

Review of Business Conditions

Business activity continued to expand on a broad front according to available information for November and December. Gains in December raised the industrial production index to 115 percent of its 1957 average, continuing the upward trend since the cyclical low in February 1961. Nevertheless, the December unemployment rate remained unchanged from November because of a reduction in the civilian labor force. Although the civilian labor force in 1961 averaged a million higher than in 1960, the gains in recent months over a year earlier have been much smaller than this. In December the number of workers in the civilian labor force was only 10,000 higher than a year earlier.

Major contributors to the December rise in industrial production were the continued increase in auto assemblies and a nonseasonal rise in steel ingot production. The output of steel continued to rise in early January reaching the highest weekly level since early in 1960. The production of autos rose 9 percent in December from the high level of output in November. Some nonseasonal easing in auto output is in prospect for January, however, judging from the volume of autos assembled during the first three weeks of January and production schedules for the remainder of the month. The unusual rise in December steel production may have stemmed in part from a buildup in inventories in anticipation of a possible summer steel strike. Nevertheless, manufacturers' inventories increased only slightly in November as supplies of finished goods declined, reflecting further gains in sales. The dollar volume of manufacturers' sales rose to a new high of \$32.2 billion in November, with sales by durable goods producers leading the advance. The increase was widespread among major groups of durable producers, particularly in the auto industry.

The preliminary November estimate of construction put in place was revised sharply upward due to a spurt in public construction activity related largely to military facilities and highways. With a subsequent decline in public construction, the December estimate for total construction dropped 2 percent to a seasonally adjusted annual rate of \$60 million. Housing starts, seasonally adjusted, also declined in December for the second consecutive month.

The consumer sector continued to strengthen. Personal income in December reached a record high. Seasonally adjusted retail sales during the month, however, declined 1 percent from the record November figure, largely as a result of an easing in auto sales. For the year as a whole, retail sales totaled \$219.1 billion, a slight decline from the record 1960 level. The strong level of auto sales in November was accompanied by the largest seasonally adjusted increase in instalment credit for any month since June 1960. Auto sales continued at a high level in the first ten days of January.

Despite sizeable advances in industrial activity and retail sales in recent months, pressure on prices has not been evident. Wholesale prices remained almost stable during the last three months of 1961 and, at the close of the year, were slightly lower than a year earlier. The consumer price index eased in November but was slightly above the index for November 1960.

Market yields on corporate and municipal securities remained comparatively stable in December and early January, as did those on long-term United States Government issues. Yields on Treasury bills and other types of short-term paper trended upward during the same period, reflecting in part the pressure on the market of increased supplies of Treasury bills.

In response to a change in Federal Reserve regulations, higher interest rate payments on savings (effective January 1) were announced by many commercial banks in the country. The new regulation permits payment of $3\frac{1}{2}$

LABOR FORCE DATA, ANNUAL AVERAGES

(in thousands)

		Pacific Coast States		United States				
	1959	1960	1961 p	1959	1960	1961		
Civilian employment	7,628.2	7,750.9	7,810.1	65,581	66,681	66,796		
Unemployment	393.0	478.2	572.3	3,813	3,931	4,806		
Civilian labor force	8,021.2	8,229.1	8,382.4	69,394	70,612	71,603		
Rate of unemployment (percent of civilian (labor force)	4.9	5.8	6.8	5.5	5.6	6.7		

p-Preliminary.

Sources: United States Department of Labor and state departments of employment.

percent on regular savings accounts and 4 percent on savings or time deposits held for 12 months. Small increases in rates have also been announced by some savings and loan associations.

District employment rose; unemployment fell

Gains in all major industry divisions pushed District nonagricultural employment ½ percent higher in November, after allowance for seasonal factors. The largest increases occurred in manufacturing, contract construction, and mining; however, the latter industry was depressed by a labor dispute in Arizona during October.

All major manufacturing industries on the Pacific Coast registered gains in November except the typically erratic canning and preserving industry and primary and fabricated metals. Particularly sharp increases occurred in rubber and miscellaneous plastic products, electrical machinery, and transportation equipment. Within the latter industry, automobile manufacturers increased their payrolls by 14 percent; aircraft employment rose by 1.3 percent with additional hirings of 1,600 workers in California and 1,800 in Washington; and employment in Pacific Coast shipyards continued at the high levels of the past year. In the Los Angeles-Long Beach area, the improvement in aircraft employment was considerably greater than had been anticipated earlier in the year, but it only partly reflected stepped-up defense procurement. In the San Francisco-Oakland area, on the other hand, burgeoning defense activity was clearly responsible for the recent sharp reversal of trend. In San Diego, aircraft layoffs continued, reflecting primarily the exhaustion some months back of a major producer's backlog of orders for commercial jets.

The average weekly hours of manufacturing production workers in the District rose from 40.0 hours in October to 40.2 hours in November. This increase in hours worked plus a 3-cent rise in average hourly earnings pushed weekly earnings to a record \$109.75.

The number of unemployed workers in the Pacific Coast States dropped by 1.5 percent in December, and civilian employment rose slightly to 7,910,200, on a seasonally adjusted basis. As a result, the rate of unemployment in the three-state area declined from 6.2 in November to 6.1 percent for December, the same rate of unemployment as in the nation. The rate of unemployment in the Pacific Coast States averaged somewhat higher than nationally in 1961 for the second consecutive year but was closer to the national unemployment rate than in 1960.

Nonagricultural employment in the Pacific Coast States increased slightly in December after seasonal adjustment; gains in manufacturing, finance, services, and government offset moderate losses in mining, construction, and transportation. Employment in wholesale and retail trade was unchanged from November. For the year 1961, nonagricultural employment on the Pacific Coast rose by just over 1 percent. This resulted solely from an expansion of employment in the service-producing industries (trade, finance, services, and government). Despite sizeable gains in the latter half of the year, employment in manufacturing was down from 1960 by 20,400 workers (1.2 percent), and construction employment fell by 5,800 (1.6 percent).

Reports from employers concerning hiring intentions in the next few months suggest further improvement in most major labor markets in the District. Although major seasonal layoffs occur in trade, construction, and nondurables manufacturing during this period of the year, offsetting substantial gains are expected in durable goods, finance, service, and government. Reports from automobile assemblers generally reflect the substantial gains and equivalent optimism that has characterized the industry in major production centers elsewhere in the country. Moreover, moderate but steady employment gains are anticipated in the next few months in ordnance, nonelectrical machinery, instruments, and most other durables producing lines. Although employer reports suggested only moderate improvement in primary metals employment between November and January, recent gains in orders may generate greater than expected hiring.

District construction activity increased in November

The total dollar volume of contracts let in the District during November amounted to \$571 million, 13 percent above the same month last year. The pattern of increase was much the same as that reported for the nation as a whole. Nonresidential contract awards rose 24 percent above 1960, partly because of gains in contracts for commercial and industrial buildings. November residential contracts were also above last year (35 percent). Single-family home construction contracts increased as they did nationally. Contracts let for apartment buildings also increased in the District, however, in contrast to the decline shown in the national data. Heavy engineering contracts awarded fell 33 percent below November 1960, reflecting declines in both public works and utilities construction. In the former, this was due principally to a drop in contracts let for streets and highway construction.

On a seasonally adjusted basis, the pattern of change from October to November was similar to that for the year-ago comparisons. Total construction contracts let rose about 6 percent above October due to gains in contracts for residential and nonresidential buildings. Heavy engineering contract awards, on the other hand, declined.

There appears to be little change in the mortgage rates prevailing in District mortgage markets. Mortgage funds provided by District savings and loan associations seem to be readily available. Through November, the net increase in the share accounts of these associations continued to run substantially above 1960 levels, as has that for time deposits at District commercial banks. Secondary market purchases in the District by the Federal National Mortgage Association continued to rise, with the net increase in its secondary market holdings in November being the highest since May 1960.

Lumber orders up moderately in December

After declining substantially during the latter part of November, Douglas fir new orders picked up moderately in December. They were, nevertheless, still below the level of fir output throughout most of the month, even though production declined sharply in the final week of December due to holiday shut-

downs by a number of mills. The November decline in new business was the result of an order cutback by Eastern buyers and may have been due in part to tightness in intercoastal shipping service. The December 1 rail freight reduction may have also caused buyers who receive their shipments by rail to postpone their purchases in the latter part of November. Western pine production remained at relatively low levels throughout December, while orders picked up somewhat from the latter part of November. However, neither Douglas fir nor Western pine orders in December suggest that a substantial pickup in demand is materializing. This may change, though, if single-family new home construction continues to improve.

The moderate improvement in new business that occurred in December was reflected in a slight rise in lumber prices during the latter part of the month and into January. Crow's industry average price of \$72.27 per thousand board feet in early January was slightly above the December average price.

Mixed market demand for District metals

The average weekly output of steel in the Western area declined from November to December in contrast with an increase nationally. Expansion of Western steel production since the holiday period, however, was relatively large. From the week ended December 30 to the week ended January 13, the output of steel in the West advanced 11.1 percent while steel production in the nation rose 9.2 percent.

National steel production in the week ended January 13 rose to 123.5 percent of the 1957-59 average, the highest weekly output of steel since the first week of April 1960. The vigor of the rise in steel output is further demonstrated by the increase in production from November to December on a monthly basis. Such a rise is contrary to the usual seasonal pattern and stemmed from a sharp increase in orders, spreading from automobile makers to other steel users, coupled with the beginnings of buying as a hedge against a possible industry-wide strike when steel labor contracts expire in mid-1962.

Copper buying has picked up from the slow rate that prevailed in October and November. The rise is due partly to trouble in the Congo, increasing orders from brass mills, major users of refined copper, and to some copper buying for inventory buildup as a hedge against possible copper mine strikes at midyear. The copper industry is watching efforts at restoring peace between copper-rich Katanga Province and the central Congo Government.

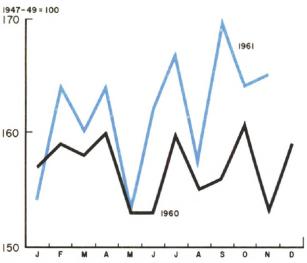
Major miners and smelters of zinc are pricing prime western grades at 12 cents a pound at East St. Louis, the price reached after a rise of ½ cent in early December. The move to increase the price of prime western zinc was attributed to a steady drop in overall United States zinc stocks and a rise in shipments as demand by the steel industry continued strong. Producer stocks of all grades at the end of October were 150,000 tons, the lowest in a year and a half, after seven straight months of decline. October shipments of refined zinc were the highest in nearly 2½ years, and industry sources believe that November shipments were even higher.

Lead is suffering from continued excessive stocks and overproduction here and abroad. Some price cutting below the official quotation of 10½ cents a pound (New York) is said to be taking place. Buying in the United States has dropped sharply in the past several weeks as consumers failed to enter the market in any large volume for January delivery as had been expected.

Consumer income and expenditures rise

Twelfth District personal income reached a record high of \$65.9 billion in 1961, ac-

Twelfth District department store sales rose in latter part of 1961



Source: Federal Reserve Bank of San Francisco.

cording to estimates published by *Business Week*. This represents an increase of about 6 percent from the 1960 level. During the last three months of the year, personal income averaged \$5.7 billion, which was slightly more than 2 percent greater than in the preceding quarter and 5 percent above the year-ago quarter. The expansion in personal income in the fourth quarter was relatively larger in the District than in the nation, with the latter having only a 3 percent increase from a year ago and less than a 2 percent rise from the third quarter.

District department store sales in 1961 rose 3 percent above the 1960 level. Much of this increase occurred in the last few months of the year, reflecting an active Christmas season. Part of the strengthening in department store sales, however, results from the opening of new stores for which year-ago data were, of course, not available for comparison. Among durable goods, the most current data on new passenger car registrations in California suggest that November was the high month for 1961. During the first seven days of December registrations continued at a high level, exceeding the daily average for November. In the following two-week period, regis-

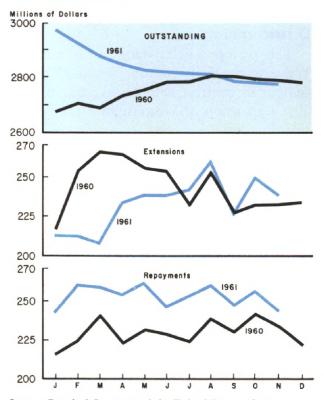
trations declined somewhat with the approach of the holiday season.

Despite the higher level of personal income in the District, consumers utilized more bank instalment credit to finance their current purchases during the July-November period than during comparable months of 1960. Nevertheless, repayments continued to exceed extensions. As a result, the total volume of instalment credit held by banks in the District declined through November.

Farm receipts hit record high in October

Receipts from marketings by District farmers in October jumped to a record high for the month, \$626 million. As monthly returns in recent years generally reached their peak in October, the \$626 million also represents a record flow of monthly income. Although re-

Larger extensions of instalment credit by Twelfth District banks in recent months



Source: Board of Governors of the Federal Reserve System.

ceipts from marketings of crops and livestock, separately, were not at a record high during the month, combined they reached a recordbreaking level of returns. Gains in October farm receipts from a year earlier occurred in all District States except Utah and Washington. The decline in Utah was very slight, but totaled 12 percent in Washington, largely as a result of a lower volume of marketings.

Prospects for irrigation water supplies in 1962 vary considerably among District States as of January 1. Adequate water supplies are indicated for the Pacific Northwest States of Washington, Oregon, and Idaho. The outlook is also more favorable in Arizona and Utah than a year earlier with the snowpack in Utah considerably above average and the heaviest since 1958. Nevertheless, a continuation of above normal snowfall is necessary if Utah reservoirs are to be replenished. In contrast with the sharp improvement in Utah, water supply prospects are even less favorable in California and Nevada than a year earlier. The dry conditions in these two states during the past three years is reflected in the extremely small volume of water in major reservoirs. Without a sharp improvement in moisture supplies during the remaining winter months, water shortages are expected again this year, particularly in the San Joaquin Valley.

December increase in total bank credit brings yearly gain to over \$2 billion

An increase of \$464 million in December brought total loans adjusted and investments at District weekly reporting member banks to a level more than \$2 billion above that at the end of December 1960. Slightly more than half the gain in bank credit in December was due to an increase in loans as credit demand was augmented by tax borrowing at midmonth. Loans to public utilities during the

month rose \$40 million, more than any other classified business loan category. The increase in business loans was approximately the same as in the corresponding period of the preceding year. Although borrowing by business prior to the December 15 tax date was only about half that in 1960, loans continued upward in the final week of the period in contrast to a decline a year ago. The December increase in business borrowing raised the volume of outstanding business loans to 6 percent above the level at the end of 1960. Bank borrowing by sales finance companies associated with the quarterly tax payment period was of about the same magnitude as in mid-December 1960. A further rise in real estate loans in December resulted in a yearly increase of \$133 million contrasted with a decline in the preceding year. The substantial increase in consumer loans during December reflected demand for bank credit to finance automobile and Christmas buying.

District weekly reporting banks increased their holdings of United States Government securities by \$89 million in December. The rise of \$173 million in bill holdings was partially offset by a decline in securities in the 1- to 5-year maturity range. During this period, banks added \$137 million to their holdings of securities other than Governments, the largest monthly increase in 1961.

Demand deposits adjusted rose by \$301 million and time deposits by \$220 million during December. In the latter category, the largest increase was in deposits of states and political subdivisions as December tax payments were deposited. The yearly increase in total time deposits was \$1.5 billion, with savings deposits accounting for about two-thirds of the gain. Demand deposits adjusted also rose by more than \$500 million during 1961.

During December, District banks were, on balance, net purchasers of Federal funds in sizeable amounts. The tightness in District bank reserve positions was reflected in the

¹ Adjusted to exclude valuation reserves and loans to domestic commercial banks.

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		
		29, 1961 27, 1961 Percent		. 28, 1960 27, 1961 Percent		. 29, 1961 27, 1961 Percent	From Dec. to Dec. 2 Dollars		
	Dollars	reiteilt	Dollars	rercent	Dollars	rercent	Dollars	Percen	
ASSETS:									
Total loans and investments	+478	+1.86	+2,250	+ 9.40	+3,937	+ 3.32	+9,370	+ 8.28	
Loans adjusted and investments 1	+464	+1.82	+2,157	+ 9.06	+3,729	+ 3.18	+9,293	+ 8.31	
Loans adjusted 1	+238	+1.49	+ 698	+ 4.48	+2,891	+ 4.03	+3,560	+ 5.01	
Commercial and industrial loans	+101	+1.78	+ 324	+ 5.94	+ 817	+ 2.54	+ 779	+ 2.47	
Real estate loans	+ 29	+0.53	+ 133	+ 2.49	+ 52	+ 0.39	+ 575	+ 4.48	
Agricultural loans	— 1	0.14	+ 50	+ 7.44	+ 29	+ 2.37	+ 144	+12.9	
Loans for purchasing and carrying securities	22	9.09	+ 28	+ 14.58	+ 862	+21.53	+ 921	+ 23.3	
Loans to non-bank financial institutions	+ 71	+8.72	+ 50	+ 5.99	+ 763	+14.20	+ 177	+ 2.9	
Loans to domestic commercial banks	+ 14	+7.33	+ 93	+83.04	+ 208	+ 15.98	+ 77	+ 5.3	
Loans to foreign banks	+ 14	+6.17	+ 40	+19.90	+ 67	+11.43	98	-13.0	
Other loans	+ 45	+1.41	+ 103	+ 3.30	+ 293	+ 1.77	+1,200	+ 7.6	
U. S. Government securities	+ 89	+1.26	+ 1,055	+17.26	+ 315	+ 0.93	+3,700	+12.1	
Other securities	+137	+5.68	+ 404	+18.82	+ 523	+ 4.46	+2,033	+19.9	
LIABILITIES:									
Demand deposits adjusted	+301	+2.50	+ 663	+ 5.67	+2,437	+ 3.81	+2,667	+ 4.1	
Time deposits	+220	+1.67	+1,532	+12.89	+ 284	+ 0.69	+6,086	+17.2	
Savings accounts	+ 60	+0.56	+ 970e	+ 9.92e	+ 311	+ 1.04	n.a.	n.a.	

e-Estimated.

n.a. Not available.

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

fact that the bulk of District Federal funds transactions were made at the discount rate of 3 percent.

Average interest rates on business loans decline in December

The quarterly interest rate survey covering the period December 1-15 showed a drop in the unweighted average interest rate on shortterm business loans made by District banks to 5.25 percent, a decline of 5 basis points from the 5.30 percent rate in September and the rate of 5.32 percent in December 1960. One-third of the total dollar amount of shortterm loans was made at the prime rate of 4.5 percent, a higher proportion than in September. There was a reduction in the dollar volume of loans at rates of 6 percent and over, with the 5-6 percent range remaining relatively constant. Average rates on loans over one year rose to 5.30 percent, above the relatively low rates of 4.89 percent in September and 5.28 percent in December 1960 when several large atypical loans unduly influenced the average rate. The number of loans made, both short- and long-term, was below that in September, but the dollar amount in both categories was greater. The dollar volume of longterm loans was also a slightly higher percentage of total dollar volume than in September.

District banks increase rate paid on savings deposits

The announcement by major District branch banking systems on January 2 that they would pay 31/2 percent on savings deposits assured this as the "going rate" in the District, since many unit and smaller banks

had already stated their intention of paying the higher rate. Many of the banks will continue to compute interest on a daily basis and compound interest quarterly. Some District banks have also announced a 4 percent rate on savings held for a 12-month period. Conditions under which this higher rate will apply vary rather widely among the banks. Some will apply the 4 percent rate to regular savings deposits held for 12 months, while other

banks are requiring a "special" savings account or savings certificates of a specified minimum amount. The higher rate on savings attracted sufficient funds during the two-week period ended January 10 to increase the bank savings accounts of individuals, partnerships, and corporations at weekly reporting member banks in contrast to a decline that usually occurs in the first part of January.

Corporate Income Taxes and the Banking System

ost people probably think of loans to business firms as having been obtained to purchase inventories or to provide working capital while production is taking place. If these were the only major reasons for borrowing, it is likely that business loans would show a definite seasonal pattern related to the pattern of general business activity during the year. However, the movement in business borrowing which is most pronounced is a quarterly pattern of peaks which cannot easily be related to normal seasonal shifts in business activity but appears instead to be related to corporate borrowing to meet Federal income tax payments. This article discusses alternative means by which corporations may prepare to meet their tax liabilities and analyzes available data on business loans from banks to determine roughly the nature and importance of "tax borrowing."

A pattern in business loans

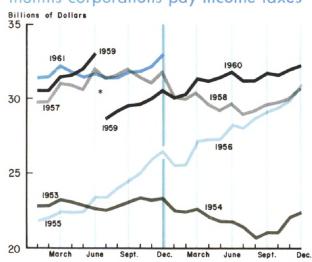
It has been apparent for nearly a decade that there is a regular quarterly movement in loans to business firms by commercial banks. This is especially noticeable in the figure for commercial and industrial loans of the large city banks which report weekly to the Federal Reserve System. Borrowing by business firms seems to increase fairly substantially in the months of March, June, September, and December and slack off somewhat in the months just afterward. The explanation which best seems to fit this pattern is that some business firms are borrowing to obtain funds with which to pay all or part of their taxes to the Federal Government.¹

To illustrate this tax-borrowing pattern, Chart I has been drawn to indicate the movement of commercial and industrial loans during each year since 1953. These movements do not seem to be normal seasonal shifts, based on the fluctuations in business activity during the year, since it is not likely that different movements in the various industries would combine to produce such a regular pattern year after year. Examination of changes in business loans broken down by industry groups from a sample of the weekly reporting banks tends to bear out this conclusion.

Patterns in corporate tax payments

Individual income taxes were placed, in large part, on a "pay-as-you-go" basis nearly 20 years ago. Before 1954, corporate income taxes were still not paid until the following year. However, in 1950, a plan was begun to

CHART I Business loans show peaks in months corporations pay income taxes



^{*}The weekly reporting bank series were substantially changed starting in July 1959. The main effect on business loans was to exclude loans to sales and personal finance companies; revised figures are not available for earlier periods. Source: Board of Governors of the Federal Reserve System.

¹It should be pointed out that many corporations make dividend payments in the four months in which these business loan increases occur. Some of this borrowing is probably related to those payments. This factor makes it difficult to make precise estimates of tax borrowing.

TABLE I
TREASURY RECEIPTS FROM CORPORATE INCOME AND PROFITS TAXES

(billions of dollars)

Calendar Year	March	— Tax Receipts f	rom Corporations in:- September	December	Total for Year	Percent paid in Months Indicated
1954	7.4	7.0	1.1	1.2	19.9	83.3
1955	6.8	6.2	1.1	1.4	18.6	83.6
1956	8.1	7.2	1.7	1.8	22.7	82.8
1957	7.3	6.7	2.3	2.3	22.2	83.7
1958	6.5	5.9	2.3	2.4	20.4	
1959	5.5	4.8	3.3	3.2	20.2	82.7
1960	6.2	5.5	3.5	3.3	22.7	81.7

Source: United States Treasury Department.

make corporate income tax receipts come closer to being paid as income was earned. Under the Mills Plan, the percentages of corporate income tax which were to be paid at quarterly intervals were gradually revised. Starting in 1950, in which equal tax payments were due three, six, nine, and twelve months after the end of the corporation's accounting year, the payments due in the last two periods were gradually reduced, and the first two increased. By 1955, the entire payment was due, based on 1954 income, in the third and sixth months after the end of the accounting year. (We will assume, as is the case for the majority of firms, that the accounting year ends on December 31; the income tax payments would then be due on March 15, June 15, September 15, and December 15 of the following year.) For the first time corporations in 1955 were also required to estimate that year's income and pay two instalments on that year's income tax in September and December.1 The percentages of the total tax to be paid in these two months were gradually raised in the next five years, and those in March and June lowered, until in 1960 the percentages were again equal for all four quarters. The difference in 1960 from the situation in 1950 is that corporate income tax receipts now lag corporate profits by only six months instead of a full year.

Data on corporate income tax payments are shown in Table I, with the amounts paid during the four months indicated above. The amounts paid into the Treasury by corporations have consistently been larger in March and June than in September and December. In view of this, tax borrowing would be expected to be larger in the first half of the year than in the second half.

Primary impact on the banking system

Although it was the quarterly pattern of business loans that first came to the attention of financial commentators and economists, it has since been found that there are other effects on commercial bank loan demand resulting from corporate income tax payments. Therefore, the term "primary effect" will be used to define the effect of tax borrowing by nonfinancial business firms only.

It hardly needs to be emphasized that business firms as a group are continually borrowing from commercial banks for various purposes. As of December 1961, commercial and industrial loans outstanding at all weekly reporting member banks totaled about \$32 billion. A firm wishing to borrow to cover all or part of its corporate tax liability would

Strictly speaking, the estimate and payment are required only for corporations having a tax liability in excess of \$100,000 plus any credit for foreign taxes paid. Although this only applies to about 5 percent of all corporations, Treasury figures indicate that this small number accounts for a very large share of total corporate taxes paid.

constitute an additional source of loan demand to that related to normal business activity. To measure the volume of tax borrowing is difficult in the present state of knowledge, and to a large extent arbitrary. The procedure used here has been to average the changes in total business loans that occurred in each of the tax-date months from 1953 to 1961, inclusive. In order to show only the changes in borrowing related to nonfinancial firms, the monthly changes in loans to sales and personal finance companies have been excluded before July 1959.1 The results are shown in Table II.

While the magnitudes of these loan changes are quite small relative to total business borrowing from commercial banks, they represent large increases in loan demand in a period of a month. These increases are, on the average, more substantial than those in other months of the year and, in some years, have been more than double the March figure shown in Table II.

Data from a sample of the weekly reporting banks indicate which industries seem to account for the tax borrowing observed in total business loans. Several industries show a fairly clear tax-borrowing pattern; these are metals and metal products firms, and public utilities and transportation enterprises. Several others show what seems to be tax borrowing at certain times during the period since 1951 (the year these data were first available), although this is not certain because of strong seasonal movements in the industries in question. The limitations of the available loan data prevent making anything but very broad generalizations. However, it is possible that variability in profits may account for the localization of tax borrowing in these particular industries and not, so far as can be seen, in the others for which we have data. It should be emphasized, though, that there is

TABLE II

AVERAGE CHANGE IN BUSINESS LOANS IN MONTHS INDICATED-1953-1961

(millions of dollars)

Month March	Average Loan
Month	Increase
March	\$674
June	492
September	438
December	306

Note: The data in this table are for weekly reporting member banks. Changes in loans to sales and personal finance companies, from a sample of the weekly reporting banks, were deducted from business loan changes prior to July 1959, when loans to sales and personal finance companies were removed from commercial and industrial loans and placed in a separate loan category. Source: Board of Governors of the Federal Reserve System.

no evidence of any clear relationship between movements in profits of these industries and the tax borrowing they appear to do, even with suitable lags.

Other ways to meet tax payments

A business corporation which has Federal income taxes to pay has several ways to obtain the funds to make the payments. One way, probably the simplest, is to allow the firm's cash balances at banks to build up prior to the tax date. While this method may be used by both large and small firms, it is probably more characteristic of smaller businesses. Since World War II, large corporations whose cash balances are in the millions of dollars have shown renewed interest in managing these funds to earn a return on almost every dollar held, even for very short periods. Partly as a result of the rise in interest rates in recent years, corporate treasurers have looked for ways to invest temporarily idle funds. Money which is to be used, even in only a few days, to make a tax payment can earn \$69.40 per day if \$1 million is invested at $2\frac{1}{2}$ percent per annum.

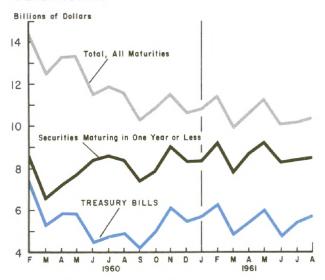
A corporate treasurer has many choices open to him in investing his funds. Securities issued or guaranteed by the United States Government are often used in this way. There is no risk of default; an active and continuous market for these issues exists, and the short-

The changes in business loans on which the averages are based are not completely comparable due to the fact that the changes in sales finance company loans are based only on a sample of the weekly reporting banks before July 1959.

CHART II

Corporations reduce Government securities holdings in tax

date months



Source: United States Treasury Department.

ness of their time to maturity makes Treasury bills and other short-term Federal securities practically free from risk of loss if sold before their maturity dates. In recent years the Treasury Department has sold what are designated as tax anticipation securities. Issued either as bills sold at a discount, or as certificates of indebtedness which bear a fixed coupon rate of interest, these securities may be turned in at the Treasury in payment of Federal taxes. Since they usually are sold to mature one week after a tax date but are received at par with full interest accrued, there is some incentive to buy and hold them for tax payment purposes. They also, in effect, enable the Treasury to make some advance collection of taxes.

Although monthly estimates of corporate holdings of Treasury securities have been made by the Treasury Department since 1939, the monthly Survey of Ownership of Federal securities gives detailed information on corporate holdings for a sample of just under 500 firms. The movements in the total of these holdings, though available only since

February 1960, are similar to those observed in the longer series and have been used in Chart II, with a breakdown by maturities. A definite decline in holdings can be seen in the months corporations make their tax payments, and the relative sizes of the declines are more or less in conformity with the relative sizes of the tax payments made in those months as well.

In addition to securities issued, or guaranteed, by the United States Government, several financial institutions offer short-term securities which are particularly well suited for temporary investment of corporate funds. Sales finance companies, to finance part of their lending operations, sell short-term paper both on the open market and directly to buyers. In the direct placement of these issues, the corporation purchasing them can specify the date on which the securities will mature. The advantage of matching exactly the date the securities mature and the date the funds are needed is that it gives the corporate treasurer virtual certainty of both the principal amount and the interest yield. On the other hand, if the treasurer is forced to buy, for example, a Treasury certificate of indebtedness that matures well after the time he needs the funds, an increase in interest rates in the meantime may have depressed the price. The treasurer may have to take a capital loss that offsets part of the accrued interest on the certificate, and the resulting yield may prove not to have been worth the trouble of investing the funds.

Dealers in United States Government securities have developed an interesting type of short-term security in connection with financing their operations. This security is called a repurchase agreement. A dealer will sell a block of Treasury bills (for example) to a large corporation. At the time of the sale, he agrees to buy the same securities, or their equivalent, back into his portfolio at some later time, often as soon as one day later. An

FEDERAL RESERVE BANK OF SAN FRANCISCO

TABLE III CORPORATE TAX PAYMENTS AND RELATED ITEMS

(millions of dollars)

from				Decreases in —						
		Treasury receipts from corporate taxes ¹	Treasury tax anticipation bills ¹	Repurchase agreements of corpora- tions ²	Sales finance company paper ³	Corporate holdings of U.S. securities ¹	Business loans at banks ³			
September	1960	3,492	*	403	359	1,392	570			
December	1960	3,331	*	237	657	667	184			
March	1961	5,799	1,680	192	22	409	726			
June	1961	5,246	1,606	17	† 21	† 81	309			
September	1961	3,251	928	279	186	678	329			
December	1961	n.a.	*	414	n.a.	n.a.	813p			

n.a. Not available.

No issue maturing at that time.

†Increase

p—Preliminary.

1 United States Treasury Department.

² Federal Reserve Bank of New York. ³ Board of Governors of the Federal Reserve System. Loan data are those of weekly reporting member banks.

interest charge, often appearing as the spread between the sale price and the repurchase price, is paid by the dealer for the use of the funds involved. For the corporation, this allows precise tailoring of its investment to the time the funds are needed, and there is very little risk of any kind attached to the transaction.

In Table III, a summary has been made of some of the factors felt to be involved in corporate tax payments. Mainly for reasons of data availability, only six consecutive tax dates have been used to illustrate the changes in loans and securities holdings which can be related to corporate tax payments.

Some of the items in Table III require a brief explanation. Treasury receipts from corporate income taxes as shown include payments by financial as well as nonfinancial firms, since separate data are not available. Since many of the Treasury tax anticipation bills are held until final maturity, the amount shown includes only those which were actually used in making tax payments. The declines in repurchase agreements of corporations with Government securities dealers are for the week including the tax date; the other items are month-to-month changes.1 Corporate holdings of United States Government securities represent changes in totals held by the sample of firms surveyed monthly by the Treasury and exclude, to avoid double counting, changes in those corporations' holdings of tax anticipation bills. The figure used for sales finance company paper includes only the amounts shown as directly placed with investors; there is no information now available on total indebtedness of these firms on a current basis. Although these figures do not account for total corporate income tax payments, they are at least indicative of some of the amounts involved.

Secondary effects of tax borrowing on the banking system

It has been noted above that the banking system has placed upon it a demand for loans associated with tax payments that may be as much as three-quarters of a billion dollars. This increase in loans is assumed to be entirely due to borrowing by nonfinancial corporations. Certain financial enterprises also

¹Changes in business loans are based on differences between loans outstanding on the last Wednesday of the preceding month and the last Wednesday of the month in question.

need additional bank loans at tax dates. This arises from their need to continue financing their operations when funds previously furnished to them by nonfinancial corporations are withdrawn for tax-payment purposes.

Sales finance companies depend for their operating funds upon two main sources. Short-term paper is sold into the market through dealers and, in larger amounts, is placed directly with large nonfinancial corporations, as discussed above. The other major source of funds is the commercial banks; as of December 1961, the weekly reporting member banks had about \$3 billion in loans outstanding to sales and personal finance companies. Although data on outstanding loans are of comparatively recent date, they indicate definite increases around tax dates, especially those in June and December. These loans, like those of other business firms, appear to be repaid fairly quickly after the tax date has passed but still constitute an additional source of loan demand at the same time as the tax borrowing of nonfinancial corporations.

Table IV shows changes in loans to and in directly placed paper of sales and personal finance companies. Data on total loans outstanding to these firms were not available until July 1959. Despite the differences in coverage of the series before that date, the information will indicate the pattern of borrowing in this industry. The increases in borrowing are more prominent in December than in March or June. This would be expected on the grounds that sales finance company paper would compete with Treasury tax anticipation issues, which have not generally been available in December. The declines in borrowing in September probably are due to seasonal factors affecting the lending operations of these firms.

TABLE IV

CHANGES IN FINANCING OF SALES AND PERSONAL FINANCE COMPANIES

(millions of dollars)

			Mon	th-	
Year	Changes in:	March	June	September	Decembe
1953	Bank loans	15	8	— 29	170
	Directly placed paper	n.a.	n.a.	n.a.	—194
1954	Bank loans	16	67	— 84	228
	Directly placed paper	— 36	— 56	— 45	— 72
1955	Bank loans	98	239	—126	482
	Directly placed paper	26	— 32	— 98	—243
1956	Bank loans	158	59	—107	516
	Directly placed paper	— 45	—136	— 50	432
1957	Bank loans	292	315	184	569
	Directly placed paper	2	—294	—277	—269
1958	Bank loans	106	58	88	486
	Directly placed paper	229	355	202	—359
1959	Bank loans	235	470	— 96	737
	Directly placed paper	— 41	— 92	—280	—389
1960	Bank loans	227	359	— 60	594
	Directly placed paper	148	134	—359	657
961	Bank loans	—134	50	206	699p
	Directly placed paper	— 22	21	—186	n.g.

n.a. Not available, p—Preliminary.

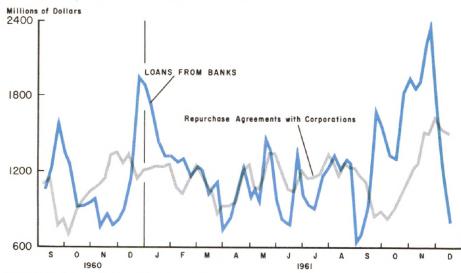
paper sold directly to investors.

Source: Board of Governors of the Federal Reserve System.

Note: The data for bank loans from 1953 through June 1959 are based on changes in loans to sales and personal finance companies as reported by a sample of the weekly reporting member banks. Since July 1959 loan changes are based on loans outstanding to such companies at all weekly reporting banks. The other data represent changes in amounts outstanding of finance company paper solid directly to investors.

CHART III

Government securities dealers tend to lose funds from corporations in tax date months



Source: Federal Reserve Bank of New York.

Government securities dealers are in somewhat the same position as the finance companies. Most of the funds for carrying their securities positions, other than those obtained from corporations, are borrowed from commercial banks. If the dealers wish to maintain more or less the same level of operations, the funds lost from maturing repurchase agreements at tax dates must be obtained from commercial banks. Again, it should be emphasized that this additional loan demand comes at the same time as does regular tax borrowing. The increased loan demand from the dealers and the sales finance companies can be defined as the secondary impact of corporate tax payments on the banking system.

Loans from commercial banks and repurchase agreements of corporations with Government securities dealers are shown in Chart III. The shortness of the time period covered makes generalizations difficult; however, there are some indications of the pattern mentioned above. Loans from banks increased substantially in September and December 1960, as repurchase agreements tended to decline at the same times. This shows up

much less clearly in March and June; there were, as mentioned above, Treasury tax anticipation bills maturing in those months, and the dealers reduced their positions substantially in March, lessening the need for funds.

Other effects of tax borrowing

It was mentioned earlier in this article that one possibility in preparing to make tax payments would be simply to allow bank balances to increase and

then be withdrawn to make the payment. Chart IV shows the movements of demand deposits of individuals, partnerships, and corporations, plotted weekly, during 1960 and 1961. The tendency for these deposits to rise just before the corporate tax dates may be due in part to deposits of the proceeds of securities holdings which have been liquidated. However, part of the movement undoubtedly represents simple cash accumulation. If a corporation is large enough to use its accumulated funds in securities investment, it is not likely that even one day's interest would be sacrificed.

The transfer of several billions of dollars in tax payments from private to public accounts might well be expected to disturb money markets. However, the movements of short-term interest rates, as shown for the past three years in Chart V, give no such indication. A major element in preventing such consequences is the use of Treasury Tax and Loan accounts in commercial banks to accumulate tax revenues until they are needed

¹The upward movement in April is probably due to accumulations for the personal income tax. There does not seem to be any evidence of personal tax borrowing in the 'all other loans' category, however.

for Federal expenditures. The Federal Reserve System also makes additional reserves available to member banks at tax payment dates, thereby smoothing the transfers of funds at such periods.

From the standpoint of the monetary and credit mechanism, the major effects of corporate tax payments are that they increase the demand for bank credit by both nonfinancial corporations and the financial institutions discussed above. It is not possible, given the limitations of available data, to give exact estimates of this tax-borrowing loan demand. However, some tentative figures can be shown, based on average increases in loans to business firms and to sales finance companies in the tax payment months since 1953. These are indicated in Table V. The shortness of the time period for which loan data are available for Government securities dealers reduces the usefulness of a corresponding estimate for their increased loan demand. It should be emphasized that the estimates of increased loans to business corporations and sales finance companies are probably conservative. The decline in loans to sales and personal finance companies in September is

probably due to seasonal factors, which also would affect the loan increases in the other months.

Summary

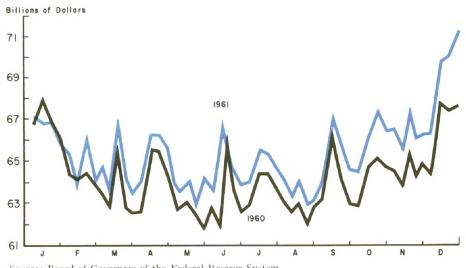
In an economy in which the unit of measure for financial flows is the billion, steady progress toward greater knowledge of the factors affecting movements of funds is a necessity. The present study may contribute to a better understanding of the ebb and flow of credit demands on the banking system. Although the

measure of tax borrowing used (the average of changes in business loans in the tax date months covering the past nine years) is admittedly a rough approximation, it may serve a useful purpose in giving some idea of the additional loan demand that can be expected in the final month of each quarter.

Primary and secondary aspects of corporate tax payments are distinguished on the grounds that there are two distinct sources of additional loan demand. The primary impact is the result of the direct demand of business firms for funds with which to make Federal income tax payments. Due to the fact that some large nonfinancial corporations also prepare for tax payments by holding securities issued by sales finance companies and by repurchase agreements with Government securities dealers, these financial firms also need to seek bank loan accommodation when the corporations desire the return of their invested funds for tax-payment purposes. These two different sources of loan demand are reinforcing, not offsetting, and it is their total effect on the demand for bank credit which is important.

CHART IV

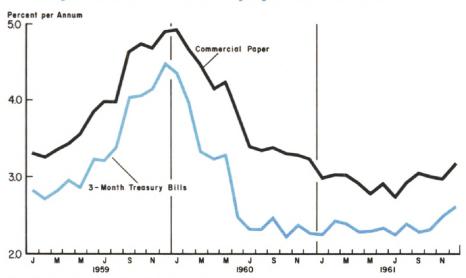
Buildup in demand deposits related to corporate tax payments



The movement of such substantial sums from privately owned corporations to the Treasury Department is a task which might well be beyond the capacity of even our well developed monetary system. From Table I it can be seen that amounts in excess of \$20 billion annually have to be transferred in payment of corporate income taxes. However, this has not apparently acted to disrupt the working of the money market. Several factors

operate to soften the impact of these huge financial flows on the monetary system. The use of Treasury Tax and Loan accounts, into which receipts from income taxes and other revenues are channeled temporarily until needed for Federal expenditures, protects the commercial banks from sudden and drastic losses of reserves. Tax anticipation securities allow advance collection of income taxes, in effect, and reduce the amount necessary to be transferred on the tax date. Since tax borrowing is highly predictable as to timing, if not as to total amount, the commercial banks

CHART V Money market takes tax payments in stride



Source: Board of Governors of the Federal Reserve System.

can, and apparently have, planned for the extra loan demand in advance, thus preventing a last minute liquidation of secondary reserves to provide for it. Finally, the Federal Reserve System also aids in smoothing the impact of tax borrowing by adjusting the volume of reserves to provide for temporary strains on the banking system of this nature.

In the period approximately from the Civil War to World War I, the monetary system was plagued by recurrent crises in the money market, mostly due to the annual need for funds for crop movements. Corporate income taxes, with the resulting need for movement

TABLE V AVERAGE TAX AND TAX-RELATED BORROWING

(millions of dollars)

Month	Nonfinancial corporations ¹ (1953-61)	Sales and personal finance companies ² (1953-61)	Government securities dealers ³ (1960-61)	Total
March	674	112	133	919
June	492	170	632	1,294
September	438	*	556	994
December	306	498	842	1,646

² See Table II for source and method of computation.
² See Table IV for source and method of computation.
³ Change in bank borrowing by dealers in week of tax-payment date. Source: Federal Reserve Bank of New York.

of large sums at intervals, could have proved as disturbing to the banking and monetary system as did the flow of farm products into the industrial and distribution networks in the last century. The advent of the Federal Reserve System in 1914 effectively removed those earlier disturbances. By making available additional reserves to member banks at tax payment dates, it has also facilitated the large transfers of funds at such periods. Studies of this type aid in developing a better understanding of those forces which underlie the smooth functioning of our monetary mechanism.

FEDERAL RESERVE BANK OF SAN FRANCISCO

BANKING AND CREDIT STATISTICS AND BUSINESS INDEXES—TWELFTH DISTRICT

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

	Condi	tion items of a	all member ba	nks², 7	Bank debits	Bank rates	Total	Total		Doub	Datail
Year and Month	Loans and discounts	U.S. Gov't securities	Demand deposits adjusted ³	Total time deposits	index 31 cities ^{4, 5}	on short-term business loans ^{6, 7}	nonagri- cultural employ- ment	mf'g employ- ment	Car- loadings (number) ⁵	Dep't store sales (value) ⁵	Retail food prices
1929 1933 1939 1952 1953 1954 1955 1956 1957 1958 1959 1960	2,239 1,486 1,967 8,839 9,220 9,418 11,124 12,613 13,178 13,812 16,537 17,139	495 720 1,450 6,619 6,639 7,942 7,239 6,452 6,619 8,003 6,673 6,964	1,234 951 1,983 10,520 10,515 11,196 11,864 12,169 11,870 12,729 13,375 13,060	1,790 1,609 2,267 7,502 7,997 8,699 9,120 9,424 10,679 12,077 12,452 13,034	42 18 30 140 150 153 173 190 204 209 237 253	3.95 4.14 4.09 4.10 4.50 4.97 4.88 5.36 5.62	60 118 121 121 127 134 139 138 146	57 130 137 134 144 154 161 153 165	102 52 77 100 100 96 104 104 96 89 94 88	30 18 31 120 122 122 132 141 140 143 157	64 42 47 115 113 113 112 114 118 123 123 125
1961 1960 December	18,499 17,139	8,278 6,964	14,163 13,060	15,116 13,034	270 258	5.50	152p 150	163 <i>p</i>	87 87	175 159	127
1961 January February March April May June July August September October November December	16,751 17,525 17,517 17,637 17,632 17,578 17,504 17,779 18,028 17,901 18,212 18,499	6,984 6,991 6,916 7,436 7,393 7,571 7,935 7,863 7,955 8,190 8,182 8,278	13,010 12,750 12,860 13,222 12,865 12,935 13,206 13,212 13,317r 13,901 13,944 14,163	13,121 13,639 13,754 13,999 14,289 14,371 14,492 14,656 14,786 14,867 14,874 15,116	254r 256r 273r 266r 265r 265r 267r 262r 277 291 265 293	5.48 5.50 5.45 5.42	$\begin{array}{c} 150 \\ 150 \\ 150 \\ 150 \\ 151 \\ 152 \\ 152 \\ 152 \\ 153 \\ 153 \\ 154 \\ 154p \end{array}$	161 161 161 160 162 163 162 164 165 166 167	84 83 83 88 81 85 86 84 87 99 100 92	154 164 160 164 153 162 167 157 170 164 165	127 127 127 127 127 126 126 125 126 127 126

		Ind	Industrial production (physical volume) ⁵							Waterborne Foreign Trade Index7, 9, 10					
Year		Petro	leum ⁷				Electric		Exports		Imports				
and month	Lumber	Crude	Refined	Cement	Steel ⁷	Copper ⁷	power	Total	Dry Cargo	Tanker	Total	Dry Cargo	Tanke		
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	252	188	223	138	686	263	11,699		
1960	110	91	134	161	154	129	271	241	305	149	808	269	14,209		
1960															
November	100	91	135	155	129	141	276	220	306	.97	826	254	15,744		
December	99	91	137	151	133	137	274	271	338	175	1,046	245	21,919		
1961					100										
January	101	91	134	159	111	139	277	235	318	118	779	218	15,394		
February	101	91	134	176	152	134	276	248	362	95	666	233	11,98		
March	103	92	131	178	162	137	285	264	363	124	952	252	19,268		
April	114r	92	135	168	172	133	283	261	331	163	759	286	13,139		
May	111r	92	143	169	191	143	285	265	331	171	865	292	15,856		
June	111r	91	143	188	187	143	289	224	290	128	684	267	11,53		
July	110	91	143	157	183	124	293	232	299	138	1,027	297	20,02.		
August		91	140	160	180	107		247	324	138	647	274	10,35		
September		92	142	163	174	138r									
October		92	144	171	181	148p									
November		92	144	182											

Adjusted for seasonal variation, except where indicated. Except for banking and credit and department store statistics, all indexes are based upor 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 deposite except interbank prior to 1942. Debits to demand deposits except U.S. Government and interbank deposits from 1942.

5 Daily average are no loans made in five major cities, weighted by loan size category.

7 Not adjusted for seasonal variation.

6 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.

12 Perleiminary.

13 Perleiminary.

14 Alaska and Hawaii are included in indexes beginning in 1950.