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IN THIS ISSUE

DEPOSIT STRUCTURE

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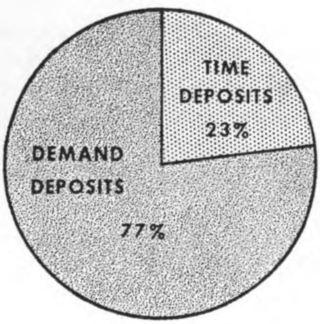

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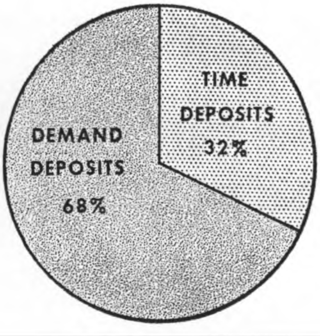
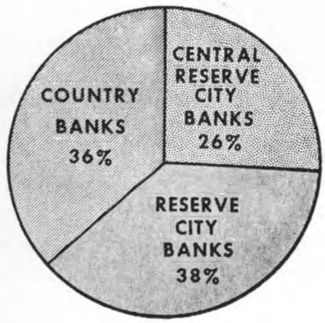


One of the most significant aspects of the deposit structure of member banks in the Federal Reserve System during the postwar period has been the increase of time deposits from 23 percent to nearly one-third of total deposits. At the same time, changes in deposit distribution have resulted in country banks holding a larger proportion of total deposits, while central reserve city banks have experienced a relative decline.

DEPOSIT DISTRIBUTION

1947



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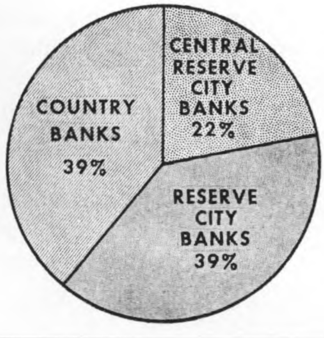


Structure And Distribution Of Bank Deposits, 1948-1961

COMMERCIAL banks must attract and maintain deposits in order to assure an adequate supply of usable funds to compete effectively in various credit markets. The significance of a "stock on hand" is of course not unique to commercial banks. Quite similarly, manufacturing and trade organizations must maintain adequate inventories to sustain or improve their competitive position in the markets for goods and services.

If considered only for inventory purposes, deposits of commercial banks thus provide the wherewithal of the basic banking function. Moreover, the characteristics of this inventory are of large significance insofar as the nature of a bank's activity is concerned. In this connection, both the "deposit mix", i.e., the ratio of demand deposits and time deposits to total deposits, and the nature of deposit ownership play an important role in the determination of the amounts and types of loans and investments which a commercial bank may acquire. These two factors (mix and ownership) in turn are significant elements in the profitability of bank operations. Thus, the composition and ownership distribution of bank deposits are of major concern to bank management; they are also important to the individuals, business firms, and governmental units which depend upon the commercial banking system as a source of credit.

The discussion which follows examines: (1) changes in the composition of the deposits of the member banks of the Federal Reserve System during the postwar period; (2) changes in the distribution of deposits among central reserve city,[1] reserve city, and country member banks; (3) some of the changes in loan and investment portfolios which have either accompanied or followed changes in the composition and distribution of deposits; and (4) the impact of changes in deposit composition and distribution on the postwar banking structure.

Shifting Deposit Structure

One of the most significant aspects of deposit structure during the postwar period has been the increased reliance on time deposits as a source of additional deposits. From the end of 1947 through 1961, total deposits at all member banks increased 71 percent. At the end of 1961, time deposits accounted for 32 percent of total deposits, whereas at the close of 1947 they had accounted for only 23 percent. This development reflected the fact that during the period under review, time deposits moved up 137 percent, as compared with a 51-percent increase in demand deposits.

In addition, the growth of total deposits during the postwar period has depended increasingly upon time deposits. This is highlighted by the fact that from the end of 1955 through 1961, the period of greatest deposit expansion in the postwar period, time deposits accounted for nearly 72 percent of the addition to total deposits.

Changes in Deposit Distribution

Largely as a result of changes in the structure of deposits, there have also been significant changes in the distribution of total deposits among member banks.

(1) Although the central reserve city member bank classification was abandoned in July 1962, the term is used throughout this article to distinguish between reserve city member banks located in New York City and Chicago, and those located outside of the former central reserve cities. Furthermore, no effort is made to adjust deposit and asset totals for (1) changes in classification of country and reserve city member banks, (2) mergers among member and nonmember banks, and (3) inclusion of banks located in Alaska and Hawaii.

The most significant trend in deposit distribution has been the decline in the proportion of total deposits held at member banks located in New York City and Chicago. During 1948-1961, inclusive, the proportion of deposits held by central reserve city banks fell to 22 percent of total deposits from nearly 26 percent. At the same time, the proportion of total deposits at country banks moved up to 39 percent from 36 percent at the end of 1947, while the share held by reserve city banks remained relatively constant.

An explanation for the decline in total deposits held at New York City and Chicago banks would include (1) the increasing importance of time deposits in total deposit mix in general and (2) the moderate expansion in demand deposits at central reserve city banks.

Until very recently, the central reserve city banks placed primary emphasis on demand deposits as a means of expanding total deposits. Demand deposits consistently have provided all but a small proportion of total deposits at both New York City and Chicago banks. As recently as the end of 1961, member banks located in these two centers derived more than 80 percent of their total deposits from demand deposits. On the same date, less than 68 percent of the deposits of all member banks were classified as demand deposits, and country banks reported only 61 percent of total deposits as demand deposits.

In the early postwar period many of the larger New York City and Chicago banks did not promote actively the acquisition of time deposits. Due to the interest cost associated with time deposits and the heavy dependence on corporate deposits rather than individual accounts, many of the larger banks elected to direct their major efforts toward attracting additional demand deposits. Thus, as of the close of 1947, central reserve city banks held nearly 26 percent of total member bank deposits but only 8 percent of total time deposits. Although, during the following fourteen years, central reserve city banks demonstrated an increasing interest in attracting time deposits, they acquired only 17 percent of the additions to total member bank time deposits during 1948-1961. This turn of events was due to the fact that increases in time deposits represented, for the most part, individual savings rather than corporate deposits.

Contrary to popular opinion, central reserve city banks accounted for a much smaller share of the expansion in total time deposits in the latter half of the 14-year period under review than in the first seven years. In the 1948-1954 period, New York City and Chicago banks accounted for 23 percent of the total addition to member bank time deposits. In marked contrast, and despite the intensification of efforts to attract time deposits, the central reserve city banks obtained only 15 percent of the total gain in member bank time deposits in the 1955-1961 period.

The slower expansion in the latter half of the period is reflected further in the fact that, although the central reserve city banks increased their share of total time deposits at member banks from 8 percent of the total as of the end of 1947 to 12 percent at the close of 1954, by the end of 1960 no further increase had occurred. The record of central reserve city banks in the latter half of the 14-year period contrasts significantly with the success of suburban-based banks in attracting individual time deposits. This turn of events reflects at least in part restrictions on branch banking which have blocked the formation of suburban branch offices by both New York City and Chicago banks.

On the other hand, during 1961 the stability of the proportion of time deposits at New York City and Chicago banks that had characterized the 1955-1960 period was undone. These banks were able to increase their holdings of time deposits from 12 percent of the total at all member banks to 14 percent, primarily as a result of the successful marketing of negotiable certificates of deposit to corporate customers.

Distribution of Demand Deposits

The recent intensification of efforts by the central reserve city banks to attract time deposits stems primarily from the pattern of change in demand deposits during the post-war period. As noted earlier, demand deposits expanded by 51 percent during 1948-1961, as compared with a 137-percent increase in time deposits during the same period. Within these aggregates, central reserve city banks experienced a modest 26-percent advance in demand deposits, while country banks increased their holdings of demand deposits by 67 percent, and reserve city banks by 58 percent. Thus, the proportion of total demand deposits at all member banks which were accounted for by the central reserve city banks fell from 31 percent of the total as of the end of 1947 to 26 percent at the close of 1961.

The retardation in the growth of demand deposits at central reserve city banks reflected in large part changes in corporate financial practices. The introduction of improvements in corporate cash management practices, coupled with increasingly attractive rates on short-term, highly-liquid investments during the post-war period, encouraged many corporate financial officers to reduce cash balances to minimum working balances, and to invest any temporary excess of funds in short-term money market instruments rather than to permit such funds to remain in non-interest bearing demand deposits.

Furthermore, the increased amount of corporate funds available for short-term investment has enlarged substantially nonbank sources of funds available to corporate borrowers. Consequently, many large corporations have adopted the practice of borrowing directly in the money market, e.g., by selling commercial paper and bankers acceptances, and thereby reducing their demand for commercial bank credit. This practice also has been a factor in the slackening pace of demand deposit growth, as the increased use of nonbank credit permits a takedown in the level of compensating balances which corporate borrowers agree to maintain as long as all or any part of a bank loan remains outstanding.

Due to the structure of their deposits, central reserve city banks have been affected most by these relatively recent innovations in corporate financial practices. The severity of the impact on New York City and Chicago banks is evidenced in the fact that, while demand deposits of individuals, partnerships, and corporations at all member banks increased 46 percent from the end of 1947 through 1961, demand deposits at central reserve city banks moved up only 16 percent. During the same period, demand deposits held by individuals, partnerships, and corporations at reserve city member banks moved up 59 percent, while those held at country banks advanced 55 percent.

Relationship Between Deposit Structure and Bank Credit

The composition of deposits also serves as a major determinant of the types and amounts of assets which a commercial bank may acquire. For example, if the total deposits of a commercial bank were comprised solely of highly volatile demand deposits, it would be necessary that the bank hold a large amount of secondary reserves, i.e., primarily short-term, highly-liquid loans and investments as earning assets.

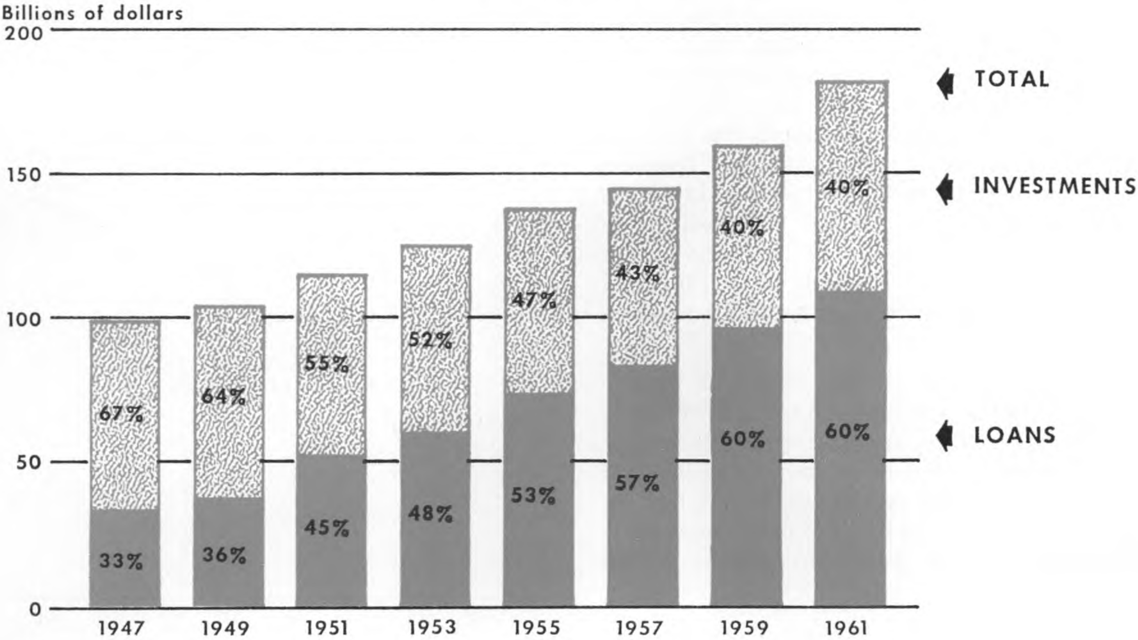
This is no different from the fact that the character and availability of borrowed funds may serve as a primary factor in establishing the asset total and asset mix of a non-financial firm. Thus, if a non-financial firm were to acquire all of its initial capital through short-term borrowing, the management of the firm would be obliged to acquire primarily assets of a short-term, highly-liquid nature to avoid financial calamity when the short-term loans fell due.

In view of the close relationship between bank deposits and asset structure, it is not surprising that the postwar changes in deposit structure and distribution have been accompanied by significant shifts in the composition and distribution of earning assets at member banks.

Earning Asset Structure

The most significant change in the struc-

GROWTH AND COMPOSITION OF EARNING ASSETS
All Member Banks, U.S.



ture of member bank earning assets in the postwar period has been the increasing proportion of bank credit extended as loans rather than investments. As of the end of 1947, only one-third of member bank earning assets were held in the form of loans. By the close of 1961, however, loans represented approximately 60 percent of total earning assets. The preference by member banks for loans rather than additional investments is further evidenced by the fact that total loans increased more than threefold during 1948-1961, while holdings of securities advanced only 12 percent. As a result, more than 90 percent of the total increase in earning assets at member banks during the 14-year period was accounted for by additions to loan portfolios.

The large proportion of member bank credit held in investment portfolios in the early postwar period reflected the important role played by the commercial banking system in meeting the credit needs of the Federal government during World War II. For example, as late as 1948, holdings of U. S. Treasury securities accounted for approximately 60 percent of the total earning assets of member banks.

The increase in interest expense resulting from a larger proportion of total deposits held in the form of time deposits coupled with increases in other bank operating costs has made it necessary for bank management to seek higher-yielding earning assets and to reduce the proportion held in U. S. Treasury securities. Furthermore, the opportunities for higher yields have occurred more frequently in bank lending activity than in security holdings.

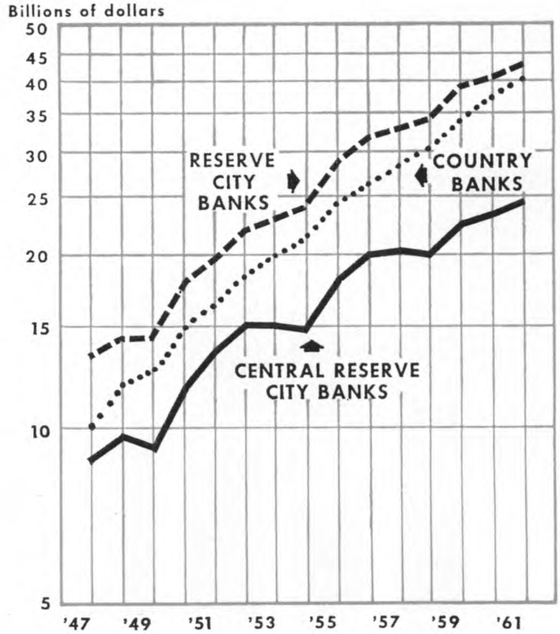
Due to larger holdings of time deposits, and the relative stability of such deposits, many banks have adopted a policy of devoting a larger share of their loan portfolios to longer-term, higher-yielding loans. This situation is demonstrated, for example, in the rapid growth of consumer loans during the postwar period. During 1948-1961, consumer loans moved up to 21 percent of total member bank loans from 14 percent, while business loans dropped from 52 percent to 38 percent. In addition, there is a substantial amount of evidence that during the postwar period an increasing proportion of business loans has been granted for periods in excess of one year. Despite the fact that real estate loans qualify as a long-term, higher-yielding loan, during 1948-1961 such loans remained almost stable as a percentage of all member bank loans.

The influence of deposit structure on the composition of earning assets is also reflected in the differences in earning assets among the classes of member banks. As of the end of 1961, the central reserve city banks held 56 percent of their total loans in business loans as compared with nearly 76 percent at the end of 1947.

On the other hand, country banks, with a larger proportion of time deposits to total deposits, have consistently held a larger relative amount of long-term loans to total loans than have central reserve city and reserve city banks. At the end of 1961, country banks held only 25 percent of their total loans as business loans, while real estate loans and consumer loans accounted for 33 percent and 28 percent, respectively. It appears somewhat surprising, however, in the face of the rapid growth of time deposits at country banks during the postwar period that real estate loans would decline as a proportion of total loans (from 38 percent to 33 percent), while consumer loans would move up (from 19 percent to 28 percent). The explanation for this development seems to be that in recent years many country banks have devoted much of their efforts to attracting consumer loans.

Changes in the composition of earning assets resulting in part from a changing deposit structure have also appeared in member bank investment portfolios. For example, many bank investment officers have increased

TOTAL LOANS OUTSTANDING
All Member Banks, U.S.



the proportion of "other securities" in investment portfolios. With the rise of bank earnings during the postwar period, an increasing number of smaller banks have moved up from the 30 percent to the 52 percent maximum corporate income tax rate. Thus, the acquisition of tax-exempt state and local government securities has become increasingly attractive to the smaller banks, as well as the larger ones. In this connection, during 1948-1961, holdings of "other securities", which comprise primarily tax-exempt state and local government obligations, increased from 10 percent to 28 percent of total investments at central reserve city banks, from 11 percent to 25 percent at reserve city banks, and from 13 percent to 27 percent at country banks.

Distribution of Earning Assets

The role of deposits as a major factor affecting the distribution of earning assets during 1948-1961 is demonstrated clearly by the fact that, as the proportion of total bank deposits held by central reserve city banks declined, a nearly equivalent decline occurred in the proportion of total earning assets held by these banks. At the same time, the percentage of total earning assets accounted for by country banks moved up to 41 percent of the total from 37 percent, and reserve city banks increased their share from 37 percent to 38 percent.

The distribution of the various components of earning assets, however, has not followed a uniform pattern during the postwar period. In the case of total loans during 1948-1961, both central reserve city and reserve city banks experienced a decline in their respective shares of total loans, while the share of country member banks moved up to 37 percent from 31 percent.

On the other hand, the decline in the proportion of total deposits at all member banks held by New York City and Chicago banks was larger than the decline in the share of total loans granted by these banks. Consequently, the reduction in the proportion of loanable funds at the disposal of central reserve city banks has not been fully offset by an equal decline in the proportion of total loans which these banks have provided. In many instances, this development has reduced significantly the liquidity of central reserve city banks. The relatively sharp reduction in the level of liquidity at the New York City and Chicago banks is demonstrated by the fact that the relationship of total loans to total deposits, a widely used measure that varies inversely with bank liquidity, rose from 24.9 percent as of the end of 1947 to 53.9 percent at the close of 1961. At the same time, the loan-to-deposit ratio at all member banks moved up from 26.6 to 51.2.

One of the major factors in postwar loan patterns has been the increased reliance of business borrowers on central reserve city banks. Despite a declining share of total loans being held at New York City and Chicago banks, 34 percent of business loans granted by all member banks as of the end of 1961 were made by the larger banks. This figure compared with 30 percent of the total as of the end of 1947.

An explanation which is offered frequently for the increased dependence of business borrowers on the New York City and Chicago banks is that many business firms are now so large, due to the numerous corporate mergers and corporate growth in general during the postwar period, that their credit needs can only be satisfied by the larger money market banks. That is to say, due to the limitations on the size of loans to one borrower imposed on commercial banks, many of the nation's banks are unable to grant loans of the magnitude which the larger business borrowers require. As a result, business firms increasingly have turned to the largest banks to satisfy their credit needs.

This development is interesting in that it is mainly the cash management practices of large corporations which have resulted in a slower rate of deposit expansion at central reserve city banks, with the pressure on bank liquidity as the banks attempt to satisfy the loan demand which stems primarily from the same segment of the business community.

Since 1957, however, there is evidence that major business borrowers have been acquiring an increasing share of their short-term credit through nonbank sources. From the end of 1957 through 1961, the percentage of business loans at all member banks which were accounted for by New York City and Chicago banks dropped to 34 percent of the total from 39 percent. Such a development does not necessarily reflect a redirection of business borrowers away from the larger banks toward the reserve city and country banks. This is demonstrated by the fact that from the end of 1947 through 1957 business loans at all member banks advanced at an average annual rate of 8.6 percent; from 1958 through 1961, however, the average annual rate of expansion dropped sharply to only 2 percent. The slackened pace of business loan demand has reflected largely the increased use of nonbank short-term credit arrangements by corporate users that might otherwise borrow primarily from central reserve city banks.

With all of the decline in total investments during 1948-1961 occurring at central reserve city banks (a substantial gain simultaneously occurred in the proportion of total investments held at country banks) the pattern followed closely that of member bank loans. As of the end of 1961, country banks accounted for more than 45 percent of total investments of member banks, as compared with 40 percent at the end of 1947. At the same time, the share held by central reserve city banks fell from 26 percent to 19 percent. Furthermore, the decline in the share of holdings of securities experienced at the larger banks was concentrated in those of the U. S. Treasury.

Impact on Banking Structure

Postwar changes in the structure and distribution of member bank resources have quite clearly brought about some fundamental changes in the structure of commercial banking. The foregoing discussion has shown that the extent of control of resources by the large central reserve city banks has declined markedly during the postwar period. Furthermore, the trend toward a wider distribution of these resources among all classes of banks indicates that changes in banking structure during the postwar period have not resulted in a larger share of banking resources being controlled by the nation's largest banks. On the contrary, changes in banking structure have, for the most part, resulted in a substantially larger share of both total deposits and earning assets being held by country banks, with a small increase in the proportions accounted for by reserve city banks.

The redistribution of bank resources is an outgrowth of the restructuring of banking markets in the postwar period. Changes in the markets for both deposits and bank credit have created an environment which is particularly favorable to the growth of suburban-based and consumer-oriented country banks.

Changes in the structure of the deposits and the earning assets of commercial banks indicate clearly the increased importance of the consumer as both a source of deposits and a major user of bank credit. With the migration of population from the metropolitan centers toward the suburbs, many country banks have benefited from a substantial increase in the size of the markets in which they do business. In addition, the modest growth in the market share of reserve city banks has been due largely to the formation of branch offices which has permitted such banks to follow the consumer to the suburbs.

In the case of the central reserve city banks, however, attempts to participate in widening markets have often been blocked or restricted by legislation dealing with the operation of branch offices. Thus, the large banks have found it increasingly difficult to attract deposits, as corporate customers continue to constrict the level of their deposits, while branch banking regulations often prevent such banks from competing freely for individual time and demand deposits.

As previously mentioned, the increased dependence of large corporations on the major money market banks to satisfy bank credit needs has meant that the decline in the share of total deposits held by these banks has exceeded the rate of decline in total loans. This, in turn, presents problems of defining adequate liquidity standards for the larger banks. Considering the changing composition of bank deposits, there may be a need for a revaluation of the widely accepted measures of bank liquidity.

One reason for the number of mergers among major banks is to make possible the extending of larger loans to corporate borrowers. The merger of two or more banks, however, does not in itself provide a solution to the problem of inadequate deposits at major banks.

An increased use of nonbank sources of short-term credit by corporate borrowers does not solve the problem of bank liquidity, as the nonbank lenders frequently are other corporations which, in turn, reduce demand deposit balances at major banks in order to

(Continued on Page 12)

A Glimpse Ahead For Autos

The year 1962 promises to be the second-best year for car sales and production. By year end, more than 6.7 million cars will probably have rolled off assembly lines, while dealers are likely to have sold nearly as many domestically produced autos. In addition, sales of imports may push total car sales above 7 million units.

The glowing picture of production and sales during 1962 has led many observers of the automobile industry to believe that the current year's ebullient rate of production and sales will be sustained during the year 1963. At the same time, there are, of course, other observers who hold a different view for 1963. Notwithstanding the diversity of various forecasts, automobile manufacturers and suppliers carefully scrutinize such forecasts and necessarily prepare their own predictions. This is done in order to gauge the probable demand for a large number of materials, such as steel, glass, and rubber, which go into the making of automobiles. In addition, production schedules, employment requirements, and budgets for the ensuing year are based on the forecasts.

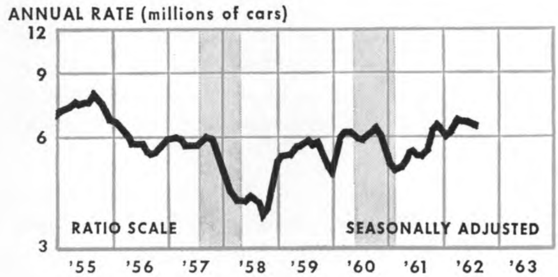
The development of most forecasts takes into account the interrelationship of basic data of the auto industry as shown in the following equation:

$$\text{Total Sales} - \text{Imports} + \text{Exports} \pm \text{Changes in Dealer Inventories} = \text{Production}$$

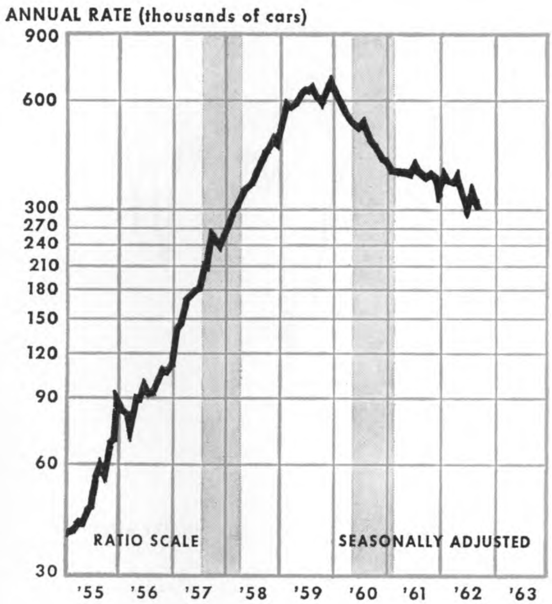
Estimates for the components of the equation must, of course, not only balance out mathematically, but each component must be reasonable in the light of anticipated developments in various segments of the economy.

In connection with the latter point, probably the most important consideration which has a bearing on the forecasts of new car sales (and thus has a bearing on production)

DOMESTIC NEW CAR SALES
Three-month moving average



SALES OF IMPORTED CARS*



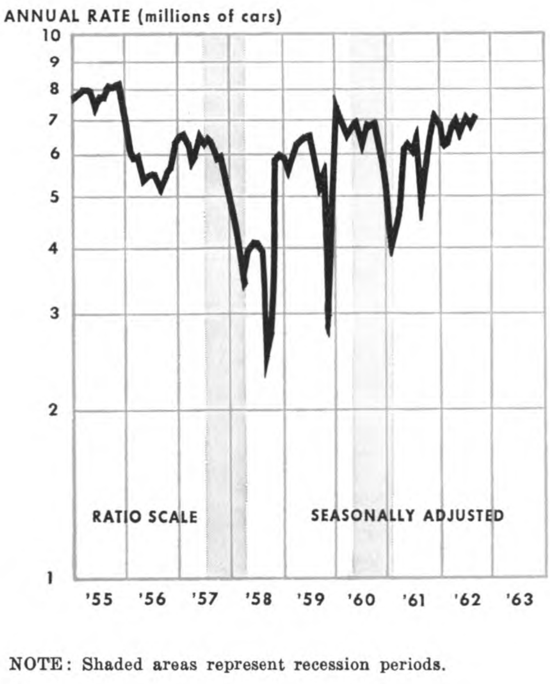
* Registrations.

NOTE: Shaded areas represent recession periods.

is the assumed future course of business activity. As the accompanying chart shows, declines in general business activity usually are associated with periods of low levels of sales. On the other hand, during periods of rising business activity, new car sales have reflected the buoyancy of business conditions. Thus the projected cyclical pattern of business activity is the most important single factor in estimating the future level of car sales. Consideration is given to such factors as anticipated changes in consumer income, changes in used car prices, and the status of buying confidence as shown, for example, in the willingness of consumers to incur instalment debt.

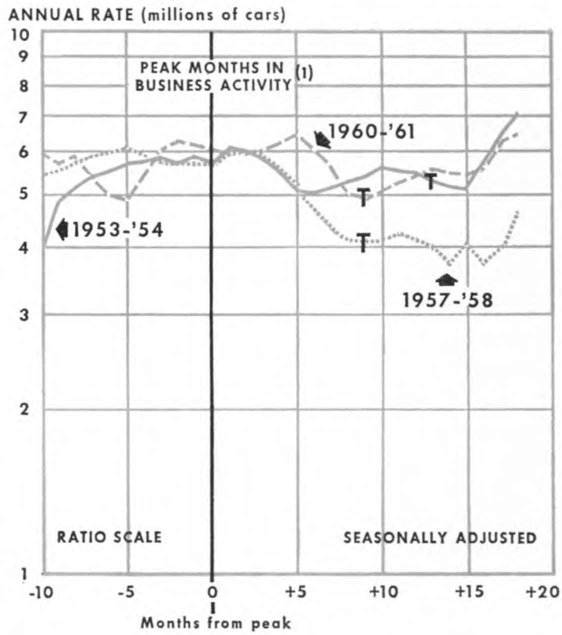
Of course, not all of the factors affecting car sales reflect cyclical changes in business activity. For example, the design of autos is regarded as having an influence on sales, yet auto design is only remotely connected with business conditions.

DOMESTIC CAR PRODUCTION



NOTE: Shaded areas represent recession periods.

DOMESTIC NEW CAR SALES AND CHANGES IN BUSINESS ACTIVITY



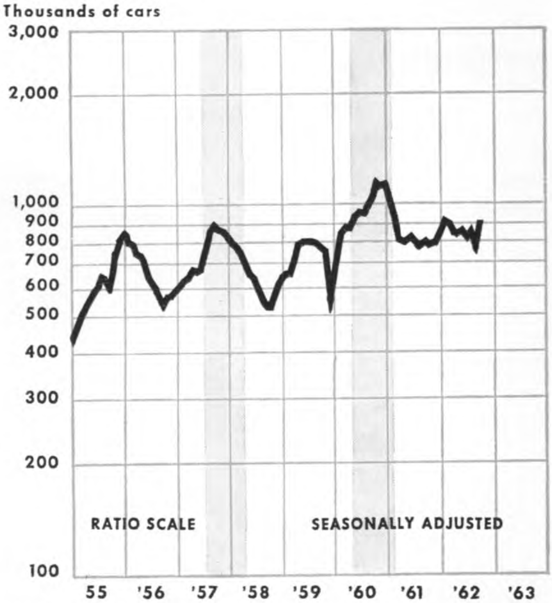
(1) July 1953, July 1957, May 1960.

T Trough months: August 1954, April 1958, February, 1961.

Sales and Production. The pattern of car sales during three postwar recessions indicates that if a recession should occur in the coming year, sales of new cars probably would decline sharply within a few months following the peak in business activity. Moreover, a marked decline in production would accompany the drop in sales.

Although the sales total for the year 1955 is often regarded as a target, it should be noted that the record level of auto sales during that year was accompanied by a somewhat unusual, and apparently temporary, shift in historical spending patterns. Consumers poured 6 percent of their total consumption expenditures into automobile purchases in 1955. This figure compares, for example, with 4.6 percent in 1960, 4.0 percent in 1961, and an estimated 4.4 percent in 1962. (The average for the 1956-62 period

DEALERS' INVENTORIES OF DOMESTIC NEW CARS
End of month



NOTE: Shaded areas represent recession periods.

amounts to 4.5 percent.) Thus, if the experience of the years since 1955 are taken as a guide, it would seem that any further rise in consumer spending for automobiles (in absolute terms) has to stem from a further expansion in business activity and disposable income.

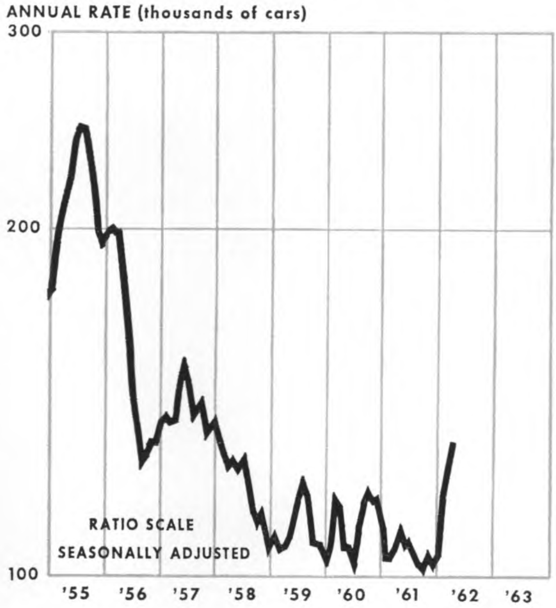
Inventories. Inventories of new cars held by dealers have tended to expand during the latter phases of most business expansions. In marked contrast to that pattern, inventories of new cars have remained fairly steady for the past two years, except for the special circumstances which followed the automotive strikes in the late summer of 1961. Thus it appears that much tighter controls on inventory levels are playing an increasingly important part in the planning of automobile production. Moreover, it is possible that, as a result, any forthcoming swings in the level of inventories are likely to be considerably less pronounced than the earlier fluctuations.

Imports. Total sales of imported cars have been sliding downward since the final months of 1959, when a large number of U. S.-produced "compact" cars were introduced. Apparently, the impact of the domestic small car has been favorable during the past three years, so far as U. S. competition with foreign produced makes is concerned.

In the past year, the decline in sales of imported cars is particularly significant in view of the strong advance in domestic sales during the same period, indicating that imports have lessened their hold on the American auto market. (However, representing a notable exception to the general trend, sales of the major make of automobile which is imported from Western Germany have shown a strong gain during the past year.)

Exports. Auto exports from factories in the U. S. have remained at low levels for more than three years, as compared with the level of auto exports during 1954-55, when exports were at record levels for the postwar period.

U. S. EXPORTS OF DOMESTICALLY PRODUCED CARS
Five-month moving average



It is true that during the first half of 1962 auto exports appeared to show new strength. However, this strength should be interpreted in light of the fact that part of the improvement was due to an acceleration of exports to Canada in April, and may have represented an attempt by U. S. producers to export a large volume of cars to Canada before the value of that country's dollar fell further. In addition, a rise in shipments to Argentina during June reflected some special non-recurring circumstances.

From the foregoing discussion, it is clear that responsible forecasting procedures have many ramifications which must be conscientiously explored.

It is important to emphasize that no forecasting technique has been found which gives perfect results. Nevertheless, estimates of the future course of auto production and business activity will continue as long as there is a need for auto producers and suppliers to plan ahead.

(Continued from Page 8)

advance the funds. In addition, corporate borrowers tend to reduce existing levels of demand deposits as they become less dependent upon the larger banks to satisfy their short-term credit needs.

The reduction in concentration of member bank deposits at central reserve city banks thus far in the postwar period may be a desirable change in the banking structure. However, in view of the increased dependence of business borrowers on the New York City and Chicago banks to satisfy their credit needs and the relative lack of mobility of loanable funds within the banking system, a question arises as to the desirability of any further changes in the distribution of total bank deposits which would reduce the proportion available to central reserve city banks. Consequently, the changing structure of banking markets suggests that a review of existing banking legislation may be helpful to assure that the growth and development of a particularly important segment of the banking system is not stifled.