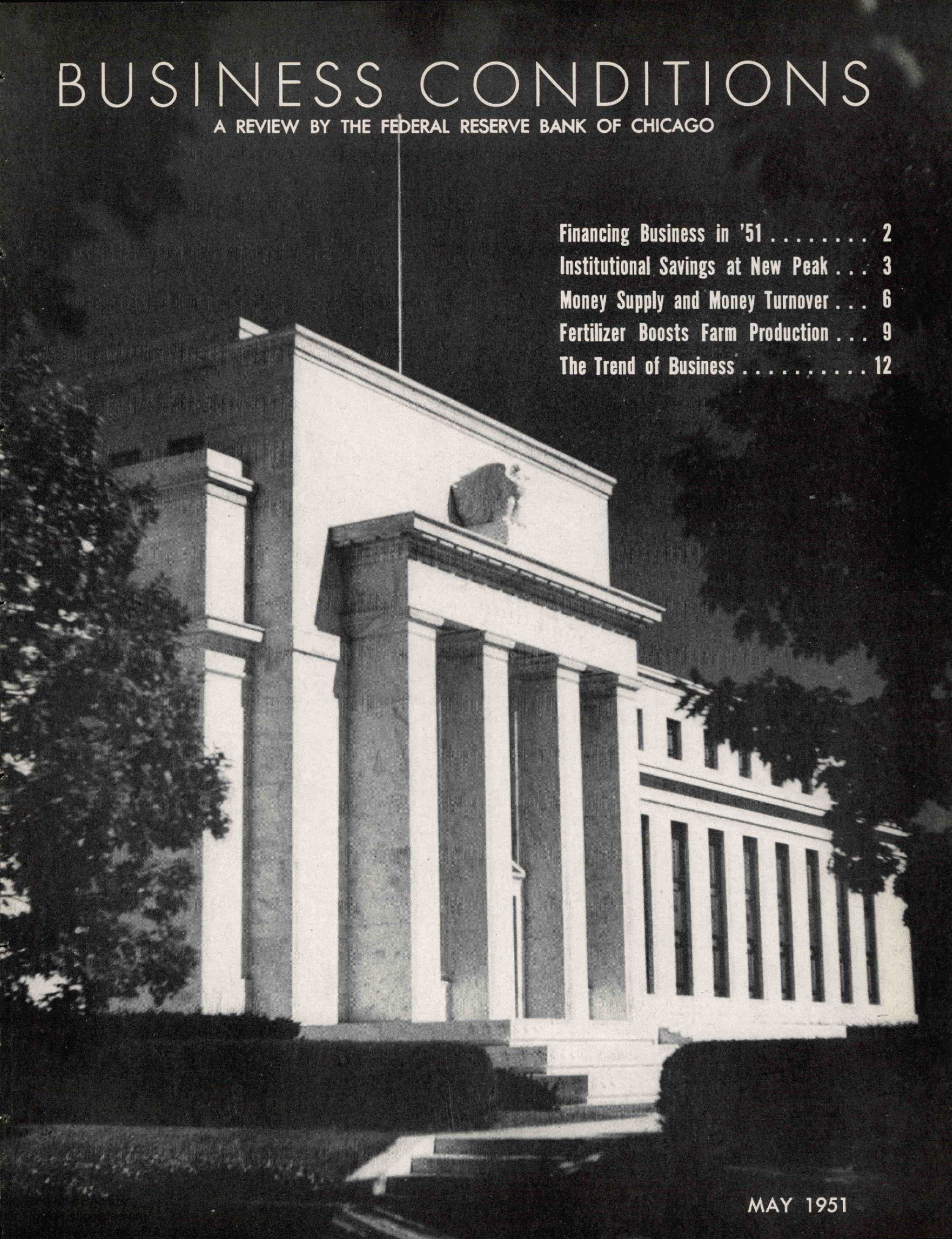
BUSINESS CONDITIONS

A REVIEW BY THE FEDERAL RESERVE BANK OF CHICAGO



MAY 1951

Financing Business in '51

Requirements Grow with Plant and Equipment

Financial requirements of business will be greater in 1951 than ever before. Large sums will be needed for working capital purposes—to meet higher pay rolls, taxes, and other costs and to carry larger inventories. Even more important, however, are the huge capital spending programs now under way. In general, the needed funds will be at hand, at least for purposes compatible with the defense program, but the financing problems involved and their solution will vary from the experience of previous years.

The burden of industrial expansion now planned, coupled with accelerated defense spending, will exert a severe strain upon the nation's resources. Nevertheless, it is hoped that substantial increases in total production will permit civilian consumption to continue at near-record levels. A prime requisite to the attainment of this threefold objective of rearmament, larger capacity, and high-level consumption is an ample flow of funds to business enterprise.

WHY ADDITIONAL FUNDS ARE NEEDED

All types of business assets tend to increase as business activity rises. The funds used for these purposes must be obtained from various liability and net worth accounts (see accompanying table). The largest single asset grouping for most firms, particularly those engaged in heavy manufacturing, is the capital account—the buildings and machinery which make production possible.

Capital Expansion—Plant and equipment expenditures this year are expected to total 23.9 billion dollars —25 per cent above the previous peak year of 1948— according to a recent survey of the SEC and the Department of Commerce. This estimate may be on the low side since businessmen tend to underestimate actual outlays in years of rising activity.[1]

All categories of business contemplate substantial increases over last year in capital spending. Manufacturing leads the other groups with a projected 45 per cent increase over last year. The largest gains for particular industries will occur in steel, nonferrous metals, chemicals, automobiles, and electric power. Despite the fact that plants built during World War II are being reactivated, some new factories are being constructed to handle war contracts, particularly for jet aircraft engines and parts.

If all-out war is avoided, it is hoped that the capital spending in 1951 plus an equally ambitious program next year will allow consumers to purchase more finished goods in 1953 than ever before, despite a continuance of the current mobilization program. Hence, the expansion of basic industries is being encouraged.

Inventories—Last year total business inventories rose about ten billion dollars to reach the highest levels on record. Continuing price increases coupled with the trend in inventory accumulation evident so far this year indicate another substantial rise this year.[2]

As the nation converts more facilities to war goods, inventories of some firms will decline, but the over-all trend will still be upward. In 1941, a year similar to the present in that military procurement was beginning to shove civilian output aside, inventories rose by about 30 per cent. After the pattern of defense production and firmer price controls is etched upon the economy, the inventory rise will slow down.

Other Uses—As over-all business activity continues to expand and taxes, prices, and wages rise further, additional sums must be kept in readiness to meet current expenses. Funds held for this purpose consist for the most part of cash and short-term Government securities. Some reduction in over-all financial requirements could be achieved by reducing bank balances and security holdings which constitute a reserve for emergency use. But it is necessary to the smooth functioning of the productive process that sufficient money be readily available. Business currently is in good shape with regard to working funds. On January 1, 1951, cash and U.S. Government securities in the hands of corporations totaled

SOURCES AND USES OF CORPORATE FUNDS, 1946-50[1]

(In billions of dollars)

Item	1946	1947	1948	1949	1950
Uses:					
Plant and equipment outlays	11.6	15.0	17.5	16.1	17.0
Inventories (change in book value)	11.2	7.1	5.0	−4.6	6.5
Change in customer receivables	4.8	7.5	2.4	−.5	6.5
Cash and U.S. Government securities	−4.7	1.0	—	3.0	6.5
Other current assets	−.7	−.1	.5	−.2	.5
Total uses	22.2	30.5	25.4	13.8	37.5
Sources:					
Internal:					
Retained profits and depletion allowances	7.6	11.6	12.8	8.6	12.5
Depreciation allowances	4.3	5.2	6.0	6.7	7.0
Total internal sources	11.9	16.8	18.8	15.3	19.5
External:					
Change in trade debt	4.0	4.4	.9	−2.2	3.5
Change in Federal income tax liability	−1.6	2.3	.8	−2.4	7.0
Other current liabilities	1.8	.4	—[2]	−.1	1.0
Change in bank loans	3.3	2.6	1.1	−1.8	2.5
Change in mortgages	.6	.8	.6	.7	1.0
Net new issues	2.3	4.4	5.9	5.4	4.0
Total external source	10.4	14.9	9.3	−.4	19.0
Total sources	22.3	31.7	28.1	15.0	38.0
Discrepancy (sources less uses)	+.1	+1.2	+2.7	+1.2	+.5

[1]Excludes banks and insurance companies.
[2]Less than 50 million dollars.
SOURCES: Department of Commerce and Council of Economic Advisers.

[1]An independent survey conducted by McGraw-Hill and published in *Business Week*, March 31, 1951, suggests an even greater expansion. See also, "Business Investment Programs and Their Realization," *Survey of Current Business*, December 1950.

[2]Part of the actual increase in inventory values is hidden in these figures because of the growth of the last-in-first-out method of inventory accounting. The higher cost of carrying inventories is indicated indirectly through lower profit totals.

(*Continued on Page 10*)

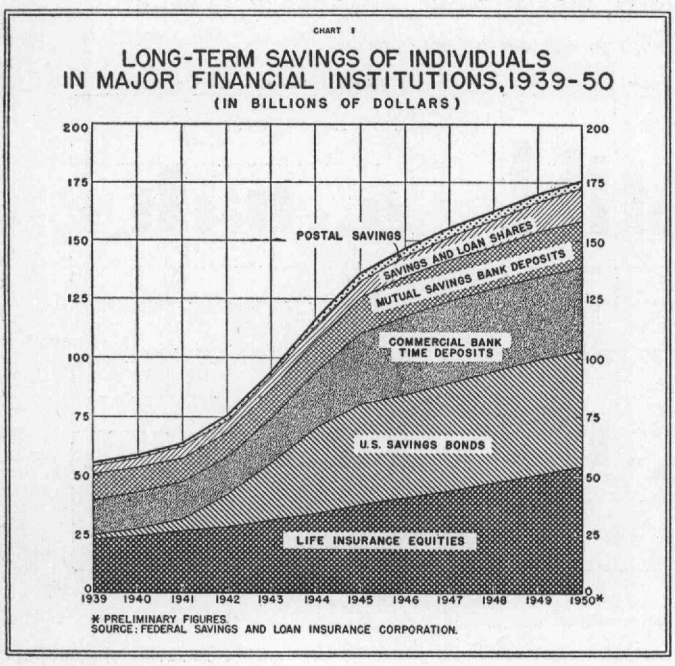
Institutional Savings at New Peak

Consumer Buying Spree Holds Down 1950 Increase

Savings of individuals in the major financial institutions reached a new record total of over 175 billion dollars at the end of 1950. Despite peak levels of income and employment, however, last year's net inflow of savings into these institutional media—which include commercial bank time deposits, mutual savings bank deposits, savings and loan association share accounts, postal savings, savings bonds, and life insurance equities—was the smallest which had been experienced since 1941. Totaling about six billion dollars, the increase was 14 per cent less than that of 1949. Moreover, it appears that net additions to savings during the first quarter of this year were at substantially reduced levels in comparison with earlier postwar years.

The reason for the relatively poor savings experience last year was, of course, the wave of buying which engulfed the country during the summer months following entrance of the United Nations into the Korean war. Considering the magnitude of the buying spree, it is surprising that savings held up as well as they did. Total consumer expenditures, which had been at a seasonally adjusted annual rate of 186 billion dollars during the second quarter of the year, rose to a 199 billion dollar annual rate in the July-September quarter. Purchases of durable goods, such as automobiles, appliances, and furniture, jumped from 26.5 to 34 billion dollars at annual rates in the same period, an increase of 28 per cent.

Since the relatively high cost of durable goods cannot ordinarily be met out of current incomes, the increase in expenditures for these items last summer undoubtedly forced the liquidation of many individual savings balances. Nevertheless, a substantial inflow of new savings offset these liquidations in large part, with the result that a small net addition to total savings occurred in the July-September period. The net inflow of savings subsequently recovered to about the level of earlier months, as the first wave of scare buying tapered off in the fall.



The second wave of consumer buying, which lasted roughly from the end of December through the early part of March, apparently involved a smaller amount of spending than that of last summer. Although department store sales approached those of July and August on a seasonally adjusted basis, for example, actual dollar sales were considerably smaller, reflecting the usual sharp contraction of retail business during the early months of the year.

The impact of this spending on institutional savings flows accordingly was less severe. Commercial bank time deposits declined moderately during January and February, while mutual savings bank deposits remained about the same. The net liquidation of Series A-E Savings Bonds, which began early last summer, apparently continued through the early part of this year. Savings and loan share accounts increased in January and February, but considerably less than in earlier years. Only life insurance equities, as measured by increases in life company assets, continued to grow by amounts moderately exceeding those of previous years, as had been the case during the first period of scare buying. Thus, the total net savings inflow in early 1950 appears to have been substantially smaller than in the early months of other postwar years but considerably larger than that which occurred last summer.

It seems likely that the net inflow of savings to financial institutions will become significantly larger in the months ahead. Incomes have been rising gradually and will continue to do so as wage rates advance, overtime work becomes increasingly common, and employment expands somewhat further. The volume of defense work is now growing rapidly, and substantial cutbacks in civilian production—especially of metal-using consumer durable goods—will become necessary in the near future. As the goods which consumers desire to purchase become increasingly scarce, and if price controls prove to be reasonably effective, the proportion of current income which is channeled into savings may be expected to rise.

THIS MONTH'S COVER

Federal Reserve Building in Washington, D.C.

BIG SAVINGS GROWTH WAR-INSPIRED

Large accumulations of savings in the hands of the public are a distinctly modern phenomena. Today's holding of nearly 176 billion dollars in institutional savings compare with 64 billion in 1941, an increase of 175 per cent. In the previous decade, savings rose by only 17 billion dollars, and in the 1920's, by 22 billion dollars. Thus, the increase in savings balances experienced in the past ten years has been nearly triple that of the previous two decades combined.

By far the largest growth in savings occurred during the four war years (see Chart 1). Additions totaled 11 billion dollars in 1942, 19 billion in 1943, more than 22 billion in 1944, and almost 20 billion in 1945. High and rising levels of income and employment, combined with the almost complete disappearance of new houses, automobiles, home appliances, and many other consumers' goods, led to the more or less forced accumulation of savings balances. Additions to savings accounted for a peak of over 15 per cent of consumer income after taxes in 1944, as compared with 3.9 per cent in prewar 1939, and only 3 per cent last year.

Increases in savings balances dropped sharply in 1946 and declined further in 1947 and 1948, as consumer goods gradually become more readily available. A backlog of demand, resulting from unfilled desires during four years of war, led to peak production of almost every major type of consumer's product during the postwar period. Nevertheless, net additions to savings have been made in every postwar year, despite record levels of acquisition and consumption of goods. Incomes rose rapidly during this period with the result that, in the aggregate, reductions in savings balances were not necessary in order to finance purchases.

Many individuals, of course, drew down their savings accumulations in order to finance heavy purchases of goods during the postwar period, but the total stock of institutional savings apparently has remained fairly well distributed. According to the *Survey of Consumer Finances,* released annually by the Federal Reserve Board, holdings of life insurance have continued to be widespread, with 74 per cent of all spending units having made premium payments in 1949 as compared with 75 per cent in 1947. Savings accounts of one type or another (including time deposits in commercial and mutual savings banks, savings and loan share accounts, and postal savings) were held by 42 per cent of all spending units in early 1950, as against 39 per cent in 1946. The proportion of spending units holding Series A-F Savings Bonds, however, declined from 63 per cent in 1946 to 39 per cent in early 1950.

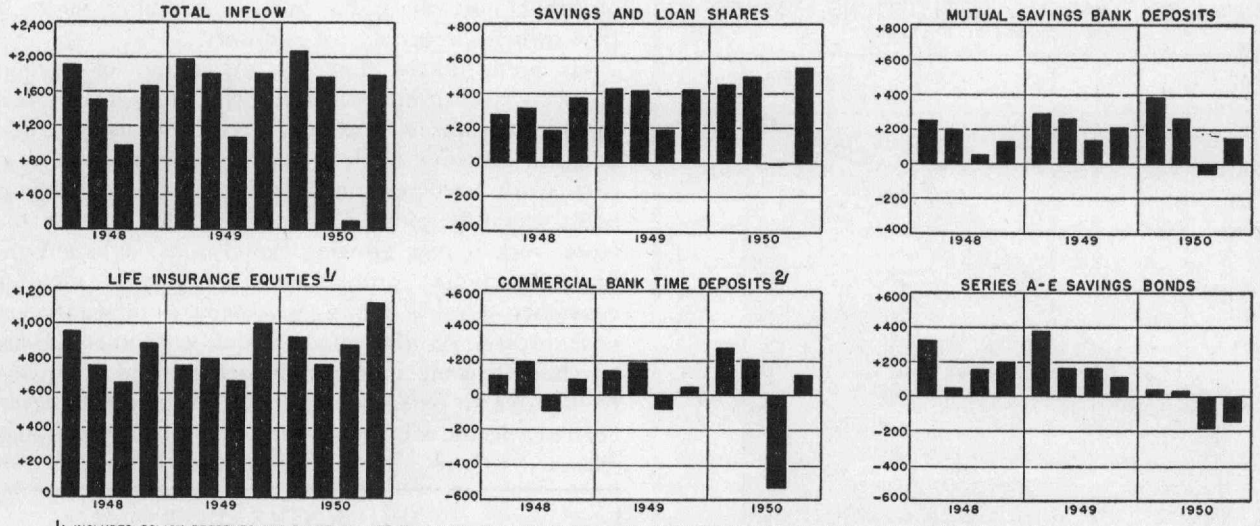
The median holding of spending units possessing liquid assets (which include checking accounts but exclude life insurance equities) was $750 in 1946 and $810 in 1950, but that of all spending units dropped from $400 in 1946 to $250 in 1950. This reflected primarily an increase from 24 to 31 per cent in the proportion of spending units holding *no* liquid assets. There does not appear to have been any significant growth in the concentration of liquid assets in the hands of people with high incomes, however, even allowing for probable changes in the past year. Spending units in the top 20 per cent income bracket held 48 per cent of total liquid assets in early 1950, as compared with 53 per cent in 1946. Likewise, the upper half of all income recipients held 73 per cent of total liquid assets in 1950 and 78 per cent in 1946.

The tremendous growth in long-term savings of individuals during the past decade resulted in significant

CHART 2

NET FLOW OF SAVINGS TO SELECTED FINANCIAL INSTITUTIONS, QUARTERLY, 1948-50

(INCREASES OR DECREASES IN HOLDINGS IN MILLIONS OF DOLLARS)



1/ INCLUDES POLICY RESERVES AND DIVIDENDS LEFT TO ACCUMULATE, LESS POLICY LOANS. FIGURES FOR 1950 ARE PRELIMINARY ESTIMATES.
2/ EXCLUDES INTER-BANK DEPOSITS AND TIME DEPOSITS OF FEDERAL, STATE, AND LOCAL GOVERNMENTS.

shifts in the relative importance of the several savings media. Proportions of total accumulated savings held at the end of selected years were as follows:

	1940	1945	1950
Life insurance equities	41.7	27.6	30.7
U.S. Savings Bonds, Series A-G	4.7	31.5	28.2
Commercial bank time deposits	26.1	22.0	20.0
Mutual savings bank deposits	18.0	11.3	11.4
Savings and loan shares	7.2	5.4	8.0
Postal savings	2.3	2.2	1.7

During the war period, the private savings media declined sharply in relative importance as a result of development of savings bonds into a large-scale program. Dollar holdings of all other types of savings institutions expanded significantly, however, with commercial banks and postal savings experiencing the largest relative growth. In the postwar years, savings bonds, commercial bank time deposits, and postal savings lost ground in relative importance, while savings and loan shares and life insurance equities steadily gained more than a proportional net inflow of savings.

LIFE INSURANCE—THE SAVINGS MAINSTAY

In the past several years, and particularly in 1950, additions to life insurance equities have been by far the most important element in the total savings inflow picture (see Chart 2). This importance is shown by the fact that increases in insurance equities accounted for 54 per cent of the total inflow of savings in 1948 (to the five institutional media included in the chart), 48 per cent in 1949, and nearly 65 per cent in 1950. Moreover, last year's savings experience demonstrated the great resistance of insurance to liquidation for purposes of financing consumer buying. Not only did additions to insurance equities *not* decline in the third quarter, but in fact they increased substantially as a result of the record levels of new life policy sales.

The strength of life insurance as a type of savings may be ascribed to several important factors. First, life insurance is a combination of the elements of protection against risk and savings accumulation. Since insurance is a means for providing immediate and relatively large protection to a family and for accumulation of resources for old-age retirement as well, it has benefited from both the growing desire for security and the moral approval of society. Once entered into, the essentially contractual nature of premium payments tends to maintain this flow of savings from the policyholder to the company. Furthermore, policyholders hesitate to surrender their policies to finance current expenditures, because of the loss of protection to their families.

Second, life insurance is sold aggressively through direct contact, unlike most other types of savings media. Third, the long-term growth in insurance coverage has resulted in a continued build-up of life policy reserves, since the average age of the insured—and thus the mortality rate—remains relatively low. Finally, the decade of experience with inflation and current widespread expectations of further deterioration in the value of the dollar constitute a strong argument for buying additional insurance to assure adequate coverage for beneficiaries.

Of the other types of savings, share accounts in savings and loan associations and mutual savings bank deposits have shown the most strength in recent years. The net liquidation of savings accounts during the third quarter of 1950 was moderate for both media, and the subsequent recovery was substantial, particularly for savings and loan associations. In fact, additions to share capital in 1950 established a new record, despite the heavy outflow of funds in the summer. For the postwar period as a whole, moreover, savings and loan associations have enjoyed by far the largest relative growth in savings balances. Share capital has increased 91 per cent in these five years, as compared with 44 per cent for life insurance equities, the next most rapidly growing savings media. Various factors have entered into this success, but the most important appear to be the higher return paid on share capital and the generally aggressive merchandising efforts of savings and loan managers.

As is indicated by Chart 2, commercial bank time deposits and Series A-E Savings Bonds had the most unfavorable savings experience during 1950. The substantial net liquidation of time deposits last summer nearly offset the gains of the rest of the year, although the subsequent recovery was fairly impressive. Increases in time deposits of banks during most of the period from 1947 to date have been relatively small, while gains during the war years were substantial. This suggests that people tend to regard these deposits as the most liquid type of saving and turn to them more readily in order to finance large consumer purchases.

The savings bond problem appears to have grown fairly serious. Net liquidations of bonds occurred in both the third and fourth quarters of 1950, and the gains in the first half of the year were very small. In fact, accruals of interest on outstanding bonds more than accounted for the increases in holdings in each quarter since the early part of 1949. Many reasons for the deterioration in the program during the past two years have been cited; perhaps the most significant, however, has been the well-publicized decline in the value of the dollar in *connection* with savings bonds. Although this loss in purchasing power applies equally to all types of institutional savings, the widely used "4 for 3" savings bond slogan lends itself to the observation that investors will actually be getting more nearly "2 for 3" in terms of prewar dollars.

It does not appear that the relatively weak performance of savings in general and savings bonds in particular during recent months represents a true flight from fixed dollar assets to an important extent. Rather, individual savings balances have been drawn down primarily to finance forward buying of goods which are expected to be in short supply or higher in price in the near future. A large-scale liquidation of savings would have tremendous inflationary effects on our economy; such a development can best be prevented by taking positive steps to stabilize prices and thereby strengthen public confidence in the value of the dollar.

Money Supply and Money Turnover

Basic Monetary Measures Trace Post-Korea Inflation

For all businesses, consumers, and state and local governments combined, money holdings are now larger than in any other comparable period in our history, and money is being passed from hand to hand more rapidly than in any spring since 1937. At the end of 1950, "adjusted" demand deposits plus currency outside banks totaled a record 118 billion dollars. Even though this "active money supply" declined seasonally in the first two months of the current year, the total remained more than 6.5 billion above year-ago levels. Moreover, adjusted demand deposits were being spent once every 13 business days in December and, while falling off seasonally from this peak postwar rate in first-quarter 1951, were still being spent 14 per cent faster than a year ago.

Most of the recent rise in these measures occurred in the first six months after the outbreak of the Korean war, as private spending at all levels in the economy quickened in response to anticipations of shortages and price increases. The rise in the money supply, chiefly as a result of bank loan expansion, added significantly to the total volume of spendable funds in the hands of the public. The sharp advance in the rate of spending of money, however, financed the major portion of the inflationary rise in money transactions since last June.

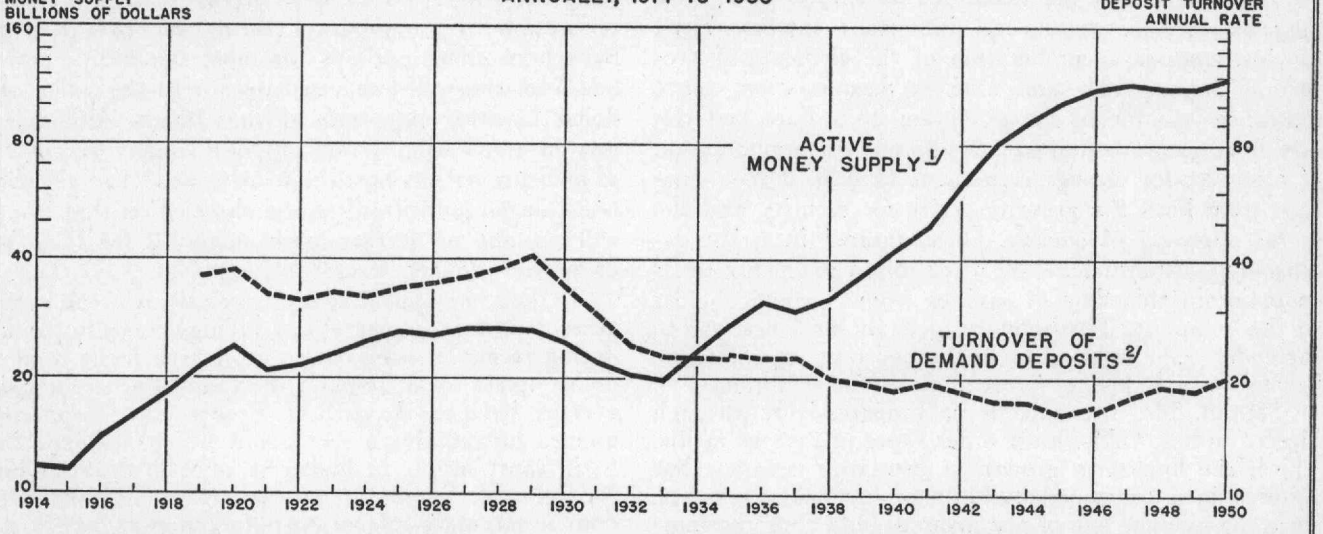
MONEY MEASURES AND THEIR MEANING

The total volume of money expenditures is probably the most comprehensive available measure of over-all economic activity. Its very comprehensiveness, however, makes for many shortcomings. It gives no indication of the total dollar volume of production as do gross national product figures, nor any true measure of the volume of current income available to various groups of buyers for the purchase of these goods. It gives no clue to the highly important shifts among various types of spending, as do retail sales figures for example. Nor does it match the forecasting potential provided by figures on such expenditures as business capital investment and the net Federal surplus or deficit, which are particularly important in creating income and attitudes that influence future spending. None of these more specific measures mentioned above, however, can provide a usable picture of the total flow of money through all the markets in the economy. Because figures on total money expenditures do provide this approximation, they are a valuable supplement to any study of business fluctuations.

On the basis of present information, the total flow of money spending can be measured most meaningfully when divided into two basic parts: (1) total volume of money held, and (2) the average rate at which it is being spent. Many overlapping measures of both of these factors are available, and the choice of measures depends upon the purpose of the analysis. For example, because this article is concerned with actual money spending, it is logical to consider money as "that which is directly and easily exchangeable for most goods, serv-

CHART I

TRENDS IN ACTIVE MONEY SUPPLY AND DEPOSIT TURNOVER
ANNUALLY, 1914 TO 1950



[1]Demand deposits adjusted at all commercial banks plus currency outside banks and U.S. Treasury, end of June 1914 to 1922, end of year thereafter.

[2]Annual rate of turnover of demand deposits (excluding interbank deposits and collection items) at reporting member banks in 100 leading cities excluding New York City, 1919 to 1935; annual rate of turnover of demand deposits (excluding interbank and U.S. Government) in reporting banks in 100 leading cities excluding New York up to 1946, and in 93 leading cities excluding New York City thereafter.

ices, and other forms of assets." Such liquid assets as time and savings deposits, savings and loan shares, and postal savings deposits have therefore been excluded. These assets must first be converted into demand deposits or currency, and thus appear in the active money supply figures, before being spent. In addition, that portion of the money supply held by two special groups is also excluded here. First, because figures on the exact volume of Government spending are available elsewhere and because primary concern centers on fluctuations in private activity, figures on Government money holdings are not considered. Second, because money held by banks (interbank deposits and cash in vault) does not for the most part represent money available for spending, but rather cash assets behind a portion of the money supply (i.e., bank deposits) owned by the public, this segment of the total money supply is also excluded in order to avoid double counting. With minor technical adjustments[1], the remaining demand deposit figure is termed "demand deposits adjusted." Such bank deposits, together with currency outside banks and the U.S. Treasury, are owned by individuals, businesses, and state and local governments and comprise the "active money supply."

Insofar as the rate of use of this total "active money supply" is concerned, no complete and accurate figures are available. For one thing, no records whatsoever exist on the speed with which currency outside banks passes from hand to hand. Nonetheless, lack of this particular information is not as important as it first appears because less than 10 per cent of the total dollar volume of money transactions is paid for in currency.

The rate of use of demand deposits (variously termed "deposit activity," "velocity of deposits," "deposit turnover") is much more significant and can be reasonably ascertained. For many years a varying number of banks has been reporting debits to deposit accounts in their institutions. Computation of the ratio of these total debits to average deposit accounts gives a fairly accurate measure of the turnover of those deposits.[2] To be consistent with the concept of the active money supply, deposit turnover ratios should be calculated on a base of "adjusted demand deposits" rather than total deposits. While debits to adjusted demand deposits are not available, debits to a roughly similar category of deposits[3] are compiled weekly by reporting member banks in 94 leading cities throughout the country.

An additional complication arises here, since New York City banks report by far the largest single-city share of debits to these accounts. This is primarily the result of the atypically large volume of securities market and other financial transactions cleared through deposit accounts in this city. A more representative picture of nationwide demand deposit activity, therefore, can be obtained by considering only bank reports from the other 93 leading cities, excluding New York. Even in these cities, of course, the turnover ratio of debits to demand deposits is weighted by financial transactions, but here such transactions generally are tied more closely to direct business activity and are not so large as to conceal the pattern of nonfinancial payments. The reporting banks in these 93 other centers account for about half of all demand deposits outside New York City. Rural communities are considerably underweighted in this sample of reporting banks, but because of the relatively low concentration of population in rural areas, the described measure of demand deposit activity is probably fairly typical for the nation as a whole.

[1]Adjustments include subtraction of "cash items in process of collection," and addition of bank "cashier's and officers' checks."

[2]Deposit turnover figures are usually calculated on an annual rate of turnover basis. These statistics, however, are not strictly comparable over long periods of time because of the shifting number of banks reporting deposits and debits.

[3]This weekly series is debits to deposits excluding interbank and U.S. Government deposits (equivalent to "adjusted demand deposits" less cashier's and officers' checks plus cash items in process of collection).

A BACKWARD GLANCE

Over the past four decades great changes have occurred in both the volume of the active money supply and its rate of use. At the end of 1950 the supply of money was 15 times as large as in the pre-World War I years of 1915 and 1916, while the average annual turnover of deposits was only slightly more than half as great as in the earliest recorded year, 1919. Chart 1 gives a résumé of the varying trends within this span of years. The data are plotted on a semi-logarithmic scale, on which equal vertical distances represent equal percentage changes. The most striking single movement illustrated in the chart is the spectacular and almost uninterrupted rise in the volume of money between 1933 and 1947. Much of the rise after 1937, of course, was the necessary result of Government borrowing from banks to finance the war effort. This portion of the increase, while much larger than in the comparable World War I period between 1915 and 1920, was actually not much more rapid than in the earlier period but simply of longer duration.

The chart also shows that while the contraction in the money volume after the crash of 1929 was sharp, an even steeper cut in money spending was effected by means of a drastic decline in deposit velocity. Moreover, rather than recovering from this slump, the rate at which people spent money slid still further after 1937, partially offsetting the expansionary influence of the growing volume of money holdings. This was particularly true during the wartime period, when rationing and price control curtailed spending. In addition, direct Government buying of materials, especially during the war, eliminated many of the normal "middleman" transactions and thus tended further to reduce deposit turnover figures. The gradual tendency toward vertical integration in American business over the entire interwar period also had somewhat the same effect.

Finally, it is interesting to note that during a good part of the periods of prosperity after both World War I and World War II, much of the inflationary pressure which arose stemmed from a substantial increase in the rate of spending of existing large money balances. Particularly in the period after World War II, the rise in velocity represented in some measure a "growing up" on the part of the domestic economy to the huge vol-

ume of money created during the war.

MONEY IN THE CURRENT BOOM

A much more detailed picture of money developments in the last three years is presented in Chart 2. Figures for both money supply and deposit turnover are shown as index numbers with December 1947 as a base of 100, so that cumulative percentage changes in the two measures can be compared. As the chart indicates, seasonal movements are strong in both series. Each year turnover rates show a sharp decline in the early months, another drop to the annual low in August, quick recovery in September, and a rise to the yearly peak through the heavy buying months of November and December. In the active money supply, seasonal swings are less frequent and less pronounced; a substantial contraction through the March Federal tax payment period is usually followed by a fairly steady expansion thereafter.

With allowance for this seasonal pattern, active money volume underwent a gentle contraction in the recession year of 1949. As early as March of 1950, however, money volume began to expand more than seasonally. The rise gradually accelerated under the pressure of rapid bank loan expansion, and by the end of 1950 the money supply was seven billion dollars above year-ago levels. Although the decline over the first two months of 1951 was roughly comparable to those of previous years, private money holdings at the end of February remained 5.5 billion dollars, or five per cent, higher than February 1948. With the outlook for increased business borrowing for defense purposes and some Treasury refunding and deficit financing in forms available and attractive to banks, further expansion of the money supply seems likely during the remainder of 1951.

The major factor in recent fluctuations in total money spending, however, has been the changing rate of use of existing money holdings. The mild slump in business activity between late 1948 and mid-1949 was characterized by a substantial if uneven decline in deposit turnover below usual seasonal levels. Likewise, after hitting a sharp trough in August 1949, the rate of money use recovered rapidly in the return to high levels of prosperity during late 1949 and the first half of 1950. Then came Korea, and the immediate jump in deposit velocity demonstrated that in financing "scare buying" businesses and consumers draw quickly and heavily upon their existing money holdings. Throughout the summer the average annual rate of money use continued to rise much more than seasonally, and after a letdown during the buying lull of October and November, it touched a postwar peak of 23.0 in December of 1950. This rate represented a 15 per cent increase above the average December 1947 rate of spending, three times as large as the concurrent five per cent rise in the money supply.

In the first quarter of 1951 the trend in turnover was less clear. In January, the second wave of anticipatory buying was reflected in a less than seasonal drop in deposit velocity. In February, on the other hand, the rate at which people were spending their bank balances slid off more than in previous years. Any signs of a continuation of this trend during March were concealed by the rise in velocity engendered by an unusually large dollar volume of income tax transactions.

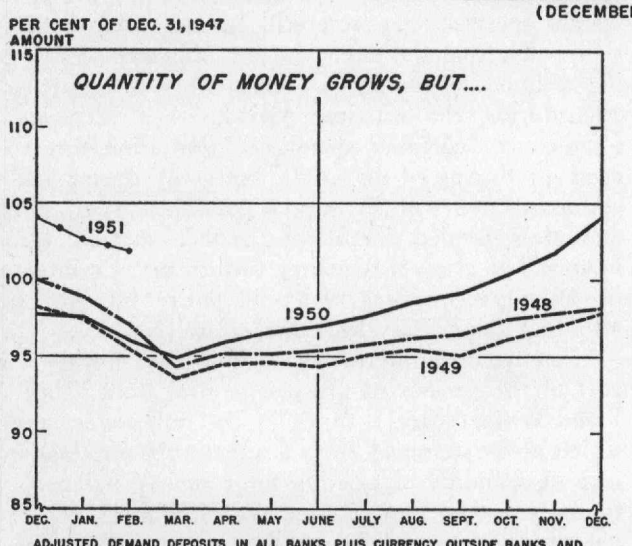
Turnover figures for April, and for most of the coming months, should be relatively free of this obscuring influence. In that period—because it has become increasingly common for the private sector of the economy to effect quick changes in over-all spending by varying the rate at which existing money balances are used—turnover figures should provide an early and significant measure of the pulse of total private economic activity.

CHART 2

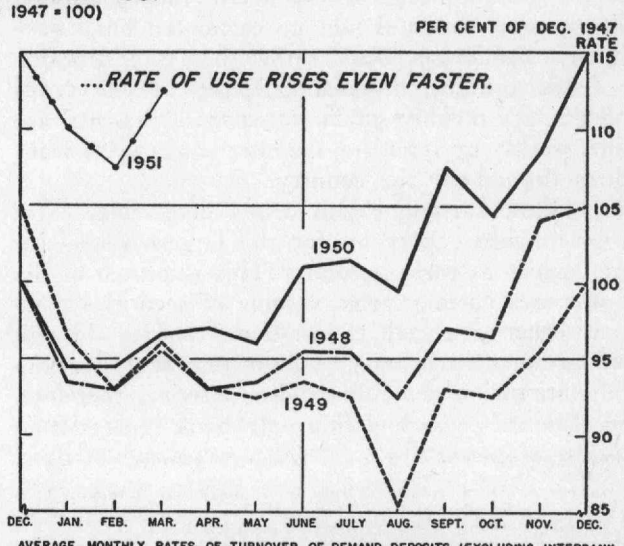
CURRENT CHANGES IN MONEY SUPPLY AND RATE OF TURNOVER

DECEMBER 1947 – MARCH 1951

(DECEMBER 1947 = 100)



ADJUSTED DEMAND DEPOSITS IN ALL BANKS PLUS CURRENCY OUTSIDE BANKS AND U. S. TREASURY.



AVERAGE MONTHLY RATES OF TURNOVER OF DEMAND DEPOSITS (EXCLUDING INTERBANK AND U.S. GOVERNMENT) IN REPORTING BANKS OUTSIDE NEW YORK CITY.

Fertilizer Boosts Farm Production

More Could Be Used Profitably

The recent decade of greatest farm production in United States' history was closely allied with a sharp increase in the use of manufactured plant food. Consumption of commercial fertilizer has reached an annual rate of approximately 17 million tons, more than double the 1940 rate, and gives every indication of showing further substantial gains.

Although it is not possible to indicate precisely the amount of present farm production which may be attributed to the use of commercial fertilizer, expert opinion indicates that it perhaps accounts for as much as 20 per cent of total output. A United States Department of Agriculture (USDA) study attributed about one-half of the 29 per cent increase in 1944 farm production above the 1935-39 average to increased yields per acre of harvested cropland. Factors contributing about equally to this increase were: (1) favorable weather, (2) improved varieties, harvesting, and soil management practices, and (3) increased use of fertilizer. Since 1944, crop yields have shown some further upward trend, due in part, to increased applications of manufactured plant foods.

GOVERNMENT PROMOTES USE

For many years, state experiment stations, extension services, and numerous commercial agencies have actively promoted a wider use of manufactured plant foods in farm production. Many farmers, however, first "tried" it as a result of the subsidized distribution made through farm programs sponsored by the USDA and the Tennessee Valley Authority (TVA). Such allotments reached a peak volume in 1942 when about one-eighth of the total amount used was dispersed by Government agencies. Since that time this subsidized distribution has been greatly curtailed although TVA, Soil Conservation Service (SCS), and Production and Marketing Administration (PMA) continue to promote its use. The PMA still provides small subsidies when fertilizer is applied in accordance with regulations formulated by that agency.

Probably the primary influence, however, is that of relative prices. Farmers could hardly afford not to buy fertilizer in recent years. Since 1939 commercial fertilizers have increased in price proportionately less than any other important commodity used in farm production (see accompanying table). Furthermore, factors such as fertilizer which increase output per acre tend to economize on the cost per unit of output of other production factors and, even under price relationships less favorable than exist at present, most farmers could use more of them profitably. Historically, the volume of fertilizer used has varied with fluctuations in farm income. Consumption declined, for example, to about 4.4 million tons in 1932 then increased to 8.3 million in 1937. Since 1940, new records have been established each year (see accompanying chart).

DISTRICT USE INCREASING RAPIDLY

About 60 per cent of the nation's fertilizer consumption currently is by farmers in the South Atlantic and South Central states. In 1949 the three leading states—North Carolina, Georgia, and Alabama—accounted for more than a fifth of the total, using 75 per cent more than the five Seventh District states of Illinois, Indiana, Iowa, Michigan, and Wisconsin. Heavy use of commercial fertilizers in the South is occasioned by the fact that much of the soil in that area lacks the native productivity of most Corn Belt soils and the agriculture of the area is built around a cash-crop system of farming, which until recently has placed little emphasis on the role of livestock in the maintenance of soil fertility.

The greatest *rates of increase* in fertilizer consumption in recent years have occurred in the North Central states and the far west, areas of only limited use prior to 1940. Indiana is the leading consumer in the Seventh District, although Illinois and Wisconsin have shown the greatest rates of increase, the former now using 10 times more than in 1939. Quantitatively, the Seventh District states are now using more than five times as much fertilizer as in 1939. Relatively, these states account for about 14 per cent of that used in the nation, or more than double their 1939 share of the total.

INCREASED SUPPLIES WILL BE NEEDED

Fertilizer prices in 1951 will exceed those of last year, but the increase is not likely to deter farmers from using about all that is available. In terms of fertilizer nutrients,

PRICES OF COMMODITIES USED FOR FARM PRODUCTION
INDEXES FOR SELECTED YEARS
(1935-39 = 100)

Item	1940	1945	1947	1949	1950
Fertilizer	96	118	131	147	141
Feed	95	164	225	196	200
Livestock	113	178	252	278	324
Motor supplies	96	111	124	140	144
Motor vehicles[1]	101	135	161	199	200
Farm machinery	100	115	135	176	180
Farm supplies	104	146	159	176	177
Building and fencing materials	101	134	191	210	218
Seed	86	162	192	202	193
All commodities used for production	99	142	181	192	198

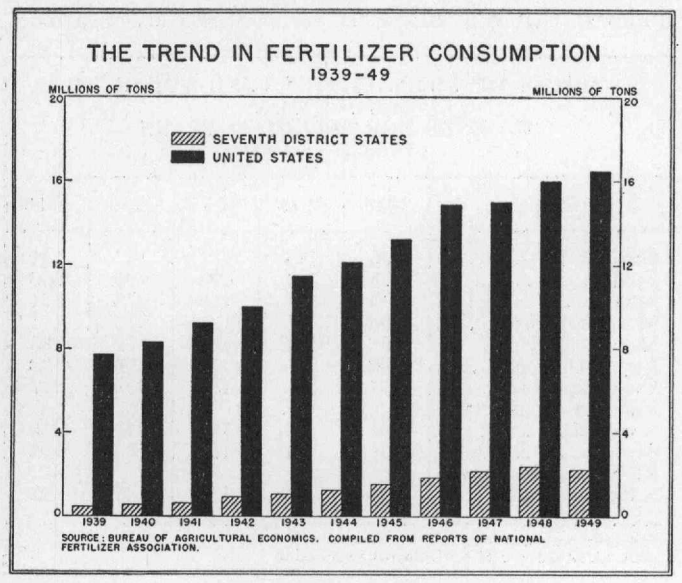
[1]Includes autos, trucks, and tractors.
SOURCE: Bureau of Agricultural Economics.

consumption this year is estimated at 4.6 million tons compared with 4.2 million in 1950.

Nitrogen and potash supplies for the year ending June 30, 1951, are indicated to surpass all previous records. However, because of the tremendous demand, spot shortages may result, particularly in the southern states where a large increase in cotton acreage is anticipated. To the extent that this takes place, consumers may be forced to deal outside of regular market channels to procure the quantities necessary to meet their needs. Recent reports indicate that this is occurring at present in nitrate fertilizers, although on a limited scale.

Superphosphate supplies apparently will be below those of 1949-50 due to a shortage of sulphur. In 1949 the fertilizer industry used more than a third of the United States' sulphur production. The growing requirements of war industries limit the amount currently available for fertilizer. Rock phosphate supplies, however, should about equal those of last year.

Without fertilizer, some of the agricultural land now producing on an economic basis would be submarginal and contribute little to food supplies. The practicability of applying fertilizer to raise the productive capacity of some marginal soils to a profitable basis has been demonstrated. For the individual farmer, of course, the relationship between farm product and fertilizer prices and the production response to fertilizer applications are the all-important factors when deciding whether and to what extent commercial plant foods can be used economically. Consideration must be given, of course, to both short and long run aspects. Certainly no farmer today who is interested in achieving maximum efficiency, maintaining soil fertility, and realizing a high net income can plan his cropping operations without giving thought to the optimum use of this production material. In general, expanding requirements for farm products suggest that substantially larger quantities of fertilizers than have been produced in any year to date may be needed in future years if crop yields and aggregate production are to be increased in step with increasing demand.



FINANCING BUSINESS IN '51

(*Continued from Page 2*)

46.5 billion dollars, in contrast with 42.2 the year before.

WHERE THE MONEY WILL COME FROM

In the past it has been common to attempt to link particular assets with certain liabilities—inventories with bank loans, long-term debt with fixed assets payables and receivables, and so forth. Actually, all sources of funds simply provide business with dollars to be used in supplying various needs, and it is extremely difficult to isolate the end use of new money.

Retained Earnings—The principal source of funds for American business in the long run has always been the money generated by the business itself. Last year undistributed profits for all U.S. corporations, other than banks and insurance companies, were about 12 billion dollars—a total exceeded only in 1948 when taxes and dividends were lower. Since last June retained earnings have been running about 16 billion dollars. Nevertheless, it is likely that funds available to business from this source will decline slightly in 1951 because of the squeeze on profit margins caused by higher costs and additional Government business and the fact that higher regular income tax rates and the excess profits tax will be applied to all of 1951.

Dividends paid probably will be somewhat below the 9.4 billion dollars recorded for last year because of the need for funds for other purposes. Corporate management will be under pressure in a year of high prosperity to retain established dividend rates, but it is likely that many of the year-end extras paid in 1950 will not be repeated.

Depreciation Reserves—Charges to depreciation reserves which totaled over seven billion dollars last year, in contrast to 4.3 billion in 1946, will continue to rise in 1951. More high-cost assets are being brought on the books each year, and five-year accelerated depreciation will begin to apply on those defense-connected projects which have been granted certificates of necessity. So far, applications for accelerated depreciation have been filed for 10 billion dollars worth of projects of which about 500, totaling over three billion dollars, have been approved.

The Income Tax Liability—An important but often overlooked source of funds to corporations during years of rising taxes is provided through the accrued Federal income tax. Unlike individuals, corporations pay taxes quarterly on the previous year's income. Until the tax is actually paid, the funds are available for use in the corporation's business. In 1943, the accrued corporate income tax totaled over 16 billion dollars and played an important part in the financing of war business.

The income tax liability will be less stable than formerly under the new corporate tax speed-up. This year, 60 per cent of the tax due on 1950 income must be paid by the end of June. By 1955, the entire tax liability for the previous year will have to be liquidated in six

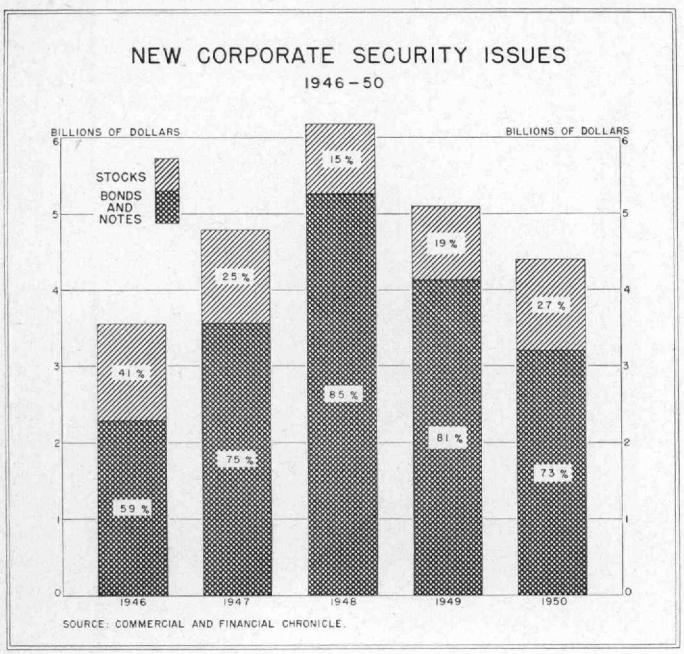
months. The result is an additional financing problem for business since provision must be made for paying the tax by accumulating cash or securities or through borrowing. Nevertheless, during 1951 the growth in the income tax liability will exceed retained earnings and constitute the largest single source of corporate funds.

Security Issues—Because of large over-all requirements for funds, the pressure on internal sources, and the importance of capital spending projects, security issues for new capital this year may exceed substantially the 4.4 billion dollar total recorded last year. Despite the favorable level of stock prices it is likely that debt issues will continue to dominate the picture. Debt financing is still cheap and available and is particularly advantageous under the terms of the excess profits tax.

When long-term Government bonds dropped below par in March, repercussions were felt immediately in the corporate bond market. Institutions became less willing to undertake private investments if such action necessitated the sale of Government securities at a loss, and outstanding offerings of corporates had to be priced downward. Since then bond yield indexes have shown increases ranging to one-fourth of one per cent. New issues are bearing higher coupon rates, and there were reports of issues being delayed or withdrawn awaiting clarification of the situation.

Assets of insurance companies, which purchase the great bulk of corporate debt obligations, are rising at the fastest rate in history. They increased at an annual rate of about 4.8 billion dollars in the last six months of 1950. Moreover, the supply of urban mortgages, the principal competing outlet for life insurance funds in the postwar period, is likely to decline substantially as a result of restrictions placed upon new residential construction.

Bank Loans—In the second half of last year business loans of weekly reporting banks rose 4.2 billion dollars, or more than 30 per cent. (In the Seventh District the gain was even larger during this period, 34 per cent.) Through the first quarter of 1951, when the seasonal trend is normally downward, these loans rose another 1.4 billion dollars. As was true in 1946, many firms which do not ordinarily employ bank credit are turning to the banks to supplement other sources of funds.



An important part of the growth in short-term credit since last June was used to finance the huge, sometimes speculative, inventory accumulations. Although increased bank credit did not loom large in the total sources and uses of funds picture last year, this manner of financing business is particularly important in an inflationary period because new bank loans tend to increase the total money supply.

Under the Voluntary Credit Restraint Program administered by the Federal Reserve System and the American Bankers Association, banks have been requested to refuse loans which do not "commensurately increase or maintain production, processing and distribution of goods and services." The task of individual bankers who wish to cooperate in the program is greatly complicated by the difficulties involved in defining inflationary loans in general and inventory loans in particular.

It is possible that the new open market policy coupled with ample inventories in many lines will dampen loan expansion in the months ahead. In the meantime, the Voluntary Credit Restraint Program should be helpful in increasing bankers' awareness of the potent inflationary forces which are unleashed by continued expansion of bank loans. Insurance companies and investment bankers are also participating in the program to reduce unnecessary lending.

GOVERNMENT TO HELP DEFENSE FINANCING

The problem of financing business in 1951 and 1952 may be underestimated when approached in terms of over-all data. Many individual firms will have a plethora of funds at their disposal as production of nonessentials is reduced and inventories are converted into cash. However, abnormal difficulties will be presented to firms whose normal assets and backlogs are increased disproportionately because of work on defense contracts. Often the very firms planning large capital outlays will also require additional investment in inventory. Steps have already been taken by the Government to alleviate these problem cases.

Accelerated depreciation has already been mentioned, but a number of other devices are available. They include advances and prepayments on Government contracts, V-loan guarantees on working capital loans to defense contractors, and direct lending through the RFC and other Government agencies.

With the exception of accelerated depreciation, none of the Governmental aids to business finance described above have been employed extensively up to this time. As the need arises, however, the machinery for implementing these programs can be utilized. Now, as in World War II, it is unlikely that defense production and desirable industrial expansion will be delayed for lack of funds.

The Trend of Business

Inventories Undergoing Adjustment

The slackening of upward pressures reported in April *Business Conditions* has shown further development toward inventory readjustment, but seems to lack sufficient force to bring about a general downward movement of business. Inventories of both hard and soft goods in the District are at high levels in relation to sales and, perhaps more important, are badly out of balance. Expanding capital expenditures for plant and equipment and rising defense expenditures are expected to offset the effects of high inventories, however, and renew upward price pressures in the months ahead.

Stocks of furniture, home appliances, radio and television sets, and used cars seem to be largest in relation to sales and output, but many soft goods inventories also are at unusually high levels. Raw materials prices have continued to decline, and wholesale prices have shaded off slightly, but final prices to consumers have remained firm except for special sales.

Sales in Seventh District department stores during March and April were about at last year's level, in contrast to the January and February rate of about 25 per cent above the year-ago pace. In part, this sales decline is a reaction from the scare buying of earlier months. With the more favorable war news and the failure of shortages to develop, consumers are now less anxious to buy. Some, who are aware of the high inventory position, may be anticipating price declines.

Percentage changes in weekly sales of Seventh District department stores since January 1, compared with the same week a year ago, are as follows:

Week Ended	Per Cent	Week Ended	Per Cent
January 6	+35	March 3	+23
January 13	+32	March 10	+28
January 20	+29	March 17	+10
January 27	+22	March 24	+ 3
February 3	+ 5	March 31	— 9*
February 10	+12	April 7	+ 2
February 17	+24	April 14	0
February 24	+37		

*Week following Easter.

Construction — An exceedingly strong demand for new houses is evident in all District centers. As was true for the nation as a whole, however, housing starts in March showed a less-than-seasonal increase from February. Starts in coming months probably will continue below the seasonal pattern as pre-Regulation X commitments are exhausted. Tightened availability of mortgage funds will have some future effect upon new house starts. The trend toward rising interest rates, generally, causes FHA and VA loans to weaken somewhat, because of their fixed rates. However, a very large volume of nonresidential construction—especially industrial projects—is being planned and started. This work, along with highway and other public projects, seems likely to offset for the most part whatever decline in residential activity may occur later in the year. Construction contracts awarded, as compiled by F. W. Dodge Corporation, illustrate the current year trends in the District as compared with a year ago.

Month	Nonresidential	Per Cent Change From Year Ago	Residential	Per Cent Change From Year Ago
January	$88,000,000	+110	$57,000,000	+ 2
February	$63,000,000	+ 35	$79,000,000	+11
March	$97,000,000	+ 40	$92,000,000	— 2

Output from factories in the District continues at record levels in basic steel, industrial equipment, farm machinery, and most foods. Production declines have occurred in several home appliance lines, however, and television production has been curtailed quite sharply in several District plants. Automobile output currently is running somewhat above last year's level, which was limited by the Chrysler strike at that time. Production of cars in 1951 to date is about 20 per cent above the comparable period in 1950.

Employment in establishments in Seventh District states continues at high levels in comparison with last year.

Month	Total Employment	Per Cent Change From Year Ago	Manufacturing Employment	Per Cent Change From Year Ago
January	8,260,000	+ 8	3,575,000	+13
February	8,270,000	+10	3,615,000	+17
March (est.)	8,295,000	+ 9	3,620,000	+16

Some layoffs at District plants have taken place during recent weeks. Those announced have been in automobile, home appliance, and television companies. Mostly, the layoffs are said to be due to shortages of key materials, N.P.A. restrictions, and the fact that defense production in these particular plants will not require large numbers of workers in the immediate future. Some television companies in the District, however, have stated frankly that they have been unable to move their finished inventories fast enough to justify scheduling of continued high production.

Business loans in District reporting banks have increased relatively little since mid-March, in sharp contrast to their rapid rise earlier in the year. In part, this trend is a mild and belated reflection of the usual spring decline in needs for funds. Banker restraint in making new loans is increasingly evident, however, based upon concern over high inventories held by some borrowers, cooperation in the new Voluntary Credit Restraint Program, and some unwillingness to sell Government securities at current below-par market prices in order to obtain additional loanable funds.