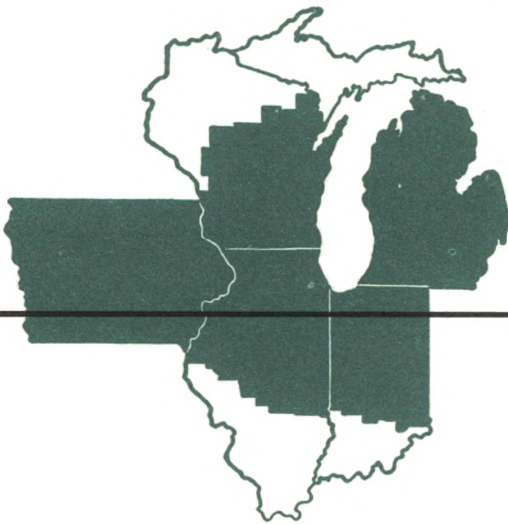
A review by the **Federal Reserve Bank of Chicago**

Business Conditions



1955 November

Contents

City surveys under way 5

The saving grace 6

The Trend of Business 2-5

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

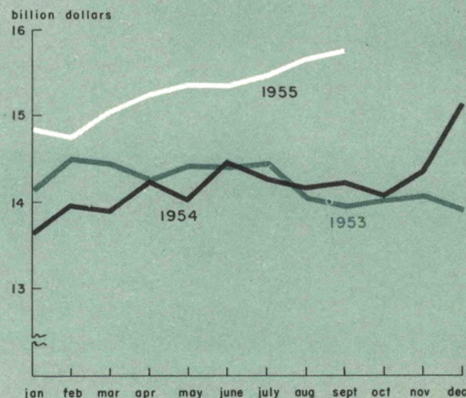
THE Trend OF BUSINESS

Prospects for high and slowly rising levels of economic activity in the months immediately ahead remain excellent. The illness of the President introduces a new element of uncertainty in the calculations of decision makers in finance and industry, but it appears that so far, at least, the economic impact of the events of September 24 has been notable only in the case of the stock market. There is no evidence that spending plans of business and consumers have been altered downward or that lenders are eying new credits with greater caution than the standard previously dictated by the general tightness of the money market.

Returns now coming in show that the economy entered the fall with vigor. September retail sales, encouraged by continuously rising personal income and a further increase in consumer credit, beat last year by 11 per cent—perhaps the largest year-to-year gain for the year. Business buying for inventory slowed to about a 3 billion annual rate, but sales gains and growing order backlogs indicate that inventory building will continue for several months. Order books of machinery and equipment makers bulged in early fall as slowly rising output kept deliveries below new demand. Industrial production reached an all-time high 14 per cent above last year. F. W. Dodge construction awards in September were 12 per cent above the previous year despite a 6 per cent decline in the residential sector. Federal Government outlays, meanwhile, are expected to stabilize now that a projected cut in military spending has been shelved.

Despite the strong trends noted above, the third quarter showed some slackening in the rate of growth chalked up since last fall. Total output of goods and services has risen 7 billion dollars on an annual rate basis from the second quarter. But the rise between the previous two quarters was 10 billion dollars. Similarly, industrial production gained only two points between June and September, half as much as the March-to-June increase, and the rise in new jobs also slowed.

In part, this easing in the uptrend can be traced to the leveling in construction activity and the automobile model change-overs. But it is apparent that output in some fields was being restricted by certain capacity ceilings. All-out attempts of steel firms to catch up with orders and diversions to private use of some nonferrous metal previously destined for the Government stockpile have helped ease the situation, but some demand continues to be unsatisfied. Freight car shortages have received widespread attention and constitute another bottleneck. Business groups have urged coop-



Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

eration in reducing the "turnaround" time for cars pending additions to the supply of cars or some easing in need.

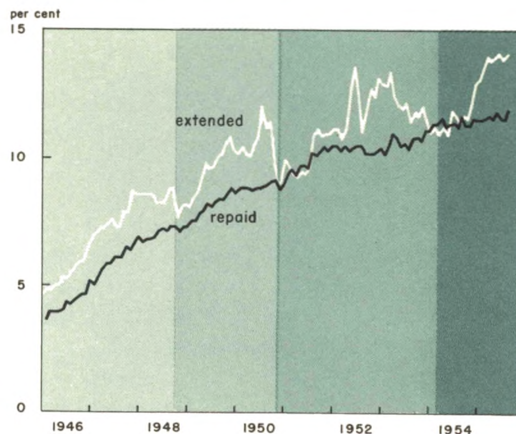
Unemployment has been reduced to a low point in most centers in recent months. Temporary layoffs in Detroit, South Bend and Kenosha in connection with end-of-model-year shutdowns of automotive firms were at their height at the end of September. By mid-October conversion to production of 1956 models was complete, and total output of passenger cars was expected to rise rapidly to the 160,000 weekly pace of last spring. Milwaukee, Rockford and Fort Wayne—slow starters in an upturn because of their dependence upon capital goods output—all reported unemployment to be greatly reduced from last year.

Aside from the auto centers, only a few smaller localities with more or less chronic surplus labor problems still reported unemployment rates of 5 per cent or more in the early fall. Nevertheless, the general employment market in this area is not nearly so tight as it was at the peak of the 1953 boom. Unskilled workers are generally described as in "adequate supply." Lists of shortages commonly include various metal-working trades and clerical workers of demonstrated competence. Employers, generally, have indicated that they expect to make modest net additions to their payrolls in the months ahead.

Retail trade was substantially higher in all major categories in September as compared with last year. As in earlier months this year, the automotive group showed the largest gain —of 30 per cent—but furniture and appliance stores were up 16 per cent and department stores about 7 per cent. For the first nine months, too, department stores nationally topped last year by 7 per cent. The rise was about the same as for the nation in most Midwest cities, but Detroit reported a strong 12 per cent increase. New passenger car registrations in this area through August were 30 per cent above 1954. Leading gains were scored by Rockford with 48 per cent and Detroit with 42 per cent.

Consumer hard goods have set the pace for consumer spending this year, both for specialized dealers and for department stores. Passenger car output exceeded 1954 by about 45 per cent in the first nine months, furniture shipments jumped about 12 per cent, and major household appliances, 25 per cent. Part of the increase went into dealer inventory, but only enough to service the greater volume of sales.

Fourth postwar instalment credit wave boosts retail sales



In the buying of these goods, instalment credit plays its major role in supplementing current consumer income. On a seasonally adjusted annual rate basis, outstandings rose by about 6 billion dollars in the third quarter of this year compared with no change in the same months of 1954. This rate of gain almost equaled the entire rise in consumer durable goods buying between the two periods. Rapid expansion of instalment credit has been aided greatly in the current year by a reduction in down payments and a lengthening of maturities. Further liberalization of terms is not likely in the coming year.

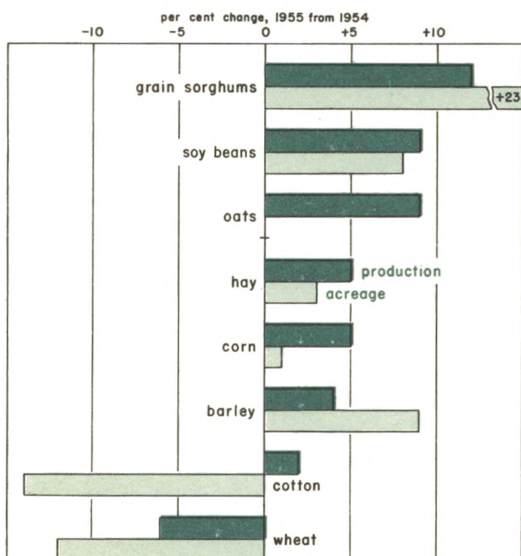
Some spokesmen of the auto industry indicate that they believe sales can be maintained at current rates in 1956. One large appliance-maker has stated that he hopes for another 20 per cent rise in sales next year. There is no reason, of course, why instalment credit cannot continue to rise as income rises and, for a

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

period of time, at a faster rate than income. But it is apparent that the steady rise of repayments acts as a drag upon free spendable income and the ability and willingness of individuals to assume new debts. During the postwar period, the contribution of instalment credit to consumer buying has expanded and contracted in a manner that suggests a "cycle" of two or three years (see chart).

Tighter credit is beginning to pinch noticeably in the housing field as project builders attempt to line up commitments from lenders for 1956. New housing starts nationally dipped slightly below last year in July and September. Seasonally adjusted, the annual rate of starts is down to 1.2 million compared with an average of 1.3 million for the first nine months of the year. In Chicago, however, September permits topped 1954 by 37 per cent, mainly because of a surge in private apartment units. For the first nine months, Chicago's gain over last year was 19 per cent. Except for Detroit, no down payment, 30-year loans had been a rarity in this area. As a result, the Midwest has not been greatly affected by the shorter maturities and higher down payments ordered earlier this year on insured and guaranteed mortgages.

1955 harvests show gains



Crop production this year is heading for a near record—second only to 1948 and 5 per cent above last year. Late summer heat and drouth damage in the western Corn Belt caused total crop output to fall below the even higher levels indicated earlier in the season.

Production of corn and other feed grains is estimated at 129 million tons—6 per cent above the 1954 output. The large harvest, plus the heavy carry-over of feed grains, suggests that the livestock industry, already producing record quantities of meat, milk and eggs, could be expanded somewhat further in 1956.

All of the seven million ton increase in feed grain production has occurred outside the main Corn Belt states. Larger feed production in the eastern portion of the Belt was largely offset by reduced output in the western portions, with the result that total feed grain production in eight Midwestern states remained about equal to last year's 81 million tons.

Illinois is the banner corn state this year, with an indicated harvest of 500 million bushels. Iowa, usually at the top of the list, is turning in a harvest of about 460 million bushels or 15 per cent less than its usual crop. The two states combined will provide 30 per cent of the nation's corn crop.

Iowa's soybean crop too was damaged by drouth and heat. Whereas the per acre yield last year was a booming 26 bushels, the crop harvested this fall averaged only 19 bushels per acre. Illinois is the top soybean state by a wide margin and turned in a 1955 harvest of 104 million bushels. Iowa, normally in second place, harvested about 37 million bushels and dropped to fourth behind Indiana and Minnesota.

Heavy harvests have spelled lower prices and reduced farm income. The three Corn Belt states, Illinois, Indiana and Iowa, largely escaped the farm income decline that plagued other sections of the country in 1953 and 1954. However, sharply lower prices for hogs, the most important Midwest farm product and

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

lesser cuts for cattle, corn and soybeans since late 1954 have placed these states in the spotlight of the farm income recession. Cash receipts are running 10 per cent below year-earlier levels in the Corn Belt compared with a drop nationally of 4 to 5 per cent.

Midwest farm real estate values continued to rise to midyear as farmers bid actively for land to enlarge existing farms to permit larger-scale, lower-cost operation. More liberal farm loan policies by life insurance companies and the Federal Land Banks aided this process. Since midyear, however, the continued weakness in farm commodity prices, especially hogs, and drouth in some areas have brought the rise to a halt.

City surveys under way

As readers of *Business Conditions* are aware, collecting, interpreting and making available information on economic developments are necessary activities of the Federal Reserve System. Within the System such economic intelligence provides the background information for credit and monetary policy decisions.

This decision making must rest primarily upon an accurate reading of nationwide trends. Yet very often the significance of national movements can only be distilled from detailed study of much smaller areas and specific industries. Recently, the Chicago Federal Reserve Bank, to more effectively meet its responsibilities for interpreting the Midwest economic situation, has set out in a new direction—a series of intensive studies of the predominant economic characteristics of metropolitan areas in this part of the country. As the first stage of this program, five cities are now under scrutiny —Decatur, Illinois; Madison, Wisconsin; Flint, Michigan; Fort Wayne, Indiana; and Waterloo, Iowa.

Purpose: perspective

The idea behind the intensive city studies is to provide a better background and perspective for the Bank's other research products. By and large, research in the Federal Reserve is a continuous flow operation. For example, at the Chicago Bank statistical material is received regularly on retail trade from firms with about 2,500 stores, and data on instalment credit is received from about 500 firms other than commercial banks. The 2,500 banks in the Seventh District cooperate to provide a wide variety of financial data. This information, together with material collected from other sources and the first-hand knowledge of the research staff, is assembled and interpreted. Then it flows out—to the Board of Governors in Washington, to the Bank's directors and officers and to Midwest bankers, businessmen, public officials and educators — via memoranda, special reports, periodic statistical releases, conferences, speeches and monthly and weekly interpretative publications.

The District is much too diverse, however, for mere aggregations of reported facts to give a wide-screen portrayal of underlying trends. To capture the full scope of economic developments, interpreters must distinguish among farming areas of various types—the Corn and Dairy Belts in this area, for instance—and among metropolitan areas in which all sorts of manufacturing, construction, trade, utility and service activities are concentrated. The precise industrial "mix" differs considerably from one city to another, imparting to each a distinctive set of economic characteristics. As a result, movements in the measures of eco-

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

nomic activity which the Bank publishes differ in significance from city to city. The city studies now under way, together with those projected, should enable the Bank's research staff to assess more accurately current local developments, as well as to gauge each area's prospects for growth and stability.

Exports the key

Economic growth and stability in an area depend mainly on the markets for the products the area sells outside its own borders—its "exports." Ours is an interdependent national economy, and many needs are not supplied locally. To buy the "imported" goods and services its residents need, an area must produce goods and services which it can sell to outsiders. Enterprises which produce for the local market depend for their success ultimately on the success of the community's "exporters." A community's well-being, therefore, depends on the ups and downs and growth prospects in the demand for the things in which it specializes. For example, payrolls, employment, retail sales and bank deposits in eastern Michigan cities are closely related to the sales of their principal "exports"—motor vehicles and parts.

For this reason, the Bank's studies concentrate on the "export" industries—appraising their relative importance in each city and examining the outlook for the principal goods and services sold to the outside world.

A city's competitive position—the efficiency of its "exporters" and its attraction as a location for new and expanding firms—is markedly affected by the state of its physical plant, its factories, housing, schools, streets, water and sewer facilities and the like. Moreover, the extent and tempo of current construction activity also affect a city's current income. So the Bank's studies also consider investment in a community and how it is financed—whether from the savings of local citizens and businesses, through local financial institutions or in the national capital markets.

For the first round of surveys, the Bank has chosen five cities which have done exceptionally well in recent years. These five are by no means the only vigorous and growing communities in the District, but they differ widely in economic makeup and their stories will illustrate the diverse bases of Midwestern urban growth.

The results of the studies will be summarized in the Bank's *Annual Report*, due in January. More comprehensive stories will be published separately at a later date.

The saving grace

No one doubts the advantages of saving to the saver and his family. An accumulation of savings, no matter how modest, nurtures a spirit of independence, provides a degree of protection against emergencies and insures a flow of income in the golden years. Moreover, saving is almost always necessary in order to realize major family ambitions, such as the purchase of a house, a car or an education for the children. In America, almost from the beginning, thrift has been taken for granted as the prudent way of life.

The aggregate economic effect of all of the individual acts of saving, however, is a much more complicated phenomenon and one on which there is a good bit of diverse opinion. That savings play a vital role in providing the funds to replenish and expand the nation's stock of capital assets—factories and machinery, utility and transportation systems,

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

public and private buildings—has long been recognized and accepted. As long ago as 1776, Adam Smith, the noted economist, pointed out: "Whatever a person saves from his revenue he adds to his capital, and either employs it himself in maintaining an additional number of productive hands, or enables some other person to do so, by lending it to him for an interest. . . . As the capital of an individual can be increased only by what he saves from his annual revenue or his annual gains, so the capital of a society . . . can be increased only in the same manner."

A mixed blessing

Other economists have expressed the view that savings are not as promptly and expeditiously put to work as Smith implies and that the resulting frictions cause troublesome economic fluctuations. Still others have doubted the capacity of a free enterprise economy to productively add to capital at a pace commensurate with a high savings rate. If people should tend to save an unduly large proportion of income, the effect would be initially to curb consumer markets, secondarily to deflate profitable investment opportunities, and ultimately to curtail over-all spending, output, employment, income and, incidentally, saving. In the environment of the 1930's, for example, J. M. Keynes, the well-known English economist, stated: "The absurd, though almost universal, idea that an act of individual saving is just as good for effective demand as an act of individual consumption, has been fostered by the fallacy . . . that an increased desire to hold wealth . . . must, by increasing the demand for investments, provide a stimulus to their production." Actually, ". . . there has been a chronic tendency throughout history for the propensity to save to be stronger than the inducement to invest."

This view, more popular in the Thirties, has waned with the spectacular world-wide postwar business expansion and large demand for all types of investment. But many of the essential questions about the relationship between saving, capital formation and economic stability and growth remain unresolved. Which of the above views lies closest to the truth depends in important part upon who does the saving, in what circumstances it is accomplished, and by what channels it flows into productive outlets.

An inquiry into the "anatomy of saving" is as difficult as it is enlightening, for the sources and methods of saving in the economy are enormously varied. Any individual or group that contributes or lays claim to some part of the nation's output is capable of saving—or dis-saving, i.e., spending in excess of current income. Thus, not only individuals, but corporations and even governments may save. Regardless of the form of economic unit, saving takes place when income exceeds spending on current account, whether for living expenses or costs of operation. The spending referred to must also include, of course, an amount sufficient to replace the portion of capital assets used up.

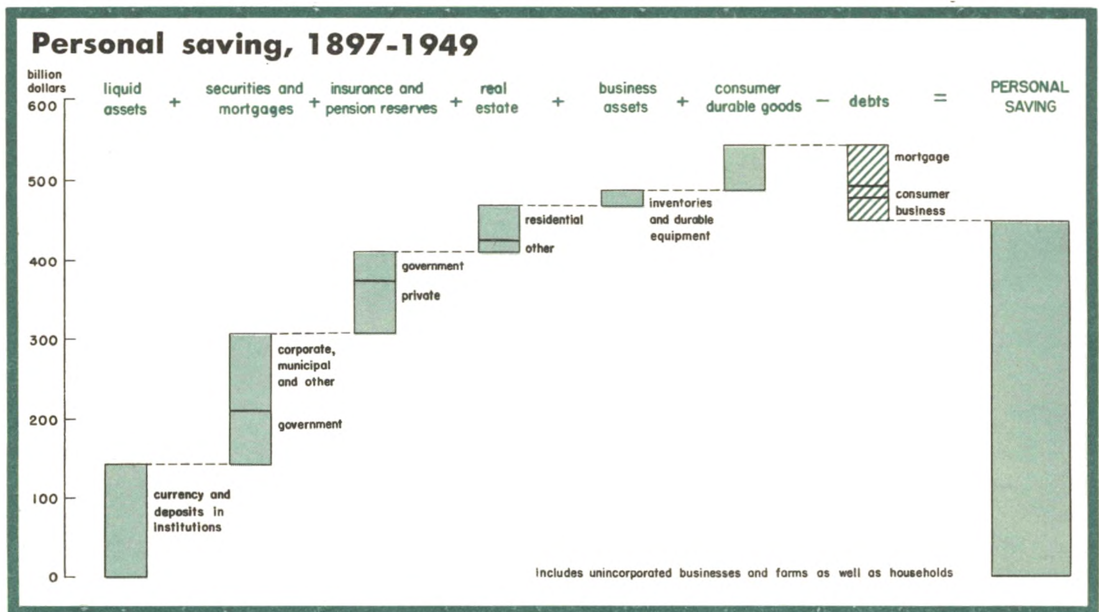
How people save

There are just about as many forms which an individual's saving may take as there are reasons for saving. In spendability, these vary from cash tucked under the mattress and deposits in checking accounts to sunk investment in household possessions.

In the directness with which the savings are put to work, they range from a saver's own purchase of a house or business to his payment of life insurance premiums which in turn are invested by the companies in such things as corporate bonds, the proceeds of which are finally used to pay for new plant and equipment. Generally speaking, however, the many forms in which people accumulate and hold their savings fall into four broad categories.

1. Holdings of cash and near substitutes for cash. Savers may store their accumulated savings in checking or saving accounts of banks, or they may put them into share accounts of savings and loan associations or with the Government as postal savings and U.S. savings bonds. In any of these forms savings have one major feature in common—they possess a rela-

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis



tively high degree of liquidity. That is, the institutions normally stand ready to repay the amounts left with them in cash and at face value (without loss) when demanded by the saver. Legal responsibility to do this varies among the institutions, but in practice they all attempt to honor withdrawal requests with immediate payment.

2. *Investments in fixed obligations, like corporate, municipal and marketable Government bonds and real estate mortgages.* These types of assets also involve the borrower's pledge to repay at face value, but only at some specified future date rather than upon demand. If the saver wishes to liquidate his holdings before then, he must sell the security to someone else, running the risk that he will have to sacrifice something from face value in order to obtain cash.

3. *Contractual savings agreements, like payments into pension and retirement funds, contributions for social security and other Government insurance programs, and the portion of premium payments on life insurance policies added to reserves.* In recent years these types have been the most rapidly growing form of savings. The main intent of the programs is to accumulate funds which will be preserved intact until their objective is reached. While there are escape provisions, by and large the savers' funds are tucked away for some future contingency: death, disability or retirement. For this reason, these are generally very long-term savings.

4. *Equity interests in businesses, real estate and other capital goods.* These include holdings of corporate stock, ownership shares in farms and unincorporated businesses, owners' equities in homes, cars, appliances and other household possessions of enduring usefulness. Additions to equity interests can come from either the outright purchase of any of these assets or the paying down of existing indebtedness. But, wherever direct ownership of a physical asset is involved, allowance must be made for the extent to which the asset has depreciated with use and over time.

The ease with which savings in equity forms may be converted to cash varies widely, from the ready marketability of quoted corporate

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

stocks to shares in proprietorships or specialized real estate that are traded so seldom as to have no organized or certain market. But in all these cases the seller is usually exposed to the risk of widely fluctuating market values.

Cross currents

For most individuals, there is a good deal of churning about in these forms of savings, as wealth is shifted from one form to another. Purchases of capital goods or securities, for example, are frequently accompanied by reductions in cash balances. Even if an individual is dis-saving on balance, he may continue to add to some types of saving. In periods of adversity, a family may postpone purchases of durable goods and reduce liquid asset balances to finance living expenses—yet continue to save through payments on life insurance policies, the mortgage on the house and other debts incurred earlier.

In fact, shifts in savings forms may have as pronounced an effect on business as do changes in the current volume of saving. Such was the case in the 1930's, as people attempted to convert their assets into cash or near-cash substitutes. Conversely, a shift away from liquid savings forms in the postwar period has been reflected in the heavy demand for consumer durable goods and new housing.

All of the transactions in and between the various savings forms must be taken into account in determining whether an individual is currently saving or dis-saving. If the individual's investment in financial assets and capital goods increases after allowance for depreciation and any changes in debt, he is a net saver; if he reduces his holdings or if depreciation and the growth in debts exceed other additions, he is a net dis-saver since he has consumed a portion of his capital.

Saving preferences

Use made of the different forms of saving varies widely among the nation's families. The best information on this was gathered in the *Survey of Consumer Finances*, most recently for 1950. That survey indicated, for example, that 72 per cent of the nation's spending units paid life insurance premiums and 15 per cent made payments to retirement and pension funds. Liquid assets were also widely used, with 60 per cent adding to or reducing such balances during the year. Nearly one-fourth of all spending units bought a new or used car in 1950, and 42 per cent purchased at least one major household appliance or piece of furniture. Saving in this form was partly offset by a rise in consumer debt, however, as 26 per cent of the spending units added to such indebtedness while only 18 per cent reduced their obligations.

Direct investment in real estate has been a popular form of saving, with more than half of the nation's families owning their own homes. In 1950, more than 10 per cent of all spending units bought or sold houses or other real estate, while 20 per cent invested in home improvements and 24 per cent added to their equity interest by making payments on existing home mortgages.

The least-used saving channel surveyed was purchases or sales of corporate or municipal securities (3 per cent). And changes in ownership equity in nonfarm unincorporated businesses, through retention of profits, losses, new investment or sale, were indicated by only 6 per cent of all spending units.

The saving families

Of course, not all families are net savers in any one year. Such factors as abrupt income declines, higher living expenses and unexpected emergency outlays lead to temporary dis-saving by a substantial proportion of families in any given period. In an attempt to measure the saving of individual families, the 1951 *Survey of Consumer Finances* added up changes in most of the types of assets listed above. Saving was defined more narrowly by omitting social security payments, purchases of consumer durable goods and depreciation, but changes in the main types of financial assets and debts as well as investment in real estate and businesses were included. Calculated in this way,

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Measurements of personal saving

Personal saving can be defined in either of two ways: (1) the excess of personal income after taxes over expenditures for consumer goods and services or (2) the gain in assets less the increase in liabilities of all households and individuals — that is, the change in their net worth over the period. Both approaches can be made to come to the same end result, provided that comparable definitions of income, expenditures, assets and liabilities are used.

The Department of Commerce computes personal saving by the income and expenditures method, the Securities and Exchange Commission on the basis of changes in assets and liabilities; although there are some differences in coverage in the regular quarterly releases, the two sets of figures are reconciled annually.

As defined by the Department of Commerce, any action which reduces spending for consumer goods and services relative to income after taxes adds to personal saving. Such an increase in personal saving will necessarily be reflected in either an increase in the consumer's assets or a decrease in his liabilities. Thus, each of the four types of saving listed in this article are implicitly contained in the total figure. Investment in tangible assets included in personal saving, such as buildings and business equipment, is written off at cost over the estimated useful life as depreciation.

Because of the definitions used, two sizable types of outlays considered here as part of the broad saving concept are excluded from the Department of Commerce personal saving total. First, additions to consumer holdings of durable goods, such as automobiles, appliances and homefurnishings, are not included. Unlike houses, purchases of such goods are classified as current consumption expenditures, even though they have a useful life well in excess of one year. Thus, income used for such purposes does not add to saving; in fact, increases in debts secured to finance the purchase of goods reduce total saving by the same amount. Second, net additions to Government insurance reserves resulting from social security withholding taxes are not included in saving, although these are usually represented as establishing future claims on the system. Rather, the payroll tax payments are deducted from personal income and treated as Government revenue.

There are great practical difficulties in accurately measuring the aggregate volume of personal saving. Records generally are not kept in such a way as to separate the saving of unincorporated businesses and farms from that of individuals. As computed by Commerce, saving is the residual of the very much larger consumer income and expenditure figures and thus is significantly affected by even small errors in either.

Adding up changes in assets and liabilities, as is done by the SEC, is subject to limitations, too, because of the large number of items covered, the use of residuals for some categories and the necessity of making rough estimates in areas where other figures are not available. In practice, consequently, there are frequently sizable differences not accounted for between the two totals, at least in initial releases.

Net change during 1954 in:	Billions
Liquid asset holdings	9.7
Other securities	3.2
Private insurance reserves	5.3
Equities in housing	2.0
Equities in unincorporated business	−4.4
Less: increase in personal debt	.4
Personal saving, SEC	15.4
Personal saving, Commerce	18.3
Difference not accounted for	2.9

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

the survey determined that three-fifths of all families were positive savers in 1950, one-third spent in excess of their income or dis-saved, and 6 per cent reported income and outgo about in balance.

As might be expected, the size of the family income has a good deal to do with whether it saves or dis-saves on balance. The vast majority of families with incomes of $7,500 or more in 1950 were positive savers and less than one-seventh were dis-savers. Among families earning $3,000-5,000, about two-thirds were savers and one-third, dis-savers. For families earning under $3,000, however, less than half were savers and nearly 40 per cent were dis-savers.

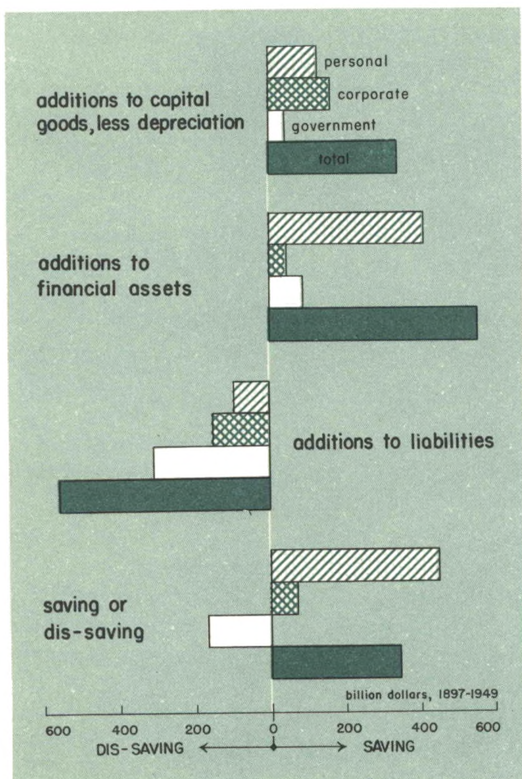
In fact, a strikingly large proportion of total personal saving is accounted for by spending units in the higher income brackets. This concentration, illustrated below for 1950, was even greater in the 1949 recession, when the top fifth of the spending units accounted for 130 per cent of that year's personal saving.

Income classes	Per cent of 1950 total: Income before taxes	Net saving
Top 20 per cent...........	44	92
Second 20 per cent.........	24	21
Third 20 per cent..........	17	3
Fourth 20 per cent.........	11	1
Bottom 20 per cent.........	4	−17
All groups	100	100

These figures show rather startling dis-saving among the lowest income groups. What may seem even more surprising is the fact that negative saving apparently goes on continually for these income classes. At first thought one might wonder how long the "nest egg" of previous accumulated savings could last, or how it ever was accumulated in the first place. It ought to be remembered, however, that the lowest income groups are not made up of the same spending units year after year. Moreover, only a portion of these spending units dis-save in any one year, but the positive saving of others in the group is too small to offset this amount. Finally, a significant number of the low-income families are ones in which the head of the household has reached retirement and is deliberately drawing down the savings accumulated in his earning years.

Within the national saving total,

corporations lead in saving via capital goods additions, individuals in saving via financial asset purchases and governments in dis-saving via borrowing



Government and business savers

In addition to the saving done by individuals and households, businesses and governments can also be said to save and dis-save. Just as in the case of individuals, these economic units may accumulate liquid assets, buildings, equipment, inventories and other current assets in excess of their financial liabilities. And, just

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

as with individuals, saving takes place when revenues exceed expenditures for current operations and are retained as net worth by businesses or surplus by governments.

For businesses, the process is readily apparent. Any earnings retained in the business show up as additions to cash balances, investment in new assets of one type or another, or repayment of current or long-term debts—all forms of saving. In addition, depreciation and depletion allowances, while an important business expense, do not represent actual cash outlays and so are utilized by businesses in the same manner as retained earnings. Thus, such allowances also add to the *gross* saving figures, although they are offset to a greater or lesser extent in any *net* saving calculation by the actual depreciation and depletion (dis-saving) which has occurred in the real assets of the business. On the other hand, investment financed from new security issues or current borrowing does not add to business saving, since this is a transfer of the savings of others.

For governments, the process is less obvious, principally because of the method of governmental accounting. But to the extent that government holdings of financial assets and investment in inventories or capital goods such as roads, buildings, equipment and other public facilities grow faster than indebtedness, saving is taking place. Some portion of current revenue must then be finding its way into new public investment, either through repayment of debt or purchase of assets. This amount represents the *gross* saving of the governmental unit. If the figure remains positive after allowance is made for depreciation on its buildings, equipment and other capital improvements, the government is also a *net* saver. If not, it has dis-saved in that period.

The concept of government saving is simpler in theory than in application. For one thing, government budgets typically do not distinguish capital from current outlays. Nor are there any balance sheets showing gross valuations of government properties and computations of depreciation thereon. Added to these problems is the question of whether Federal military outlays are more properly regarded as investment or consumption. The conventional decision has been to treat them as consumption-type expenditures. This decision, however, is the major reason why the government appears as a large net dis-saver in most calculations, since Federal outlays for military purposes have been an important part of the budget even in peacetime years and have spawned tremendous government deficits in wartime.

The national savings concept

The saving done by businesses, governments and individuals can be added up to a national total. In the process, the many individual changes in financial claims net out, for every financial asset must also be somebody's liability if stock issues are counted as claims against corporations. In other words, these changes represent opposite sides of the same transactions, and any financial assets added to gross saving totals are exactly matched by new debts in the dis-saving column.

All told, therefore, gross national saving reduces to the sum total of purchases of new durable and other productive goods, and net national saving is equal to this sum less the depreciation on existing assets. Net national saving is thus identical to net real capital formation but with the focus being on how investment funds are raised rather than how they are spent.

One final conceptual wrinkle which has to do with the method of estimating depreciation needs to be recognized. As noted in several earlier instances, gross saving and investment must be reduced by the amount of depreciation and depletion of existing assets in order to arrive at a net figure.

In the national figures, the Department of Commerce takes original cost as the basis for depreciation of capital goods. This is the most practical course for recurrent reporting, for original cost is the only certain asset value that can be read off family and business books. Yet for theoretical purposes a more significant measure of depreciation is one based upon the replacement cost of assets consumed. This

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

is because savings are measured in current terms, and the savings necessary to replace used-up capital goods have to be undertaken in the environment of current costs and prices. Over periods of marked price changes, the differences in depreciation calculated on these two different bases—and hence in net savings figures—can be substantial.

Two generations of saving

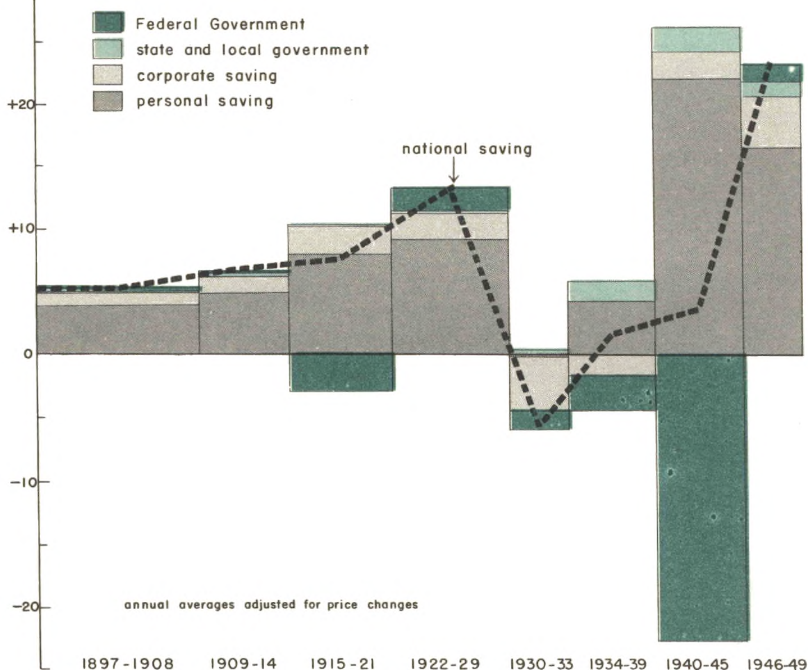
Official figures on total personal saving and gross national saving are available annually for the past 25 years, a relatively long time span for most purposes. On the other hand, because of the depressed state of business during most of the 1930's and the abnormally high rate of personal saving during World War II, the last two and one-half decades do not provide an adequate perspective for long-term saving trends.

For this reason, a book recently published by Raymond W. Goldsmith under the sponsorship of the Life Insurance Association of America (*A Study of Savings in the United States;* Princeton University Press) is especially noteworthy. It presents detailed annual estimates of both national and personal saving from 1897 through 1949. Concepts used in measuring saving differ somewhat from those in the official Commerce and SEC estimates. Investment in consumer durable goods is generally included as saving rather than consumption, and depreciation is computed on the basis of replacement rather than original cost for most purposes in the book. Although the figures thus cannot be linked with official estimates for current years, the very long time span covered is useful in gauging the movement of saving during the modern era of the nation's development.

Mr. Goldsmith's study shows that the volume of national saving has fluctuated violently from year to year in this half century. In fact, at least half of the time, one year's national saving has been 50 per cent or more above or below the preceding or following year. This tends to support the widely held view that, for many businesses and individuals, saving is at least in part a residual—that which is left from income after current living or business expenses have been met.

If individual years are grouped into periods of roughly comparable economic circumstances, the most violent fluctuations in saving disappear and persisting characteristics stand out (see

National saving movements dominated by personal thrift and wartime deficits of Federal Government

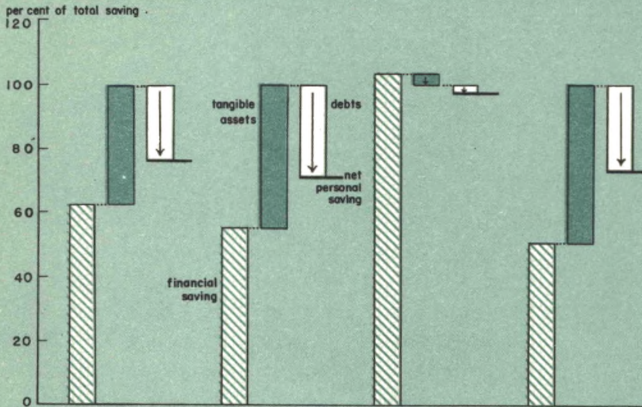


Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Changing patterns of personal saving:

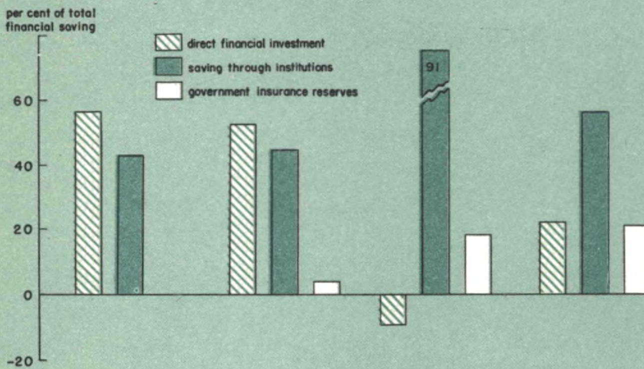
investment in durable goods,

rather than financial assets, has accounted for a larger share of saving, especially in the postwar period



institutional savings,

along with the social security program, has become an increasingly important part of total financial saving



less liquidity,

as a result, has tended to characterize the mix of new saving since the War

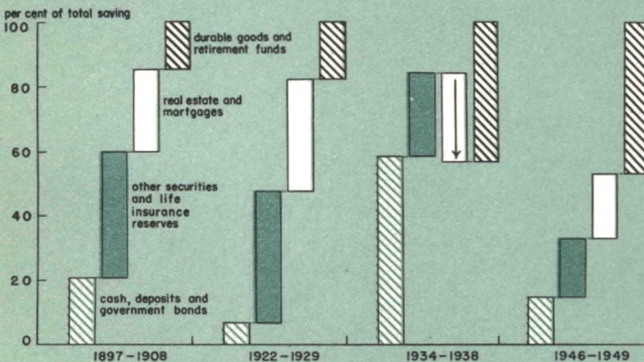


chart). As might be expected, the main feature has been a sharp uptrend in the dollar volume of national saving through the half century, except in wartime periods and during the 1930's. After adjustment for increases in the general level of prices, average annual saving in 1946-49 was more than four times the 1897-1908 average. Even on a per capita, price-adjusted basis, the increase amounted to 150 per cent.

Individual savers dominate

Personal saving typically has played the dominant role in total national saving, supporting the traditional view that households are the main suppliers and business and governments the main users of investible funds. Except for the 1930's and the war periods, the proportion of total saving accounted for by the personal sector has varied only between 69 and 74 per cent. Corporations, during the same periods, have contributed from 15 to 22 per cent of total national saving.

Governments have been relatively small savers; state and local units, during "normal" times, have accounted for but 5-8 per cent of total saving, while the Federal Government's share has varied between 1 and 7 per cent. During both world wars, however, tremendous Federal deficits resulting from military outlays were reflected in the saving totals as Government dis-saving. Consequently, even though corporate and personal saving flourished as a result of the war-induced booms and limited supplies of civilian goods, total national saving as well as real capital investment was restricted in

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

both periods. To a much lesser extent, deficits incurred by the Government in combating the depression limited total saving in the 1930's.

Despite the large long-term expansion in the dollar volume of national saving, saving as a proportion of income does not appear to have increased significantly over the half century. Amounting to 15 per cent in the immediate postwar period (1946-49), the ratio of saving to national income was little different from the 16 per cent of 1922-29 or the 14 per cent of 1897-1908. Thus, for the nation as a whole, economic units have not saved more of their income, but rather have expanded saving as income has grown.

Not in father's footsteps

The long-run uptrend in the volume of personal saving has been marked by significant shifts in the forms taken by such saving. Ignoring unusual changes in the pattern of saving during wars and the depressed 1930's, three major developments stand out since the turn of the century.

First, saving through financial intermediaries, such as banks, savings institutions and insurance companies, has gained strikingly in importance as compared with direct investment in securities and mortgages.

Second, a growing proportion of personal saving is taking place through purchase of goods for self-use rather than through investment in financial assets.

Third, because of larger direct investment in goods and growing use of long-term contractual forms of financial saving, the "mix" of current saving is considerably less liquid than was the case 50 years ago.

Saving through intermediaries. Purchase of stocks, bonds and mortgages once was the principal form of financial saving. In the 1897-1908 decade, for example, such investment accounted for 56 per cent of personal saving in financial forms. This proportion declined only slightly through the 1920's, largely reflecting the stock market boom, but since then has dropped off drastically. In the early postwar years, less than one-fourth of personal financial saving took the form of direct investment in securities, including savings bonds.

Institutional types of saving, on the other hand, have soared. Growth of the life insurance business, development of private pension and retirement plans, the emergence of mutual savings organizations such as savings and loan associations and credit unions, and the increasing proportion of personal income going to middle-income families — all have added impetus to this growth. In 1946-49, financial intermediaries (including the savings bond program) accounted for two-thirds of total financial saving, as against 44 per cent in the 15 years after the turn of the century. In addition, payments to Government insurance programs, mostly a product of the 1930's, expanded from nothing to more than one-fifth of total financial saving over the same period.

The changing pattern of personal saving has had profound effects upon business and the financial community. The movement toward institutionalized saving has enhanced the importance of financial institutions and increased the dependence of businesses and governments on these firms as an outside source of funds. Such institutions have always preferred to purchase bonds, mortgages and other debt instruments, since their obligations are also in fixed dollar amounts. This preference, along with tax considerations, has been a major factor in the long-term trend toward issuance of bonds rather than stocks by business in meeting its requirements for outside capital.

Savings into consumer durables. Personal investment in real capital assets for self-use has also mushroomed since the turn of the century. With it have gone large increases in personal mortgage and instalment debt. Mass markets for automobiles began in the 1920's, and mass merchandising of other consumer durable goods in the 1930's, and since the war we have had something approaching mass marketing of houses. The increase in holdings of real estate, consumer durable goods and other real capital assets, even after allowing

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

for depreciation, amounted to 49 per cent of the growth in all personal assets in the 1946-49 period. This compared with a 38 per cent share in the first decade of the century. Considering the home-building boom and the large volume of automobile and other durable goods purchases since 1949, it seems evident that such investments have been even more important in recent years.

Of course, personal debts have risen rapidly too, and this has tended to hold down the *net* saving which individuals have accomplished. In large part the record postwar expansion in indebtedness is associated with recent purchases of new houses and durable equipment, so that equities in such assets have risen much less rapidly than the value of the asset holdings themselves. But the rise in debt cannot entirely be considered as an offset to these real investments. To a considerable extent, debt increases have stemmed from transfers of existing assets at higher prices and from borrowing for purposes other than acquisition of a home or durable good.

The growing use of credit which has accompanied larger personal purchases of capital goods for self-use also has had repercussions in the financial community. To a degree, the personal sector has altered its role in the investment process. Households now are not only the largest suppliers of investment funds, but also the largest single group of users. In the year ended with June 1955, consumer credit and mortgage debt on 1-4 family properties rose by 16.6 billion dollars—considerably more than the increase in corporate and government obligations combined.

Over-saving?

The concern expressed by some economic analysts that consumers might save "too large" a proportion of their income as the nation grows more prosperous was mentioned at the beginning of this article. A conclusive answer to this question cannot be drawn from the historical figures, partly because relationships may change in the future and partly because reductions in spending, when they have occurred, have been accompanied by declines in income and the rate of saving. The personal saving rate has risen only moderately over the past 50 years, however, which suggests that there has been no strong tendency on the part of consumers to save more of their income despite a striking gain in real per capita earnings. In relation to income after taxes, total personal saving amounted to 10.9 per cent in the 1897-1908 period, 12.8 per cent in 1922-29 and 13.4 per cent in 1946-49—all generally prosperous periods.

Moreover, the shifting character of personal saving reduces the threat of persistently lagging consumer demand. Saving in the form of acquisition of houses, cars, appliances and other durable goods represents direct current spending for the nation's output and thus does not require independent and offsetting investments by other groups in the economy in order to keep such saving employed. Contributions to Government insurance programs can also be ignored from the standpoint of economic impact, since such payments for the most part are in the form of compulsory payroll deductions and are in fact part of the Government's revenue system. Excluding these segments from the total, net personal financial saving (increases in financial assets less growth in liabilities) dropped from 5.5 per cent of spendable income in 1897-1908 to 4.4 per cent in 1922-29 and 2.5 per cent in 1946-49. Such figures lend little credence to the view that there is a persistent tendency toward financial over-saving.

Business Conditions *is published monthly by the* FEDERAL RESERVE BANK OF CHICAGO. *Subscriptions are available to the public without charge. For information concerning bulk mailings to banks, business organizations and educational institutions, write: Research Department, Federal Reserve Bank of Chicago, Box 834, Chicago 90, Illinois. Articles may be reprinted provided source is credited.*

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis