

Monthly Review

IDAHO

ALASKA

FEDERAL RESERVE BANK OF SAN FRANCISCO
TWELFTH FEDERAL RESERVE DISTRICT

January 1961

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UTAH

ARIZONA

NEVADA

Review of Business Conditions

THE general easing in national business conditions continued during November. For the first time since early 1960, personal income failed to show a gain over the previous month. Rising income payments from other sources were no longer sufficient to more than offset the month-to-month decline in factory payroll payments which has persisted since May. The decline in factory payrolls reflects the downward trend in industrial production since July. The curtailment of industrial production in November to 105 percent of the 1957 average represented the sharpest month-to-month decline of 1960. A reduction in auto assemblies and other consumer durable goods, such as appliances and television sets, contributed heavily to the decline. During August, September, and October, the rising level of automobile production had exerted a supporting influence on industrial production. Nonfarm employment declined further in November with reductions general for all major employment categories except for service industries and state and local government. The recent course of personal income and nonfarm employment has been associated with a more cautious attitude on the part of consumers toward purchases that can be delayed. This is suggested by a decline in seasonally adjusted sales by both department stores and durable goods stores between October and November and by increasingly modest increases in instalment credit expansion during recent months. With fewer funds flowing to individuals and businesses (corporate profits declined in the third quarter of 1960), the revenue of the Federal Government is not expected to be so great as earlier anticipated. Re-evaluation by the Bureau of the Budget of budget estimates for fiscal 1961 indicates that a small deficit is now a distinct possibility whereas earlier estimates indicated a surplus in excess of \$1 billion.

District employment and unemployment at high levels in November

Nonfarm employment in the District rose slightly between October and November after seasonal adjustment. The largest increase, 0.7 percent, was registered in the construction industry. There were smaller increases in finance, services, and government; no change in manufacturing; and slight declines in mining and trade. Although manufacturing employment remained unchanged, this overall stability resulted from diverse movements in particular industries. Small increases in employment in lumber and wood products, fabricated metals, electrical machinery, and ordnance were offset by declines in aircraft, automobile assembling, and primary metals.

Total civilian employment in Pacific Coast States rose to a record high of 7.8 million workers in November. Nevertheless, the actual number of persons unemployed, while rising less than seasonally, was at the highest level for any November since 1949. On a seasonally adjusted basis, there were 546,000 workers without jobs, a decline of 3.8 percent from October but 45 percent more than in November 1959. Since the labor force increased only slightly, the rate of unemployment on the Pacific Coast fell from 6.8 percent of the labor force in October to 6.6 percent.

The Hawaiian labor market, recently a bright spot in the Twelfth District, has been relatively sluggish in recent months. In November, the rate of unemployment was 3.4 percent (unadjusted for seasonal variation), compared with 3.0 percent in 1959 and has been higher than year-ago rates since May.

As 1960 came to a close, there were three major labor market areas in the District that had been designated as having substantial labor surpluses (6 to 9 percent unemployed) by the United States Bureau of Employment Security. Two of these, San Bernardino-Riv-

erside - Ontario, California and Spokane, Washington, were so designated in November, while San Diego had been reclassified in September. Sacramento, with no significant labor surplus since March 1959, was reclassified in November to a moderate labor surplus category (3 to 6 percent unemployment).

Nine other smaller areas in the District not large enough to be included in the Bureau's regular classification program were also reported to have substantial labor surpluses; five of these were in Washington. Most of the remaining major and minor labor market areas in the District are presumably areas of moderate labor surplus. Honolulu where no significant surplus is yet reported is an exception. The most important factors affecting the reduction of job openings in the areas most recently reclassified have been the cutbacks in local aircraft, lumber, construction, and primary metals employment.

Steel producers still await increase in orders

District steel production, at very nearly the lowest rate for 1960 in November, improved slightly in December despite some curtailment of operations late in the month. In contrast, the operating rate for the nation continued to fall in December, and several mills shut down for the Christmas to New Year period as the flow of orders has not been sufficient to support high rates of production. Since, as was pointed out last month, reduced 1960 levels of production cannot be adequately explained by inventory adjustments of steel consumers, a strong recovery of the industry must await the expansion of output by industries that purchase steel for fabrication.

Copper inventories accumulate

Copper prices held relatively firm through the middle of December. At that time, custom smelters cut by 1/2 cent their buying price for scrap, but the major producer price for new

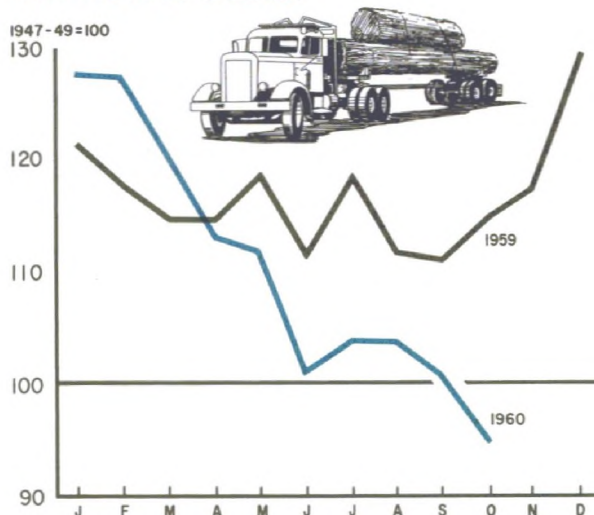
refined copper remained at 30 cents. Inventories of refined copper also climbed again during November, the bulk of the accumulation taking place in the United States.

The existence of large stocks and price competition from foreign sellers were responsible for the decline of lead prices by 1 cent from 12 cents, a level which had prevailed since April 1959 and of zinc prices which were cut by 1 cent from 13 cents, the price since January 1960.

Lumber production sinks to new low

Softwoods lumber production in the Douglas Fir region in November was down 4 percent from October and 16 percent under a year ago; the daily average output was the lowest in any November during the post-World War II period. Although new orders were up slightly from October, November orders were less than those of any other month of 1960, except for January, and were 7 percent below November 1959. The volume of unfilled orders turned up a little but continued, as in recent months, to be well below 1959. Inventories held steady at 14 percent

District lumber production continues to decline*



*Daily average output, seasonally adjusted. Source: National Lumber Manufacturers' Association, West Coast Lumberman's Association, and Western Pine Association; index by Federal Reserve Bank of San Francisco.

above the same month of 1959. The greater than seasonal cutback in production appears to have had some effect on prices. During November, green fir prices, which had been falling for several months, rose a bit; however, prices were still about 14 percent under 1959. Dry fir prices declined slightly.

At the end of November, the fir plywood industry was operating at about 60 percent of capacity. Curtailments in production have been concentrated in plywood sheathing, the price of which has been declining for some time. The average price of $\frac{1}{4}$ inch sanded plywood remained steady at \$68 per thousand square feet.

Contract awards in November rise above year-ago

The total value of construction, as measured by contract awards in the Twelfth District, fell from October to November on a seasonally adjusted basis. However, the total volume in November was 7 percent above the year-ago level as a consequence of a 42 percent increase in the value of awards for public works and utilities; contract awards for both highways and public utilities were above the November 1959 level. Contracts for nonresidential construction of other types were 5 percent above the year-ago figure, owing chiefly to increased contracts for manufacturing, religious, and hospital buildings. Awards for commercial and public buildings declined slightly from last year. Residential contracts in November were 5 percent below a year-ago, somewhat less than in recent months. For the first 11 months of the year, they were 15 percent less than in the comparable period of 1959.

Some further easing in the District mortgage market occurred in November as the average price for FHA-insured mortgages with a standard downpayment, maturity, and interest rate rose from 97 on November 1 to 97.2 on December 1.

Farm income continues to ease

Receipts of District farmers in October dipped below the year-ago level for the third consecutive month. These declines have largely offset the sizable gains in cash receipts which occurred during the first five months of 1960, so that returns from marketings for the period January-October are only slightly ahead of the pace in 1959. Slower marketings of cotton in California contributed to the year-to-year decline in October crop receipts in the state. Cotton marketings in Arizona, however, were sharply ahead of last year with three-fourths of the state's crop ginned by December 1, compared with two-thirds of the crop in 1959. The increased ginnings are reflected in Arizona cash receipts which were almost one-third higher in October than a year earlier.

A recent referendum for rice producers indicated that California farmers are less willing to "go along" with national acreage restrictions than producers in other states. In the referendum held December 13, only 71 percent of the California rice producers voted for marketing quotas on the 1961 crop. Although this is above the two-thirds majority required for approval, it is substantially less than the 91 percent favorable vote received nationally.

Department store sales show gains for last part of December

The final seasonally adjusted Twelfth District department store sales index for the month of November fell 5 percent from the October level and was down 2 percent from November 1959. This downward trend was continued during the first two weeks of December. However, in the last half of December sales were sufficiently large to reverse the trend with the result that for the five weeks ended December 31 sales were 3 percent above the like period a year ago. In the Christmas week of 1960 there were two

more shopping days preceding Christmas Day than a year ago, which accounts for the reduced sales volume earlier in December when compared with the year-ago period.

New passenger car registrations in California in November were 11 percent above the year-ago volume. The daily average sales were slightly above those for October.

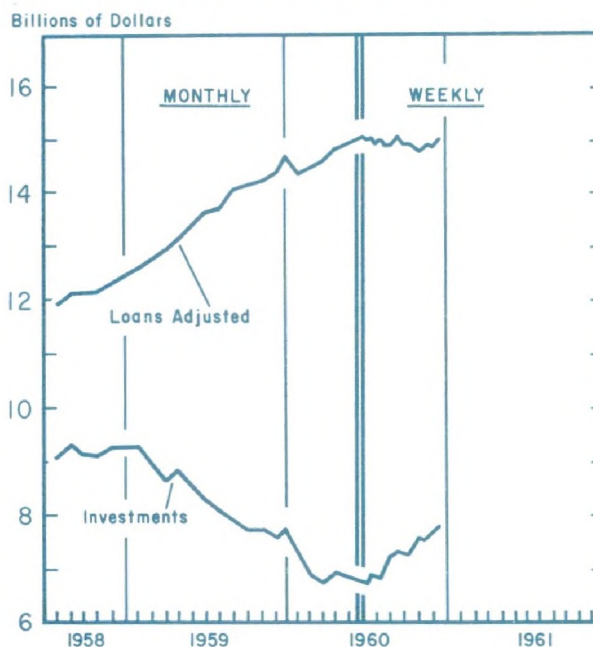
The latest available data indicated a decline of 0.5 percent in October in the volume of consumer instalment credit held by commercial banks in the Twelfth District. This was the first decline since March and was only the second decrease in two years. Of the four categories of bank-held consumer credit, only repair and modernization loans remained at the September level.

Banks' reserve positions remain easier than year ago

Beginning November 24, member banks were permitted to count all of their vault cash in meeting the reserves they are required to hold with the Federal Reserve Bank. In the case of country banks, this liberalization was partly offset by a 1 percent increase in the reserves required against net demand deposits. As a result of these changes, District banks were in a more flexible position to meet credit demands than a year ago when their reserve position was generally tight.

In November, District member banks added another \$65 million to their holdings of securities, but total loans declined slightly from the October level, contrary to the usual seasonal upturn in November. Thus far in 1960, total loans outstanding at District banks have remained substantially above the corresponding period a year ago, although since June, the difference has been narrowing so that by the end of November the margin was reduced to about \$650 million, or 4 percent. Extensive additions of United States Government securities to District member bank portfolios in recent months have

District banks add to security holdings as loan volume eases*



*District weekly reporting member banks.
Data prior to July 1, 1959 are partly estimated.
Source: Federal Reserve Bank of San Francisco.

brought these holdings to approximately \$50 million higher than in November 1959. This is in sharp contrast to the first six months of 1960 when District bank holdings were more than \$1 billion under the level of the corresponding period in 1959. Holdings of securities other than United States Governments, however, are still \$107 million below those of November 1959. Demand deposits adjusted at District member banks increased in November but by less than the usual seasonal amount. The reduction in total time deposits, on the other hand, was far less than seasonal, dipping only slightly in spite of large payouts of Christmas Club savings during the month.

Weekly reporting member banks provide more recent data on Twelfth District credit developments. In December, total bank credit outstanding at District weekly reporting member banks rose \$593 million, a record for any four-week period in 1960. Bank credit adjusted, which excludes loans to domestic commercial banks and valuation reserves,

FEDERAL RESERVE BANK OF SAN FRANCISCO

**CHANGES IN SELECTED BALANCE SHEET ITEMS OF
WEEKLY REPORTING MEMBER BANKS IN LEADING CITIES**

(dollar amounts in millions)

	Twelfth District				United States			
	From Nov. 30, 1960 to Dec. 28, 1960		From Dec. 30, 1959 to Dec. 28, 1960		From Nov. 30, 1960 to Dec. 28, 1960		From Dec. 30, 1959 to Dec. 28, 1960	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
ASSETS:								
Total loans and investments	+ 593	+ 2.62	+ 736	+ 3.27	+ 3,781	+ 3.50	+ 5,214	+ 4.89
Loans and investments adjusted ¹	+ 579	+ 2.57	+ 791	+ 3.54	+ 3,088	+ 2.88	+ 5,053	+ 4.80
Loans adjusted ¹	+ 204	+ 1.37	+ 485	+ 3.31	+ 1,729	+ 2.53	+ 2,105	+ 3.09
Commercial and industrial loans	+ 114	+ 2.18	+ 276	+ 5.44	+ 182	+ 0.57	+ 1,466	+ 4.81
Real estate loans	— 10	— 0.19	— 163	— 3.08	— 16	— 0.13	— 144	— 1.14
Agricultural loans	— 6	— 0.91	+ 87	+ 15.40	+ 15	+ 1.40	+ 154	+ 16.56
Loans for purchasing and carrying securities	+ 25	+ 15.34	+ 45	+ 31.47	+ 796	+ 25.42	+ 11	+ 0.28
Loans to nonbank financial institutions	+ 45	+ 5.88	+ 55	+ 7.28	+ 604	+ 11.35	— 260	— 4.20
Loans to domestic commercial banks	+ 14	+ 14.29	— 55	— 32.93	+ 693	+ 94.67	+ 161	+ 12.74
Loans to foreign banks	+ 13	+ 6.99	— 56	— 21.96	+ 66	+ 9.66	— 60	— 7.42
Other loans	+ 22	+ 0.73	+ 262	+ 9.41	+ 47	+ 0.31	+ 986	+ 6.83
U. S. Government securities	+ 252	+ 4.44	+ 270	+ 4.77	+ 853	+ 2.91	+ 2,697	+ 0.98
Other securities	+ 123	+ 6.26	+ 36	+ 1.76	+ 506	+ 5.29	+ 251	+ 2.55
LIABILITIES:								
Demand deposits adjusted	+ 131	+ 1.18	— 327	— 2.82	+ 1,728	+ 2.89	— 1,714	— 2.71
Time deposits	+ 387	+ 3.48	+ 477	+ 4.33	+ 676	+ 1.99	+ 2,871	+ 9.02
Savings accounts	+ 139	+ 1.49	+ 50 ^r	+ 0.53 ^r	n.a.	n.a.	n.a.	n.a.

^r Changes based on revised data.

n.a. Not available.

¹ Exclusive of loans to domestic commercial banks and after deduction of valuation reserves; individual loan items are shown gross.
Source: Board of Governors of the Federal Reserve System and Federal Reserve Bank of San Francisco.

also had a record increase. Loans adjusted climbed \$204 million with most of the borrowing occurring in mid-month as business firms sought bank credit to meet December quarterly tax payments. Public utilities were particularly heavy borrowers, and petroleum and chemical companies and commodity dealers also increased their bank indebtedness. Increased bank borrowing by sales finance companies during this period may also reflect, in part, the effects of the December corporate tax date as business firms normally reduce their holdings of finance company paper at such times. Consumer loans continued to move up seasonally, but the amount of increase was only one-half that in November and also less than in December 1959.

District weekly reporting member banks added \$252 million to their portfolios of United States Government securities in December. Most of the increase was in short-term holdings, Treasury bills and certificates of indebtedness, although additions were also made in short-and intermediate-bond holdings. District banks continued to increase their holdings of other securities in December.

Both demand deposits adjusted and time deposits rose in December at weekly reporting member banks. Savings deposits accounted for about one-third of the \$387 million rise in time deposits; the remainder of the increase was accounted for by growth in time deposits of states and political subdivisions.

Interest rates on business loans decline in fourth quarter

The quarterly interest rate survey conducted by the Federal Reserve Bank of San Francisco among a sample of commercial banking offices showed that business firms paid lower rates of interest on short-term funds borrowed from Twelfth District banks in December than in September. The average unweighted interest rate on short-term business loans was 5.32 percent in December, compared with 5.40 percent in September and 5.57 percent in December 1959. The decline of 8 basis points in the rate in December was not so great as in September (22 basis points) which reflected the prime rate re-

duction of August 23. However, one-third of the total dollar amount of loans covered in the December survey was made at the 4.5 percent prime rate, compared with only one-fourth in the September survey. Reductions in rates occurred on loans in excess of \$100,000, but rates charged on loans under that amount remained practically unchanged. Rates paid on business loans of over one-year maturity also declined from an average of 5.45 percent in September to 5.28 percent in December. This was substantially below the year-ago average interest charge of 5.62 percent. Long-term loans constituted less than 2 percent of the dollar volume of all loans reported in the survey, a drop of about 1 percent from the September survey.

Revised Indexes of Employment

The Twelfth District indexes for Total Nonagricultural Employment and Total Manufacturing Employment for 1960 have been revised according to March 1960 benchmarks.

The Auction of Treasury Bills in the Twelfth District

ONE of the most active of the many markets in our economy is the "money market" where short-term evidences of debt, both public and private, are issued and traded. The function of the money market is to provide close money substitutes to investors who temporarily have idle funds and desire to earn interest on them and yet retain a high level of liquidity. "Liquid" debt instruments are those that can readily be sold without much risk of loss because their maturities are short enough to prevent wide price fluctuations and because there is little or no doubt of their ultimate payment. Over the years, there have been many such money market instruments and their character has changed as the structure and function of financing practices have changed. Chief among these obligations in the postwar period are short-term United States Government securities (Table 1).

The Treasury issues two types of securities tailored specifically to the short-term market: certificates and bills. Certificates are sold by the Treasury at a fixed price, carry a fixed rate of interest, and usually have a maturity of one year or less. Treasury bills, which also have a maturity of one year or less, are the more important short-term security and are sold at auction every Monday morning for Thursday delivery on a discount basis and redeemed at par, the difference between the purchase price and par determining the yield. When Monday

is a generally observed legal holiday, the auction is held on the preceding Friday instead. Bills represent a large proportion of the marketable United States Government securities traded and held by investors. Of the \$151 billion of marketable Governments held by non-Government investors at the end of August 1960, over \$36 billion, or about one-fourth, were in the form of bills, while about \$17.6 billion of certificates were outstanding.

Over a period of time, the short-term debt structure has come to be arranged so that there is a regular pattern for the maturities of most short-term Government securities. At the shortest end of the scale are the 91-day or 3-month bills. The 91-day bill, first introduced in 1929, is today the principal bill maturity issued by the Treasury. While this bill maturity serves the needs of many investors, there is also a demand for weekly bills of a somewhat longer maturity. The Treasury had sold 6-month or 182-day bills for a time in the 1930's, and this practice was revived in December 1958 when 182-day bills were added to the weekly bill auction. The 91-day bills are issued in lots of approximately \$1 billion and the longer maturities in lots of about \$500 million. In December 1960, there were \$13.6 billion of 3-month bills and \$12.3 billion of 6-month bills outstanding.

An additional element in the short-term Government debt structure is the 1-year bill cycle. This cycle now consists of three issues of \$1.5 billion and one of \$2 billion, each with a year to run and scheduled to mature in January, April, July, and October. Still another type of Treasury bill is the tax anticipation bill. This is not a continuously replaced issue with a fixed maturity schedule but is an occasional issue designed to raise money in advance of tax dates. It may be issued with various maturities and usually bears a ma-

TABLE 1
OUTSTANDING PRIVATELY HELD MARKETABLE UNITED STATES GOVERNMENT SECURITIES, August 31, 1960
(millions of dollars)

Bonds	74,676
Notes	32,817
Certificates	10,925
Bills	33,047
Total	151,465

Source: United States Treasury Department.

turity date one week after one of the quarterly Federal tax dates. In addition to their function as an advance on tax receipts, their use in payment of taxes helps minimize fluctuations in bank reserves that might attend large inflows of cash to the Treasury at those times.

The Twelfth District market for Treasury bills

Some insight into the pattern of demand for Treasury bills by Twelfth District investors is furnished by data on subscriptions to Treasury bills associated with the Monday auctions of those securities. This analysis focuses attention on the sale of new issues on one day of the week as opposed to the trading of outstanding issues on every business day. However, since the decision to purchase new bills at auction and the price to be tendered are made against the backdrop of market rates for outstanding bills, the trend over time in the yields on new bills follows the same general direction as do yields on outstanding issues. Changes over time in bill purchases at auction by various investor groups will reflect, therefore, the reaction of investors to Treasury bills as a form of investment, compared with the alternative uses of funds which are available to them.

The weekly auction

It is estimated that virtually all Treasury bills purchased by Twelfth District investors at auction are processed through the Federal Reserve Bank of San Francisco.¹ The mechanics of the auction are simple and routine. On each Wednesday, the Secretary of the Treasury issues an announcement through the Reserve Banks inviting tenders for a specified amount of bills, usually about \$1 billion of 91-day bills and about \$500 million of the 182-day issue. These bids are normally made the following Monday, when each Federal

Reserve Bank, acting as fiscal agent for the United States Treasury, receives bids for bills dated and to be delivered the following Thursday. Investors are permitted to submit sealed bids from announcement time until 1:30 P.M., New York time. Nonbank investors typically submit their bids through commercial banks. The Federal Reserve System, an important holder of Treasury bills in its Open Market Account, submits its bids at the Federal Reserve Bank of New York. The majority of bids are tendered close to the deadline on Monday since bidders attempt to obtain last minute impressions of the "feel" of the money market and of their own needs. Bid prices are on a discount basis calculated to three decimal places. An investor, having in mind the rate that he wants to obtain, can determine the price to be bid by the following rule:

Multiply the discount rate by the face value of the bill, divide the product by 360 (the number of days in a year used in computing "bank" discount), then multiply by the actual number of days to maturity, then subtract the resulting figure from the maturity value of the bill.

If, for example, an investor wishes to purchase bills yielding 2.25 percent on a 91-day maturity, the bid price is calculated in the following way:

$$\frac{.0225 \times 100}{360} \times 91 = .569$$

Face value	100.000
Less discount	.569
Equals bid or purchase price	99.431

The investment yield on this bill is actually somewhat higher, 2.29 percent, because bills are sold on a discount basis rather than at par. The \$5.69 earned on the \$994.31 invested in this bill represents a return of 2.29 percent on a 365-day basis, which is the period used in calculating the yield on the coupon-bearing Treasury securities. Investors also have the option of bidding for limited amounts of bills on a "noncompetitive" basis,

¹ Twelfth District investors may submit bids through other Federal Reserve Banks, but the volume is estimated to be small. Conversely, some of the bids received at the Federal Reserve Bank of San Francisco are for investors located outside the Twelfth District.

which means that they are willing to pay the average price determined by the competitive bids.

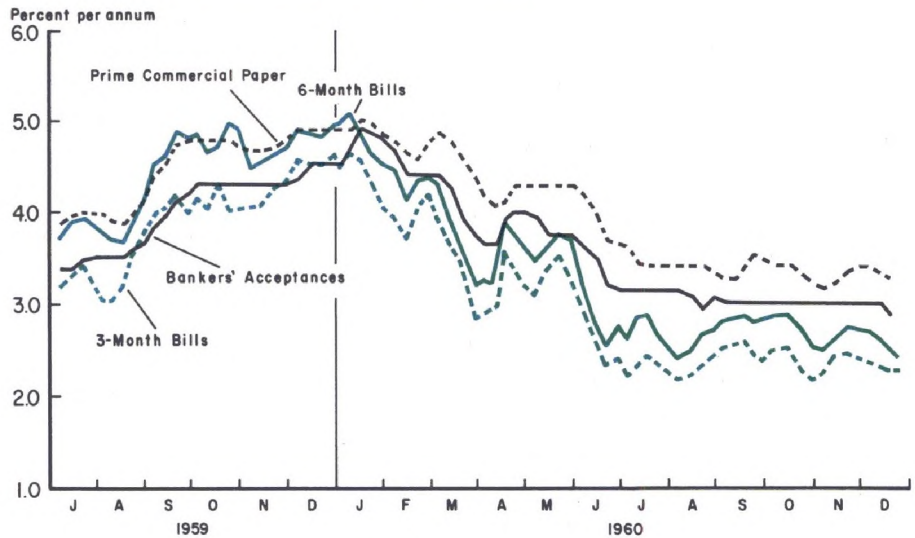
After the window where bids are received is closed at each Federal Reserve Bank office, bank officials open the sealed bids and arrange them in descending order according to the price contained in the bid. Noncompetitive bids are handled separately. A tabulation for all the offices of each Reserve Bank is wired to the Treasury Department. As soon as the Treasury Department has the bids from all twelve Reserve Banks, it repeats the process of ranking bids from the highest to the lowest price. The bills are allotted in descending order until the cumulative total, including the total amount of noncompetitive bids submitted, equals the amount of the issue offered.

Bill yields have varied over a wide range

The period covered in this study, July 1959 through mid-December 1960, is of particular interest because the yields on Treasury bills have risen sharply above and fallen below the yields offered on certain alternative forms of short-term investments (Chart 1). In December 1959 and January 1960, the return on bills reached the highest level since the 1920's. Yields on both 3-month and 6-month bills rose steadily throughout 1959, starting from about 3 percent and reaching to above 5 percent at the end of the year for 6-month bills and to 4½ percent for 3-month bills. From the highs reached in January 1960, bill yields fell sharply in the first half of 1960 and by mid-year were returning about a half

CHART 1

Short-term interest rates reached postwar peaks in late 1959 and then receded rapidly



Source: Board of Governors of the Federal Reserve System.

of what they had been returning six months earlier.

The demand for Treasury bills is conditioned by the supply of idle funds seeking temporary investment. Since the Treasury bill serves this purpose by providing a return on funds while minimizing the risk of investment, it might be expected that investors would be quite sensitive to the marked changes in bill yields that have occurred in the past year and a half. The motives that impel investors to buy bills are almost as varied as the classes of investors. Table 2 indicates the estimated distribution of the holdings of bills according to the Treasury survey of ownership for August 1960.

Since comparable data are not published as to the ownership of outstanding bills in the Twelfth District, the analysis will be pursued on the basis of subscriptions to bills for the District as compiled by the Federal Reserve Bank of San Francisco. This imposes certain limitations upon the study, for it does not consider the trading of outstanding bills in the secondary market. In many cases, buyers of bills resort to the secondary market. For

TABLE 2
OWNERSHIP OF TREASURY BILLS, August 31, 1960
(millions of dollars)

Commercial banks	4,344
Mutual savings banks	246
Insurance companies	263
Savings and loan associations	156
Corporations	4,983
U. S. Government investment accounts	636
Federal Reserve banks	2,753
All other investors ¹	23,057
Total	36,436

¹ Included with all other investors are those banks, insurance companies, savings and loan associations, and corporations not reporting in the Treasury Survey.

Note: From Treasury Survey of Ownership, August 31, 1960. Details may not add to totals due to rounding.

Source: United States Treasury Department and Board of Governors of the Federal Reserve System.

example, investors who underestimate the total demand for bills on the part of all subscribers and consequently bid too low in the auction may then buy bills in the secondary market. In addition, some investors who are not regular bidders in the weekly auction may wish for specific maturities so that their bills will run off at a certain date, returning their funds when they are needed. These investors will buy bills to suit their specific requirements in the secondary market. However, an analysis of the behavior of the most important investor groups in the District provides an indication of the pattern of demand for a specific type of money market instrument against a background of a given structure of interest rates. Moreover, because of the absence of tenders by Government securities dealers, subscriptions in the Twelfth District probably reflect more accurately the pattern of buying by final investors than do the subscriptions at the Federal Reserve Bank of New York, for example. In the New York City money market, Government securities dealers account for a large percentage of the total bids tendered and retail the bills they obtain in the secondary market. It is customary for these dealers to submit an array of bids at different prices which ensures that the

amount offered at auction will be completely sold. Since New York City is the principal national money market, bids by dealers and by New York banks for large customers play a major role in setting the auction rate. Foreign banks are also large bidders in this market. Over the period covered by this study, subscriptions entered at the Federal Reserve Bank of New York amounted to nearly three-quarters of the total tenders in the nation for 91-day bills.

The pattern of subscriptions in the District

In examining the subscriptions to Treasury bills, it is apparent that four groups of investors are of particular interest in the Twelfth District. In descending order of their volume of subscriptions, these are: commercial banks, state and local governments, corporations, and individuals and personal trust accounts. Since these investors may be motivated by different reasons in their bill purchases, it is helpful to investigate the behavior of each of the groups separately. Although this study is not intended to examine in detail the short-term investment alternatives open to the various investor classes, it is useful to indicate the returns on certain of these alternatives as they compare with the yields on Treasury bills. In this way, some of the factors affecting the decision to invest in Treasury bills may be taken into consideration.

Commercial banks hold bills as a form of reserves

The investment policy of commercial banks with respect to Treasury bills is of interest as an example of banking practice as well as one of the determinants of the pattern of bill purchases. Treasury bills are the most prominent among the "secondary reserves" of banks. Although not a legal reserve, they are a highly liquid asset which may be sold quickly and easily to meet the need for funds, yet an asset that will earn a return. The demand for bills

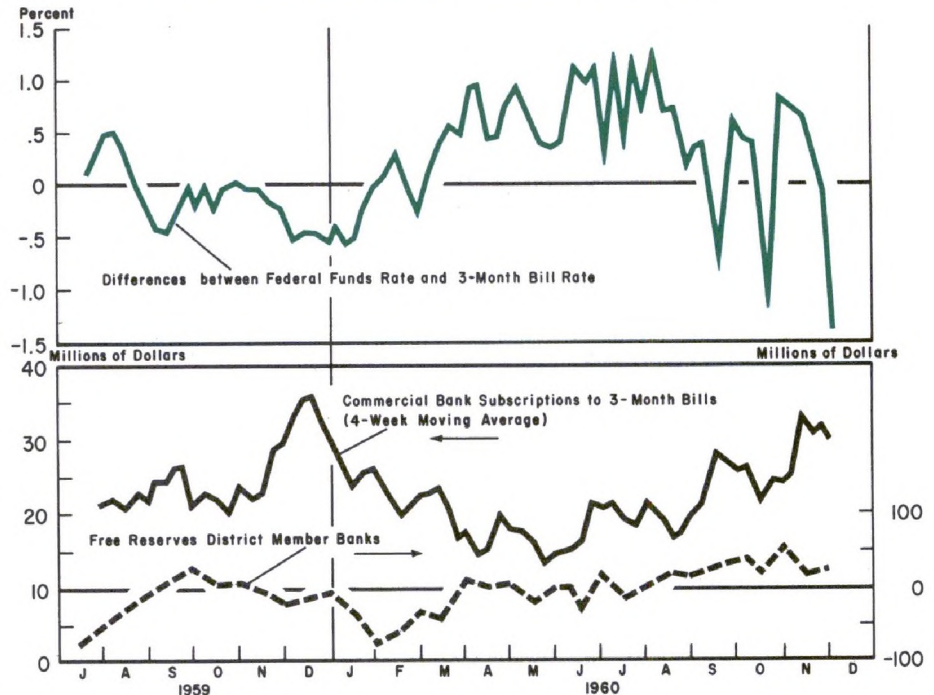
on the part of banks is determined first by the presence of free or unutilized reserves, and second, by the returns on alternative forms of short-term investments. These are illustrated in Chart 2.

The general shape of the time series representing total commercial bank subscriptions for 3-month bills indicates the importance of the differential between the market yield on bills and the effective rate on Federal funds transactions.¹ In December 1959 and early January 1960, the yield on 3-month bills had risen above 4.50 percent, 0.5 percent above the discount rate, which serves as the customary ceiling for the Federal funds rate. Chart 2 indicates that there was a pronounced rise in District bank subscriptions during this period. The fact that the amount of tenders reached a peak in the week of December 17, 1959, only to recede as rapidly as they had risen, may be accounted for by the fact that these bills matured in the week of March 15, 1960 and could have been held, let run off, or sold by the holders to meet corporate Federal income tax payments. Another reason for the sharp decline in bank subscriptions may be seen in the free reserve position of District member banks, which turned rather sharply downward during January 1960.

¹ Federal funds are claims to balances held at the Federal Reserve Banks. Commercial banks having excess reserves may sell claims to these balances to other banks needing funds to cover a reserve deficiency in what amounts to an overnight loan. The rate on Federal funds transactions is determined by the supply of excess reserves in the banking system and the demand for such funds, with a maximum ordinarily set by the discount rate, the rate at which member banks may borrow from the Reserve Banks. An analysis of the nature of Federal funds transactions in the Twelfth District will appear in a forthcoming issue of this *Review*.

CHART 2

Commercial bank subscriptions to Treasury bills rose as the bill rate exceeded Federal funds rate



Source: Federal Reserve Bank of San Francisco and Board of Governors of the Federal Reserve System.

From the December 1959 peak, bank subscriptions fell quite steadily until the first part of June, at which time they started an irregular upward trend. During the period December 1959–September 1960, the yield on 3-month bills was successively falling, below, or rising relative to the rate on Federal funds transactions. Thus, the pattern of bill tenders by District banks was roughly inverse to the differential between the bill rate and the Federal funds rate. The fact that District member banks as a group were no longer net debtors to the Reserve Bank after July undoubtedly strengthened their demand for bills.

It should be stressed that rate differentials between alternative forms of short-term investment are not of themselves sufficient conditions for determining the direction of bank investment in secondary reserves. The manager of the money desk of a commercial bank must consider first his present reserve posi-

tion and what will happen to it in coming weeks or months. A bank's reserve position changes constantly, as the bank acquires or loses deposits, as loans are made or repaid, and as it purchases or sells securities. The manager must make decisions as to how to invest excess funds or how to obtain funds when he is faced with a deficiency. If a large deposit comes in as, for example, a corporation prepares to pay dividends and it is expected that it will remain with the bank for only a few days, the manager would probably sell Federal funds since the funds invested go out on an overnight basis and can be brought back when withdrawals are expected. In this case, the convenience of Federal funds transactions might be the deciding factor. However, if the deposits of the bank increase and it expects to have excess reserves for longer than just a very few days, there are other alternatives open to the manager. He may then compare the expected yields on sales of Federal funds with the anticipated returns from possible purchases of Treasury bills or other money market instruments. Conversely, if a bank faces a reserve deficit, it may elect to purchase Federal funds if the deficiency is thought to be of short duration; or, in the longer run, it may either sell bills or let them run off at maturity without tendering bids for additional bills in the auction. If the rate on Federal funds is below the market rate on bills, it would be more advantageous for the bank to hold onto bills and buy Federal funds. If the bill rate is below the Federal funds rate, it would be cheaper to liquidate bills.

Commercial banks in the aggregate show a definite response to changes in the relation between the rate on Federal funds transactions and on Treasury bills, since these two choices define their principal investment positions in the short-term market. The presence of a large volume of uncommitted reserves in the banking system will act to shift the banks' preference to bills for, unless the ex-

cess reserves are spread thinly throughout the country banks, the Federal funds rate will decline absolutely and relatively to the bill rate as the supply of reserves in the banking system increases and the need for funds to cover reserve deficiencies decreases. But at the same time, banks will wish to invest excess funds in short-term instruments and might be expected to increase their bids for bills, and the increasing demand on the part of banks will act to push down the bill rate but not as low as the Federal funds rate.

The demand for Treasury bills on the part of banks in the Twelfth District must be considered in the light of the fact that the rates on both Treasury bills and Federal funds transactions are made in a national market. However, banks in the District cannot be treated in isolation from banks in the rest of the country. District banks may either gain funds from or lose funds to banks outside the District; the reserves of the banking system are not uniformly distributed. As deposits (and reserves) flow into the District, banks in the District might be expected to increase their demand for bills while the demand declines in areas where banks are losing funds in the clearings. In this way, District banks might subscribe for larger amounts of bills relative to banks elsewhere, depending, of course, upon the relation between the Federal funds rate and the bill rate.

The subscriptions for Treasury bills on the part of the commercial banks does not necessarily mean that the banks entering bids will hold the bills they receive until they mature. They may buy bills in the auction and then sell them in the secondary market. Thus, a bank can easily alter its bill position by purchasing or selling bills in the secondary market as well as buying bills in the weekly auction and holding them to maturity. However, a comparison of District bank bill subscriptions and the level of bills held by District weekly reporting member banks indicates that

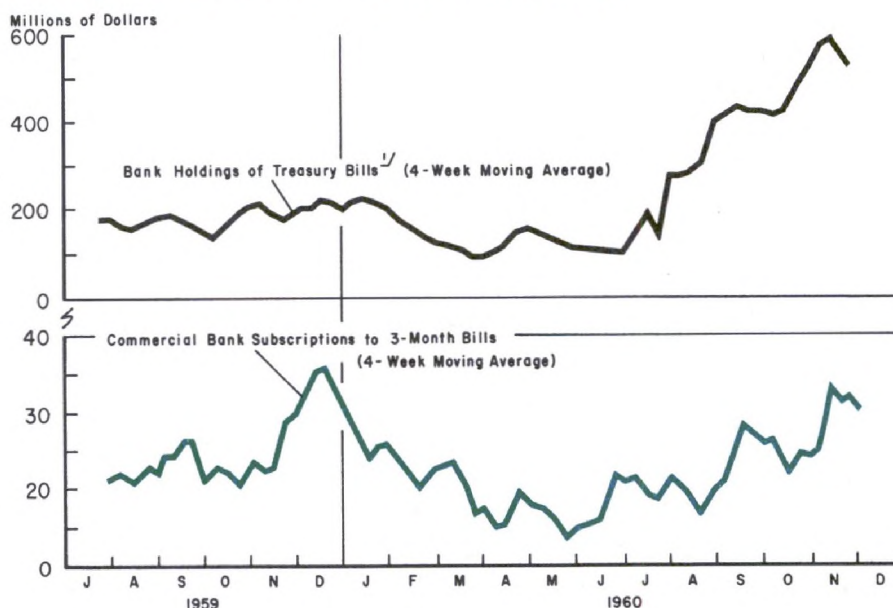
there is some degree of correspondence between the two items. Chart 3 demonstrates that as District banks increase their demand for bills in the weekly auction, they are also in the process of increasing their total holdings; conversely, as their bids in the auction slacken, their holdings of bills decline. Although an analysis of the subscriptions of banks provides only a partial picture of bank policy with regard to bills, it nevertheless appears to afford an accurate indicator of such policies.

State and local governments are second largest buyers of bills in District

In the Twelfth District, state and local governments formed the second largest individual group of subscribers for Treasury bills in the period examined. On the average, this investor group accounted for about 27 percent of total subscriptions tendered. In Chart 4, a trend is suggested when subscriptions reached a peak in April 1960 and fell off in succeeding months. The April date was probably dominated by the receipt of income taxes in California, some of which was invested in bills. The other and lesser peaks might be interpreted as the investment of tax receipts by various governmental units in the District which, after the tax date, invest the funds received in bills in the next week's auction. In the main, there are two investment alternatives for state and local governments: either time deposits in commercial banks or Treasury bills.

CHART 3

Commercial bank subscriptions to Treasury bills move parallel to their level of bill holdings



¹ Twelfth District weekly reporting member banks.
Source: Federal Reserve Bank of San Francisco.

The behavior of changes in time deposits of state and local political subdivisions at the weekly reporting banks indicates that in most cases a large rise in subscriptions for Treasury bills is accompanied by a rise in time deposits, and declines in subscriptions accompany a reduction in time deposits. In only two instances were there months in which subscriptions rose while time deposits fell off. One of these cases was in September 1959, when bill yields were rising rapidly, and the other was in January 1960, when bill yields had started to turn down from their peak. On the other hand, time deposits rose in November 1959 while subscriptions showed a decline. Aside from these exceptions, subscriptions and changes in time deposit balances show a roughly parallel course of movement which is particularly evident from February on in 1960. The behavior of these two series suggests that state and local governments follow a practice of maintaining given proportions of their funds in time deposits and investing receipts over and above

these amounts in Treasury bills. The yield on Treasury bills was consistently above the 2.5 percent ceiling¹ on time deposits until July 1960. The fact that subscriptions and changes in time deposits moved in the same direction both before and after the interest differential in favor of bills was eliminated indicates that factors other than the rate of return also influenced the investment of these funds.

There are a number of reasons why local governments enter the bill market.

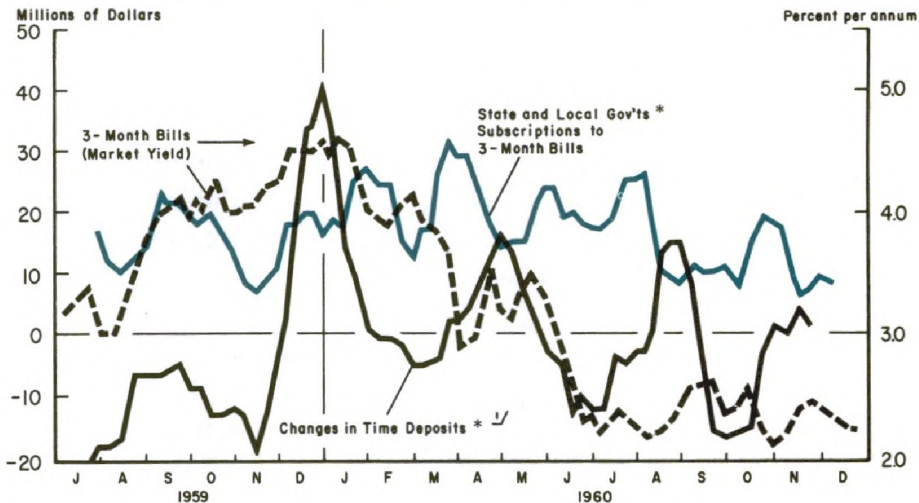
After property tax dates, these units find themselves temporarily with large idle balances. The range of possible investments for these funds is often limited by law, and Treasury bills along with time deposits in banks constitute the chief investment outlets for these funds. When state and local governments enter the capital market to sell bonds for the purpose of financing capital projects, they generally make a practice of selling enough bonds to cover the costs of construction for six months or a year in advance. The bond sale receipts may be invested in bills, with maturities arranged to run off when the funds are needed to meet progress payments. The fact that California political units alone account for more than one-eighth of all sales of state and local issues in the nation ensures that there will be large and temporarily idle balances seeking investment in short-term instruments.

The rapid growth of population of the District means that such units will be in the mar-

¹ During the period covered in this study, banks which are members of the Federal Reserve System were not permitted to pay more than 2.5 percent on time deposits having a maturity of less than 6 months and not less than 90 days—a maturity schedule comparable to that for Treasury bills.

CHART 4

State and local governments subscriptions to Treasury bills less responsive to changes in bill rates



*4 week moving average.
 † Held by state and local governments at Twelfth District weekly reporting member banks.
 Source: Federal Reserve Bank of San Francisco and Board of Governors of the Federal Reserve System.

ket frequently to finance new capital outlays. Unless the bill rate should fall to very low levels and remain there for a period of time, it may be expected that they will continue to be major purchasers of Treasury bills.

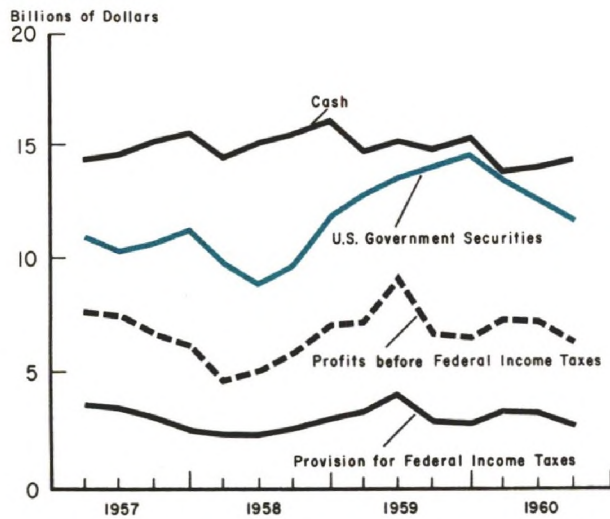
Corporations less important holders in District than in nation

Although corporations have been the largest single holders of Treasury bills as a group in the nation, they run behind state and local governments in the magnitude of their bill tenders in this District. Over the period covered in this study, corporations have accounted for about 19 percent of the total subscriptions for bills. Perhaps this stems from the fact that many of the major corporations in the country have their head offices in the East and are more likely to enter bids through their head offices than through their branch installations scattered about the country.

The reasons that corporations buy bills are quite different from those of the other major subscribers in the District. Detailed balance sheet data are not available for corporations

CHART 5

Corporate holdings of Government securities move with tax liabilities



Source: Federal Trade Commission and Securities and Exchange Commission.

in the District, but an examination of the compilation of the income statements and balance sheets of manufacturing corporations in the nation prepared by the Federal Trade Commission and the Securities and Exchange Commission affords the best source of information concerning the factors that are apparently most important in influencing the purchase of bills. Chart 5 indicates that holdings of Treasury securities (which are chiefly bills) vary directly with profits before taxes and provision for corporate Federal income taxes but vary inversely with cash holdings.

When business is booming, profits are on the rise and cash flows into corporate coffers. At the same time the income tax liabilities of corporations increase and they must set funds aside to meet these taxes. During such a period, interest rates in the money market are on the upswing and corporations attempt to hold down their cash balances and put idle funds into the money market to earn a return on these funds. Corporations try to minimize cash balances in a relative sense, holding them down but turning them over more rapidly, as the scale of their operations increases.

The chief form of short-term investment of corporate funds over and above needs for current operations is, as noted above, Treasury bills.¹ As funds are needed to settle tax liabilities or outlays for plant and equipment, bills are sold or allowed to run off.

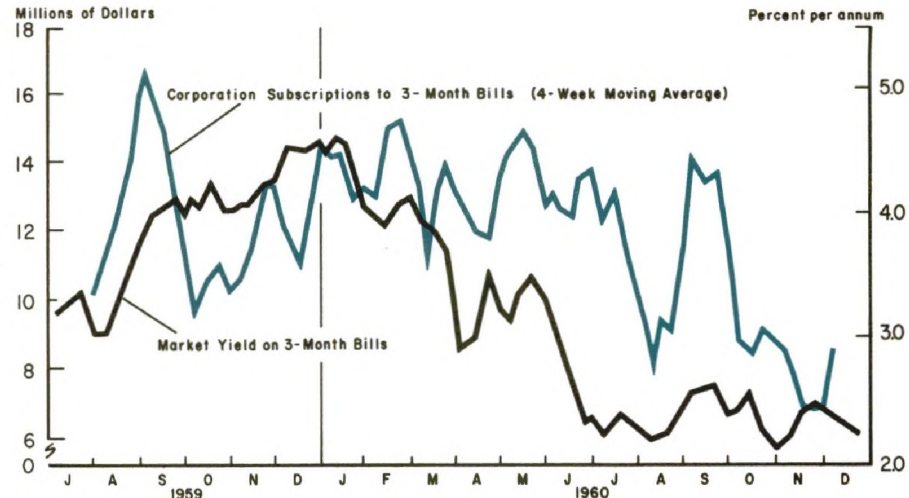
Although the principal determinant of corporate holdings of Governments is evidently the level of accrued tax liabilities, corporate treasurers might be expected to be sensitive to changes in the level of rates in the money market and to respond to the differential between the Federal funds rate and bill yields. If the Federal funds rate is above the market return on Treasury bills, corporations may arrange repurchase agreements with Government securities dealers. Repurchase agreements are a special form of loan, wherein the lender enters into a contract to buy securities at a specified price and sell them back at some future date at a higher price, the difference in the buying and selling price of the securities determining the rate of interest on the loan. This type of transaction may be mutually advantageous to both parties in that the securities dealer may borrow at a lower rate than he might from a bank while the corporation obtains a more favorable return than it might from the purchase of bills. Although corporations do not trade in the Federal funds market on a day-to-day basis on a scale comparable to the volume of commercial banks, they do enter the market via repurchase agreements. Repurchase agreements may be tailored to specific maturities and serve as a means by which corporations may meet obligations, such as dividend or tax payments, that will fall due on a given date. Repurchase agreements represent an alternative use of idle corporate funds, compared to short-term money market instruments or time deposits. The advantage of these arrangements lies in the fashion in which the maturity

¹For an interesting and informative description of corporate participation in the Government securities market, see the *Monthly Review* of the Federal Reserve Bank of Kansas City, December 1960.

CHART 6

Corporations buy bills in anticipation of coming tax payments

of the agreement may be made to correspond to the need for the funds to be returned to the corporation. There are also other alternatives for the investment of short-term funds: corporations may find it desirable to purchase commercial paper or finance company paper if the rates on these instruments are higher than the yield on bills. If money market rates fall below 2.5 percent, the range of investment opportunities widens to include time deposits in commercial banks, for this is the maximum rate payable on such deposits with maturities of 90 days to 6 months.



Source: Federal Reserve Bank of San Francisco and Board of Governors of the Federal Reserve System.

District corporation subscriptions for 3-month bills are examined against a background of yields on various types of short-term instruments in Chart 6. The high point in September 1960 suggests that corporations were buying bills that would run off just in time to meet the December 15 tax date. After this peak, there is no clearly discernible pattern other than a gradually rising trend through the fourth quarter of 1959 and the first quarter of 1960, followed by an equally gradual declining trend in the second quarter of 1960, which grew somewhat more pronounced in the third quarter. The rate on Federal funds transactions was above the bill yield in this period (Chart 2), which might indicate that some corporate funds were being channeled into this market and out of the purchase of Treasury bills. A more likely explanation lies in the fact that profits were declining and hence there was less need to make provision for tax liabilities.

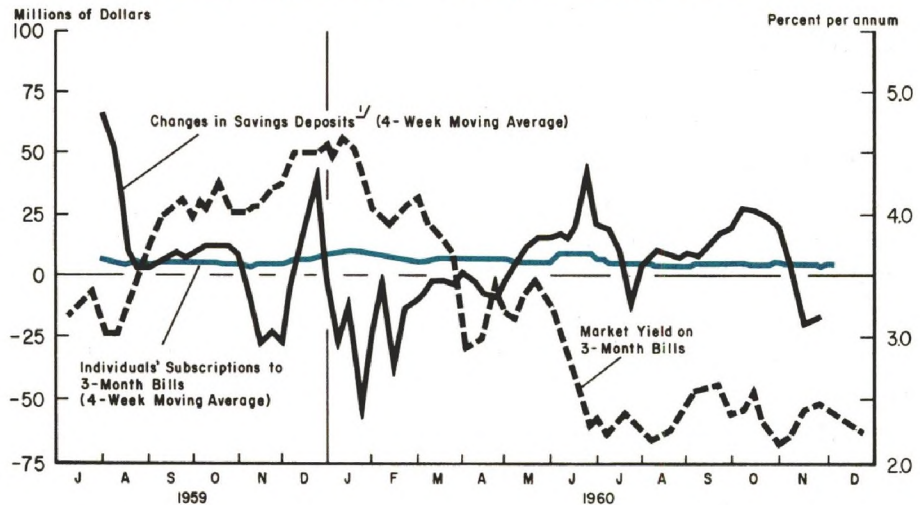
Individuals less responsive to bill yields

The types of investors discussed thus far tend to follow the money market closely from day to day, and their purchases and sales of securities are based on a high degree of familiarity with the factors that determine the structure of market rates. By contrast, individual investors (which includes business partnerships and personal trust account holdings) do not ordinarily regard the bill market as a major outlet for idle funds. Individual investors are the smallest group in the District in terms of the dollar volume of subscriptions, accounting for about 10 percent of total subscriptions in the period under study.

There are certain institutional and other factors that make the response of individuals to changes in bill rates fairly sluggish. First, there is a reluctance to shift funds out of savings accounts until the end of an interest period. This is evident from Chart 7 which indicates that although yields on bills had been rising steadily throughout the second half of 1959, individuals did not withdraw

CHART 7

Individuals' subscriptions to Treasury bills respond slightly and with a lag to changes in bill rate



¹ Twelfth District weekly reporting member banks.
 Source: Federal Reserve Bank of San Francisco and Board of Governors of the Federal Reserve System.

funds from time deposits in commercial banks in any volume until January 1960, when the largest increase in bill tenders from individuals occurred. However, the withdrawals of savings deposits by individuals cannot be ascribed entirely to participation in the Government securities market. On January 1, 1960, savings and loan associations in California raised their dividend rate from 4 to 4½ percent, and it must be presumed that a large part of the withdrawals from commercial bank time accounts went into savings and loan shares. Secondly, there seems to be a certain amount of inertia among individual investors coupled with a lack of knowledge of the short-term Government securities offered. The investment possibilities of Governments was forcefully brought to the attention of investors in October 1959 when the announcement of a 5-year Treasury note bearing a coupon rate of 5 percent (known afterwards as the "magic fives") called forth 110,000 subscriptions from individuals in the nation.

The Twelfth District pattern of Treasury bill subscriptions from individuals during the period July 1959 to November 1960 shows that this group responded to changes in bill yields but with a lag. There may be some reluctance to buy bills unless it is clear that bill rates have established a definite upward trend. Similarly, although bill yields began to fall from their peak in February, the volume of individual subscriptions declined but still remained higher than the second half of 1959, averaging around \$9 to \$10 million per week throughout the spring. It was only after bill

yields had been declining for several weeks that the average volume of individual subscriptions declined further. From July to November 1960, the return on Treasury bills ranged between 2.25 to 2.50 percent, and average subscriptions dropped back to \$5 to \$8 million per week. It may be assumed that some individuals shifted funds back to banks where they could earn a return of 3 percent, and this may be reflected in the strong upward trend in savings accounts at commercial banks.

Noncompetitive bids important in District

In the weekly bill auction, subscribers have the option of naming a price at which they wish to purchase bills or entering a noncompetitive bid. In the latter case, no price is named and the investor agrees to pay the average price determined by the competitive bids.

In the Twelfth District, a large proportion of the bids tendered is entered on a noncompetitive basis. Since the maximum allotment to any one bidder submitting such a subscrip-

tion is \$200,000 for 91-day bills and \$100,000 for 182-day bills, it is likely that these bids come from smaller investors—small banks, businesses, local governments, and individuals—who do not follow money market conditions as closely as do the larger investors. There may also be certain bidders who very much want the securities and do not wish to run the risk of underpricing their bid and not obtaining them. In the District, noncompetitive bids account for between one-fourth and one-half of total allotments. For the country as a whole, bids at the average price generally run about one-fifth to one-fourth of total allotments. The proportion of noncompetitive bids has grown sharply in recent years, attesting to an increasing interest and participation by smaller investors in the bill market. On a national basis, such bids were only about 2 percent of the total in 1947; by 1953, they had grown to approximately 15 percent and in 1960 averaged 20 to 25 percent.

The increase in the volume of noncompetitive bids in recent years admits of two interpretations. Since those bidders submitting noncompetitive tenders in effect agree to accept the average price (or conversely, yield) set in the auction, this throws the burden for the determination of the auction rate upon the bidders who tender specific bids. In assessing the influence of this development, much depends upon the identity of the noncompetitive bidders—whether they have been consistent bidders entering specific prices who have had indifferent success in meeting the price and obtaining bills, or whether they are principally newcomers to the bill market. If the present noncompetitive bidders formerly submitted specific price bids, this would possibly presage a change in the structure of prices being tendered. On the other hand, if the bulk of those entering noncompetitive bids are essentially new to the bill market and are not disposed to enter specific bids, the nature of the structure of specific price bids might be said to remain undisturbed.

It is possible that a relatively large proportion of noncompetitive bids might lead to larger swings in the average auction price. If the demand for bills is strong, specific price bids will be on the high side and force down the auction rate or yield. Conversely, if the demand for bills is slack, the Treasury must go further down the scale of specific bids and the auction rate will be relatively high. This would presume that those investors who regularly submit bids at specific prices were not influenced by the growing number of noncompetitive bids. However, if this last group of investors were to take cognizance of the fact that growing numbers of investors were submitting non-price bids, they might feel that they must revise their strategy and “sharpen their pencils” if they are to satisfy their demand for bills. They would have to bid closer to what they feel the market price to be and in consequence the range of submitted prices may be narrowed. The evidence at hand is insufficient to support either of these views to the exclusion of the other.

Summary

In assessing the demand for Treasury bills in the weekly auction by the four investor groups considered, it is evident that forces other than the structure of money market interest rates condition the decision to buy bills. These forces may not operate in the same direction for different groups of investors. For example, in a boom when monetary policy leans toward restraint, banks may find that their reserve positions do not allow them to accommodate the demand for loans unless they reduce their securities holdings. In consequence, banks may find that they must reduce their demand for bills at the same time that yields on bills are rising. In such periods, corporate income is rising and idle funds¹ are

¹The term “idle funds” is used in a qualified sense, for the corporate treasurer would be quick to state that he has no “idle” funds; they are all committed. The funds referred to as “idle” are those which are committed to specific purposes but which may not actually be used for these purposes for a number of months.

FEDERAL RESERVE BANK OF SAN FRANCISCO

invested in the short-term market in anticipation of tax payments or to be disbursed later for plant and equipment outlays. In effect, banks are then shifting their part of the underwriting functions to other investors.

The demand for Treasury bills on the part of state and local governments is influenced to a high degree by the capital construction programs of these units and the volume of bond flotations in the long-term capital market. If the demand for long-term funds on the part of this investor group was sensitive to

long-term interest rates, this might, by indication, influence the demand for bills, for, if long-term rates were rising, these units would be less inclined to float bonds, and, as the volume of bond sale receipts declined, the demand for bills from this sector would likewise decline.

Individuals make up a relatively minor part of the total demand for Treasury bills in the District, but, if bill rates rise sufficiently and persistently, they will be drawn into the market, although not in such volume as to constitute a major force in the market.

BANKING AND CREDIT STATISTICS AND BUSINESS INDEXES—TWELFTH DISTRICT¹

(Indexes: 1947-1949=100. Dollar amounts in millions of dollars)

Year and Month	Condition items of all member banks ^{2, 7}				Bank debits index 31 cities ^{4, 5}	Bank rates on short-term business loans ^{6, 7}	Total nonagricultural employment	Total mfg employment	Car-loadings (number) ⁵	Dep't store sales (value) ⁵	Retail food prices ^{7, 8}
	Loans and discounts	U.S. Gov't securities	Demand deposits adjusted ³	Total time deposits							
1929	2,239	495	1,234	1,790	42	....	...	...	102	30	64
1933	1,486	720	951	1,609	18	....	...	...	52	18	42
1939	1,967	1,450	1,983	2,267	30	....	60	57	77	31	47
1950	...	...	...	...	...	...	103	105	98	107	100
1951	7,866	6,463	9,937	6,777	132	3.66	112	121	100	112	113
1952	8,839	6,619	10,520	7,502	140	3.95	118	130	100	120	115
1953	9,220	6,639	10,515	7,997	150	4.14	121	137	100	122	113
1954	9,418	7,942	11,196	8,699	153	4.09	120	134	96	122	113
1955	11,124	7,239	11,864	9,120	173	4.10	127	143	104	132	112
1956	12,613	6,452	12,169	9,424	190	4.50	134	152	104	141	114
1957	13,178	6,619	11,870	10,679	204	4.97	138	156	96	140	118
1958	13,812	8,003	12,729	12,077	209	4.88	138	154	89	143	123
1959	16,537	6,673	13,375	12,452	237	5.36	143	163	93	157	123
1959 December	16,537	6,673	13,375	12,452	240	5.71	147 _r	168 _r	98	158	123
1960 January	16,354	6,304	12,971	12,111	248	....	149	170	99	157	124
February	16,388	5,976	12,493	12,017	243	....	150	170	92	159	123
March	16,660	5,707	12,553	11,986	242	5.72	150	170	95	157	123
April	16,933	5,999	12,810	12,042	254	....	151	170	95	159	126
May	17,104	5,813	12,290	12,142	255	....	150	168	95	153	125
June	17,131	5,738	12,298	12,277	255	5.73	151	167	85	153	125
July	16,895	5,967	12,608	12,253	260	....	151	166	81	159	126
August	17,142	6,303	12,579	12,454	249	....	151	166	85	155	125
September	16,923	6,339	12,575	12,547	253	5.53	151	166	83	155	126
October	16,958	6,626	12,848	12,628	263	....	151	165	78	160	126
November	16,898	6,697	12,907	12,616	249	....	152	165	...	...	126
December ^p	17,137	6,960	13,056	13,028	259	5.50	...	...	...	...	...

Year and month	Industrial production (physical volume) ⁵							Waterborne Foreign Trade Index ^{7, 9, 10}					
	Lumber	Petroleum ⁷		Cement	Steel ⁷	Copper ⁷	Electric power	Exports			Imports		
		Crude	Refined					Total	Dry Cargo	Tanker	Total	Dry Cargo	Tanker
1929	95	87	78	55	...	103	29	190	150	247	124	128	7
1933	40	52	50	27	...	17	26	110	...	...	72	...	...
1939	71	67	63	56	24	80	40	163	107	243	95	97	57
1950	114	98	103	112	125	115	120	92	80	108	144	145	103
1951	113	106	112	128	146	116	136	186	194	175	162	140	733
1952	115	107	116	124	139	115	145	171	201	130	204	141	1,836
1953	116	109	122	131	158	113	162	141	138	145	314	163	4,239
1954	115	106	119	133	128	103	172	133	141	123	268	166	2,912
1955	122	106	124	145	154	120	192	166	178	149	314	187	3,614
1956	120	105	129	156	163	131	209	201	261	117	459	201	7,180
1957	106	101	132	149	172	130	224	231	308	123	582	216	10,109
1958	107	94	124	158	142	116	229	176	212	123	564	221	9,504
1959	116	92	130	174	138	99	253	188	223	138	686	263	11,699
1959 November	117	91	133	165	148	43	257	148	202	71	807	290	14,284
December	129	91	131	163	212	40	260	209	266	128	858	302	15,333
1960 January	127	90	130	156	197	67	265	229	296	134	958	277	18,687
February	127	90	127	173	206	116	263	230	271	172	720	259	12,719
March	120	91	131	165	183	134	271	287	316	246	678	296	8,707
April	113	91	137	182	162	141	265	240	287	172	813	286	14,484
May	112	91	136	167	164	144	271	251	331	139	774	290	13,341
June	101	91	132	170	158	142	270	243	288	180	872	294	15,944
July	104	91	138	149	134	123	270	193	257	102	681	263	11,565
August	104	90	138	164	125	121	275	227	280	153	1,025	261	20,948
September	101	90	136	143	127 _p	141	...	...	...	...	...	...	...
October	95	91	131	159	124 _p	144	...	...	...	...	...	...	...
November	...	...	...	...	125 _p	...	...	...	...	...	...	...	...

¹ Adjusted for seasonal variation, except where indicated. Except for banking and credit and department store statistics, all indexes are based upon data from outside sources, as follows: lumber, National Lumber Manufacturers' Association, West Coast Lumberman's Association, and Western Pine Association; petroleum, cement, and copper, U.S. Bureau of Mines; steel, U.S. Department of Commerce and American Iron and Steel Institute; 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. Department of Commerce. ² Annual figures are as of end of year, monthly figures as of last Wednesday in month. ³ Demand deposits, excluding interbank and U.S. Government deposits, less cash items in process of collection. Monthly data partly estimated. ⁴ Debits to total deposits except interbank prior to 1942. Debits to demand deposits except U.S. Government and interbank deposits from 1942. ⁵ Daily average. ⁶ Average rates on loans made in five major cities, weighted by loan size category. ⁷ Not adjusted for seasonal variation. ⁸ Los Angeles, San Francisco, and Seattle indexes combined. ⁹ Commercial cargo only, in physical volume, for the Pacific Coast customs districts plus Alaska and Hawaii; starting with July 1950, "special category" exports are excluded because of security reasons. ¹⁰ Alaska and Hawaii are included in indexes beginning in 1950. _p—Preliminary. _r—Revised.

