District, 5.4 percent in the nation.

TABLE 2

RELATIONSHIP BETWEEN TYPE OF FARM AND BORROWING FOR INTERMEDIATE-TERM PURPOSES IN THE TWELFTH DISTRICT

	Number of borrowers (in thousands)		Amount outstanding (in millions of dollars)		Average indebtedness per borrower (in dollars)		Intermediate-term investment as a percentage of indebtedness for all purposes	
Type of farm	All purposes	Intermediate-term	All purposes	Intermediate-term	All purposes	Intermediate-term	Number of borrowers	Amount of indebtedness
General	49.3	32.1	$185.6	$ 62.1	$3,762	$1,931	65%	33%
Dairy	25.7	18.6	114.3	58.2	4,444	3,122	72	51
Other major product[1]	22.0	9.4	132.4	28.2	6,026	3,009	43	21
Meat animals	16.1	7.4	182.2	29.3	11,300	3,946	46	16
Cash grain	12.2	6.3	71.0	16.2	5,822	2,552	52	23
Cotton	4.1	2.6	28.0	7.6	6,806	2,944	63	27
Poultry	4.0	1.9	10.9	3.6	2,763	1,948	48	33
Not ascertained	9.9	9.1	13.8	7.6	1,400	833	92	55
All types	143.3	87.4	$738.4	$212.7	$5,152	$2,432	61	29

[1] Includes farms specializing in the production of such products as fruits, vegetables, nuts, etc.
Note: Because of rounding, figures may not add to totals.

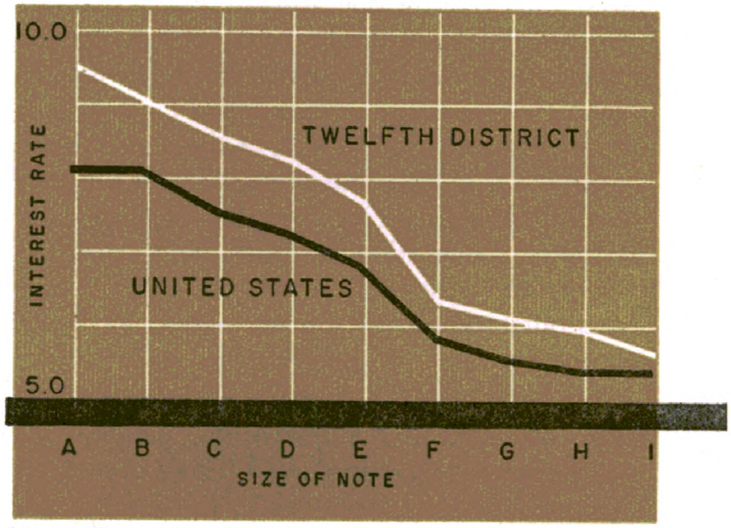
the country as a whole. As the average size of loan outstanding in the District was larger than that outstanding nationally, the difference between interest rates is often greater than is indicated by these averages, as is shown in Chart 3. Loans to District farmers for farm improvement and to purchase consumer durables apparently were influential in narrowing this gap as interest rates on these loans declined comparatively rapidly with increase in loan size. Also related to the narrowing of the spread in interest rates was the greater use of real estate as security. Loans secured by real estate usually carry lower interest rates than other loans and are often larger in size. Eleven percent of the intermediate-term loans in the District were secured by real estate compared with 7 percent of the notes nationally. All of this indicates that interest rates in the District are higher than in the nation as a whole, and, in fact, the difference is even greater than is apparent on the surface when the more minute comparisons by type and size of loan are considered.

The use of real estate as security also influenced the interest charges on various types of intermediate-term investment loans within the District. This again was more noticeable on the larger loans. In the case of farm improvement loans, for instance, almost two-thirds of them were secured by real estate and they tended to carry lower interest rates than loans for other purposes where the use of real estate was not as common. The difference in the ability of the various types of intermediate-term investment items to add to the income of the borrower may also be a factor affecting interest rates. In the case of farm improvement loans, for example, the income of the borrower is normally expected to increase sufficiently as a result of the investment to pay for it. Such loans differ considerably from most consumer durable loans in this respect. Investment in consumer durables may be expected to generate little additional income from farming as such investments are related more directly to the personal comforts of the farm family than to the farm as a business.

Interest rates on all intermediate-term investment loans within the District averaged higher

Chart 3

EFFECTIVE INTEREST RATE BY ORIGINAL SIZE OF NOTE [1]
TWELFTH DISTRICT AND UNITED STATES



[1] Outstanding on June 30, 1956.

Note: Original size of note groupings are as follows: A) Under $250; B) $250-499; C) $500-999; D) $1000-1999; E) $2000-4999; F) $5000-9999; G) $10,000-24,999; H) $25,000-99,999; I) $100,000 and over.

than those charged on farm loans for other purposes. An important factor accounting for this difference is the common use of instalment repayments on intermediate-term loans with interest charged on the original amount of the loans. This was a quite common repayment arrangement in the District and applied to about half the notes or 27 percent of the dollar volume of loans outstanding. As rates on these notes averaged 9.7 percent, they account for much of the difference in interest rates on intermediate-term loans and bank loans to farmers for other purposes. Rates on single payment intermediate-term loans average 6.1 percent and rates on other instalment loans averaged 6.2 percent as compared with the average rate on all bank loans in the District of 6.1 percent.

Conclusion

No very startling conclusions have emerged from this study of bank financing of intermediate-term farm credit in the Twelfth District. It was found that the banks are doing an adequate job of supplying their farm borrowers with loans for the purchase of automobiles, trucks, farm equipment and improvements, and livestock. Such loans are usually extended for longer periods in this District than elsewhere in the nation, and the number of renewals is consequently lower. Operators of smaller farms use intermediate type credit more frequently and more exclusively than the wealthier owners and managers of larger units. Tenants seldom use it, with the single exception of cotton farmers, who often manage large acreages. Use of intermediate credit also varies with type of farm, with a concentration occurring among those types which receive fairly regular income payments. Interest rates for these loans are higher in the Twelfth District than in the nation as a whole, and the leadership of the Twelfth in the practice of secondary financing is still handily illustrated by the figures for purchase of intermediate type obligations from dealers and merchants.

BUSINESS INDEXES—TWELFTH DISTRICT[1]

(1947-49 average = 100)

Year and month	Industrial production (physical volume)[2] Lumber	Petroleum[3] Crude	Petroleum[3] Refined	Cement	Lead[3]	Copper[3]	Electric power	Total nonagricultural employment	Total mf'g employment	Car-loadings (number)[2]	Dep't store sales (value)[2]	Retail food prices[3, 4]	Waterborne foreign trade[3, 5] Exports	Waterborne foreign trade[3, 5] Imports
1929	95	87	78	54	165	105	29	....	....	102	30	64	190	124
1933	40	52	50	27	72	17	26	....	....	52	18	42	110	72
1939	71	67	63	56	93	80	40	....	55	77	31	47	163	95
1948	104	101	100	104	105	101	101	102	102	100	104	103	86	98
1949	100	99	103	100	101	93	108	99	97	94	98	100	85	121
1950	113	98	103	112	109	113	119	103	105	97	105	100	91	137
1951	113	106	112	128	89	115	136	112	120	100	109	113	186	157
1952	116	107	116	124	87	112	144	118	130	101	114	115	171	200
1953	118	109	122	130	77	111	161	121	137	100	115	113	140	308
1954	111	106	119	133	71	101	172	120	134	96	114	113	131	260
1955	121	106	122	145	75	117	192	127	143	104	122	112	164	308
1956	116	105	129	156	77	118	210	134	152	104	129	114	195	444
1956														
April	117	105	122	160	82	140	203	133	150	105	131	113	175	397
May	119	105	129	173	74	135	211	133	152	107	122	113	183	519
June	121	105	125	161	82	135	215	134	153	105	126	114	204	427
July	120	105	132	160	75	110	212	134	152	102	132	115	215	559
August	117	105	128	171	84	123	212	135	153	101	131	114	207	500
September	112	104	136	168	78	122	209	135	153	107	131	114	212	459
October	110	104	128	163	81	127	217	136	154	102	130	115	256	563
November	111	104	135	146	79	123	216	137	156	100	132	116	242	401
December	112	103	132	139	72	123	210	138	159	106	131	116	234	436*r*
1957														
January	108	102	131	120	79*r*	125	220	139	160	105	131	116	237	421
February	115	102	130	127	88	138*r*	211	138	159	96	127	117	265	417
March	115	101	132	140	88*r*	133*r*	221	138	159	100	133	116	....	....
April	110	101	132	....	82	134	....	138	159	103	127	117	....	....

BANKING AND CREDIT STATISTICS—TWELFTH DISTRICT

(amounts in millions of dollars)

Year and month	Condition items of all member banks[6] Loans and discounts	U.S. Gov't securities	Demand deposits adjusted[7]	Total time deposits	Bank rates on short-term business loans[8]	Member bank reserves and related items — Factors affecting reserves: Reserve bank credit[9]	Commercial[10]	Treasury[10]	Money in circulation[9]	Reserves[11]	Bank debits Index 31 cities[3, 12] (1947-49=100)[2]
1929	2,239	495	1,234	1,790	......	− 34	0	+ 23	− 6	175	42
1933	1,486	720	951	1,609	......	− 2	− 110	+ 150	− 18	185	18
1939	1,967	1,450	1,983	2,267	......	+ 2	− 192	+ 245	+ 31	584	30
1949	5,925	7,016	8,536	6,255	3.20	+ 13	− 930	+ 378	− 65	1,924	102
1950	7,093	6,415	9,254	6,302	3.35	+ 39	−1,141	+1,198	− 14	2,026	115
1951	7,866	6,463	9,937	6,777	3.66	− 21	−1,582	+1,983	+ 189	2,269	132
1952	8,839	6,619	10,520	7,502	3.95	+ 7	−1,912	+2,265	+ 132	2,514	140
1953	9,220	6,639	10,515	7,997	4.14	− 14	−3,073	+3,158	+ 39	2,551	150
1954	9,418	7,942	11,196	8,699	4.09	+ 2	−2,448	+2,328	− 30	2,505	154
1955	11,124	7,239	11,864	9,120	4.10	+ 38	−2,685	+2,757	+ 100	2,530	172
1956	12,613	6,452	12,169	9,424	4.50	− 52	−3,259	+3,274	− 96	2,654	189
1956											
May	11,837	6,566	11,144	9,139	......	− 22	− 233	+ 217	+ 47	2,498	181
June	12,030	6,482	11,262	9,294	4.44	+ 5	− 405	+ 341	+ 32	2,404	185
July	12,157	6,396	11,392	9,233	......	− 6	− 143	+ 240	− 8	2,519	195
August	12,173	6,439	11,356	9,286	......	+ 4	− 315	+ 247	− 103	2,565	198
September	12,423	6,491	11,581	9,305	4.57	+ 3	− 454	+ 466	− 59	2,640	182
October	12,384	6,468	11,747	9,326	......	− 5	− 417	+ 312	− 2	2,542	195
November	12,504	6,431	11,867	9,235	......	0	− 143	+ 209	+ 38	2,579	195
December	12,804	6,383	12,078	9,356	4.65	− 17	− 303	+ 451	+ 38	2,654	200
1957											
January	12,488	6,505	11,812	9,587	......	+ 33	− 558	+ 249	− 144	2,548	206
February	12,556	6,356	11,279	9,690	......	+ 41	− 816	+ 494	− 139	2,517	200
March	12,576	6,177	11,129	9,794	4.74	− 37	− 170	+ 170	− 9	2,495	199
April	12,649	6,520	11,622	9,839	......	− 35	− 445	+ 430	− 31	2,560	202
May	12,694	6,315	11,210	9,995	......	+ 56	− 261	+ 209	+ 54	2,526	200

[1] Adjusted for seasonal variation, except where indicated. Except for department store statistics, all indexes are based upon data from outside sources, as follows: lumber, California Redwood Association and U.S. Bureau of the Census; petroleum, cement, copper, and lead, U.S. Bureau of Mines; electric power, Federal Power Commission; nonagricultural and manufacturing employment, U.S. Bureau of Labor Statistics and cooperating state agencies; retail food prices, U.S. Bureau of Labor Statistics; carloadings, various railroads and railroad associations; and foreign trade, U.S. Bureau of the Census. [2] Daily average. [3] Not adjusted for seasonal variation. [4] Los Angeles, San Francisco, and Seattle indexes combined. [5] Commercial cargo only, in physical volume, for Los Angeles, San Francisco, San Diego, Oregon, and Washington customs districts; starting with July 1950, "special category" exports are excluded because of security reasons. [6] Annual figures are as of end of year, monthly figures as of last Wednesday in month. [7] Demand deposits, excluding interbank and U.S. Gov't deposits, less cash items in process of collection. Monthly data partly estimated. [8] Average rates on loans made in five major cities. [9] Changes from end of previous month or year. [10] Minus sign indicates flow of funds out of the District in the case of commercial operations, and excess of receipts over disbursements in the case of Treasury operations. [11] End of year and end of month figures. [12] Debits to total deposits except interbank prior to 1942. Debits to demand deposits except U.S. Government and interbank deposits from 1942. *p*—Preliminary. *r*—Revised.