

MONEY MARKET ESSAYS



**Federal Reserve Bank
of New York**

March 1952

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FOREWORD

This booklet is the second of a series of publications designed to furnish the student of banking with information not readily available elsewhere, concerning various aspects of the national money market and factors affecting it. The first of the series, *Bank Reserves—Some Major Factors Affecting Them*, was published in March 1951.

All but the first of the articles in this second booklet appeared originally in the *Monthly Review of Credit and Business Conditions* of the Federal Reserve Bank of New York; the first article—"The Money Market"—is the text of a talk given by its author at the Federal Reserve Bank of St. Louis. All have been brought up to date for this reprinting. The booklet comprises brief discussions of the more important elements in the private sector of the money market; we hope in the future to publish a companion piece that will consider Governmental instruments and operations important to that market.

Copies of this and the earlier booklet are available for classroom use and for similar purposes.

ALLAN SPROUL,
President.

New York City
March 1952

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THE MONEY MARKET

by

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THE financial pages of the newspapers, economists' professional publications, and other periodicals make frequent reference to "the money market," but the term is rarely defined. Probably the reason is that the money market is, in fact, a rather nebulous affair, consisting of interrelationships and transactions among varying participants, rather than a definite group of individuals like the members of the New York Stock Exchange or the Chicago Board of Trade; it has no specific location, as does an organized security or commodity market; and its principal activities have changed gradually but markedly over the years. In earlier periods, references to the money market were frequently so narrowly limited as to mean chiefly the market in which security trading and speculation was financed—the market for "call" and "time" loans to security brokers and dealers, or "street loans" as they used to be called.¹ At other times, the term has been used so broadly as to include long-term borrowing and lending operations in the form of security flotations.

For the purposes of this discussion, "the money market" may be defined as the central national market in New York City where temporary surplus funds of various types of organizations (including secondary reserves of the banks) go to find income-producing employment without sacrifice of liquidity, and where short-term needs for funds are satisfied, usually at interest rates that are advantageous to the borrower. It is a place where final adjustments between the supply of funds and the demand for funds are made for the country as a whole, after much regional clearing has been effected. In general, it is an impersonal market involving the usual lender-customer relationships only to a limited extent. The open-market borrower frequently has certain sources from which he expects to obtain part of the funds he needs fairly regularly, but he usually

feels no obligation to go to any particular lender or group of lenders for his financing any longer than he considers that to be in his interest, and he gets his money from whatever source he can on the most favorable terms. Similarly, the lender in the money market ordinarily assumes no responsibility for financing the borrower any longer than suits his convenience.

SOURCES OF FUNDS

By far the most important source of money market funds, usually, is commercial banks. For many years considerable amounts of the secondary reserves (and even primary reserves) of the commercial banking system have tended to concentrate in New York City through the correspondent banking system, the amounts varying with the fluctuations in public demands for currency and credit and the flow of funds throughout the country. This condition was especially true before the establishment of the Federal Reserve System when the large New York City banks provided a kind of limited central banking system.

At that time, some of the funds of out-of-town banks were loaned or invested for them in "street loans," short-term business paper, or securities, but considerable amounts were simply deposited with the New York City banks and those banks employed them in the money market if suitable outlets were available. In addition to facilitating deposits and withdrawals of funds by correspondent banks, the New York City banks could to some extent (within the limits of their own reserve positions) increase the total volume of bank reserves by making loans to their correspondents. But their own reserve requirements were high and they seldom had very large amounts of excess reserves, so that their ability to supply additional funds to correspondent banks was rather narrowly limited. Consequently, when demands for funds from other parts of the country were heavy, they tended to cause stringencies in the New York money market, which occasionally reached the

¹ See the article beginning on p. 27.

point of becoming money panics. It was this kind of situation that led to the creation of the Federal Reserve System.

It was expected that the establishment of the twelve regional Reserve Banks would end the concentration of bank reserve funds in New York and the dependence of the commercial banking system on the liquidity of the New York money market after a transitional period. To a considerable extent it did. But the practice of sending secondary reserves to New York (also primary reserves in the case of many nonmember banks) continued and still prevails on a large scale. And, of course, the New York City banks lend or invest in the money market not only the funds of their correspondents, but also considerable amounts of their own funds. Some of their most temporary lending is to other banks, in the form of sales of "Federal funds," which will be discussed later.

The second major source of supply of funds for the New York money market has been temporary surplus funds of business concerns. Many national corporations maintain accounts with the New York City banks in which they deposit funds for meeting interest and dividend payments, taxes, and other general expenses, and also such additional funds as are not needed at other points around the country for the conduct of their business. When these funds accumulate in amounts in excess of needs for current working balances, and appear likely to remain idle at least for some foreseeable period ahead, it has been the common practice of corporations to employ them in short-term loans or investments if suitable outlets are available and offer sufficient return to make it worth while. Furthermore, business concerns frequently invest the proceeds of long-term security issues temporarily, pending their use for capital expenditures.

A smaller source of money market funds is investing institutions, such as insurance companies. These institutions normally employ most of their funds in longer-term investments, but sometimes enter the money market for substantial amounts of short-term securities, pending disbursements on their investment commitments or the development of more attractive long-term investment op-

portunities.

Another, distinctly minor and quite irregular, source of funds is State and local governments and their subsidiary organizations, as well as some agencies of the National Government. For example, if a State government sells a bond issue for purposes which will involve disbursements over an extended period, such as a veterans' bonus or a construction program, or accumulates funds to pay off a bond issue, it may wish to invest some of the proceeds temporarily in the money market.

For many years, especially since the first World War, during the period in which New York City has gained in importance as an international financial center, it has been the custom of many foreign central banks to keep some of their reserves in New York in the form of earmarked gold or dollar assets of various kinds. To a considerable extent dollar assets are kept on deposit in the Reserve Banks, but frequently the foreign central banks like to obtain some income on dollar funds they do not need to draw upon immediately. The Federal Reserve Bank of New York began more than 25 years ago to buy bankers' acceptances for foreign central banks in the market, and added its guarantee of payment (for a fee), in behalf of all Federal Reserve Banks. But in recent years, the supply of bankers' acceptances has been insufficient to supply all such demands and several foreign central banks have requested the investment of some of their dollar funds in Treasury bills and other short-term Government securities.

New York agencies of foreign commercial banks also supply fairly sizable amounts of funds to the money market through loans to security dealers and short-term investments.

Finally, the Federal Reserve Banks serve as a residual source of supply of funds for the New York money market, but further discussion of that matter will be left until later.

SOURCES OF DEMAND FOR FUNDS

Reference was made previously to the predominance of brokers loans ("street loans") as a source of demand for funds in the money market in earlier years. For many years security brokers and dealers have borrowed on either a demand or a time basis to finance their customers' trading on

margin, and to carry their own holdings of securities, to the extent that their "portfolios" have been in excess of their capital funds. Usually the greater part of their borrowing has been on a "call loan" basis—that is, it has been repayable on demand in clearing house funds, so that the lender could get his money back on one day's notice. These "street loans" were for many years considered the safest and most liquid available use for temporary surplus funds of banks and others. The only disadvantage—and frequently it proved to be an advantage—was that the yield was unpredictable, depending upon the relationships between the total supply of funds and total demand for funds in the money market, and the consequent fluctuations in interest rates. The amount of such loans has fallen far below the volume of earlier years—to a range of about 200 to 800 million dollars since 1945, as compared with several billion dollars in the late '20's. In recent years borrowings on a demand basis by Government security dealers have been substantial (frequently 500 million to 1 billion dollars or more), but they have by no means taken the place of the "street loans" of earlier years.

At least until the '20's the next most important outlet for money market funds was open market commercial paper²—that is, short-term notes of well-known business concerns with strong credit ratings (for example, some of the big milling companies and mail order houses), which are purchased by commercial paper dealers and resold by them, chiefly to banks. Such paper has long been attractive to banks all over the country (especially the "country" banks) as a means of employing their secondary reserves. This is still an active market, but not as important as in earlier years.

Another type of business paper which was developed in the United States after the Federal Reserve System was established, and with its encouragement and support, is bankers' acceptances³ or "bankers bills" (which were commonly referred to simply as "bills" until a new type of bill—the Treasury bill—was created about 20 years ago). These bankers' acceptances, which are used

mainly in the financing of exports, imports, and storage of staple commodities, soon attained the rating of top-quality business paper, as in the form in which they are sold in the open market they represent two-name paper—that is, the bankers' acceptance is not only the obligation of the concern on which it is drawn, but it is also the unconditional obligation of the "accepting" bank. In some instances it may also carry the endorsement of the dealer by whom it is sold. Use of bankers' acceptances has diminished considerably in the past 20 years because of low rates on direct loans, but has shown some revival recently.

A minor and sporadic source of demand for money market funds is short-term borrowing by State and local governments. The commonest form is tax anticipation notes, which are frequently issued by local governments to provide them with funds, pending the receipt of large periodic tax payments. A considerable part of such borrowing is done in the local communities, but a fair amount is done in the New York money market.

A far more important type of government borrowing in the money market developed from the adoption by the United States Treasury in 1929 of the practice of selling securities in the form of discount bills, generally maturing in 91 days, through competitive bidding.⁴ This represented an adaptation of British practices to the financial system of the United States. These Treasury bills are, of course, offered throughout the country, but a large proportion has been absorbed in the New York money market, and most of the trading subsequent to issuance is done in the New York money market. Even earlier—as far back as the first World War—short-term Treasury obligations in the form of certificates of indebtedness had been a fairly important money market instrument. The certificates were sold at a fixed price, and for a number of years were commonly of one-year maturity, whereas the Treasury bill provided weekly issues and redemptions of securities with shorter maturities (most commonly three months), and

⁴ These Treasury bills carry no interest coupons but are sold at prices slightly below par, the difference between the purchase price and the par value at maturity providing the income, or yield, on the investment. (See article on "Marketing of Treasury Bills" in the October, 1951 issue of the *Monthly Review* of the Federal Reserve Bank of New York.)

² See the article beginning on p. 17.

³ See the article beginning on p. 22.

at prices and yields to be fixed in the market. For several years, Treasury bills replaced certificates of indebtedness entirely, but the use of certificates was resumed during the second World War, and the volume of both types rose to unprecedented levels. Certificates were rapidly replaced by short-term Treasury notes during 1950, and disappeared entirely at the beginning of 1951, but their use was resumed after a few months.

In addition, obligations of Government-sponsored organizations, such as Federal Intermediate Credit Bank debentures, are minor sources of demand for funds in the money market.

A final source of demand for short-term funds in the money market is the banks themselves, chiefly the large city banks. The reference here is to interbank borrowings of immediately available reserve funds or "Federal funds."⁵ These dealings involve the transfer of reserve balances on the books of the Federal Reserve Bank, from the reserve account of the lending bank to the reserve account of the borrowing bank, generally through an exchange of checks, one drawn by the lending bank on the Federal Reserve Bank payable immediately, and the other by the borrowing bank on itself payable through the clearing house the next business day (i.e., "clearing house funds"). In other words, they represent day-to-day loans between banks. Most of the transactions are between New York City banks, although not infrequently large banks in other cities are also involved—probably more often as lenders than as borrowers—in which case borrowings and repayments of reserve funds are effected by telegraphic transfers.

ORGANIZATION OF THE MONEY MARKET

Several different types of organizations are involved in the mechanism of the money market:

1. The large New York City banks, sometimes referred to as the "money market banks" or the "Wall Street" banks (although most of them are not located on Wall Street);
2. Dealers in securities, especially Government security dealers;
3. Commercial paper dealers;
4. Bankers' acceptance or "bill" dealers;
5. Money brokers, whose function it is to

know who in the money market is in need of quickly available funds, and who has money to lend (although much less is heard now of this function than in earlier times);

6. Federal Reserve Banks.

There is no clean-cut separation of functions among all these various types of organizations. For example, the dealer in bankers' acceptances is likely to be a dealer in Government securities, and at times may also serve as a money broker. The Government security dealer may be a dealer in other securities as well; he may act as a broker as well as a buyer and seller on his own account; he is almost always a borrower. The role of the commercial bank in the money market is predominantly that of a lender of funds, either on its own account or on behalf of its correspondent banks or other customers; but the commercial bank is also a buyer and seller of short-term Government securities and frequently of other types of open market paper; and, as was noted previously, the large city banks are often day-to-day borrowers of reserve funds. A few of the large New York City and Chicago banks serve as dealers in Government securities, in which case they are sometimes referred to as "dealer-banks."

While all the different organizations have important functions to perform in facilitating the smooth operation of the money market, easily the most important and essential (with the possible exception of the Federal Reserve Banks) are the New York City banks. Most money market transactions are cleared through their books, and all inflows or outflows of funds between New York City and other parts of the country (except for Federal Reserve or Treasury account) go through their reserve accounts on the books of the Federal Reserve Bank of New York.

The Federal Reserve Banks were referred to earlier as residual suppliers of funds to the money market. Federal Reserve credit may be considered a balancing factor in the market—supplying funds when they are needed and absorbing them when there is a surplus. There has never been any question but that the Reserve System should supply, through the money market or directly to the banks (at a price), whatever amount of funds is needed to enable member banks to main-

⁵ See the article beginning on p. 13.

tain their reserves at the required levels. But the Reserve System has never willingly accepted the obligation to supply passively, at a fixed level of rates and at the option of the market, all the funds that might be in demand (except perhaps in periods of national emergency when major national objectives, such as the winning of a war, could not be permitted to be impeded by a lack of adequate financial support), since that would conflict with its responsibility for maintaining, as far as it is able, the monetary conditions necessary for economic stability.

FACTORS AFFECTING MONEY MARKET CONDITIONS AND OPEN MARKET INTEREST RATES

Conditions in the money market and changes in the levels of open market interest rates reflect, of course, the interaction of changes in the supply of and demand for funds. While the aggregate demands from Federal, State, and local governments and from business organizations in the open market fluctuate considerably over fairly long periods, the day-to-day and week-to-week changes in money market conditions are usually determined much more largely by changes in the supply of funds. As was mentioned earlier, the commercial banks are by far the most important single source of funds in the market, and that supply is determined chiefly by the banks' reserve position, especially that of the large New York City banks.

The reserve position of the commercial banking system as a whole reflects the various factors that are shown in the weekly statements published by the Board of Governors of the Federal Reserve System, such as gold inflows or outflows and changes in the deposits of foreign central banks in the Federal Reserve Banks, changes in public demands for currency, net receipts or disbursements by the Treasury reflected in changes in its balances with the Federal Reserve Banks, fluctuations in the volume of Federal Reserve "float," and changes in the reserve requirements of the banks.⁶ It is through the last named factor that business and public demands for credit in the

form of direct borrowings from the banks have their indirect effect upon money market conditions. As bank loans expand or contract, the volume of deposit liabilities and the reserve requirements of the commercial banks change correspondingly. Changes in the banks' reserve requirements as a result of action taken by the Board of Governors of the Federal Reserve System to increase or decrease the percentages of reserves which member banks are required to maintain are, of course, also an occasional influence of some consequence upon the money market. Changes in Federal Reserve credit, which are also included in the weekly statement—especially Federal Reserve credit in the form of discounts and advances to member banks and holdings of United States Government securities—constitute the balancing factor, and the readiness and the rates at which such credit is supplied to the banking system are a major factor in determining money market conditions.

Not all the changes reflected in the weekly statement have an immediate impact upon the money market, but their influence usually is not long delayed. For example, a demand for currency in the Dallas Federal Reserve District may be met initially by drawing upon the excess reserves of banks in that area, but if it attains considerable volume it is likely to result in withdrawals of balances from city correspondents or sales of short-term Government securities in the New York money market. Similarly, an increased demand for credit in the San Francisco District, and a resulting rise in the reserve requirements of banks in that area, may be met for a while by drawing upon excess reserves or borrowing from the Federal Reserve Bank of San Francisco, but if continued it is likely sooner or later to have some reflection in the money market.

The most important immediate determinant of day-to-day money market conditions is the reserve position of the New York City banks, through which practically all transfers of funds in and out of the money market are made. The reserve position of the New York City banks is, of course, affected by the local impact of all the factors mentioned above which affect the reserve position of commercial banks generally, but in addition there are day-to-day movements of funds between New

⁶ These factors and their influence on bank reserves are discussed in a companion booklet, *Bank Reserves—Some Major Factors Affecting Them*, available on request to the Federal Reserve Bank of New York.

York City and other parts of the country which frequently amount to 100 million dollars or more. Consequently, even though banks in other areas may be experiencing an increase in their excess reserves, if the New York City banks are short of reserves, firm money market conditions are likely to prevail at least temporarily. Similarly, when New York City banks have substantial amounts of excess reserves, money market conditions are likely to be easy, and the most sensitive open market interest rates are likely to decline temporarily, even though banks in other areas may be losing reserve funds through Government tax collections, public demands for currency, or other factors. Through deposits or withdrawals of correspondent bank balances and business transfers of funds, however, such disparities between the reserve positions of the New York City banks and of banks in other areas are likely to be equalized quite rapidly. Thus by putting funds into the money market or taking funds out of the market, the Reserve System can exert an immediate influence on money market conditions and, fairly quickly, an influence on credit conditions throughout the country, even though the initial effect is reflected only in the reserve position of the New York City banks.

The essence of effective regulation of credit and the money supply is to retain control over the amount and cost of reserve funds supplied to the commercial banks, and the manner in which they are supplied. Reserve funds can be made available to the banking system on the initiative of the Federal Reserve System through the purchase of Government securities in the market, or by forcing the banks to come to the Reserve Banks and borrow the reserve funds they require. Offerings of securities to the Reserve System can be greatly influenced by the willingness or unwillingness of the System to take the securities at current market prices, and the extent to which the banks are ready and willing to borrow can be influenced by the Reserve Bank discount rate. In general, it is the policy of the Reserve System to limit the availability of reserve funds to the banks in periods of inflation, and to make reserve funds easily available in periods of business recession and deflation.

CHANGES IN THE MONEY MARKET OVER THE YEARS

Aside from major changes in supply and demand conditions which have been reflected in broad movements in the general levels of interest rates, the money market has been subject to gradual but important changes in its functioning and principal activities over the years. The creation of the Federal Reserve System itself was probably the most important single development affecting the functioning of the money market. It lessened the dependence of the commercial banks of the country on the New York City banks (or, more broadly, on the New York money market) by providing twelve regional institutions to hold the reserves of banks that became members and to provide facilities for supplying banks in their respective areas with additional reserve funds and with currency to meet the demands of their customers. As was noted earlier, however, it did not break down correspondent bank relations, nor end the use by commercial banks of the facilities of the New York money market for employment of their surplus funds and secondary reserves.

Other major changes (some of which have been more gradual, so that their significance was not at first so readily recognized) include:

1. The great change in supply and demand relationships in the money market, which grew out of the depression of the '30's and the great inflow of gold that followed, and the resulting major lowering of the general levels of interest rates;
2. The virtual disappearance, as an important factor in the money market, of call loans to security brokers and dealers;
3. The shrinkage in business borrowing through the open market in the form of sales of commercial paper and bankers' acceptances, because of the diminished advantages of such forms of borrowing, compared with direct borrowing from the banks;
4. The great increase in the volume of short-term Government securities available for trading in the money market;
5. The growth of the market for "Federal funds" (rates on which have now taken the place of the call loan rate as the most sensitive and the

most widely fluctuating interest rate in the money market).

The extent of some of these changes may be illustrated by a few figures comparing the present volume of loans and short-term securities available for trading in the money market with the amounts available 25 years ago.

(Approximate amount in millions of dollars)

	1925	1950
Brokers loans*	2,400-3,500 ^e	500- 800
Commercial paper	600- 800	250- 350
Bankers' acceptances	600- 800	200- 400
U. S. Treasury bills, certificates of in- debtedness, and short-term notes†	2,500-3,000	42,000-46,000

* Borrowings in New York City by members of the New York Stock Exchange; 1925 figures estimated on basis of related data; 1950 figures represent borrowings on collateral other than Government securities.

† Certificates and notes only in 1925; Treasury bills initiated in 1929; notes maturing within two years are included in both 1925 and 1950.
e Estimated.

It is evident from these figures that the importance of business borrowing (including the securities business) as a source of demand for funds in the money market has greatly diminished, both absolutely and even more relatively. Short-term Government securities have become by far the most important type of money market instrument.

The present predominance of Government securities (and the growth in the public debt which it reflects) has important implications for the freedom of the money market, since it involves, of

course, greatly increased interest and influence of the Government in money market conditions. One reflection of this influence is the very narrow range of fluctuation in most interest rates during recent years; day-to-day changes in rates now are usually not even in eighths of one per cent—on short-term Government securities they are in "basis points" or 1/100ths of 1 per cent. (The one exception is the rate on "Federal funds" which has fluctuated between rates as low as 1/16 of one per cent and rates only slightly below the Federal Reserve discount rate.)

Nevertheless, the tremendous growth in public debt and the dominant position of Government securities in the over-all debt structure of the country and in the investments of its financial institutions have induced much greater sensitivity to small changes in interest rates, and especially to changes in the *direction* of rates. There is reason to believe, therefore, that the Federal Reserve System may in the foreseeable future be able to carry out its credit policies effectively within the limits of considerably narrower fluctuations in interest rates than was the case some years ago. In fact, it does not seem likely that, even if the System had a completely free hand to influence the money market as it deemed most appropriate, without having to consider the effect of its actions on the market for Government securities, this country will again in the near future witness anything like the rate fluctuations of earlier days, when the rate for call loans to security brokers fluctuated by 1 or 2 per cent (and sometimes much more) from day to day.

MEMBER BANK BORROWING FROM THE FEDERAL RESERVE BANKS

by

MADÉLINE McWHINNEY

DURING the early postwar years member bank borrowing from the Federal Reserve System was for the most part a tool by which large money market and correspondent banks could keep their cash reserves at a minimum and their earning assets at a maximum. Toward the end of 1951, however, as the Reserve Banks, in their open market operations, began to show an increasing reluctance to supply the market with reserves to carry it over periods of temporary stringency, the resort to borrowing became much more widespread.

Banks regularly assess their future needs for funds, and attempt to manage their loan and investment portfolios so as to be able to meet those needs as they arise. But most banks, and particularly those in money market centers, encounter periods of temporary money market tightness when they lose reserves unexpectedly through a withdrawal of funds from the market in connection with unforeseen security transactions, gold outflows, or other factors. Since large banks find it profitable to keep their resources as fully invested as possible and therefore seldom maintain substantial excess reserves for more than a few days at most, such losses of funds are likely to draw their reserves down below the required level. Banks may obtain funds to tide them over such periods in one of three ways: (1) sell securities; (2) buy reserves ("Federal funds") from other banks which have excess reserves; or (3) borrow from a Reserve Bank. (A bank could also call loans, but this is not a likely procedure today, particularly for the short run.) The choice of method depends primarily on two factors—the cost and the length of time the funds will be needed. If a bank expects its money position to ease shortly, as a result of such factors as an inflow of funds from correspondent banks or a return flow of currency, it is likely first to try to

buy (borrow) Federal funds.¹ If they are not available in adequate volume at a satisfactory price, it will borrow or sell securities, depending upon cost. (If the market is tight, the sale of even short-term securities may be relatively costly.) If a reserve deficiency is expected to be of some duration, the bank will probably sell securities, although it may have to borrow until it finds an acceptable bid for its securities.

Smaller banks have generally not made as much use of the borrowing privilege. They usually try to keep their deposits at the Reserve Banks above the required level, since the expense of keeping a constant watch on their reserve positions and of making continual adjustments in their assets is likely to be greater than the additional income which they could realize by keeping fully invested. However, some of the smaller banks, particularly those in agricultural or resort areas, have strong seasonal swings in both deposits and demands for loans. These banks often borrow from the Reserve Banks prior to their lending season in order to be able to meet their customers' demands for working capital, and they repay their borrowings after crops are marketed or the vacation season draws to a close. Although many more banks have borrowed for seasonal purposes in recent years than have borrowed for day-to-day reserve adjustment purposes, seasonal loans have accounted for only a small proportion of the dollar volume of total member bank borrowing.

Two developments of recent months have tended to increase the amount of borrowing done by the member banks. The first is the Treasury-Federal Reserve "accord" announced last March and the Reserve System's subsequent withdrawal of its support of Government securities at fixed prices. The sharp decline in security prices which followed this announcement and the uncertainty

¹ See the discussion of this procedure in the article beginning on p. 13.

engendered as to the future trend of prices have tended to discourage the sale of securities. In addition, the Federal Reserve System's open market policy has been directed toward keeping the money market fairly tight as an anti-inflationary measure. The second factor is the widening of the spread between the bid and offer prices of Government securities. Such a development increases the cost of a "turn-around," i.e., the repurchase of the same or similar securities previously sold during a period of strain.²

Member bank borrowings in the first 15 years of Reserve System history were large. They were often close to or above the billion dollar mark. The peak, which was reached in November 1920, was 2.8 billion dollars. During the Great Depression they dropped off sharply and remained at a negligible level until the latter part of World War II. At that time the banks began to borrow heavily in connection with the payment periods for the last three War Loan drives. This borrowing was facilitated by the special wartime discount rate of $\frac{1}{2}$ of 1 per cent on advances secured by short-term Government obligations. After the end of the war and especially after the elimination of the special discount rate in the spring of 1946, the amount of borrowing again declined. In 1950 the average amount outstanding on statement dates was only about 125 million dollars, although amounts on these days ranged from 25 million to 394 million dollars. As the result of the moderately restrictive credit policy followed by the Reserve System since the announcement of the Treasury-Federal Reserve accord in March 1951, however, banks are finding it increasingly necessary to borrow to meet temporary reserve deficiencies (see the accompanying chart). During a period of tight money market conditions in December 1951, borrowings outstanding reached an 18-year high of 959 million dollars.

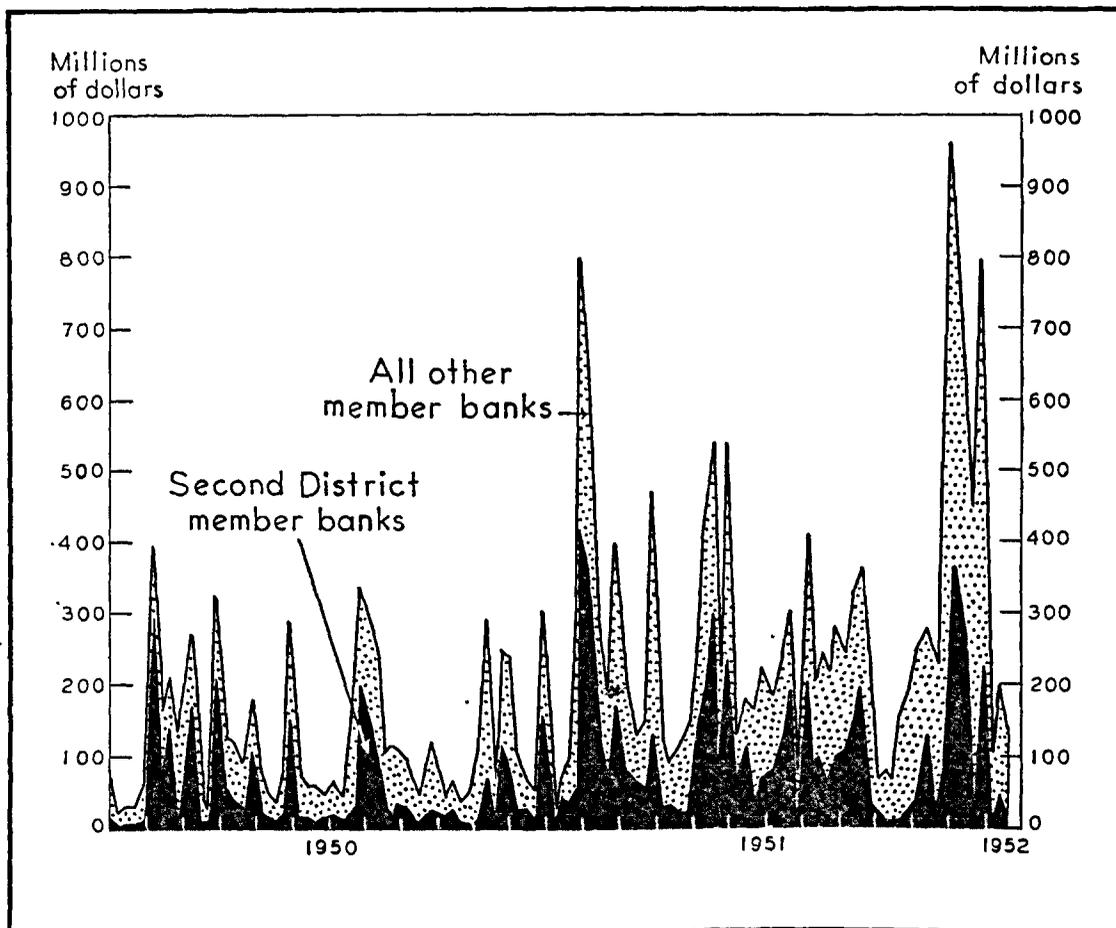
The relatively limited use of the borrowing privilege during most of the period from 1929 to

1951 may be attributed to a number of reasons. First, the large amounts of excess reserves acquired by the banks during the late 1930's largely obviated the banks' need to borrow. Second, a tradition developed against incurring a substantial indebtedness for an extended period of time. Third, the wartime arrangement whereby banks could sell Treasury bills to the Federal Reserve Banks under a repurchase option largely eliminated the necessity for borrowing during the time it was in effect. Finally, during a large part of the period it was cheaper to sell Government obligations than to borrow, and most banks had relatively large portfolios of Government securities from which such sales could be made. Yields on short-term Government securities generally were lower than the discount rate, and prices moved within a relatively narrow range. This stability reduced the risk of loss for banks holding Government obligations. A bank which sold Government securities, instead of borrowing, to meet a temporary demand for funds felt fairly confident that it could buy them back at approximately the same price as it had sold them.

A bank which wishes to borrow may do so in one of two ways: it may *rediscount* eligible paper with the Reserve Bank, or it may obtain a *direct advance* on its promissory note, which in turn is secured by either Government securities or eligible paper. Eligible paper is defined in the regulations of the Board of Governors of the Federal Reserve System as "a negotiable note, draft, or bill of exchange, bearing the endorsement of a member bank . . . the proceeds of which have been used or are to be used, in producing, purchasing, carrying, or marketing goods in one or more of the steps of the process of production, manufacture, or distribution, or in meeting current operating expenses of a commercial, agricultural, or industrial business, or for the purpose of carrying or trading in direct obligations of the United States . . ." Furthermore, to qualify as "eligible," commercial or industrial paper must have a maturity of not more than 90 days, while agricultural paper must mature within nine months of the date of discount. No maturity restrictions apply to Government obligations, although at some periods in the past, special preferential rates have been available on

² Another, possibly temporary, consideration tending to increase the use of borrowing when banks need funds is the inclusion of such borrowings in the excess profits tax base when the invested capital method of computing this tax is used. Unnecessary borrowing to obtain a tax benefit is discouraged by the Reserve Banks, however, and there is no evidence that it is being done to any appreciable extent.

Member Bank Borrowing from Federal Reserve Banks
All Member Banks and Second District Banks
 (Wednesday dates, December 31, 1949 – January 16, 1952)



loans against short-term Government obligations.

As a result of the banking crisis of 1931-33, the Federal Reserve Act was amended (Section 10[b]) to permit member banks to borrow, in case of emergency, against any asset acceptable to the Reserve Banks. This extension of the borrowing privilege beyond the holdings of normally eligible paper was enacted in 1932 to enable the banks to obtain additional cash reserves in periods of declining business activity, when their volume of eligible paper would tend to be low. Since 1933, borrowing of this emergency type has been rare. Section 10(b) loans carry an interest charge at least $\frac{1}{2}$ of 1 per cent higher than the rate for loans against eligible paper, and may be outstanding for as long as four months.

In the first two decades of Reserve System history member banks used the rediscount and direct advance methods about equally, but nowadays almost all member banks employ the direct advance method. The mechanics of the direct advance method are simpler and, in the case of renewals, more flexible. Most loans are currently made against Government obligations—partly because of the relatively simple procedures involved and the large holdings of Government securities available for use as collateral. Applications for loans secured by eligible paper must be accompanied by a complete financial statement of the original borrower for each piece of paper of \$1,000 or more that is to be used as security. For the past ten years Government securities have

been almost the only collateral offered to secure advances in the Second District; in some other sections of the country, however, minor amounts are advanced on some types of eligible paper, principally loans guaranteed by the Commodity Credit Corporation. On November 30, 1951, less than 1 million dollars, out of a total of 624 million in outstanding loans to member banks, was secured by some type of paper other than Government obligations.

Under normal conditions, loans to member banks may have a maturity of up to 90 days and arrangement can be made for renewals.³ In recent years, however, most advances to member banks have been outstanding for short periods only. The large city banks which still account for the bulk of the dollar volume of borrowing usually want the money overnight or for a few days at the most. Loans to banks outside the large money centers occasionally have fairly long maturities. Of the 624 million dollars of advances outstanding on November 30, 596 million dollars matured within 15 days. In the 1920's sometimes as much as 30 per cent of the total amount outstanding had a maturity of 31 days or more.

Total member bank borrowings fluctuate fairly widely over a year without any clear seasonal pattern, depending for the most part on money market conditions. While there are periods each year when the money market is apt to be relatively tight or easy, other factors which do not follow seasonal patterns, such as Reserve System open market operations or inflows or outflows of gold, may counteract the tendency. In 1951, however, changes in the amount of borrowings outstanding began to show a high degree of inverse correlation with changes in excess reserves. The amounts borrowed by individual banks at any one time range from a few thousand to 100 million dollars or more, depending on the size of the bank, the character of its operations, and its need for reserves at any given moment.

Although the central reserve New York City banks normally account for a large percentage of the dollar volume of loans outstanding, both in the Second District and in the country as a whole,

they usually account for only a small fraction of the number. At peak periods, as many as 80 or 100 of the 735 member banks in the Second District may borrow at a time, but only 5 or 10 of them are likely to be central reserve city banks.

In 1951 the twelve Reserve Banks combined made 11,077 loans to 1,168 member banks; the total amount of credit extended was 43.4 billion dollars. The Federal Reserve Bank of New York made 3,118 loans, to 333 banks, totaling about 13.5 billion dollars, or about 28 percent of both the total dollar volume and the total number of loans extended by the System. In earlier years New York's share of the total was larger.

The repurchase agreements which the Federal Reserve Bank of New York makes with qualified Government security dealers are somewhat analogous to member bank borrowings. Under such agreements the dealers sell Treasury bills or other short-term Government securities to the Bank subject to repurchase within 15 days at the same price. These agreements are arranged to help dealers over periods of temporary market stringency and to assist them in carrying sufficiently large "positions" to do their part in maintaining markets for Government securities.

The Board of Governors, in promulgating Regulation A (Discounts for and Advances to Member Banks by Federal Reserve Banks) noted:

The guiding principle underlying the discount policy of the Federal Reserve banks is the advancement of public interest . . .

In extending accommodation to any member bank, the Federal Reserve banks are required to have due regard to the demands of other member banks, as well as to the maintenance of sound credit conditions and the accommodation of commerce, industry, and agriculture, and to consider not only the nature of the paper offered, but also the general character and amount of the loans and investments of the member bank, and whether the bank has been extending an undue amount of credit for speculative purposes in securities, real estate, or commodities, or in any other way has conducted its operations, in a manner inconsistent with the maintenance of sound credit conditions.

The Reserve Banks are thus in a position not only to control to some extent the amount of member bank borrowing through the discount rate, but also to refuse credit accommodation to member banks in some circumstances. The Federal Reserve Act provides that the Board of Directors of each Reserve Bank shall set its discount rate,

³ Loans secured by the securities of certain Government corporations may be outstanding only 15 days.

subject to "review and determination" by the Board of Governors of the Federal Reserve System. On occasion in the past, different rates have been set in the various sections of the country, and at times there have been differential rates on various types of paper, but a single uniform rate has prevailed throughout the System since 1942.⁴ At the beginning of 1952, the rate at all Federal Reserve Banks was $1\frac{3}{4}$ per cent per annum. In the past the rate has ranged as high as 7 per cent and as low as 1 per cent. During World War II a special preferential rate of $\frac{1}{2}$ of 1 per cent for borrowing against short-term Government securities was in effect.⁵

Changes in the discount rate are concrete evidence of the Federal Reserve System's view of economic conditions and the need for facilitating or restricting the extension of credit. Furthermore, such changes tend to set the pattern for other market rates. Since the Federal Reserve discount rate is the rate of "last resort," rates on open

market commercial paper, bankers' acceptances, and prime business loans usually move up or down when a change is made in the discount rate, but they may, of course, change at other times as well even though no change in rediscount rates occurs.

⁴ Since the Boards of Directors of each of the Reserve Banks do not always act on the discount rate the same day, there may be differences for a few days in the rate charged by the various Reserve Banks.

⁵ The rate charged by the Federal Reserve Banks on loans to member banks under Section 10(b) have ranged from $\frac{1}{2}$ to $2\frac{1}{2}$ per cent above the regular discount rate. However, since 1941 this rate has been held uniformly by all the Reserve Banks at $\frac{1}{2}$ of 1 per cent above the discount rate. Rates under the last paragraph of Section 13 on loans secured by direct obligations of the Government to borrowers other than member banks are not tied to the discount rate. They have ranged from 2 to $4\frac{1}{2}$ per cent, although from the fall of 1939 to the spring of 1946 a special rate of 1 per cent was in effect on loans to nonmember banks secured by direct Government obligations. At the beginning of 1952 the rate was $2\frac{1}{2}$ per cent at eight of the Reserve Banks and $2\frac{3}{4}$ per cent at the other four.

FEDERAL FUNDS

by

HOBART C. CARR

WHAT are Federal funds? Who wants them and who supplies them? Essentially, Federal funds represent the title to reserve balances with the Federal Reserve Banks. They are thus immediately available funds, as contrasted with other types of balances, such as clearing house funds (checks or drafts on clearing house banks), which in New York are not available to the holder of the check or draft until the day after receipt. To put it another way, a check drawn on a member bank's account at the Federal Reserve Bank is collectible (upon presentation there) in funds immediately available at the Reserve Bank, while a check drawn on a clearing house bank is collectible in funds available at the Reserve Bank the next day, when clearing balances are settled on the books of the Reserve Bank.

The principal supply of Federal funds comes, therefore, from banks with balances at the Federal Reserve Bank beyond their needs for meeting reserve requirements and from non-banking institutions holding drafts on the Federal Reserve Bank. For example, if the ABC National Bank is required to have a balance in its reserve account of \$22 million on a given day, and it actually has on deposit \$25 million, it is in a position to let another bank use the excess of \$3 million. The ABC National Bank, then, might let the XYZ State Bank use the \$3 million so that the latter could thereby avoid incurring a deficiency in its own required reserves.

The rate on Federal funds varies from day to day as buyers and sellers negotiate in the money market. The XYZ State Bank normally would not pay more for the use of the funds than it would have to pay if it borrowed from the Federal Reserve Bank at the discount rate. Under present conditions the upper limit, of course, is the current discount rate;¹ the lower limit is usually barely

enough to cover the expense of writing checks and making bookkeeping entries. A helpful rule of thumb used in the money market is the calculation that interest at 1 per cent per annum for one day on \$1 million is about \$28. Since millions of dollars are being exchanged in the Federal funds market on many days, the interest return available to the seller and the savings available to the buyer (when the rate is below the discount rate) are more than enough to justify the transactions to cost-conscious bankers. During the last quarter of 1951, as the chart shows, there were a number of days when the rate was below 1 per cent.

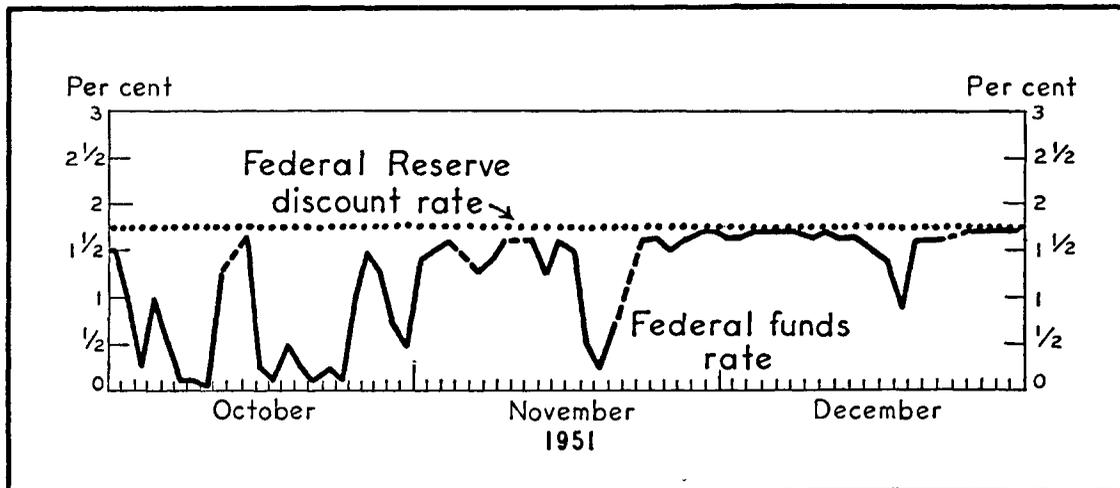
The actual transfer of Federal funds within a given locality usually involves an exchange of checks. The buying bank gets a check on the Reserve Bank and gives a check drawn on itself, which becomes payable in Federal funds the following business day. Ordinarily, the interest payment based on the number of calendar days² of use is included in the clearing house check, but some banks prefer a separate check covering the interest payment. Sometimes no interest is charged and the borrowing bank merely makes a commitment to return the same amount of funds upon demand or at a specified later date. Since this commitment involves risk in terms of the cost of the funds at the time of "returning the favor," such "swapping" of funds is not a common practice.

Sales of Federal funds between banks in different banking centers are made by using the Federal Reserve wire transfer service. The lending bank transfers funds to the borrower on one day and a reverse shift is made the next day. In New York City, these transfers to and from out-of-town banks have increased of late. Ordinarily, only the large banks in other centers are involved. When banks in the City need Federal

¹ If the discount rate is $1\frac{1}{2}$ per cent, the upper limit of the Federal funds rate is usually $1\frac{1}{8}$ per cent; if the discount rate is $1\frac{3}{4}$ per cent, the Federal funds rate usually does not exceed $1\frac{1}{4}$ per cent.

² Transactions are usually for a single day; but over week ends they are for two or three days, depending upon whether the participating institutions are open for business on Saturday.

Federal Funds Rate in New York City (Daily for the Fourth Quarter of 1951*)



* The figures shown represent the modal rate for each week day's transactions; holidays are indicated by dashed lines.

Source: Garvin, Bantel & Company.

funds, their requirements are so great that the borrowing of small amounts of Federal funds is not worth the trouble. When funds are scarce elsewhere and relatively plentiful in New York City, the same reasoning applies with respect to the lending of Federal funds by the City banks. A bank with an "overage" of 10 million dollars, for example, would not care to put itself to the trouble of parceling it out in lots of, say, 100 thousand dollars.

The increase in out-of-town participation in the New York City market has contributed to a widening of fluctuations in the flow of funds in and out of this area. One day large amounts of funds will flow into the City and the next day large sums will flow out. The magnitude of these daily flows is often upwards of a hundred million dollars. Under such conditions the Federal Reserve System's problem in gauging money market prospects and in conducting its operations in Government securities is made more difficult. The System, and the New York Federal Reserve Bank in particular, must take into account not only country-wide developments affecting member bank reserve positions but also the situation in New York City, which is by far the most important money market in the country. Anything that causes money market

conditions in New York City to depart widely and unpredictably from those in the country as a whole complicates the System's problems, for it may give rise to a situation where one type of operation may be called for locally and another in the country as a whole.

It is obvious from the nature of the transactions that the sale of Federal funds is a loan and that their purchase constitutes borrowing; member banks have been directed by the System to treat them as such on their statements.³ This results in limiting the amounts of Federal funds which may be sold by either National or State banks. With certain exceptions, a National bank is prohibited by the National Bank Act from lending to any one borrower more than 10 per cent of its paid-in capital and unimpaired surplus. New York State banks are subject to a similar limitation, except that undivided profits are included in the base. National banks, moreover, may be restricted in their purchases of Federal funds by the provision that aggregate borrowings of such banks cannot exceed their capital stock; there are some exceptions to this rule, however.

³ The Bureau of Internal Revenue of the Treasury Department so views them, too. It permits their inclusion in the "capital base" used in calculation of excess profits tax liabilities.

There are no restrictions on borrowing by New York State banks.

In practice, borrowing limitations would be a hardship only to those National banks whose capital stock is very small relative to the fluctuations in their deposits and reserves. The loan limitation, on the other hand, makes it difficult at times for banks to dispose of large excess reserves.

The over-all supply of Federal funds is determined by the familiar factors of supply and use of reserve balances. For example, when currency in circulation or Treasury balances with the Reserve Banks go down, Federal funds tend to become more plentiful. On the other hand, when the gold stock, Federal Reserve "float,"⁴ or System holdings of Government securities fall, Federal funds tend to become scarce.

The reservoir of available Federal funds at times is smaller than the aggregate amount of *excess* reserves of member banks—first, because not all member banks wish to make their excess balances available to the market, second, because considerable amounts of excess reserves which are usually held in relatively small sums by banks all over the country do not reach the market, and third, because excess reserves of certain banks may be immobilized to offset a previous (or an anticipated) deficiency in the current reserve requirement period. On the other hand, a bank may sell Federal funds even when its reserves are temporarily deficient if it is protected by "over-ages" (excess reserves) during the earlier part of the same reserve requirement period. Generally, however, a bank will supply Federal funds in the market only when it has excess reserves.

In each banking center, local banks are normally the chief source of supply of Federal funds. Of late, however, sales of Federal funds have been made, on an increasing scale, by out-of-town banks also. Banks, moreover, are not the only suppliers and users of Federal funds. In fact, the supply of Federal funds which is put on the market by non-banking institutions is quite significant. Chief among such suppliers are the Government security dealers. In the course of their operations these

dealers frequently acquire title to Federal funds, either before such funds reach commercial banks or on the way from one bank to another. For example, when a dealer sells Government securities to the Federal Reserve System he receives payment in Federal funds. The dealer may sell the funds for other means of payment (such as clearing house funds), which he may deposit with his bank or use to repay his borrowings. Government security dealers also acquire Federal funds in other ways. They may have contact with nonmember banks or with local agencies of foreign banks in possession of Federal funds. In addition, they may acquire such funds through the sale of Government securities to nonbank investors which have obtained Federal funds (in the form of Treasury checks) from redemptions of Treasury issues.

The demand for Federal funds stems mainly from member banks which need to adjust their reserve positions. Many times it is cheaper to buy such funds than to borrow at the Reserve Bank. In addition, some banks have a tradition of not being in debt to the Reserve Bank. A few of the New York City banks, for example, have not borrowed from the New York Federal Reserve Bank for years.

Banks, however, are not the sole source of demand. When dealers buy Government securities from the Federal Reserve System, they need Federal funds in order to be able to make payment on the day the securities are delivered. They may need this means of payment also in order to do business with other investors who require cash settlement on the date of sale. Among such investors are corporations and State and local governments, all of which have been increasingly anxious to keep their funds invested in Government securities up to the day when the funds are needed for actual disbursements. Thus, they may sell Government securities on the day when their own securities must be paid off, or on the day when funds are needed for transfer to distant areas. As a result of such close timing, these groups of investors need immediately available funds.

Owing to their strategic position, Government security dealers not only participate in the Federal funds market but also contribute greatly to its

⁴ For a discussion of the nature of "float," see *Bank Reserves—Some Major Factors Affecting Them* (page 25), available on request to the Federal Reserve Bank of New York.

functioning. For example, a bank in need of funds may indicate its needs to a dealer who, if he does not have the funds himself, may know some bank that does. He will also know approximately what the going rate is and will put the buyer in touch with the seller. Some dealers will perform, even for a bank, the function of agent in placing or obtaining Federal funds.

In rendering such services, for which they make no charge, the offices of many Government security dealers become, in effect, a market place. Probably the most important *single* New York City market in terms of daily dollar volume of transactions, however, is in the offices of a Stock Exchange firm. This particular firm merely performs the service function of bringing buyers and sellers of Federal funds together and is in no way a participant in the market. After having determined their reserve positions from the clearing house settlements and from other transactions, some banks telephone the broker's office in the morning and indicate whether they are in need of funds or have them for sale; sometimes they also indicate approximate amounts. Buyers and sellers are then brought together by the broker and rates are agreed upon. This service and that of

recording rate changes (or prospective changes) during the day is performed by the intermediary without fee or differential. Other banks in the City make little use of the services of an intermediary in their Federal funds operations, preferring to deal directly with one another.

Most of the above discussion of Federal funds relates to the New York City market, since that market is by far the most important one in the country. The trading in Federal funds in New York City consists for the most part of transactions between City buyers and sellers or between City banks and out-of-town institutions, but some of the trading involving out-of-town banks exclusively is also consummated here. Local markets do exist in a number of other banking centers, and the bonds between some of them (particularly the Philadelphia market) and the New York market are very strong. A few outside markets used to have rates which bore no close relationship to the New York City rates. This was true, for example, on the West Coast and in the St. Louis area, where a flat rate was charged to participating banks. Now, however, most of the rate quotations in markets outside New York City are based on City rates.

THE COMMERCIAL PAPER MARKET

by

CLIFTON H. KREPS, JR.

BUSINESS concerns may obtain short-term credit accommodation either by borrowing from banks directly or by disposing of their promissory notes through an intermediary—the commercial paper dealer—who in turn places the notes with financial institutions seeking investment outlets for short-term funds.¹ Transactions of the former type are said to take place in the customers' loan market, those of the latter type in the commercial paper market. While the term "commercial paper" may refer, in a broad sense, to all types of short-term negotiable instruments, its more restricted meaning (and the one used in this article) is that of short-term promissory notes discounted with dealers for resale to financial institutions, mainly banks. For the banks, commercial paper, besides providing an investment outlet for short-term funds, may also give access to reserve funds, when needed, by serving as eligible collateral for borrowing from Federal Reserve Banks.

The commercial paper market is the oldest of the several segments of the open market for short-term funds. It developed to substantially its present form shortly after the turn of this century, but its antecedents can be traced in our financial history for over a hundred and fifty years. An outstanding characteristic of this market is the impersonality of its operations. All borrowing and lending is effected through commercial paper dealers, except in the case of paper sold by certain large finance companies. Of the ten dealers in the market, five handle commercial paper only, while the other five are engaged in various lines of the brokerage and securities business as well. Nationwide distribution of paper is achieved through branch offices and correspondent relationships.

Formerly it was customary for dealers to accept paper from would-be borrowers for sale on a commission basis, but presently prevailing practice

¹ Businesses may also secure short-term funds by selling accounts receivable to factors or borrowing against them from commercial receivables companies.

is for dealers to purchase paper outright. Interest at the current rate is deducted in advance, as is the dealer's commission of one fourth of one per cent of the face value of each note. Notes ordinarily bear maturities of from four to six months, and are issued in convenient round denominations.²

Dealers generally resell commercial paper on a ten-day option basis, although in some cases options may be granted for fourteen days. Options are usually granted for credit checking purposes only and dealers have refused to accept paper returned for reasons other than the unsatisfactory credit standing of the maker.

The standards required of borrowers in the commercial paper market are so high as effectively to limit the number of firms which may employ this form of short-term financing. "Prime names" are found, however, in diverse lines of business and in every section of the country. The accompanying table shows how commercial paper borrowers in 1951 were distributed among various lines of activity. The geographic location of these borrowers was very wide. The Chicago Federal Reserve District, where 64 business concerns used the market in 1951, had the largest number of borrowers. The New York District, with 58 borrowers, was second, and the Boston District, with 57 borrowers, was third. In other Federal Reserve Districts, the number of concerns borrowing in the commercial paper market ranged from 47 in the Richmond District down to 12 in the San Francisco District.

Of the total of 398 borrowers in 1951, 386 (97 per cent) used one-name, unsecured promissory notes. Endorsed or guaranteed notes were given by only 9 borrowers, and notes secured by collateral were used in but 3 instances. Borrowing

² Denominations of 5, 10, 25, 50, 100, 250, and 500 thousand dollars are in use, but the larger denominations are infrequent. A borrower of 1 million dollars might execute, for example, eight notes of 50 thousand, 12 of 25 thousand, 24 of 10 thousand, and 12 of 5 thousand dollars.

Distribution of Commercial Paper Borrowers by Line of Activity in 1951

<i>Line of activity</i>	<i>Number of borrowers</i>
Manufacturers	
Textiles	68
Grains, flour, fertilizers, and seed	37
Leather and leather products	21
Metal products	18
Meat packers, canners, and sugar refiners....	14
Lumber, wood, paper, and rope	9
Food and dairy products	9
Chemicals, drugs, and paints	9
Other	10
Total	195
Wholesalers	
Groceries and food products	31
Hardware and paints	20
Textiles and leather products	8
Other	17
Total	76
Retailers	
Department and chain stores	27
Other	14
Total	41
Finance*	
Automobile	44
Small loan companies	21
Commercial	14
Total	79
Other	7
Total	398

* Does not include General Motors Acceptance Corporation, Commercial Investment Trust, Inc., and Commercial Credit Company, which do not use dealers but instead place their paper directly with purchasers.
Source: National Credit Office.

concerns had a net worth ranging from 250 thousand to over 25 million dollars, but more than half of them were concentrated in a group with net worth of from 1 to 5 million dollars.

Commercial paper is not viewed as a source of permanent working capital. Firms borrowing in the commercial paper market do so normally for the seasonal financing of inventory or other current working capital requirements, such as the carrying of trade receivables. Finance companies, however, are in the market more or less continuously,³ and some other concerns have at times borrowed for considerable periods.

³ Three of the largest finance companies now sell their paper direct, and do not use dealers at all. Paper of these companies outstanding totaled 884 million at the end of 1951, as compared with market outstandings of 434 million dollars at that time.

The commercial paper market is properly considered not as a substitute for direct bank lines of credit to borrowing firms, but as a supplement to them. Its use as a supplement to direct bank lines of credit in obtaining short-term accommodation has certain advantages for business concerns. Borrowing on commercial paper is generally less expensive than direct borrowing. It enables borrowing concerns to secure part of their funds in a national market, and thus to obtain more favorable terms from their banks on direct borrowings. If properly coordinated with direct bank borrowing, use of the commercial paper market permits a periodic "clean-up" of bank loans, and also enables firms whose banks are unable to supply the full amount of funds required to obtain additional accommodation in a market broader than the customers' loan market.

In addition, concerns which are able to use commercial paper financing become better known in the financial world and are presumably thereby placed in a more favorable position for raising such long-term capital as they may from time to time require.

Only firms in good financial and trade standing, as disclosed by statements audited by outside accountants, have access to the commercial paper market. Borrowers must be willing to submit detailed information on finances and operations to dealers and to prospective purchasers of their paper. A satisfactory current ratio, a reasonable amount of invested capital,⁴ and earnings in fair proportion to volume, as compared with similar concerns, must be shown. Funds borrowed must be used for current purposes, not for permanent investment. In addition, some commercial paper dealers have at times required firms using their facilities to borrow amounts sufficiently large to make the accounts profitable to handle.

Although commercial paper was formerly held by a wide range of investors, participation on the lending side of the market has been limited in recent years almost exclusively to commercial banks. Traditionally, commercial paper has been regarded as well adapted for use by banks as

⁴ In recent years, the minimum invested capital figure appears to have been about 250 thousand dollars. Few firms this small enter the market, however.

secondary reserves. It can be purchased from dealers in amounts and maturities which suit the needs of the individual banker. Since open-market borrowing does not lend itself to renewals, commercial paper can be relied on as a certain source of cash at maturity. Furthermore, eligible paper within ninety days of maturity may, if necessary, be rediscounted with or used as security for advances from Federal Reserve Banks. (Federal Reserve Banks cannot, however, purchase commercial paper in the open market.) Finally, the acquisition by banks of profitable new accounts may be facilitated by the purchase of commercial paper.

Rates charged on commercial paper are generally lower than those on direct bank loans, even after allowance is made for the one fourth of one per cent commission customarily charged by dealers on each note handled. The differential reflects the fact that commercial paper represents prime risks, on which the possibility of loss is very small. In fact, judging from the experience of national banks, credit institutions have suffered much lower losses on commercial paper than on either customer loans or investments. Aggregate losses of all holders were negligible prior to 1932, and no losses have been experienced since 1937.⁵ This record largely explains the strength and steadiness of the demand for commercial paper, which in recent years has enabled dealers to dispose readily of their offerings.

In spite of the strong demand for commercial paper, and of low interest rates and other advantages connected with its use by borrowers, a downward trend in commercial paper financing has been evident since 1920. The volume of paper outstanding, the number of borrowers, the number of dealers, the number of lenders, and the relative importance of this method of financing as compared with direct borrowing from banks have all declined since the end of World War I.

Commercial paper outstanding is reported to the Federal Reserve Bank of New York by dealers active in the market. The volume of such paper reached a peak in January 1920, when it totaled 1,296 million dollars. It declined to a low of

60 million in May 1933, and although it had recovered to 388 million in February 1942, the impact of war brought another decline to 101 million in June 1945. The highest volume reached through the end of 1951 (435 million in November 1951) was only one third of the 1920 total, in spite of the great increase in the dollar value of national income. Part of this decline reflects the fact that while in earlier years some leading finance companies placed their paper through dealers, they now sell it directly to banks throughout the country, and these borrowings, therefore, are not included in the totals compiled by this bank.

On the other hand, the decrease in volume has been accompanied by, and in part results from, a corresponding fall in the number of borrowers using the market. This number declined from well over 4,000 in 1920 to a low of 375 in 1945. Thereafter, the number of borrowers rose to a postwar peak of 429 in 1947 and then declined to 397 in 1950, rising by one, to 398, in 1951.

The shrinkage in the volume of commercial paper has greatly reduced the number of dealers, and has led also to a narrowing of the market on the buying side. About thirty dealers were operating in the country during the decade of the twenties, compared with only ten now (including one not recently active in the market). Purchases of paper from dealers by individuals and corporations seeking short-term investments have long since come to an end, and the large banks in New York City and some other cities have not bought commercial paper for their own account for a number of years past. The withdrawal of these banks from the market has been explained as probably resulting from the decline of the rate on prime names below the minimum commercial lending rate to which banks in leading centers tend to adhere. Large increases in the volume of other instruments suitable for use as secondary reserves (e.g., short-term Government securities) must also have contributed to the withdrawal. The shortage of offerings and the attendant limitation on new account prospects in the existing small market, coupled with unwillingness to break the rate structure, seem likewise to be important reasons.

⁵ Defaults occurred in five of the fourteen years since 1937, but full payment was subsequently made in every case.

In recent years, although there has been nationwide distribution of commercial paper, buying has been primarily by moderate-sized and smaller banks. The banks of New England, a section of the country which has always looked with favor on commercial paper financing, are among the most important purchasers.

These developments have naturally led to a decline in the relative importance of commercial paper in the loan portfolios of banks. Such paper probably never constituted an important part of these portfolios. Even at the end of 1919, open-market commercial paper outstanding was less than five per cent of the total loans of all commercial banks. But this proportion had fallen by the end of 1932 to $\frac{4}{10}$ of 1 per cent, an all-time low. By the end of 1946, it had risen to $\frac{3}{4}$ of 1 per cent of all commercial bank loans. It fell again, however, to $\frac{6}{10}$ of 1 per cent at the end of 1950. Thereafter it rose slightly to $\frac{8}{10}$ of 1 per cent at the end of December 1951.

Several broad reasons may be advanced in explanation of the decline in the commercial paper market since 1920. First among these is changes in general business conditions. Generally lessening activity in the commercial paper market during the twenties has been attributed in part to the advantage taken by many companies of inflated conditions in the stock market to acquire permanent working capital, and thus to reduce their need for open-market borrowing. Depressed economic conditions following 1929, resulting in a greatly decreased business demand for short-term funds, account for the sharp drop in the volume of commercial paper outstanding to the May 1933 low of 60 million dollars. Our entry into World War II, and the subsequent development of special arrangements to finance war production, caused the termination, in 1942, of a period of rising volume associated with the improvement in general business conditions after 1934. And during the war and postwar periods, some business concerns have used part of their prevailing high earnings to build up working capital positions, thus again, as in the twenties, reducing their need to use the commercial paper market.

A second reason for the long-run shrinkage of the commercial paper market may be found in

changes in business borrowing practices, including the large-scale resort to term loans. The development by large finance companies of methods of direct placement for their paper, by-passing the dealers altogether, has doubtless had a substantial effect in reducing the volume of open-market paper outstanding, since the high figures of the twenties undoubtedly included considerable amounts of finance paper.

The change in structure of the commercial banking system since World War I has also contributed to the decline of the commercial paper market. Mergers, the growth of branch banking, and development of the practice of correspondent participations have resulted since 1920 in the appearance throughout the country of banks and groups of banks with lending limits large enough to enable them to supply substantial lines of credit to single borrowers.⁶ Many large institutions have aggressively sought business on a national scale. This increased competition of the customers' loan market with the commercial paper market has been favored by the low money rates generally prevailing over the last two decades. Low interest rates tend to make the open market's cost advantage over the customers' loan market seem less attractive than when higher rates prevail.

Finally, the commercial paper market no longer fully enjoys one of the advantages claimed for it in years prior to 1920, namely, its usefulness in equalizing the supply of and demand for short-term commercial credit between geographical areas of seasonal surplus and deficiency. The Federal Reserve System, by providing means for the ready movement of funds throughout the country and thereby leveling out local conditions of tight or easy money, has materially reduced the market's appeal in this respect. Also, the growth of commercial bank holdings of Government securities has given banks ready access to Federal Reserve funds. These factors have contributed inescapably to the market's decline.

Commercial paper borrowing expanded steadily in the first ten months following the beginning of hostilities in Korea, rising from 240 million

⁶ National banks are prohibited by law from lending an amount larger than 10 per cent of their unimpaired capital stock and surplus to any one borrower, and many State banks operate under similar restrictions.

dollars in June 1950 to 387 million dollars in April 1951. This substantial (61 per cent) increase in volume reflected in part the waves of scare buying by consumers and in part business attempts to anticipate shortages by accumulating inventories. As scare buying and inventory accumulation waned in early 1951, commercial paper declined from its April peak to 364 million dollars in May and 331 million dollars in June.

Some concern was expressed in the market at that time over the possibility that the nation's rearmament program might soon have adverse effects on commercial paper financing similar in nature, though of lesser extent, to those associated with our participation in World War II. These adverse effects have not yet been felt, however. Instead, the volume of commercial paper outstanding increased steadily from its June low to a figure of 410 million at the end of October, the largest amount outstanding since November 1930. A further six per cent increase in November brought commercial paper outstanding to 435 million at the end of that month, and the year end figure (434 million) showed little change from this total.

This considerable increase in volume during the last half of 1951 occurred in the face of a firming of rates on commercial paper which was evident throughout the year. The rate on prime, 4-to-6-month notes ($1\frac{3}{4}$ per cent at the end of December 1950) rose to a range of $2\frac{1}{8}$ - $2\frac{1}{4}$ per cent by mid-May. By the end of the year, partly as a result of two increases (in October and December) in the bank rate on prime business loans (which brought it to 3 per cent), prime four-to-six-month borrowers in the commercial paper market were paying $2\frac{3}{8}$ per cent for accommodation.

The commercial paper market still possesses a three-eighths per cent rate differential for prime borrowers over the customers' loan market, how-

ever, even after taking account of the dealers' quarter per cent commission on each note. On the assumption that such a differential should assume more significance for prospective borrowers in a period of rising interest rates, this advantage might serve to explain some of the increase in volume of commercial paper outstanding which occurred in the last half of 1951. It might also be interpreted as a factor operating to increase volume still more in the future.

Dealers and others close to the market, however, do not appear to attach much significance to this cost advantage as a factor influencing the volume of commercial paper borrowing. Instead, they tend to explain the recent increases in volume largely in terms of normal seasonal expansion, on a larger base than has existed in recent years, and to continue to express some concern over the possible adverse effects of the defense effort on commercial paper financing.

Thus the increase in the volume of commercial paper outstanding during the past six years (from 101 million dollars in June 1945 to the November 1951 peak of 435 million) does not necessarily presage any permanent revival of the market. It is measured from an abnormally low postwar level. It occurred, moreover, while economic activity was reaching heights never before achieved in peacetime and it was influenced by unusual rates of consumer and business expenditure. The latest increases in volume have been attributed largely to seasonal factors, and the possibility still exists that conditions arising out of the defense program may eventually bring about a decline in the volume of commercial paper marketed. Finally, both the volume of paper currently outstanding and the present number of borrowers are seen to be small when compared with the figures associated with previous periods of prosperity.

BANKERS' ACCEPTANCES

by

CLIFTON H. KREPS, JR.

THE postwar period has witnessed some increase in the use of the bankers' dollar acceptance as a device for financing trade and as a medium for short-term investment. The peak volume of acceptances outstanding from the end of World War II through the end of 1951 (490 million dollars in December 1951) was almost five times that recorded in the spring of 1945, when the wartime low in acceptance financing was reached, and represented the highest level reached since February 1935. This postwar peak volume was still small compared with the prewar peak of 1,732 million dollars reached in December 1929, but the recent growth in acceptance use follows a period of continuous decline in the market which began in 1930.

The bankers' acceptance is a time draft which has been drawn on and accepted by a bank, trust company, or other institution engaged in the business of granting bankers' acceptance credits. Upon acceptance, such a draft becomes an unqualified promise to pay at maturity and is eligible, under certain conditions, for purchase or rediscount by Federal Reserve Banks. After presentation and acceptance, bankers' acceptances are either returned to the presenter (the drawer or other owner, or his agent) for sale in the open market, or discounted for him by the accepting bank.

The bankers' acceptance thus makes possible the addition of the credit of a bank or accepting institution to that of a purchaser or holder of merchandise. This addition of credit makes of the bankers' acceptance a readily marketable, negotiable instrument, through the sale of which sellers of goods may obtain funds quickly and easily. For accepting drafts on behalf of their customers financial institutions charge a commission, customarily $1\frac{1}{2}$ per cent per annum,¹ and a customer is required to provide the accepting institution

with funds to meet his drafts before they mature.

The financing of trade through the use of bankers' acceptances is a practice of very long standing. Active markets for bankers' "bills" have existed in Europe—notably in London—for centuries. Prior to World War I, however, bankers' dollar acceptances were used but little in this country. It was not the practice of national banks to accept drafts drawn on them, and only a comparatively small amount of acceptance credit was created by State banks and private bankers. The Federal Reserve Act, enacted in December 1913, authorized member banks of the Federal Reserve System to accept drafts, subject to certain restrictions and to the regulations and rulings of the Federal Reserve Board. The Act also made acceptances eligible for discount at Federal Reserve Banks, subject to the usual requirements as to maturity and endorsement, and authorized Federal Reserve Banks to deal in eligible acceptances on the open market. The passage of the Federal Reserve Act (and its amendment in 1916 broadening the accepting powers of member banks) thus made possible the development of an acceptance market in the United States.

The Federal Reserve Act authorizes member banks to accept drafts or bills of exchange drawn upon them to finance four broad categories of transactions: the import and export of goods; the shipment of goods within the United States; the storage of readily marketable staple commodities, either in the United States or in foreign countries; and the furnishing of dollar exchange. Drafts or bills accepted must have not more than six months to run, except for those drawn to furnish dollar exchange, which must have not more than three months to run.

The use of bankers' dollar acceptances for financing exports and imports is not limited to financing the foreign trade of the United States. American accepting banks are also permitted to extend dollar acceptance credits to finance the movement

¹ That is, $\frac{1}{8}$ per cent on 30-day sight drafts, $\frac{1}{4}$ per cent on 60-day sight drafts, $\frac{3}{8}$ per cent on 90-day sight drafts, etc.

of goods between foreign countries. Such broad acceptance powers were granted to facilitate financing the foreign commerce of the United States, to aid in establishing the dollar as an international currency, and to promote the development of an international money market in the United States. Drafts to finance exports and imports are often drawn for acceptance under authority of a letter of credit, issued to the drawer by the accepting bank.² American accepting banks issue such "credits" on behalf of their own customers and customers of their domestic correspondents. In addition, letters of credit are issued on behalf of foreign residents by arrangement with foreign banks,³ which are usually correspondents or branches of the accepting bank.

Acceptances covering domestic shipments of goods must have attached at the time of acceptance the shipping documents conveying title to the goods. Further, domestic shipment acceptances must have a maturity consistent with the customary credit terms in the particular business involved. These requirements are designed to prevent the improper use of this type of acceptance credit as a source of working capital.

The storage of readily marketable staples in the United States or in any foreign country may be financed by means of bankers' acceptances. Bills drawn for this purpose must be secured at the time of acceptance by warehouse, terminal, or similar receipts for the goods stored. Also, the acceptance must remain secured until paid.⁴ Since the purpose of warehouse acceptances is to permit the temporary holding of readily marketable staples in storage pending their sale, shipment, or distribution, such acceptances ordinarily should not have maturities in excess of the time necessary to effect reasonably prompt sale, shipment, or distribution of the goods into the process of manufacture or consumption.

² Letters of credit authorize the drawing of drafts in accordance with certain terms, and stipulate that all drafts drawn in conformity with these terms will be accepted and honored at maturity.

³ The arrangements provide that the foreign bank will supply the American accepting bank with funds to meet the drafts at maturity. Both banks charge a commission, the cost of which is borne by the foreign customer initiating the transaction.

⁴ Goods may be withdrawn from storage prior to the maturity of acceptances secured by them provided other acceptable security is substituted.

Member banks of the Federal Reserve System are also authorized by law, upon receipt of permission from the Board of Governors, to accept drafts having not more than three months to run for the purpose of furnishing dollar exchange to foreign countries, or to dependencies or insular possessions of the United States, where banks or bankers are justified by the usages of trade in drawing on member banks in this country to create such dollar exchange. The Board of Governors publishes a list of these countries and areas.⁵ In an early ruling, the Board appeared to imply that "the usages of trade" referred primarily to the practices growing out of a lack of frequent, regular mail connections. In later years, however, the degree of seasonality in a country's foreign trade became an important consideration.

The use of dollar exchange credits makes it easier for foreign banks to provide dollar payment for imports from the United States during periods when exports to the United States suffer a seasonal decline. Their use may thereby also help to smooth out seasonal fluctuations in exchange rates between the dollar and other currencies. However, drafts are drawn to create dollar exchange in anticipation of actual exports, and Federal Reserve regulations prohibit the acceptance of drafts drawn merely because dollar exchange is at a premium, or for any speculative purpose. Neither are member banks permitted to accept "finance bills," which are not drawn primarily to meet the demand for dollar exchange arising out of the normal course of trade.

Of a total of 490 million dollars of bankers' dollar acceptances outstanding at the end of December 1951, 235 million was based on imports into the United States, 133 million on exports from the United States, 48 million on goods stored in the United States, 44 million on goods stored in or shipped between foreign countries and 7 million on goods shipped in the United States. Twenty-three million, an unusually large amount, was for the purpose of furnishing dollar exchange. With this exception, however, the order of relative importance indicated by these figures is one which

⁵ All countries of Latin America (except Haiti and the Dutch West Indies), Australia, New Zealand, the Australasian dependencies, and the Dutch East Indies (Indonesia) are presently on the list.

has persisted with but slight change since the mid-thirties. Since 1943, imports alone have been the basis for more than half of all dollar acceptance credits granted in every year.

The market for bankers' acceptances includes, in addition to the various sources of supply, dealers and a variety of institutions which buy and hold acceptances.

Acceptance dealers buy bills from holders seeking to dispose of them, sell bills to those seeking them, and generally make ready markets, for either purchases or sales. They ordinarily purchase acceptances outright, instead of handling them on a commission basis. Dealers operate with small portfolios and endeavor to sell bills purchased as quickly as possible. The dealers' compensation is represented by the spread between the rates at which they buy and those at which they sell, currently $\frac{1}{8}$ of 1 per cent.

Dealers were active in the acceptance market almost as soon as the market was established. One of the largest of present-day acceptance houses commenced business in January 1919, and by the spring of 1921 Eastern dealers had established branches on the Pacific Coast. Some dealers active during the twenties withdrew from the market following 1929, and in 1931 only eight dealers remained. At present, there are six dealers, of whom four account for the greater share of the business. Only one of these deals exclusively in acceptances, the others being also engaged in one or more phases of the securities business.

Accepting banks discount some of their own bills directly and also purchase the bills of other acceptors from correspondents and in the open market. They purchase for their own account and for the account of foreign and domestic correspondents. At the beginning of the American acceptance market, the number of accepting banks increased rapidly, and in the years 1918-21 a total of several hundred was reached. The number has declined since then, as banks in smaller interior cities, and those without adequate knowledge of acceptance financing or properly equipped acceptance departments, dropped out of the market. By the end of 1930, about 164 banks were listed as acceptors of bankers' bills, while at present there are about 125 accepting institutions. But through-

out the history of the American acceptance market, by far the greater part of the accepting has been done by 40 to 50 institutions. These large acceptors are located in major financial centers. New York, the country's foremost financial center, is the principal acceptance market.

Prior to 1932, both Federal Reserve Banks and "others" (that is, all other buyers except accepting banks) were much larger holders of acceptances than the accepting banks. But during the period 1932-45, accepting banks held well over half of the total volume of acceptances outstanding in every year. Yields on acceptances in the years before the depression were low in comparison with commercial paper, Government securities, and call loans secured by stock exchange collateral. Banks therefore held acceptances only in moderate amounts, for use in adjusting their reserve positions. However, between 1932 and the outbreak of war, when excess reserves were large, accepting banks retained larger amounts of their own acceptances than before, and also sought bills more aggressively in the market. Starting in 1930, on the other hand, the total volume of acceptances outstanding declined sharply. As a result of these factors, bill portfolios of accepting banks came to represent a much larger proportion of total acceptances outstanding than had previously been the case. By 1945, when the low point in volume of acceptances outstanding was reached, accepting banks held over three fourths of the total, compared with only 11 per cent in 1929. Also, within their portfolios, the accepting banks' own bills increased markedly in importance relative to bills bought, rising from less than one third in 1929 to almost 60 per cent in 1945. In the postwar period, as acceptances outstanding increased in volume from their wartime low, and as short-term interest rates became firmer, the proportion of total acceptances outstanding held by accepting banks declined (to 40 per cent in December 1951). But the proportion of accepting banks' own bills to their total acceptance portfolios (60 per cent in December) showed little change.

In the earlier years, as already indicated, Federal Reserve Banks were large purchasers of acceptances. They bought both for their own account and for the account of foreign central banks. Tra-

ditionally, Reserve Banks never sought actively to buy acceptances for their own account; instead, they stood ready to purchase, at specified rates, all prime, eligible, endorsed acceptances offered by banks. Also, it was the policy of the Reserve Banks not to sell acceptances acquired for their own account, but to hold them until maturity. Reserve Banks did enter the market actively in order to purchase and sell for foreign central bank correspondents, however.

When private demand for acceptances was strong, open market rates tended to fall below the buying rates of the Reserve Banks. But throughout the period from 1916 to 1931, private demand was generally insufficient to clear the market. Market rates therefore rose toward Federal Reserve buying rates, and the Reserve Banks were offered large quantities of acceptances. Between 1916 and 1924, they bought each year from 25 to 60 per cent of all bills drawn. And from 1925 through 1931, their holdings for their own account at the end of each year averaged from one fifth to one half of total acceptances outstanding.

Reserve Bank acceptance portfolios shrank very rapidly in 1932, but rose slightly in 1933, owing to the banking crisis. Thereafter, the Federal Reserve Banks held no acceptances for their own account until 1945, and they made only nominal purchases for foreign correspondents in scattered years. In 1946, in 1947, and again in the spring of 1951, small amounts offered at Reserve Bank buying rates were purchased by the Reserve Banks for their own account. In 1946 also, there was a resumption of purchases at market rates for the account of foreign correspondents. These purchases have continued throughout the postwar period, though in amounts greatly reduced from those of the late twenties.

The almost complete cessation since 1934 of Federal Reserve acceptance purchases for their own account is primarily the result of two factors—(1) the spectacular decrease in the supply of acceptances following 1929 and continuing until the spring of 1945, and (2) the concomitant growth of demand by accepting banks (which had not been large holders of acceptances during the twenties) for the smaller supply. As a result of these influences, practically no acceptances were

offered to the Reserve Banks from 1934 through 1945. The small purchases of 1946 and 1947 coincided with a relatively sharp increase in the supply of acceptances in these years. By 1948, private demand for acceptances had accommodated itself to the larger supply and Federal Reserve purchases for own account ceased until the end of March 1951, when an offering of 2 million dollars was taken by the Reserve Banks.

During one or more stages in the life of the American acceptance market, bankers' acceptances have been held by various categories of investors other than the Federal Reserve Banks (for own or foreign account) and the accepting banks (for their own account). Such categories include non-accepting banks (for their own account), customers and correspondents of domestic commercial banks, dealers in bankers' acceptances, foreign banks with agencies in the United States, savings banks and insurance companies, and individuals, partnerships, associations, and corporations in many other lines of activity. The great decline since 1929 in the volume of acceptances outstanding, however, has caused a considerable narrowing of the market. The major holders of acceptances today, other than accepting banks for their own account and Federal Reserve Banks for the account of foreign correspondents, are believed to be foreign banks with agencies in the United States and domestic commercial banks for the account of foreign customers and correspondents.⁶

Holders other than the Reserve Banks and accepting banks were an important source of demand for bankers' acceptances prior to 1932. Their holdings from 1925 through 1930, for example, were in most months larger than those of the Reserve Banks, and exceeded holdings of accepting banks in every year. But from 1932 through 1945 they played a subsidiary role to accepting banks as buyers of acceptances. After 1945, as the supply of acceptances began to increase, both accepting banks and other holders added to their portfolios through 1947. Holdings of accepting banks de-

⁶ Foreign correspondents of domestic commercial banks are usually also commercial banks, although some foreign central banks maintain deposits with American commercial banks. Like the foreign correspondents of Federal Reserve Banks, they have for years followed the practice of investing part of their dollar holdings in bankers' acceptances.

clined in 1948 and 1949; those of other holders, however, continued to increase. Thus in 1949, for the first time since 1930, other holders provided a larger source of demand for bankers' acceptances than accepting banks. They continued in 1950 and 1951 to be the most important factor in the demand for acceptances. At the end of December, they held 272 million (56 per cent) of the total of 490 million dollars of acceptances outstanding. This compares with holdings at the same time of 197 million (40 per cent) by accepting banks and 21 million (4 per cent) by Federal Reserve Banks for the account of foreign correspondents.

Two reasons may be advanced in explanation of the strong demand for acceptances by "others" in the postwar period. First, as indicated above, this demand is mostly foreign in origin, and bankers' acceptances have long enjoyed a high degree of popularity abroad as a short-term investment medium. Second, the income (discount) earned on bankers' dollar acceptances owned by nonresident, foreign corporations has been held by the Treasury Department (in a 1947 ruling) to be exempt from Federal income taxation. From the standpoint of foreign investors, this gives the bankers' accep-

tance a considerable advantage over other comparable, short-term, dollar investment media (Treasury bills, for example), the income from which is subject to a 30 per cent withholding levy.

Further growth in the use of bankers' dollar acceptances depends on the future course of privately financed international trade. Domestic uses of acceptances have never been important in this country, since the practice of open-account financing was firmly established here before an acceptance market developed. It is the international uses, particularly the financing of merchandise imports and exports, which have traditionally accounted for the bulk of the bankers' dollars acceptances drawn. Substantial increases in the volume of acceptances outstanding, therefore, can be expected only from expansion of these international uses. Such expansion presupposes a growth of international trade in nongovernmental channels, whether through an over-all increase in trade (both private and governmental) or through a shift of existing trade from governmental to private channels.

FINANCING SECURITY BROKERS AND DEALERS

by

STANLEY L. MILLER

FUNDAMENTAL changes have occurred since the thirties in the market for bank loans secured by stock exchange and other security collateral. In slightly more than two decades the call loan market has contracted greatly both in volume and in its relative importance in the money market. Although at one time call loans were the most important means used by banks to employ surplus funds and to adjust reserve positions, they have now become a comparatively small outlet for loans direct to borrowers and the formal arrangements of an impersonal market no longer exist. While students of the money market need no longer focus as much of their attention as they did in the past upon the fluctuations of call loan rates, the volume of call loan activity, the mechanics of market operations in call loans, and upon the degree of interdependence between this market, the money market, and bank reserves, it is important to understand the institutional arrangements which have succeeded to the functions formerly served by the call loan.

In 1929, before the stock market break, security loan rates in New York varied from day to day over a range from about 5 to 15 per cent, generally remaining well above the rates for prime commercial paper. The aggregate volume of security loans extended by banks and others was several times the volume of recent years. The market then was impersonal, with transactions occurring largely through the money desk on the New York Stock Exchange; that desk was discontinued in 1946, after more than a decade of negligible activity at an unchanging interest rate of 1 per cent, and for many years security loans have largely been made by banks through direct negotiation with the borrowers. Loans "for the account of others" (than banks) have been legally prohibited since mid-1933. The proportion of their earning assets which the weekly reporting banks in New York city lodged in security loans at the end of December 1951 was about one third of the 1929

ratio; for all other banks, the proportion was only about one ninth that of 1929. To a degree, security loans have tended to become comparable with customer loans and so are part of the normal lending business, rather than representing primarily a residual employment for excess funds, or the first means of obtaining funds from the money market in the event of a drain on bank reserves.

Bank reserve adjustments have not for some time centered on the call loan market, and for nearly a decade short-term Treasury securities have been relied upon as the principal (negotiable) money market instrument. As a result, the liquidity of the money market no longer depends upon call loans that reflect activity and prices in the stock markets; nor are the stock markets heavily influenced by short-run changes in the availability of money market funds. Thus, an institutional arrangement that was at one time an important source of cyclical instability in the financial sector of the economy has largely disappeared.

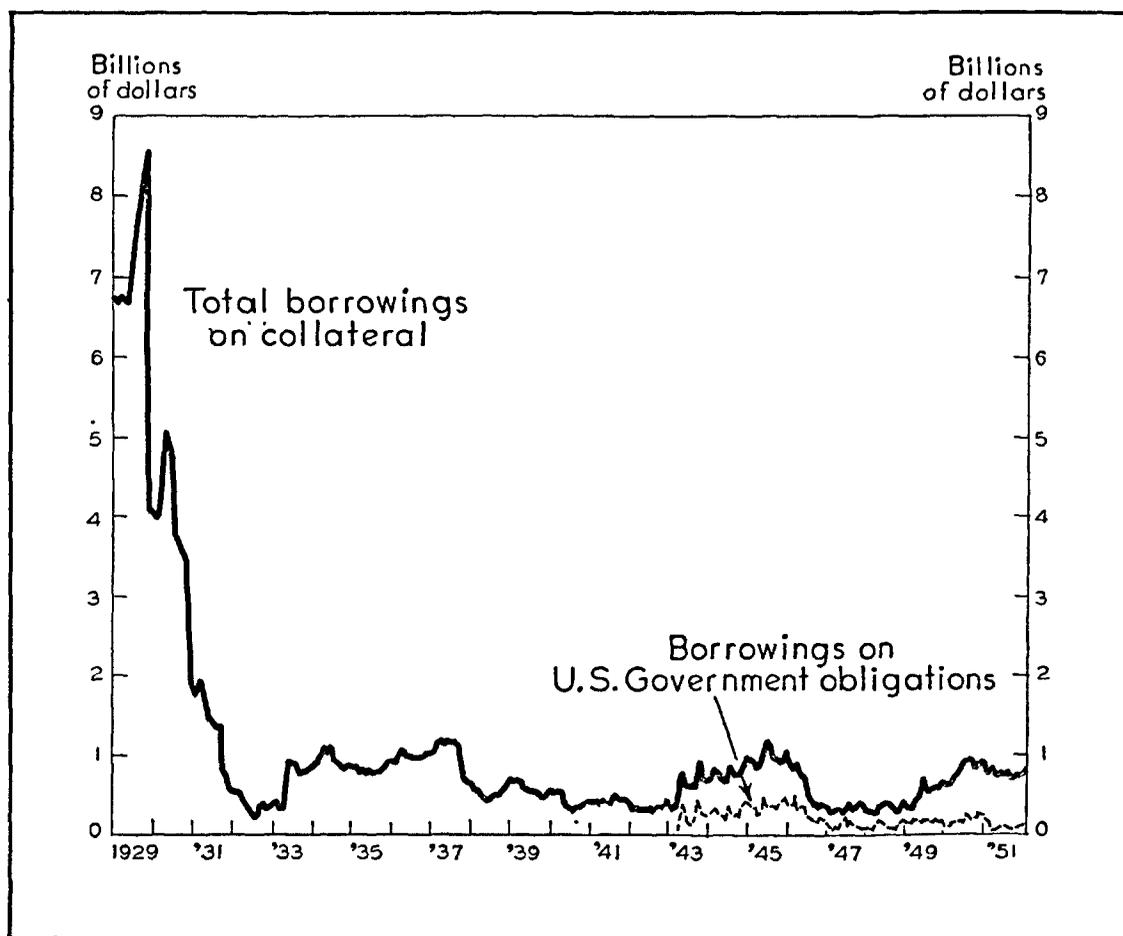
This article will describe, in part, the kind of security loan market that has emerged, following these fundamental changes. It discusses the present characteristics of one of the most important segments of that market, the loans to brokers and dealers. The review will include a brief summary of the purposes for which brokers and dealers borrow, the sources of funds for these loans, the principal types of loans made, the legal margin requirements, and the customary practices of the banks in relating their own margin requirements and interest charges to the nature of the securities offered as collateral.

WHY BROKERS AND DEALERS BORROW

Brokers and dealers in securities require bank credit in order to finance: (1) their customers' purchases of securities, (2) their own "positions" or inventories of securities held either in short-term trading accounts or in longer-term investment accounts, (3) their purchasing and carrying of new security issues pending sale to ultimate in-

Chart 'I

Borrowing on Collateral by Members of the New York Stock Exchange*



* Amounts outstanding at end of month, January 1929—December 1951. Loans on U. S. Government securities first shown for March 1943. The figures in this chart differ from those shown in Chart II. Chart I represents loans exclusively to members of the New York Stock Exchange. They include loans from banks and all other sources in and outside of New York City.

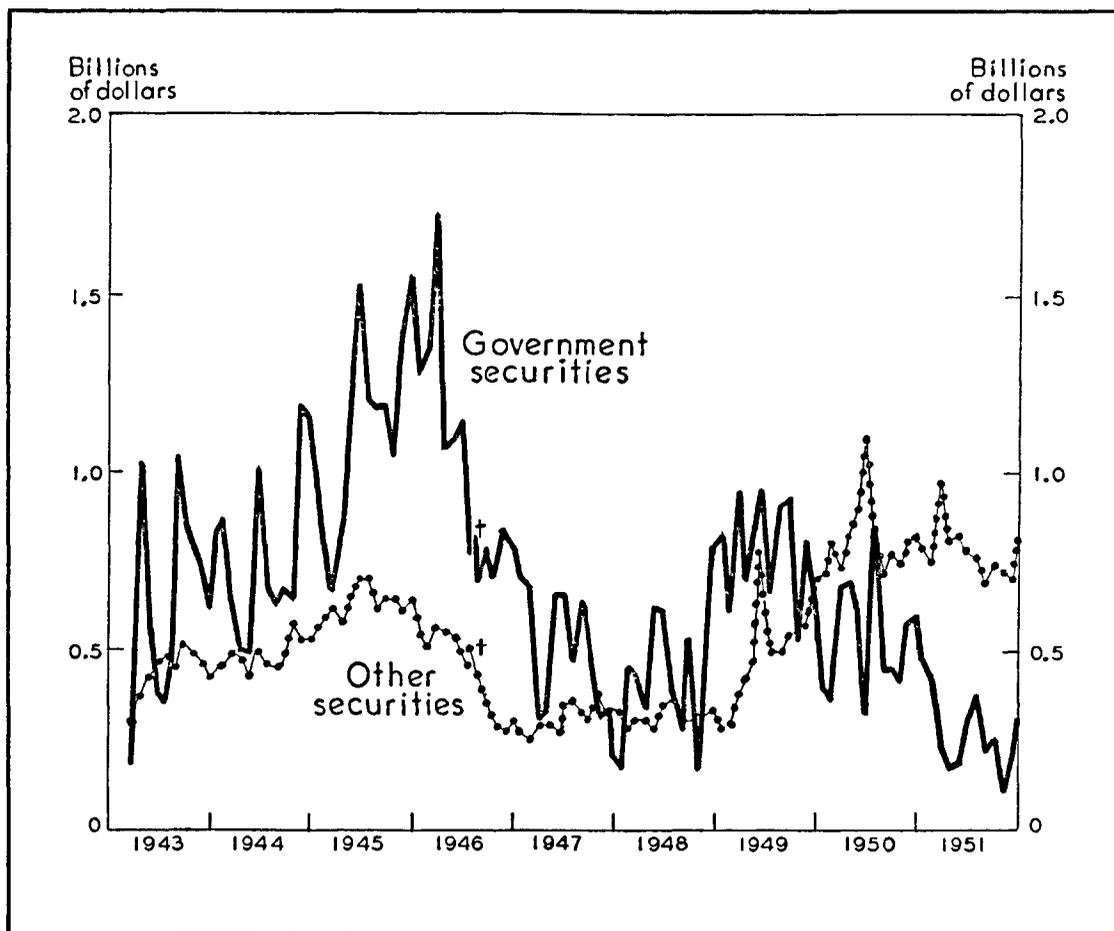
Source: New York Stock Exchange.

vestors, and (4) the delivery or clearance of securities traded.

Available data are not sufficiently detailed to show the actual volume of bank funds used in satisfying the various purposes for which brokers and dealers borrow. It is possible, however, to indicate their order of magnitude within the two broad classes into which broker and dealer loans are subdivided—those for "purchasing or carrying other securities" and those for "purchasing or carrying Government securities". On December 26, 1951, loans on other securities at the weekly

reporting member banks were about 1.0 billion dollars; those on Government securities were roughly 390 million dollars. The total of 1.4 billion dollars included practically all loans made to brokers and dealers by banks in the United States; and the reporting banks in New York City accounted for more than three quarters of this total. Although the reporting banks themselves do not submit data indicating the amount of their loans used for each of the four purposes mentioned above, rough approximations can be estimated from data released by the New York Stock

Chart II
 Outstanding Loans to Brokers and Dealers for Purchasing
 or Carrying Securities by New York City Weekly
 Reporting Member Banks*



* Amounts outstanding on last Wednesday of the month, March 1943—December 1951. See also footnote to Chart I.

† Change in the number of weekly reporting member banks.

Exchange and other sources. Loans on "other securities" are largely of the first type (broker borrowing to finance customer purchases—mainly of stocks), although at times perhaps as much as one fourth of the total might be accounted for by either the second or the third purpose (that is, financing broker or dealer "positions", or their holding of new securities pending sale to ultimate investors). The fourth purpose relates largely to over-the-counter market transactions, which may have to be financed briefly during the process of transferring ownership; but since the greater part

of these loans are made and repaid within the same day they are not shown in bank data on outstanding loans (which are reported as of the close of business on the reporting date). As far as the broker and dealer loans on Government securities are concerned, these are predominantly for financing "positions," although a small portion often represents overnight loans arranged to finance the "carry" while a transfer of ownership is being effected.

The aggregate volume of loans to brokers and dealers has fluctuated between two thirds of a

billion and two billion dollars over a large part of the post-World War II period (through the end of 1951). The variation is influenced by such factors as the current volume of trading in securities, the amount and rate of sale of market offerings of securities by business and governmental bodies, changes in security prices and in interest rates, and variations in the readiness of investors (including dealers) to take speculative positions.

During the war and early postwar years, dealer loans on Government securities constituted the largest single category of loans to brokers and dealers. Toward the end of 1945, for example, the loans on Governments amounted to close to 2 billion dollars, more than twice the volume of borrowings on other collateral at that time. There has been a sharp reduction in dealer loans on Governments since 1947. And, as already noted, on December 26, 1951 loans to brokers and dealers for "purchasing or carrying Government securities" at all weekly reporting member banks were less than two fifths of the loans on other securities. In aggregate amount, broker borrowings on listed securities at the end of 1951 constituted the largest outlet for bank loans to security brokers and dealers, although they have not changed materially in volume over the past several years. Dealer borrowing on Government securities ranked second in volume, and loans to finance dealer positions in unlisted bonds and stocks appeared to rank third. A large segment of this third type probably represented funds borrowed to carry dealer positions in State and local government issues.

New security financing plays at times an important part in the fluctuations in outstanding security loans. As a rule, new publicly offered security issues will have been largely sold by the underwriters before payment is due to the issuing corporation. Loans to carry the remainder, pending sale to investors, are usually outstanding no more than one week. But a turnabout in security prices, creating difficulties in the sale of new issues and congestion in the market, can become an important factor leading temporarily at least to an increase in security loans. Some new bond issues floated during past periods of market weakness have been carried by the underwriters on a call loan basis

for several years. Treasury refunding operations have often been an important influence on the volume of dealer loans on Government securities. At such times there is ordinarily an increase in the volume of trading in Government securities, as those investors whose needs are not exactly met by the newly offered security attempt their own refunding through sales of the maturing issue in the market. In the course of facilitating this redistribution within the market, dealers tend to increase their own positions. It is, to a large extent, only after the new securities are actually issued that sales bring about a reduction in dealer positions and dealer loans. Dealer positions may also be increased by the shifting of securities within the market that precedes Treasury new money offerings.

SOURCES OF FUNDS

Security loans are mainly an outlet for the funds of banks in the leading financial centers. The member bank call report for June 30, 1951 showed that loans to brokers and dealers by central reserve city banks in New York and Chicago were about 11 per cent of the total loans of these institutions and 87 per cent of all member bank loans to brokers and dealers. The loans of the New York City banks, furthermore, were 11 times those of the Chicago banks. Within New York City, only banks located in the financial district in lower Manhattan make loans to brokers and dealers on a large scale. Other banks apparently have neither the experience nor the large volume of demand necessary to make this kind of loan profitably at the comparatively low interest rates prevailing over the last two decades.

Brokerage firms which are members of an organized stock exchange have a second important source of funds, the "free" cash credit balances of their customers. Member firms may utilize such balances to finance the margin purchases of other customers. Thus, on June 30, 1951, New York Stock Exchange member firms reported that while customer and firm accounts had debit balances of about 1.3 billion and 375 million dollars, respectively, outside borrowing amounted to only 680 million dollars. The difference of more than one billion dollars was largely supplied by the free credit balances in the accounts of other customers.

TYPES OF SECURITY LOANS

Security loans may be divided into two types, those which finance holding and those which are made for a few hours to finance a change in ownership. The former may be either demand (call) or time loans; the latter are either day or overnight loans. The call and time loan agreements between brokers or dealers and the banks are similar in that under either form the borrower agrees to keep the loan properly margined (that is, a specified proportion of his own funds invested in the securities) and to permit securities pledged against the loan to be sold by the lender in satisfaction of the debt in the event of default or of failure to maintain adequate margin. The time loan takes the form of a note in a specific amount with a specified maturity date, and may be renewed at the current renewal rate of interest. The call loan, on the other hand, takes the form of a general agreement, in which the amount of the loan is not specified. Under this agreement successive loans and repayments are made, and any indebtedness may be terminated at short notice either on demand of the lender or repayment by the borrower. In both cases, substitution of collateral is freely permitted with due regard for the quality of the new collateral and the margin required. Most security loans are made on a call basis, and in current practice such loans are rarely called. Repayment is normally at the initiative of the borrower. Interest costs are usually computed daily at the prevailing rate.

The maximum amount of call (and time) loans outstanding to any one borrower is governed by the quality of the collateral, the credit standing of the broker or dealer, and the loan limit of the bank. The New York Stock Exchange stipulates that the aggregate indebtedness of a member firm may not exceed 15 times its net capital. The loan officer of an individual bank determines the credit limit for each broker or dealer on the basis of the borrower's credit standing and the quality of the pledged securities. The aggregate amount of loans to any one broker or dealer may not, of course, exceed 10 per cent of the capital and surplus of a national bank (or 10 per cent of the capital, surplus, and undivided profits of a New York State member bank), except that for certain

security loans including those on Government securities the maximum is 25 per cent.

The practice in this country of making full cash payment daily for security purchases (in contrast with the fortnightly settlements in Great Britain, for example) has necessitated the creation of special types of temporary credit accommodation for dealers in securities. These are known as the day loan and the overnight loan, which are used primarily by those dealing in Government securities and various over-the-counter issues (most payments for stock exchange transactions are offset through clearing arrangements). Day loans, payable on the same day they are made, enable dealers (1) to pay for securities they have contracted to purchase and receive, and (2) to pay off a loan against which securities have been pledged in order to release those securities for delivery to a buyer against payment. Overnight loans provide dealers with funds to pay off day loans, and thus enable them to hold overnight the securities they have not been able to deliver during the day.

Both the day and the overnight loans are evidenced by a note for a specific sum of money. The overnight loan is fully secured by securities pledged against the loan. The day loan is safeguarded by a lien or chattel mortgage on the securities in the process of receipt or delivery, and a list of the securities involved may be attached as part of the day loan note, but the lender does not have possession of the securities. Day loans require no margin and the rate of interest in New York has remained fixed at one per cent since the middle of 1929. Overnight loans are subject to the same maximum loan values and interest rates as other security loans.

REGULATIONS T AND U

Under powers delegated by the Securities Exchange Act of 1934, the Board of Governors of the Federal Reserve System has issued Regulations T and U which, in general, place limits on borrowing to purchase or carry "listed" securities (i. e., securities listed on national security exchanges registered with the Securities and Exchange Commission). Regulation T applies to extensions of credit which brokers and dealers (including members of national security exchanges) make to their customers; Regulation U applies to loans

made by banks on any stock for the purpose of purchasing or carrying listed stocks. The Board has the power to vary the borrowing limits, through stipulating "maximum loan values," with changing conditions. At the present time, the effect of the Regulations is to require customers (including brokers when operating for their own account) to use their own funds, that is to provide "margin," for 75 per cent of the purchase price of a security. Federal Government, State, and municipal bonds are exempt from both Regulations. Other bonds are exempt from Regulation U (loans made by banks) but not Regulation T (loans made by brokers). Regulation T, in addition, prohibits brokers and dealers from extending credit for the purpose of purchasing or carrying those securities which are both unlisted and nonexempt.

In extending credit to firms which are members of a stock exchange, the New York City banks require such firms to sign a statement declaring that they are subject to Regulation T. In the case of loans on listed issues, borrowing firms are also required to segregate their customers' securities from their own holdings. Among other purposes, this segregation permits the banks to lend to brokers somewhat more freely against customers' securities, which have already been "margined" by the customers under Regulation T, than on securities owned by the broker himself, since the banks must treat these in conformity with Regulation U.

The legal prescription of maximum loan values, generally referred to as the regulation of margin requirements, has been effective in limiting the volume of bank credit used to finance speculative transactions in listed stocks. The security loan, and more particularly the call loan, has in the process been made a relatively more stable money market instrument, much less vulnerable than formerly to forced sales because of changes in security prices.

INFLUENCE OF COLLATERAL ON LOAN VALUES AND INTEREST RATES

As shown in the accompanying table, the maximum loan values which banks themselves permit for security loans, and, to a lesser extent, the interest rates charged on such loans, vary with the

Terms of Call Loans to Brokers and Dealers on Securities by New York City Banks (as of December 31, 1951)*

Type of issue	Loan values (In per cent of market price)	Interest rates (In per cent)
<i>Outstanding</i>		
<i>Stocks</i>		
<i>Listed</i>		
Customer accounts	66%	2½-2¾
Firm accounts	25	2½-2¾
<i>Unlisted</i>	50-60	2½-2¾
<i>Bonds</i> §		
Corporate	75-95	2-2¾
Municipal	80-98	2-2¾
Government†		
Maturing in 1 year or less....	95-100	2-2½
Maturing in over 1 year.....	95-98	2-2½
<i>New issues</i>		
<i>Stocks</i>		
<i>Listed</i>	90-95	2-2¾
<i>Unlisted</i>	90-95	2-2¾
<i>Bonds</i>		
Corporate	90-95	2-2¾
Municipal	90-95	2-2¾

* Data are a composite of lowest and highest loan values and interest rates found in a survey of four leading New York City banks.

§ Includes short-term securities.

† Loans to dealers maintaining active markets in Government securities.

type of security offered as collateral. Inquiries at four leading New York City banks showed that as of December 31, 1951, the loan values which the banks specified for brokers' loans on listed stocks generally amounted to two thirds of the market value of such securities whenever the purpose of the loan was to finance customer dealings already subject to Regulation T. Banks may permit these loan values to rise to, but not often over, 75 per cent. To carry listed stocks (apart from underwriting operations) in their own portfolios on borrowed money, however, stock exchange firms and others could borrow no more than 25 per cent of the market value, as required by Regulation U. The loan values which the banks specified on loans secured by unlisted stocks were in the neighborhood of 50 per cent. Progressively higher loan values are customarily allowed on loans secured by corporate bonds, the securities of State and local governments, and obligations of the Federal Government. Loans on

new corporate and municipal security issues, held in underwriting syndicates pending distribution to the public, are regularly permitted to represent a higher proportion of market value than would normally be allowed for loans on outstanding issues.

Rates charged brokers and dealers on security loans also vary somewhat depending on the quality of the collateral and the character of the business of the broker or dealer. Interest rates charged by the New York City banks on loans secured by stock exchange collateral are usually $\frac{1}{4}$ to $\frac{1}{2}$ of one per cent higher than those charged when the collateral consists of Government securities. The interest rate on call loans secured by stocks was raised to $2\frac{3}{4}$ per cent on December 18 by most banks, although a few banks continued to quote the previous prevailing rate of $2\frac{1}{2}$ per cent. Most New York City banks also charge the stock exchange call rate on broker and dealer loans secured by corporate and municipal bonds

and unlisted stocks. Only those dealers who actively maintain markets in Government securities are granted the lower rate on Government security loans. Call rates on Governments fluctuate daily with money market conditions. Toward the close of 1951, the rate ranged from a minimum of 2 per cent to a maximum of $2\frac{1}{2}$ per cent.

SECURITY LOANS

NO LONGER A MARKET INSTRUMENT

The present characteristics of the security loan market are markedly different from those of the late twenties. As presently organized, on an over-the-counter basis, the market for loans to brokers and dealers accounts for a relatively small proportion of the earning assets of the commercial banking system. Despite the fact that most of these loans are made in demand (call) form, the possibility no longer exists for a repetition of the type of "call money panic" that at times proved so disastrous in the past. The call loan has ceased to be an important money market instrument.
