

February



ALASKA



IDAHO

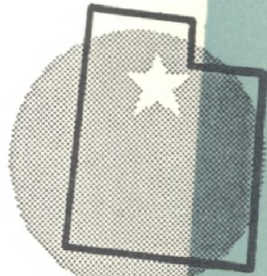
Monthly Review

FEDERAL RESERVE BANK OF SAN FRANCISCO
TWELFTH FEDERAL RESERVE DISTRICT



WASHINGTON

February 1963

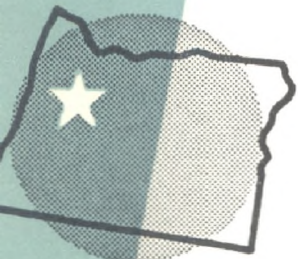


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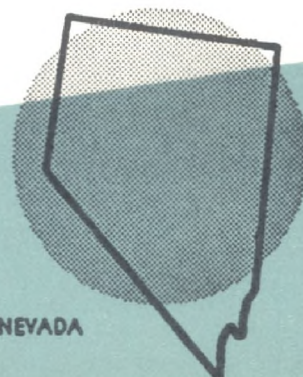
OREGON



HAWAII



CALIFORNIA



NEVADA



ARIZONA

Review of Business Conditions

NATIONAL business activity during January continued at about December levels, and the economy thus spent another month on the high-level plateau that has prevailed since last summer. Industrial production was 119 percent of the 1957-59 average, unchanged from the December index which was revised downward from 120 percent; strikes and severe weather were factors limiting output in both of those months. The production index has varied fractionally between 119 and 120 since mid-1962. Iron and steel production, which declined slightly in January on a seasonally adjusted basis, rose during the last week of the month and the first two weeks of February, judging from unadjusted figures. Large steel producers noted a rising trend in orders for both consumption and inventory. New orders received by durable goods manufacturers rose 4 percent in January, reversing a decline in the previous two months. The gain was concentrated in primary metals, machinery, and aircraft industries. Durable goods manufacturers' sales were unchanged from December to January.

The value of new construction put in place during January was at a seasonally adjusted annual rate of \$62.5 billion, up somewhat from the revised December rate, and was little changed from levels prevailing during most of the second half of 1962. The January increase was concentrated in residential building, which rose 2 percent. Housing starts declined sharply in January, however, with much of the decline attributed to unusually severe weather in most regions.

Automobiles remained a strong factor in the economy during January; assemblies remained at the advanced level of the previous six months, and dealer deliveries of new autos rose somewhat. Automobile sales continued at a high level in February. Total retail sales

in January were slightly above the November-December level, despite declines in sales of department stores and some other types of retail outlets. Weather conditions were a factor in trade, as in production, and weekly figures indicate sales rebounded somewhat in the first two weeks of February. The Census Bureau's January survey of consumer buying intentions indicated that, compared with a year ago, more consumers plan to buy household appliances, used cars, and new and old homes this year, while the proportion expecting to buy new cars was about the same.

Employment in nonfarm establishments was little changed in January, on a seasonally adjusted basis, and remained at the peak level of approximately 55.6 million that has existed since mid-1962. Manufacturing employment and the average workweek were somewhat below last summer's levels, and transportation employment was reduced because of the month-long strike of longshoremen at Eastern and Gulf ports. The rate of unemployment in January rose to 5.8 percent of the civilian labor force, compared with 5.6 percent in December, and was at the same relatively high level as a year earlier. Personal income rose by an annual rate of \$2 billion to \$452.4 billion in January, but it would have shown little change if the Veterans' Administration had not made a special prepayment of dividends equivalent to \$3.6 billion at annual rates.

In the Twelfth District, business activity was much less affected by poor weather in January than in other parts of the nation. Even though the construction and lumber industries in certain areas of the District were somewhat affected by the cold wave in the western United States during part of the month, the impact on activity was undoubtedly less than in the nation. Housing starts, for example, rose in southern California, in con-

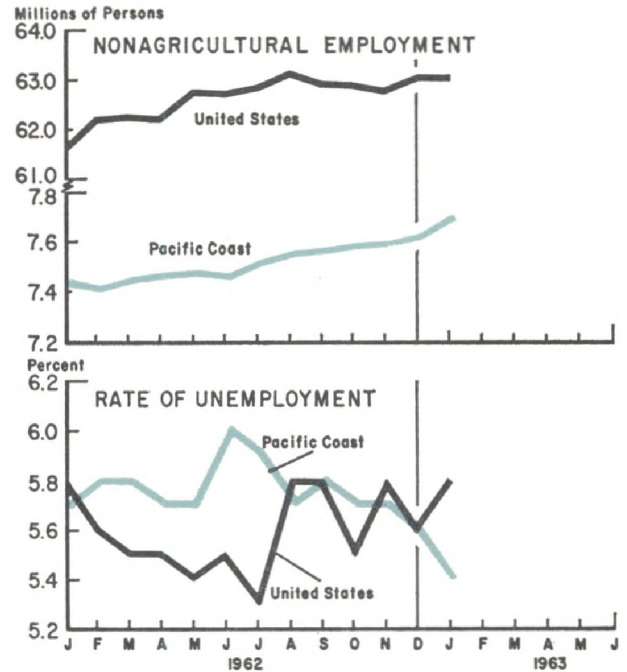
trast with a sharp decline in the national total. Aside from seasonal influences, construction activity remained an element of strength in the District economy during December and January. Construction employment increased and, on balance, the available indicators of future construction activity, including demands for mortgage credit and the volume of construction contract awards, suggest a continued high level of building in the District.

Retail trade, too, held up better in the District than in the nation. Department store sales in the District rose slightly in January on a seasonally adjusted basis. Auto sales continued at a record pace, as indicated by registrations in California.

Employment expanded in the District in December, and there was a sizable increase during January in the number of jobholders in the populous Pacific Coast States. Unemployment on the Pacific Coast declined for the third consecutive month, and the rate of unemployment was back to its prerecession level for the first time. Nationally, the unemployment rate in January was at its 1962 high.

Another area of contrast between the Twelfth District and the nation was reflected in the loan, investment, and reserve figures of commercial banks. The January decline in loans of weekly reporting member banks in the District was less than seasonal, and relatively less than the decline nationally, particularly in business loans. At the same time, however, there was a greater decline in demand deposits at District banks, thereby putting the banks under some reserve pressure. Holdings of short-term Treasury securities declined and purchases of Federal funds rose. Nationally, bank holdings of Government securities increased in January, and there was less tightness in the reserve positions of banks outside the Twelfth District.

Nonfarm employment on Pacific Coast has expanded more rapidly than in nation



Source: United States Department of Labor and State departments of employment.

More people at work, fewer unemployed in January

January data for the Pacific Coast States indicated an increase of 0.8 percent in nonfarm payroll employment, following a gain of 0.5 percent in December¹. The most substantial increases were in contract construction, manufacturing, and services. There were also January employment gains in primary metals and lumber and wood products, two industries in which employment did not expand in 1962. The increase in the primary metals industries was the first since June 1962, although the number of jobholders was still less than a year ago by 3 percent, or 2,000 workers. Employment in lumber and wood products establishments rose from December to January and was above year-ago levels in all three states. In contrast, there were some cutbacks in employment in the defense-related industries during January. Ordnance employ-

¹ All data are seasonally adjusted unless otherwise noted.

ment in California declined by 1,600 workers, the first monthly decline since April 1961. This drop was caused, in part, by lay-offs in the Los Angeles area due to the cancellation of the Skybolt Missile Program. Aircraft employment declined by 1,500 workers to 247,900, with decreases in both California and Washington. However, the electrical equipment industry, mainly electronics, continued its rapid growth of 1962 with a gain of 1.2 percent from December.

A significantly reduced rate of unemployment accompanied the employment gains of December and January in the Pacific Coast States. The January unemployment rate of 5.4 percent represented the lowest for these states since April 1960, just before the onset of the 1960-61 recession.

While January data for the entire District are not yet available, nonfarm payroll employment rose 0.5 percent in December. This increase was a continuation of a steady month-to-month gain in the number of jobholders during most of 1962.

Department store sales at high level in January

Twelfth District department store sales during the first five weeks of 1963 were 6 percent above the year-ago period. All of the major metropolitan areas within the District shared in the increases. The seasonally adjusted Twelfth District department store sales index for January equalled the previous high set in November 1962. This represented an increase of 1 percent (and 1 index point) over December and was 8 percent above the year-ago month.

California auto registrations hit record in January

During January, there were 65,476 new cars registered in California, a record for that period. This averaged 2,518 registrations per

day, 1 percent higher than in December and 31 percent above the year-ago month. In the nation as a whole sales were also at record levels for January, being 13 percent above the same month last year.

December rise in consumer credit at District banks

Total instalment debt at Twelfth District commercial banks rose \$40 million in December, largely as a reflection of Christmas buying. Auto credit outstanding increased by \$17.4 million. This was a smaller growth than from October to November, primarily as a result of lower extensions. Personal loans and other consumer goods paper outstanding, which include financing of Christmas goods, rose \$14.8 million and \$7.5 million, respectively. Extensions for these loans were up sharply from November, bringing total extensions up to about the August level, the previous high.

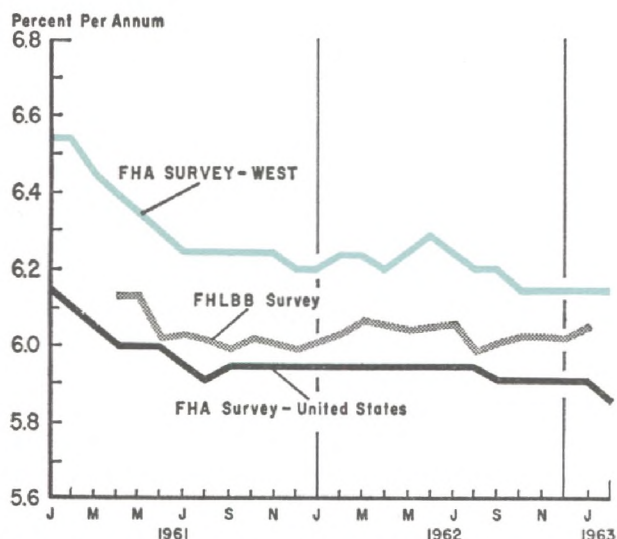
Construction awards rose in December

Construction contract awards in District states (excluding Alaska and Hawaii) totaled \$797 million in December, after seasonal adjustment.¹ This was a gain of 1.7 percent from November. Although this was less than the rise in the nation, the comparison is substantially influenced by one large public utilities contract in the national total. District residential contracts declined fractionally, as gains in apartment contracts did not quite offset a decline in those for single-family homes.

Housing starts in January rose in the West, particularly in southern California, according to the Census Bureau. Work started on private dwellings declined in the nation as a whole by substantially more than is usual for the season, and the drop-off was greatest in

¹Based on data reported by the F. W. Dodge Corporation. Seasonally adjusted unless otherwise stated.

Trends in conventional mortgage rates reflect ample availability of funds



Note: All of these series are for interest rates on conventional mortgages. The Federal Housing Administration series is based on a monthly survey of its insuring directors as of the first day of every month. Data from the 74 regional offices are combined into regional and national averages. The "West" includes Montana and Wyoming in addition to the nine Twelfth District states. The Federal Home Loan Bank Board series is based on a survey of over 200 large savings and loan associations across the country. These associations are asked to report rates charged on the conventional mortgage loans they make in the first ten days of each month. The rate data are weighted averages and are strongly influenced by responses from the large associations located in California.

Source: Federal Housing Administration and Federal Home Loan Bank Board.

those areas affected by severe weather during the month.

FHA-insured housing activity declined in December

Applications in December to the District offices of the Federal Housing Administration for mortgage insurance on new-home loans fell about 2 percent below their November level and were almost 9 percent less than a year earlier. The same pattern held for FHA-inspected housing starts, which declined by 14 percent from November to December, and were 16 percent below a year ago. New-home applications and inspected housing starts in the nation also showed month-to-month and year-to-year declines, but these were considerably greater than in the District, possibly due to a relatively stronger seasonal influence.

Mortgage credit conditions remain stable

There was little change in mortgage loan rates or in prices for mortgages between January and February, either in the District or in the nation as a whole. The monthly survey conducted by the Federal Housing Administration indicated that conventional mortgage rates in the West on February 1 averaged 6.15 percent for new homes and 6.20 percent for existing homes. Secondary market prices for FHA-insured home mortgages rose \$0.10 to \$97.80 per \$100 for 5¼ percent, 25-year new-home mortgages with a 10 percent down payment. Rates on conventional mortgages were generally stable during 1962 (see chart), and FHA-mortgage prices drifted upward throughout the year. These patterns reflect ample availability of funds relative to the rise in demands for mortgage credit.

Insured savings and loan associations in the Twelfth District showed gains both in their savings accounts and in mortgage holdings during January, and loan commitments also increased.

Lumber orders exceeded production in December and January; prices rose

Lumber production declined during December in the Douglas fir and Western pine regions. Orders in each region exceeded production, however, and average lumber prices rose. In the Douglas fir region, December orders were fractionally higher than in November, and substantially higher than a year ago. Production was reduced by 15 percent, largely because of the Christmas holiday, bringing output well below orders. Unfilled orders rose by 15 percent. In the Western pine region, a 7 percent increase in orders accompanied by an 8 percent cutback in production also put production below orders.

January production, orders, and shipments in the Douglas fir region surpassed their

December levels. Production was less than orders but exceeded shipments, so that unfilled orders and inventory both increased. Preliminary weekly data indicate that, in the Western pine region, January production, orders, and shipments declined from December. However, orders still outran production.

Crow's average lumber prices rose 0.2 percent in December to \$73.73; a further rise brought the average to \$74.41 by February 1, about 1 percent above the year-ago level.

Western steel output declined slightly in January

Western steel production declined 1.7 percent from December to January, while national output advanced 3.8 percent. The decline in District production in January appeared to be attributable to producers meeting their orders during the first part of the month out of inventory. There was a pickup in production in the latter half of the month. Western mills stepped up their operations further in the early part of February, and output reached its highest level since the week of April 7, 1962. However, steel production increased more briskly in areas outside the District, where the automobile industry is a more important factor in the market for steel products.

Copper shipments rise; prices hold steady

Producer shipments of refined copper to domestic consumers rose in January to their highest levels since last June; mine production and scrap intake increased, and stocks declined. Through mid-February, orders apparently continued at the January level. Brass mills, however, reported some decline in orders from January to mid-February. Prices remained steady for the year to date, except for some weakness in scrap copper toward mid-February. The producers' price for refined copper has held at 31 cents a pound for over 20 months. Work stoppages in Katanga

and at other African mines during January and the first part of February continued to limit increases in world copper supplies.

Farm returns continue at record level

Cash receipts of District farmers from marketings set a new record for the month of December, although they declined seasonally from the unusually high level in November. For the entire year, they totaled a record \$5.5 billion, with the volume of receipts increasing from 1961 in all District states¹ except Nevada. New records were established in three District states—California, Arizona, and Idaho. Heavy marketings contributed to the 1962 advance in District returns, but there was also some increase in prices received by farmers. Nationally the flow of receipts from marketings also reached a record high in 1962, but the rate of increase was somewhat less than in the District.

January decline in District bank loans less than seasonal

Bank loans normally decline in January as funds borrowed in connection with December tax payments and other temporary year-end needs are repaid. In the last half of January this year the decline in total loans² outstanding at weekly reporting member banks in the Twelfth District was larger than in the comparable weeks of 1962. For the month as a whole, however, the reduction in total loans was about one-third less than in January 1962 and two-thirds less than in 1961; moreover, loans increased during the first week of February. The relatively larger decline in the last part of January, therefore, appears to indicate only a lag in timing of seasonal loan repayments rather than a weakening in loan demand.

The January decrease of \$77 million in commercial and industrial loans was only

¹ Excluding Alaska and Hawaii, for which data are not available.

² Adjusted to exclude loans to domestic commercial banks and less valuation reserves.

FEDERAL RESERVE BANK OF SAN FRANCISCO

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

(in millions of dollars)

	Twelfth District				United States		
	Jan. 30, 1963	Change from Dec. 26, 1962 to Jan. 30, 1963		Change in corre- sponding year-ago period	Change from Dec. 26, 1962 to Jan. 30, 1963		Change in corre- sponding year-ago period
	Outstandings	Dollars	Percent	Percent	Dollars	Percent	Percent
ASSETS:							
Total loans and investments	\$28,071	—262	— 0.9	— 0.4	—2,791	— 2.1	— 1.8
Loans adjusted and invest- ments	27,739	—288	— 1.0	— 1.5	—2,549	— 2.0	— 2.1
Loans adjusted ¹	18,328	— 89	— 0.5	— 0.8	—2,854	— 3.5	— 3.6
Commercial and industrial loans	6,154	— 77	— 1.2	— 2.6	— 871	— 2.5	— 2.8
Real estate loans	6,382	+ 76	+ 1.2	+ 0.4	+ 122	+ 0.8	+ 0.2
Agricultural loans	909	+ 17	+ 1.9	+ 6.0	— 2	— 0.1	+ 3.7
Loans to non-bank finan- cial institutions	1,026	+ 6	+ 0.6	— 4.7	— 577	— 8.2	—10.1
Loans for purchasing and carrying securities	260	— 52	—16.7	+ 0	—1,268	—21.8	—21.8
Loans to foreign banks	197	— 11	— 5.3	— 6.6	+ 1	+ 0.2	— 4.4
Other loans	3,731	— 25	— 0.7	+ 0.9	— 84	— 0.5	+ 0.2
Loans to domestic com- mercial banks	332	+ 26	+ 8.5	+135.1	— 242	—11.3	+22.3
U. S. Government securities	6,328	—158	— 2.4	— 2.7	+ 178	+ 0.6	+ 0.7
Other securities	3,083	— 41	— 1.3	— 2.2	+ 127	+ 0.8	— 0.5
LIABILITIES:							
Demand deposits adjusted	12,036	—468	— 3.7	— 3.7	—1,768	— 2.7	— 3.0
Total time deposits	15,403	+271	+ 1.8	+ 2.3	+1,291	+ 2.6	+ 3.4
Savings deposits	12,222	+ 92	+ 0.8	+ 1.1	+ 431	+ 1.2	+ 1.9

¹ Exclusive of loans to domestic commercial banks and after deductions 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.

about half the decline in January 1962. Transportation equipment manufacturers accounted for the largest proportion of seasonal repayments by durable goods manufacturers, as they had in January of 1962. Loan repayments by food and liquor processors were nearly one-third less than in January 1962, but wholesale trade firms (other than commodity dealers) made far larger reductions in their bank-held debt than a year earlier. Mortgage holdings of District weekly reporting banks increased \$76 million in January, offsetting the decline in business borrowing. It appears that the steady upward trend in real estate loans, which began in mid-1961, is continuing into the new year. The "other loan" category, mainly consumer loans, which expanded in the fourth quarter of 1962

largely as a result of increased automobile financing, declined in January despite a continued high level of automobile sales. During January, District banks extended sizable amounts of credit to brokers and dealers for purchasing and carrying United States Government securities, but by the end of the month these loans had been repaid and total outstandings in this loan category were reduced to \$17 million. Loans to brokers and dealers for carrying other securities, however, increased about \$18 million over year-end outstandings.

Banks in District outpace nation in loan performance

The more favorable loan performance of weekly reporting member banks in the Twelfth

District compared with those in the nation which prevailed during 1962 appears to be continuing in 1963. The 0.5 percent reduction in loans in January at District banks contrasts with a 3.5 percent decline nationally. While District banks in the last few years have had a much smaller percentage total loan decline in January than other banks, the margin in favor of the District widened this year. This disparity was also evident in business loans which declined only 1.2 percent in the District compared with a 2.5 percent reduction in the nation. One of the sustaining factors in District loan performance was the continued increase in real estate mortgage holdings, up 1.2 percent in January.

District banks reduce holdings of short-term securities

District weekly reporting member banks reduced their investment in United States Government securities by \$158 million in January. The reductions were largely in holdings of Treasury bills, but these banks also sold notes and bonds maturing within one year, while adding to intermediate and longer term maturities. The decline of over 2 percent in holdings of Treasury issues contrasted with a small percentage increase nationally. District banks also reduced their portfolios of securities other than Treasury issues, while nationally there was an increase in such holdings. In the District, bank portfolios of other securities have tended to decline seasonally in the first part of the year, and therefore the January drop may be only a temporary reversal of the sharp upward trend in this type of investment which prevailed throughout 1962.

January decline in demand deposits results in reserve pressure on District banks

Weekly reporting banks in the District had a loss of 3.7 percent in demand deposits adjusted in January. This decrease was slightly greater than in January 1962 and was more than 1 percentage point above that nationally. The decline in demand deposits adjusted was accompanied by a reduction of \$300 million in United States Government deposits.

There is normally a leveling off in the rate of increase in time deposits in January and, in some years, there has been a net decrease. Withdrawals are usually large after crediting of year-end interest and there is customarily some switching of funds among competing types of investment. This year there was a substantial increase in savings deposits at District banks in the first week of January, reflecting crediting of interest, and in the succeeding week a net decrease of \$8 million. In the last two weeks in January savings rose slightly so that for the month as a whole savings deposits at weekly reporting banks in the District increased \$92 million. This rate of gain, however, was under that nationally, as was the percentage increase in the other time deposit categories.

Largely as a result of the loss in total deposits, District banks were under reserve pressure throughout the month of January. This was reflected in net sales of United States Government securities, some borrowing from the Federal Reserve Bank, and substantial net purchases of Federal funds (excess reserves which one bank loans to another). Toward the end of the month there appeared to be some easing in reserve positions, but District banks continued to be net purchasers of Federal funds.

Cash Flows and Corporate Investment

THERE are two main sources of funds for nonfinancial corporations which enable them to pay for additions to plant and equipment or inventories. Firms can obtain funds through the money or capital markets or can use internally generated funds to finance their capital expenditures. In addition, nonfinancial corporations may use funds to add to their financial assets, or they may dispose of such assets to obtain funds for other purposes. The purpose of this brief article is to examine in broad outline the trends in the sources and uses of funds by nonfinancial corporations during the postwar period. The basic figures that have been used are the flow-of-funds data prepared by the Board of Governors of the Federal Reserve System.

An examination of these data for nonfinancial corporate enterprises as a group indicates several broad trends during the postwar period. Internally generated funds, that is, net retained earnings and depreciation and depletion allowances, have shown a generally upward trend since World War II. Although the total declined in a few individual years, this was due entirely to fluctuations from year-to-year in the amount of net retained earnings; depreciation allowances rose steadily. In terms of dollar amounts, these cash flows matched fairly well the expansion in capital expenditures (plant and equipment spending plus inventory changes). There has also been an upward trend, though at a much slower rate, in net sales of corporate stocks and bonds, which are "outside" sources of permanent funds for these corporations. Finally, nonfinancial corporations as a group have made net additions to their "financial assets" as distinct from productive equipment; these include cash balances, securities holdings, and trade credit. Although changes in corporate holdings of these financial assets have at times been sources of funds for other operations, they have for the most part absorbed

funds in the postwar period; expansions in trade credit outstanding have absorbed especially large amounts of corporate cash flows as well as inflows of "outside" capital in recent years.

Corporate investment and its financing in the postwar period

The relationship between "outside" and "inside" sources of funds to changes in the fixed capital (plant and equipment) of nonfinancial business corporations will be examined first. Data for these items for the years 1946-61 are shown in Table 1. In accordance with economic usage, the term "investment" refers to changes in capital equipment and inventories rather than to the total values of these assets held by the corporations at any given time.

The data shown in Table 1 indicate several significant developments during the postwar years. We can note that there was, up to about 1955, a fairly steady upward trend in the total amount of capital spending, for plant and equipment especially. Since 1955, however, there has been some leveling off of expenditure of this type. Changes in inventories, as we have indicated elsewhere, have been largely associated with fluctuations in the level of general business activity.¹ For present purposes, we are not concerned with the relationship of capital spending to the business cycle but rather with its generally upward movement. A comparison of these uses of funds with the particular sources listed in Table 1 indicates that with only two exceptions (1946 and 1956) the sources have provided more funds than were required for capital investment. The financing of the postwar reconversion in 1946 would have put a strain on both internal sources of funds and financing available at the time from the capital markets

¹"Do Bank Loans to Business Predict Inventory Levels?", *Monthly Review*, Federal Reserve Bank of San Francisco, June 1962.

TABLE 1
INVESTMENT AND ITS FINANCING, NONFINANCIAL BUSINESS CORPORATIONS
 (Billions of dollars)

Source or Use of Funds	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Use of Funds (Investment)	17.8	16.8	19.7	14.0	21.7	28.8	22.9	23.1	19.5	29.1	34.2	33.0	23.8	34.0	33.5	32.1
Plant and equipment	11.3	15.0	17.2	14.9	15.8	20.0	20.2	21.8	20.5	23.5	28.9	31.6	25.0	26.3	29.4	28.1
Other fixed investment	0.5	0.6	0.4	0.8	1.1	0.2	0.5	0.5	0.9	0.7	0.4	0.7	1.4	1.6	1.3	2.2
Change in inventories	6.0	1.2	2.1	-1.7	4.8	8.6	2.2	0.8	-1.9	4.9	4.9	0.6	-2.6	6.1	2.8	1.8
Source of Funds (Financing)	7.5	18.3	23.8	19.7	27.3	29.8	23.6	26.0	22.8	34.7	31.0	35.1	33.1	41.0	36.9	41.9
Cash flows	5.6	14.3	18.6	15.5	24.3	24.3	16.6	20.8	17.7	29.9	25.0	26.3	25.0	35.6	31.5	34.9
Net retained earnings	0.6	8.1	11.2	7.3	15.3	13.8	4.8	7.4	2.6	12.4	5.9	5.3	3.1	12.3	6.5	8.3
Capital consumption allowances	5.0	6.2	7.4	8.2	9.0	10.5	11.8	13.4	15.1	17.5	19.1	21.0	21.9	23.3	25.0	26.6
Outside funds	1.9	4.0	5.2	4.2	3.0	5.5	7.0	5.2	5.1	4.8	6.0	8.8	8.1	5.4	5.4	7.0
Increase in corporate stock	1.0	1.2	1.0	1.3	1.4	2.2	2.3	1.8	1.6	2.0	2.3	2.4	2.3	2.3	1.8	2.7
Increase in corporate bonds	0.9	2.8	4.2	2.9	1.6	3.3	4.7	3.4	3.5	2.8	3.7	6.4	5.8	3.1	3.6	4.3

Note: In the interests of brevity, this table includes only data relating to principal sources of investment funds and their principal uses for "real" investment. Other sources of funds (other liability items) and changes in financial assets (or use of funds, in general) are given in Table 2, with the exceptions shown in the note to that table.

Source: Board of Governors of the Federal Reserve System, *Flow of Funds/Savings Accounts, Supplement 5* (December 1961), Table 4D; *Federal Reserve Bulletin*, August 1962, p. 1060.

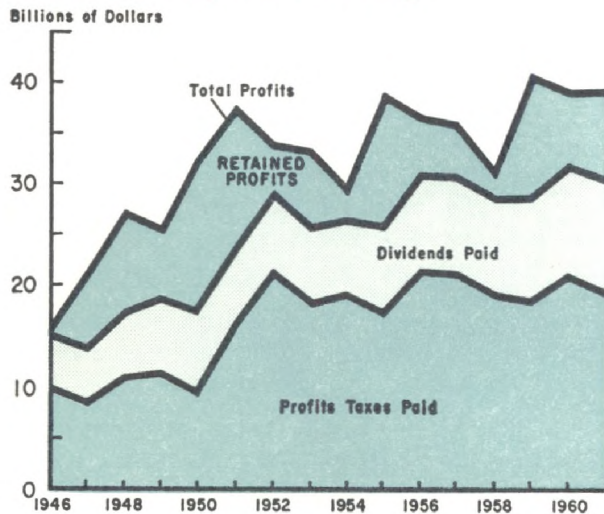
had it not been for the ability of firms to acquire additional finance by liquidating holdings of United States Government securities built up during World War II. The other "exceptional" year, 1956, followed the very rapid economic expansion of 1955 and was a period in which business firms were responding to the large volume of business done in the prior year by making substantial additions to productive capacity; again, firms drew upon their liquid asset holdings as well as other sources to supplement the investment funds obtained from cash flows and from sales of stock and bonds.

There are several elements that have contributed to the rising levels of capital expenditure since 1946. First, the replacement of capital goods has cost progressively more as a consequence of the rise in prices which has occurred until recently in the postwar period. Second, there has been, in addition to the replacement of equipment which is worn out or obsolete, some "net" or additional investment which has expanded productive capacity during the postwar years. A third factor, the effect

of which is more difficult to evaluate, is automation. It is probably a common impression that automation means a heavy capital investment and a more expensive stock of capital equipment than previously was being used. This may be true in many instances. However, it may sometimes be the case that replacement of old machines by "automated" equipment does not raise the value of the capital equipment the firm owns, and it might, in some cases, reduce it, while at the same time the new equipment is capable of producing as much or more in a given time than the old. An examination of the ratio of total fixed capital investment to sales volume for manufacturing corporations does not show any obvious upward trend in the postwar period, such as might be expected if automation has had the effect of increasing the cost of capital equipment relative to production revenues. Finally, changes in allowable methods of depreciating capital equipment for income tax purposes may have contributed, at least during certain postwar years, to faster additions to capital equipment than would otherwise have taken place.

CHART 1

Retained earnings are a diminishing source of corporate saving



Note: Data are for nonfinancial business corporations only.
Source: Board of Governors of the Federal Reserve System.

The relative importance of funds obtained through sales of corporate stock and bonds diminished during the period from 1946 through 1961. In 1946, these sales accounted for about one-fourth of the sources of funds shown in Table 1, which does not include funds obtained on mortgage loans or from commercial banks or other lenders. In 1961, however, cash flows, the other major source of funds, represented about five-sixths of the sources of funds shown in Table 1, and nearly seven-eighths in 1959. Why have these internal sources of funds become so much more significant in the corporate financial picture?

The interdependence of corporate saving and investment

Cash flows are composed of two separate elements, which are largely, though not entirely independent of each other so far as the causes of their movements are concerned. These elements are net earnings after Federal income taxes and payment of dividends to stockholders, and capital consumption allowances (usually called depreciation or depletion, depending on the nature of the capital

assets on which they are based). Net retained earnings depend on a number of factors, such as general business conditions which affect sales and costs of production, dividend policies of boards of directors, and Federal corporation income tax policies and rates. (The latter, of course, include depreciation allowable in computing taxable income). Chart 1 shows the movements in total profits of non-financial business corporations in the post-war years and indicates the changes in the component elements mentioned. Retained earnings have undergone substantial changes during this period. They are now a somewhat smaller proportion of total profits before taxes and dividends than in the earlier postwar years. This appears to have been due both to rising income tax payments and increased dividends. These factors have had, in general, the effect of making net retained earnings the residual element which fluctuates as do total profits. This is not necessarily inevitable; corporations could have chosen to let dividends be the residual element and hold a constant proportion of total profits for investment purposes. However, this has evidently not been true to date.

The reason for the heading given to this section refers primarily to the other main element of cash flows—capital consumption allowances. These allowances are a means for a firm to recover the value of its fixed investment, over the useful life of capital equipment, from the revenues that such investment plays a part in earning. Given the procedure used to estimate the amount of the original (or replacement) value lost in any given year by a piece of productive equipment, depreciation is a deduction from gross sales revenues as long as the depreciation schedule is in effect. However, during the same period there need not be an outlay of funds for new equipment to replace that which has been “used up.” The equipment may well continue to be useful throughout its life and then suddenly

TABLE 2
CHANGES IN FINANCIAL ASSETS AND LIABILITIES, NONFINANCIAL
BUSINESS CORPORATIONS

(Billions of dollars)

Changes in Financial Assets or Liabilities	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Financial Assets	-1.9	7.7	4.8	4.7	15.5	7.7	5.2	2.2	4.6	16.8	4.0	4.1	9.8	11.7	2.1	10.9
Demand deposits and currency	1.1	2.2	0.2	1.1	1.5	1.8	0.7	0.2	2.0	1.0	0.1	*	1.5	-1.0	-1.2	0.9
Federal securities	-6.9	-1.2	0.7	2.0	2.9	1.1	-0.8	1.6	-2.3	4.4	-4.4	*	-0.2	4.4	-3.0	-0.9
Other financial assets	0.8	1.3	1.4	1.2	1.6	1.3	2.0	1.2	1.0	1.3	2.3	2.6	2.5	2.2	3.3	3.3
Trade credit	3.1	5.4	2.5	0.4	9.5	3.5	3.3	-0.8	3.9	10.1	6.0	1.5	6.0	6.1	3.0	7.6
Financial Liabilities	7.7	7.4	3.3	-1.5	11.5	8.3	5.5	1.0	3.1	14.0	11.5	3.4	6.1	10.7	4.3	8.1
Mortgages	1.3	1.5	1.3	1.4	1.8	1.4	1.3	1.2	1.8	2.0	1.8	1.8	3.2	3.4	3.1	3.5
Bank loans	2.6	2.2	0.6	-1.7	3.1	3.3	1.0	*	-0.7	2.8	5.3	2.0	0.4	3.8	2.6	1.6
Other liabilities	0.2	0.2	0.2	0.1	0.3	0.2	0.2	0.1	*	0.3	0.1	0.5	0.1	0.5	1.5	0.6
Trade debt	3.6	3.5	1.2	-1.3	6.3	3.4	3.0	-0.3	2.0	8.9	4.3	-0.9	2.4	3.0	-2.9	2.4

*Less than \$50 million.

Note: This table supplements Table 1 by indicating some of the principal liabilities through which funds were acquired by nonfinancial corporations other than through sales of stocks and bonds and also some of the financial assets whose acquisition absorbs corporate funds. Some of the items omitted as not relevant to the present discussion are: liabilities—"other loans"; assets—consumer credit; "other loans" held as assets.

Source: Board of Governors of the Federal Reserve System, *Flow of Funds/Savings Accounts, Supplement 5* (December 1961), Table 4D; *Federal Reserve Bulletin*, August 1962, p. 1060.

require complete replacement; or it may be like a fleet of trucks requiring that one truck be purchased every year to replace one which is worn out, thereby maintaining the fleet in existence.

Assuming the latter of these two situations more likely (for many industries) than the former, it is still possible to argue that, on the average, "replacement" capital expenditure is at least fairly closely related to the volume of depreciation allowances generated each year. However, this assumes that the year in question is not one in which there has recently been a burst of technological change, leading to considerable investment activity, which though nominally replacing outworn or obsolete plant and equipment, actually adds to capacity. Moreover, as a consequence of the rising price level that has prevailed during much of the postwar period and the overall expansion in productive capacity, the dollar expenditure on fixed investment by nonfinancial corporations has consistently exceeded their depreciation allowances in the postwar period, as indicated in Table 1. A

rising level of new investment means a rising total of depreciation allowances to finance future investment needs. This should indicate why it is that the capital consumption component of total cash flows has been the element most responsible for their growth during the postwar years. Despite the fact that retained earnings, reflecting the vicissitudes of general business activity, have fluctuated considerably, there has been a steady, underlying upward trend in total cash flows; as long as at least some new investment takes place every year, this upward movement may be expected to continue, other things remaining the same. However, recent changes in the tax laws allowing a credit for investment against Federal corporate income taxes, plus the proposed reductions in the rate at which corporate profits are taxed, may, if all these policies are implemented, accelerate the growth of cash flows in coming years.

The interdependence of cash flows and new investment is that a rising level of new investment produces thereafter a larger volume of cash flows. Therefore, this creates a

FEDERAL RESERVE BANK OF SAN FRANCISCO

TABLE 3
CUMULATIVE CHANGES IN INVESTMENT ACTIVITY, SAVING, AND FINANCIAL ASSETS AND LIABILITIES

(Billions of dollars)

Cumulative changes from	Investment in				Funds obtained from			
	Plant and Equipment	Inventories	Trade credit	Cash and U.S. Government securities	Cash Flows	Stocks and bonds	Trade debt	Bank loans
1946 - 1950	74.2	12.4	20.9	3.6	78.3	18.3	13.3	6.8
1951 - 1955	106.0	14.6	20.0	9.7	109.3	27.6	17.0	6.4
1956 - 1960	141.2	11.8	22.6	-3.8	143.4	33.7	5.9	14.1
1961	28.1	1.8	7.6	0	34.9	7.0	2.4	1.6
1946 - 1961	349.5	40.6	71.1	9.5	365.9	86.6	38.6	28.9

Source: Calculated from data in Tables 1 and 2.

need to find outlets for the funds generated by the new investment, which can, among other things, lead to still more new investment. In a sense, this is a self-generating process over time leading to larger investment in productive equipment, accompanied by higher levels of production, and so on. It assumes, however, that there will be sufficient demand to clear the market of the additional goods and services produced, thereby creating an incentive for the investment to take place. However, additions to inventories, or to plant and equipment, are not the only means of utilizing the internal flows of corporate funds from internal savings of corporations.

“Financial” investments of corporations

We mentioned earlier that, in the early postwar years especially, internal and external funds both were needed to provide the financial support for investment programs necessitated by reconversion from wartime to peacetime patterns of business activity. Among other things, corporations drew down their accumulated liquid assets which had been held both as bank balances and in the form of securities, largely those issued by the United States Government to finance the war. However, this process could not go on forever, and Table 2 indicates that, after the

initial period of reconversion, corporations were adding, on the whole, to their cash and liquid asset holdings. 1956 was a notable exception; the volume of investment in productive equipment was unusually large that year following the boom conditions of 1955.

Another form of investment in financial assets that has become increasingly important is represented by expanding the volume of trade credit that nonfinancial corporations grant to their customers. In only one postwar year, 1953, was there a decline in outstanding trade credit. The cumulative increase in trade credit during the years 1946-50 was \$20.9 billion; in the years 1951-55, a further \$20 billion was added, and from 1956-60, \$22.6 billion. In 1961 alone, \$7.6 billion was added to the volume of total trade credit extended by nonfinancial business corporations. On the other hand, trade debt (the amounts obtained by the firms in question by indebtedness to other business firms) rose only \$13.3 billion from 1946 to 1950, \$17 billion during the next five years, and a mere \$5.9 billion from 1956 through 1960. Over the whole period (1946-61), the net gain in trade credit exceeded the increase in trade debt for nonfinancial corporations by \$32.5 billion; in other words, nonfinancial corporations were net lenders of funds during the period from 1946 through 1961 of nearly \$33 bil-

lion¹ This is clearly a substantial use of funds and may be compared with the cumulative increase in cash and Treasury securities held (\$9.5 billion) or the cumulative change in inventories (\$41 billion).

Summary and conclusions

The data examined in this article may best be summed up by consideration of the cumulative changes in productive capital, financial asset holdings, and sources of funds—both internal and external. This is done, using five-year periods, in Table 3. The addition of those sources and uses of funds listed in the table indicates that the sources exceeded all of the various forms of real and financial investment shown by about \$50 billion; this allowed other types of assets to be increased, or other liabilities to be reduced, during the postwar period. It is also evident that the cumulative cash flows and the investment in plant and equipment were nearly equal in amount. We may, if we wish, then say that all of the expan-

sion in plant and equipment for the nonfinancial corporations was financed by internal cash flows, with some funds left over for other forms of investment as well, such as the expansion of trade credit or the relatively small net addition to cash and United States Government securities that was made during the postwar period. Since this excess would not have been sufficient to accomplish these goals, stock and bonds were sold, bank and other forms of credit were used, and the firms became indebted to their suppliers about \$40 billion more than at the end of the War.

Still, a dollar is a dollar, and sources of funds cannot in reality be “lined up” with particular uses of funds in the manner indicated. All that can really be done is to show, as has been attempted above, where the funds came from, and what was done with them. In the process of doing this, we have indicated that, although internal cash flows have become more important in the total financial picture for nonfinancial corporations, these firms still need to rely on “outside” funds from the money or capital markets and from those who sell them goods.

¹ Since nonfinancial corporations are only one sector of the economy, trade credit and debt figures include borrowing or lending from other firms, such as noncorporate businesses, financial concerns, and the Federal and state governments, in addition to transactions within the sector itself.

FEDERAL RESERVE BANK OF SAN FRANCISCO
BANKING AND CREDIT STATISTICS AND BUSINESS INDEXES—TWELFTH DISTRICT¹
(Indexes: 1957-1959=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) ⁸	Dep't store sales (value) ⁸	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	19	....	...	...	110	18	53
1933	1,486	720	951	1,609	8	....	...	...	56	11	34
1939	1,967	1,450	1,983	2,267	14	....	...	...	83	19	38
1953	9,220	6,639	10,515	7,997	69	4.14	86	86	108	74	93
1954	9,418	7,942	11,196	8,699	71	4.09	85	84	103	74	93
1955	11,124	7,239	11,864	9,120	80	4.10	90	90	112	82	92
1956	12,613	6,452	12,169	9,424	88	4.50	95	96	112	91	94
1957	13,178	6,619	11,870	10,679	94	4.97	98	101	103	93	97
1958	13,812	8,003	12,729	12,077	96	4.88	98	96	96	98	101
1959	16,537	6,673	13,375	12,452	109	5.36	104	103	101	109	101
1960	17,139	6,964	13,060	13,034	117	5.62	106	103	95	110	103
1961	18,499	8,278	14,163	15,116	125	5.46	108	103	94	115	104
1962	....	....	....	....	...	....	113	109	104	123	...
1962											
January	18,646	8,082	13,671	15,448	136	....	111	107	105r	119	105
February	18,622	7,820	13,163	15,647	133	....	111	107	105r	120	105
March	18,906	7,776	13,235	15,939	138	5.50	112	107	104	123	105
April	19,070	7,811	13,706	16,091	143	....	112	108	104	118	105
May	19,328	7,582	13,945	16,352	140	....	112	108	102r	121	106
June	19,625	7,689	13,101	16,511	145	5.52	112	108	102r	123	106
July	19,669	7,532	13,535	16,587	145	....	113	109	106	123	105
August	20,017	7,309	13,255	16,655	138	....	113	109	105	124	105
September	20,165	7,471	13,446	16,772	143	5.49	114	110	107	122	106
October	20,460	7,471	13,969	16,934	146	....	114	111	104r	121	106
November	20,589	7,501	14,012	16,827	135	....	114	110	102r	128	105
December	21,102	7,608	14,431	17,093	...	5.50	115	111r	101r	127	106
1963											
January	21,035	7,454	13,917	17,390	...	....	116p	111p	...	127	...

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	84r	91	61	34	...	89	13	96	61	193	20	55	*
1933	35r	54	39	17	...	15	11	55	...	...	12	...	...
1939	62r	70	49	35	16	70	17	82	43	190	16	42	1
1952	101r	112	90	77	92	100	61	86	81	102	33	60	18
1953	102r	114	95	82	105	98	69	71	56	113	51	70	41
1954	101r	111	92	83	85	90	73	67	57	96	44	71	28
1955	107r	111	96	90	102	104	82	84	72	116	51	80	35
1956	104r	109	100	97	108	114	89	101	105	91	75	86	69
1957	93r	106	103	93	114	113	95	116	124	96	95	93	97
1958	98	98	96	99	94	101	97	89	86	96	92	95	91
1959	109r	96	101	108	92	86	107	95	90	108	112	113	112
1960	98r	95	104	101	102	112	115	122	123	116	132	115	136
1961	94r	96	108	105	111	119	124	...	...	...	...	...	...
1962	...	96	111	111	...	...	...	...	...	...	...	...	...
1961													
December	94r	96	110	95	107	126	125	138	150	105	119	117	120
1962													
January	91r	94	108	107r	119	124	132	124	131	102	125	111	132
February	97r	94	110	96r	120	138	126	137	143	123	94	107	86
March	97r	95	106	105r	112	130	130	133	124	130	120	128	116
April	93r	95	105	113r	98	140	129	107	121	67	140	117	154
May	96r	96	108	111r	107	136	131	134	145	103	137	138	137
June	94r	96	112	94r	103	130	128	104	121	59	156	132	171
July	97r	96	115	115r	84	112	128	82	85	74	...	...	...
August	94r	97	114	117r	89	115	134	...	...	...	...	...	...
September	98r	96	113	115r	90	119	134	...	...	...	...	...	...
October	98r	97	112	120r	88p	128r	...	...	...	...	...	...	...
November	103	97	113	115r	91p	127p	...	...	...	...	...	...	...
December	...	97	113	121	...	...	...	...	...	...	...	...	...

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 A new index now combining not only Los Angeles, San Francisco, and Seattle food indexes but also Portland. Reweighted by 1960 Census figures on population of standard metropolitan areas.
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. * Less than 0.5 percent.