

FEDERAL RESERVE BANK OF NEW YORK



MONTHLY REVIEW

JULY 1968

Contents

Euro-Dollars in the Liquidity and Reserve Management of United States Banks	130
The Business Situation	139
The Money and Bond Markets in June	142
Recent Capital Market Developments	147

Volume 50

No. 7

Euro-Dollars in the Liquidity and Reserve Management of United States Banks

By FRED H. KLOPSTOCK*

During the last decade, the large commercial banks in the United States have exhibited a remarkable degree of imagination and initiative in broadening their access to pools of liquid funds. Their success in attracting corporate and institutional balances through the issue of negotiable certificates of deposit (C/D's) is a case in point. Other examples are their issue of "consumer" investment certificates and the flotation of unsecured notes and debentures in the capital market. More recently this increased readiness of banks to rely on what has become known as "liability management" in the adjustment of liquidity and reserve positions has been demonstrated by their large-scale use of balances acquired through their overseas branches in the Euro-dollar market. The overseas branches became active in this market soon after it emerged in the late 1950's, and have gradually become the most important participants. But only since the midsixties have several of the major United States banks employed large amounts of Euro-dollar balances for adjustments of their money positions in response to changing needs for funds, and more and more banks have opened overseas branches to gain access to the Euro-dollar market.

For some of the large money market banks, Euro-dollars have now become a major source of funds for loans and investments; in certain instances, the head office's dollar liabilities to overseas branches exceed or closely approach its outstanding C/D's. Altogether, liabilities of American banks to their overseas branches are now in excess of \$6 billion. It is true that this total includes some funds that do not originate in the Euro-dollar market, but on the other hand the United States

banks' use of Euro-dollar balances in the management of their portfolios is not limited to the amounts reported as liabilities to their branches. For example, they may use such balances for transfers of loans to overseas branches; or they may conserve head-office resources by referring some loan demands to their branches for financing with Euro-dollars; and those that have no branches overseas may sell loans to foreign banks or borrow from foreign banks directly. The following pages examine the institutional and economic background of the practice of using Euro-dollars in portfolio management, a practice that has greatly increased during the last two years.

THE EURO-DOLLAR MARKET AS A SOURCE OF FUNDS FOR UNITED STATES BANKS

The Euro-dollar market, which centers on London with links in several other major financial centers in Western Europe and elsewhere, is a telephone and telex network through which many of the world's major banks bid for and employ dollar balances. By a generally accepted definition, Euro-dollars come into existence when a domestic or foreign holder of dollar demand deposits in the United States places them on deposit in a bank outside the United States, but the term also applies to the dollars that banks abroad acquire with their own or foreign currencies and then employ for placement in the market or for loans to customers. Compared with other markets used by American banks for adjusting their liabilities, the Euro-dollar market possesses distinctive features which both add to and detract from its usefulness as a source of funds.

By far the greatest merit of the market from the viewpoint of United States banks is that it offers the possibility of obtaining balances that are not subject to the regulatory restrictions applicable to demand and time deposits. Unlike United States banks, the overseas branches may

*Manager, International Research Department, Federal Reserve Bank of New York.

pay interest on dollar call deposits and on time deposits with maturities of less than thirty days. Thus, United States banks can gain access, through the overseas branch route, to sizable amounts of funds that they are precluded by various regulations from acquiring directly from foreign depositors. In addition, balances payable at overseas branches are not subject to Regulation Q rate ceilings, a factor of great significance when rates for money market instruments in the United States or Euro-dollar rates rise above the ceiling rates payable on deposits. And, finally, branch balances placed in head offices are not subject to member bank reserve requirements or to the fees of the Federal Deposit Insurance Corporation (FDIC). Indeed, especially during periods of tight money, the differential between Euro-dollar rates and time deposit rates in the United States tends to reflect this saving.

Another advantage of the market is its broad scope. Actual and potential Euro-dollar sources are diverse and widely dispersed geographically. They include countless banks and corporations in many parts of the world as well as monetary authorities and international financial institutions. When conditions in some countries restrict offerings by suppliers, conditions elsewhere typically free more resources for Euro-dollar placements. Monetary authorities and international institutions may add to their offerings when commercial banks and corporations pull back theirs. In short, there is a high degree of supply flexibility in the Euro-dollar market.

It must not be thought, however, that the market is always a stable source of funds for United States banks. On the one hand, there may be problems of oversupply—because of relative ease in the money markets of major supplier countries or because foreign customers' demand for loans has been weak or their established credit lines have been filled. At such times the branches will quote defensively, but even so some of them tend on occasion to take in sizable balances from day to day, as they are loath to refuse offerings by correspondent banks and corporations among their established customers that habitually lay off temporarily excess dollar balances with them. Several of the branches of major banks are in effect the residual takers of foreign banks' liquidity reserves, which tend to converge upon them largely in the form of call deposits. If these balances cannot immediately be employed abroad, the respective head offices tend to use these balances as an alternative to Federal funds purchases. Under such conditions, branch deposits in head offices may rise above the targets set by the money-desk or portfolio-management departments.

On the other hand, there are occasionally supply stringencies, notably during periods of heavy seasonal

pressures. Moreover, restrictive monetary policies in major supplier countries may reduce offerings by foreign banks. Individual branches may then be unable, at a given rate, to replace maturing deposits. If such deposits account for a sizable proportion of a branch's aggregate balances, its deposits at the head office may drop off sharply, to be built up again when the branch has been authorized to offer more competitive rates. Timing is often important, as other branches and other banks abroad may absorb early in the day major portions of the funds offered. It is true that central banks have increasingly been prepared to supply funds to the Euro-dollar market when it is exposed to pressures, but there are still occasions when the branches are forced to withdraw balances placed in their head offices, thereby forcing the latter to seek additional funds in the United States money market.

At times, the demand for Euro-dollars for use in foreign money and loan markets is so pressing that rates rise to levels that are out of line with those quoted in markets for comparable funds in the United States, thereby inducing the head offices not to renew maturing deposits. This situation is subject to reversal, because the head offices normally absorb so large a proportion of aggregate Euro-dollar deposits that any reduction of their takings will tend to bring rates down. In any event, Euro-dollar rates, especially those for call money and other short-dated funds, which are less suited than the more distant maturities for use in commercial loan markets abroad, are highly sensitive to conditions in the United States money market.

It is true, of course, that banks must allocate a major part of their branches' aggregate Euro-dollar resources to the loan and investment transactions of the branches themselves. The banks cannot disregard the demand for branch loans that comes from the affiliates abroad of important head-office accounts. And the branches must accommodate their own customers with whom they have developed close deposit and loan relationships. But the needs of the branches themselves do not appear to have restricted head-office use of the market for its own requirements. The head offices can almost always obtain additional balances in the market, at a price, if they are pressed for funds. The market has proved to be highly interest-rate elastic, and thus, as rates escalate, offerings rise at a very rapid pace. This was demonstrated during the credit crunch in the summer and fall of 1966, when United States banks by raising their bids pulled very large additional amounts into the market. The Euro-dollar pool is not inexhaustible, but it can be replenished by a large variety of funds held in several types of assets and currencies. Therefore, relatively small shifts from other uses within and to the Euro-

dollar market can satisfy a rise in the demand for funds.

There are some negative aspects of the Euro-dollar market from the viewpoint of money position management. The market is far away, and because of the time difference between London and New York (not to mention Chicago or San Francisco) opportunities for immediate and direct head-office communication with it is confined to a few hours during the morning. Moreover, due to the settlement and clearing periods involved, several days pass before a head-office decision to take on Euro-dollars is reflected in available funds in the banks' reserve accounts. Meanwhile, conditions in domestic money markets may have changed significantly. Closely connected with the distance factor is the problem of adequate information. Because of the diverse conditions prevailing in the several major areas where dollar supplies originate, it is not always easy for the branches to obtain accurate knowledge of prospective market factors that might affect rates and amounts offered. And, in turn, head-office money position managers have not always found it easy to convey to their London offices their exact needs in terms of amounts and maturities, since their desire to draw on the market is partly conditional on the rates at which balances in various maturity sectors become available, and the rates change in response to market conditions.

The large banks with overseas branches differ greatly in their appraisal of the merits of the market as a source of funds for head-office use. A few banks look upon the market as one of their preferred methods of portfolio adjustment and have made very heavy use of it almost continuously. For most large banks, however, Euro-dollars appear to be only a second choice. Several of these banks have used the market on a substantial scale solely during periods of severe reserve pressure.

By far the largest part of branch placements with head offices is held in New York, but several banks in other financial centers also absorb relatively sizable balances from their branches. A few New York banks—and several banks elsewhere that have only recently opened overseas branches—have not yet made any large-scale use of Euro-dollar deposits.

The banks differ substantially in the proportion of their branches' aggregate dollar resources that they take into their own positions. At present, almost half of the branches' aggregate dollar balances, excluding interbranch deposits, are held in head offices, but for the branches of a few banks the figure is in excess of 60 per cent while for others it is below 40 per cent.

The bulk of Euro-deposits taken for head-office use is obtained through branches in London. These branches are of course a conduit for funds from many parts of the

world. In fact, some banks have instructed their branches in other Euro-dollar centers to redeposit excess dollar balances in London offices. United States banks also obtain sizable funds directly from their Paris branches and, to a lesser extent, from their branches in Nassau. Direct placements in United States head offices by branches elsewhere are generally quite small.

MAJOR HEAD-OFFICE USES OF BRANCH BALANCES

Conceptually, the funds of overseas branches in head offices may be separated into three main categories: (1) balances borrowed by the head offices on a more or less continuous basis for the purpose of enlarging the banks' reserves, (2) balances acquired for short-term adjustments of reserve positions, and (3) working or operating balances to accommodate adjustments between head-office and branch accounts. The boundaries between the three categories are, at least for some banks, somewhat blurred; often the same balances serve all three functions, and clearly, whatever their maturity or the ultimate objective of their acquisition, they all add to the resources of the borrowing banks. Apart from these three categories, Euro-dollars are also used by foreign banks and overseas branches for the purchase of loans from United States banks and to finance loans that otherwise would have been made directly by American banks.

CONTINUOUS BORROWING FOR ENLARGING RESERVES. The major motive of United States banks in using Euro-dollar funds has been to obtain balances for enlarging or maintaining their credit potential. In their efforts to locate and solicit additional loanable funds, the banks have become increasingly attracted by the continuous availability in the Euro-dollar market of very large amounts of funds in a broad maturity range. Although a large part of these funds are call and short-dated deposits, experience has demonstrated that over extended periods even the call component remains quite steady in the aggregate. Thus the presence in, or availability to, the Euro-dollar market of very large interest-rate-sensitive funds provides the banks with an attractive alternative means of meeting demands on their liquidity positions and adding to aggregate deposit stability.

Rate advantages explain, of course, much of the heavy use of Euro-dollar deposits. During recent years, they have been for extended periods less expensive, or at least not more expensive, than domestic deposits. Even when rates in the Euro-dollar market are nominally higher than those in the C/D market, it may be advantageous to increase holdings of branch balances, relative to sales of

C/D's, because of their exemption from reserve requirements and FDIC fees. A further saving associated with the acquisition of branch balances arises from technical factors. When a bank obtains Euro-dollar balances from its branch, it may benefit from reduced reserve requirements, while clearing the transaction, for at least one day—and for more if the date of the acquisition is followed by a holiday or a weekend. The reason is that the check received by a bank in connection with the transfer of a Euro-dollar deposit acquired by its branch increases cash items in the process of collection, which are deductible from demand deposits in computing reserve requirements even though the branch balance does not add to deposits subject to such requirements. This saving arises only if the Euro-dollar deposit is repaid by a so-called "bills payable" check. Outstanding checks of this type need not be included in deposits subject to reserve requirements in contrast to checks issued by banks for purposes other than borrowings. The initial saving would cancel out at maturity of the funds if they were repaid with a check not exempt from reserve requirements.

As noted, the head offices may stand ready to accommodate important suppliers, even if Euro-dollars are offered at rates somewhat above those quoted for comparable domestic funds. Generally, the large banks are very much aware of the advantages of regular contacts and dealings in the market. Some of them have concluded that a continuous readiness to accept large amounts irrespective of immediate needs permits the overseas branches to improve their feel of the market and their information on prospective trends. Moreover, if needs for overseas balances are less urgent at a particular time, they may well rebound in the not too distant future. Keeping a hand in the market makes it a more reliable source of funds. In short, a number of United States banks believe that complete withdrawal from the market when domestic funds can easily be substituted for Euro-dollars would not serve their longer run interest, and on occasion they have been quite willing to pay a price, albeit small, for continued participation.

The head offices issue directives to the branches concerning the amounts they wish to take and the rate limits, either for specific maturities or for a "package" of maturities. During periods of rapidly mounting or declining pressures, head-office instructions to the branches regarding targets and rates are often changed from day to day. If money market conditions in the United States are relatively stable, the directives are issued for extended and sometimes indefinite periods ahead. Because the rising yield curve for Euro-dollar deposits often makes the more distant maturities too expensive relative to C/D rates for

corresponding maturities, there is a tendency for head offices to concentrate on the shorter maturities among the balances that branches tap in the Euro-dollar market. Moreover, substantial offerings in the market generally carry short maturities. On occasion, the banks have instructed their branches to reach out for rather distant maturities, so that the banks' loan and investment portfolios can be financed on a more secure basis. Sometimes, the banks acquire longer term Euro-dollars from their branches and invest them in liquid assets in order to maintain a comfortable cushion against the possibility of losing C/D money if open market rates should exceed the Regulation Q ceilings.

BORROWING TO FINANCE WEEKEND RESERVE POSITIONS. United States banks seldom use Euro-dollar balances for specifically adjusting day-to-day cash and reserve positions except over weekends. The Euro-dollar market is generally not suited to immediate reserve adjustment needs. One reason is the distance factor: In the morning hours, London time, when the branch officers would need to obtain indications of immediate head-office needs in the light of current offerings, United States banks have not yet opened for business; by noon, New York time, when the evolving cash needs of banks are becoming evident, the London market is closing up shop. Of still greater significance is the fact that the normal delivery period for Euro-dollars is two days, and even if arrangements can be made early in the morning London time to acquire dollars for same-day delivery in New York, these balances become available as bank reserves in Federal Reserve accounts only the next day (see below). Moreover, banks find it difficult to estimate changes in reserve positions for more than a few days in advance. For these reasons, banks generally consider the Federal funds market far superior to the overnight sector of the Euro-dollar market for very short-term adjustments of reserve positions. Yet, a few banks appear to be quite prepared for a variety of reasons to make continuous use of overnight deposits as a substantial core of relatively low cost funds.

An important use of the Euro-dollar market as a tool of short-term reserve management is for the financing of weekend reserve positions. In fact, most of the banks with branches employ overnight deposits each Thursday as a partial substitute for Federal funds purchases on Friday. Because of New York check-clearing practices, overnight borrowing in the Euro-dollar market value-Thursday for repayment on Friday can serve as bank reserves for three days—from Friday through Sunday. Euro-dollar transactions are generally settled through checks on New York banks. Unlike Federal funds transactions, which are recorded in Federal Reserve accounts immediately,

these checks must pass through the New York Clearing House, and it is not until the following business day that they become balances in the Federal Reserve accounts of member banks. Thus, a check drawn on bank A and deposited on Friday in bank B in repayment of a Euro-dollar deposit does not draw down A's reserves until Monday; the same applies if the check is deposited on the day before a holiday.

These weekend and holiday clearing delays are reflected in the rates that head offices must pay for Euro-dollar balances. For a one-day Euro-dollar deposit on Thursday, a United States bank in need of funds to meet its reserve requirements will be willing to pay a rate close to three times the anticipated Federal funds rate on Friday; and it will pay a corresponding multiple when the settlement date for these overnight balances precedes any other period when the New York money market is closed for one business day or longer. Thursday-Friday transactions have become so common that the rates have adjusted themselves almost fully to the anticipated Federal funds rate on Friday. Nevertheless, the banks continue to have their London branches engage in these transactions on a large scale—often for purely defensive purposes—because any bank that does not bid for overnight dollars offered value-Thursday is likely to suffer sizable losses in its Federal Reserve account as other American banks take advantage of the Thursday deposit offerings.

The money-desk managers of United States banks that wish to acquire Thursday-Friday money must make their basic decisions on amounts and rates at the end of the preceding week, or at the latest on Monday, on the basis of projections of supplies and rates in the Federal funds market the following Friday. Within limits further adjustments can be made on Tuesday or Wednesday, but the bulk of the available funds has been spoken for by that time. Actual conditions on Friday may well be and often are different from those projected. By Wednesday, however, the money-desk manager knows the amount of Euro-dollar overnight deposits that will be available on Friday, and in the light of this information he can adjust his Federal fund and dealer loan operations during the closing days of the week.

No statistical information is extant on the volume of Thursday-Friday transactions by the overseas branches of United States banks. Aggregate branch balances in their head offices tend to increase on Thursday by amounts in the \$100 million to \$300 million range, depending in part on conditions in the Federal funds market. But the overall volume of Thursday-Friday transactions is in excess of this range, which does not reflect balances that mature or are called on Thursday and are placed again for one day.

There are other categories of Euro-dollar deposit transactions that take advantage of the delay in the clearing of checks in New York. For instance, a foreign bank may accept an overnight Euro-dollar deposit on Thursday and make arrangements to sell the resulting Federal funds on Friday through its United States correspondent. For foreign banks, however, such transactions are less attractive than direct dealings with American banks' overseas branches, and have come into disuse with the branches' increasing activity in the Thursday-Friday market on behalf of their head offices.

In addition, use of the foreign exchange market to take advantage of the United States check-clearing procedure is quite common. For instance, a foreign bank, using a foreign currency, may purchase dollars in New York value-Thursday for resale value-Friday. Although the dollars it buys and sells are not "good money" until the following business day, the foreign currency is immediately available to the buyer for investment, because in foreign financial centers checks deposited before a designated hour are cleared the same day. Thus on Friday, when its Thursday dollars become available as "good money", a foreign bank can put them to weekend use in the Federal funds market and also use its Friday repurchase of local exchange for payments needs or for investment over the weekend in a foreign market. Of course, a bank engaging in such a transaction forgoes earnings on Thursday. Or a United States bank buyer of foreign exchange value-Friday can employ the funds abroad over the weekend and also retain its weekend use of the dollars with which it paid for them, since the check deposited for the settlement of the transaction is not debited against its reserve account until Monday. These and similar operations have been reflected in spot and forward exchange rate distortions and erratic flows of funds from foreign money markets.

OPERATING BALANCES OF BRANCHES. The third type of liabilities to overseas branches consists of balances carried with head offices for operating purposes. This item has no direct relationship to the branches' overall dollar liabilities. Actually there may be no necessity for a branch to carry an operating balance in its head office if it is authorized to overdraw its account at its head office in case of need, or if the various components of its assets carry maturities of the same length as those of its corresponding deposit liabilities. Moreover, branches are ordinarily able, at a price, to obtain additional balances in foreign currency deposit markets. But the voluntary credit restraint program has made it undesirable for head offices to expose themselves to sudden branch overdrafts for meeting deposit liabilities that cannot be replaced at the time of maturity without costly rate sacrifices. Some

branches have been willing to build their asset portfolios on deposits that carry somewhat shorter maturities than loan and deposit placements abroad: it is not easy, and is at times impossible, to match dollar loans to corporations with dollar deposits of similar maturities. Branches also need operating balances to discharge obligations under letters of credit and to take care of a variety of payments orders by customers, and they need contingency reserves in view of their large outstanding loan commitments.

Dollar balances at head offices have on occasion served also as contingency reserves for the branches' deposit and loan operations in sterling. Because of the swings in confidence in the pound, sterling deposits have typically been short dated. On the other hand, the branches' commercial loans in sterling—made both to United Kingdom firms and to European affiliates of United States corporations—are usually for extended periods. At times, though less so recently, the branches have preferred to draw down and convert their dollar balances at head offices in lieu of meeting their sterling liabilities through other more costly portfolio adjustments.

EURO-DOLLAR FINANCING OF LOAN TRANSACTIONS. There is, finally, the special category of Euro-dollar transactions represented by head-office loan transfers to branches. To some extent these entail the sale of outstanding loans under repurchase agreements. Such sales appear to arise mainly from efforts of head offices to maintain their outstanding claims below the quota ceilings set by the voluntary credit restraint program. The sales wipe out any simultaneous increase in branch placements in head offices that have resulted from branch acquisitions of deposits abroad for the specific purpose of purchasing the loans, but the head offices obtain funds for further loans. Of course, the head office does not acquire additional funds if the loan is paid for out of existing branch deposits. In that case the head office reduces its outstanding loans and its liabilities ("due to" branches) by the same amount. Its overall balance sheet thus contracts.

The large banks do not appear to have employed repurchase agreements with branches as a device for obtaining funds for additional domestic loans. Those banks that have considerable credit leeway under the restraint program have made several sizable sales of loans to branches. Under these circumstances, however, the purpose appears to have been to enable individual branches to acquire earning assets with funds that they had taken in to accommodate important nonbank accounts on their books.

Of greater importance than such sales, in terms of dollar amounts involved, are loans made by branches to meet loan demands on their head offices. For these loans to head-office customers the branches employ deposits ob-

tained in the Euro-dollar or other foreign currency deposit markets. It is, of course, possible that a branch would have increased its Euro-dollar liabilities even in the absence of this particular loan demand and would have placed additional balances in its head-office account.

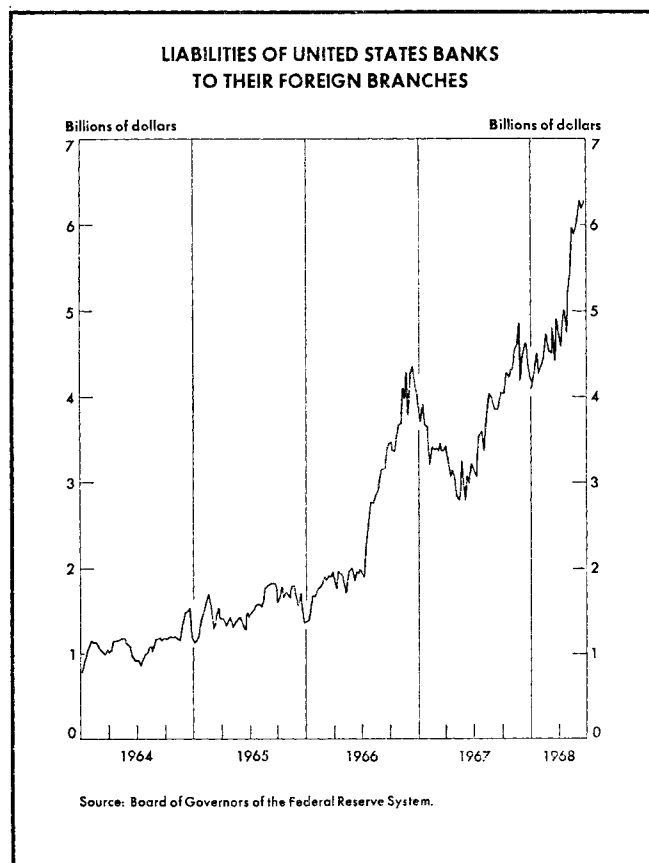
It should be mentioned again that many United States banks without branches sell substantial amounts of their foreign loans to foreign banks under repurchase agreements, primarily in order to hold their foreign claims below the credit restraint program ceilings; the foreign banks finance these loan purchases largely with Euro-dollars. And there are indications that an increasing number of banks without branches have made arrangements to borrow Euro-dollars directly from foreign banks. These two types of transactions are analogous to, and have the same liquidity and reserve effects as, the corresponding transactions between head offices and their overseas branches.

HEAD-OFFICE USE OF BRANCH BALANCES, 1964-68

Before 1964, relatively few of the banks with overseas branches made much use of the Euro-dollar market for their head-office operations. Not until the summer of that year did aggregate head-office liabilities to branches remain continuously above \$1 billion. Through most of 1965, they were substantially below \$2 billion, as shown in the chart. The majority of the banks with branches apparently preferred other options for obtaining funds, either because of cost considerations or because head-office portfolio managements had not yet developed a close liaison with overseas branch managements.

During the first half of 1966, as Federal Reserve pressures on the banks' reserve positions mounted, borrowings gradually increased and the aggregate due to branches approached the \$2 billion level. The increased resort to the Euro-dollar market during this period represented primarily an attempt to obtain resources over and above those available in domestic deposit markets and thereby to lessen susceptibility to reserve pressures.

Toward the end of June 1966, the pace of borrowing through branches quickened even more. The large money market banks then used the Euro-dollar market to cushion the effects of another weapon in the Federal Reserve's armory of credit control—administration of Regulation Q. With the Reserve System using Q as a deliberate means of reducing the rate of credit expansion, the banks were virtually priced out of the national C/D market. But about four fifths of the loss in outstanding C/D's suffered during the summer and fall of 1966 by the twelve banks with overseas branches was offset by increased Euro-dollar tak-



ings from branches. Euro-dollars at that time were in ample supply, partly because of large-scale shifts of funds out of sterling into dollars. By mid-December, aggregate redeposits in head offices, which had then reached \$4.3 billion, amounted to substantially more than half of the twelve banks' outstanding C/D's, compared with less than one fifth in mid-1966.

Thus, during the summer and fall of 1966, Euro-dollar balances played an important role in banks' efforts to meet loan demands and commitments, offset losses of other resources, and reduce the need to liquidate securities at distressingly low prices. Moreover, the banks were then experiencing an increase in demand deposits relative to time deposits, and the resultant effects on required reserves were cushioned by the acquisition of balances not subject to reserve requirements.

Late in 1966 and early in 1967, when a large movement of foreign funds into the London money market coincided with a considerable easing of money market conditions in the United States, the use of branch balances by head offices fell rapidly, and by May 1967 it had dropped

by about \$1.5 billion from the peak level reached in December 1966. The figure then began to rise, however, and in November 1967 it began to exceed the amount outstanding during the 1966 credit crunch. During the short span of six months beginning in the middle of May 1967, aggregate borrowings from branches rose by about \$2 billion.

This 1967 surge of branch deposits occurred in a market atmosphere quite different from that prevailing in the second half of 1966. During the latter part of 1967 the demand for business loans was relatively weak. The Federal Reserve supplied bank reserves quite liberally until late in the year, and banks were able to make considerable progress in improving their liquidity positions. There was little, if any, need to reach out for funds in Europe to compensate for shortages of funds in the United States. It appears, therefore, that there was a fundamental change in the banks' attitude with respect to taking Euro-dollars from their branches. Before the summer of 1966, several of them approached the Euro-dollar market with some hesitation, looking on it merely as a marginal source of funds. In general, they discovered the market's full potential only after having been virtually forced into it. As they became familiar with its breadth and depth, they lost their skepticism and came to regard the market as another normal source of funds to be tapped whenever the price was right.

Other factors also contributed to the surge in the use of Euro-dollars during 1967. Foreign investors shifted substantial amounts of their short-term sterling investments into the Euro-dollar market in response to the Middle East crisis in June and the weakening of sterling in the fall of 1967 prior to its devaluation. In addition, market relationships had been established, with considerable effort, and the banks desired to maintain them. Several felt that a withdrawal from the market because domestic funds could be easily substituted for Euro-dollars would not serve their longer run interest, even if continued participation sometimes involved a rate sacrifice.

In the spring of 1968, as money market conditions in the United States tightened, aggregate balances held for overseas branches passed the \$5 billion mark, and toward the end of June they amounted to more than \$6 billion. Sizable dollar losses by the Bank of France contributed importantly to Euro-dollar availabilities during the closing weeks of the month.

IMPLICATIONS FOR MONETARY ANALYSIS AND POLICY

United States banks' initiative in attracting hitherto untapped liquid funds—their gradual shift from a passive to

an active role in acquiring funds through incurring liabilities—has raised important issues for monetary analysis and policy. And their recently increased use of balances obtained by the overseas branches from foreign sources has added to both the number and the complexity of the issues with which analysts and policy makers need be concerned. The success of the banks' efforts to acquire additional funds abroad has implications that touch on many aspects of the financial mechanism, including the country's balance of payments, the distribution of bank reserves and the banks' response to reserve pressures, the foreign ownership of United States money market instruments, and monetary policy.

One of the major consequences of the vast increase in the intermediation of overseas branches for head-office account has been a sizable substitution of United States bank liabilities to their branches for foreign central bank holdings of United States money market assets, and with it an improvement in the United States balance-of-payments position as defined on the official reserve transactions basis. To the extent that foreign-owned dollar balances are placed with United States banks instead of being used in foreign deposit and loan markets, the dollar supply offered on foreign exchange markets abroad is reduced, and thus also for the time being the potential offerings of dollars to foreign monetary authorities. Those authorities' holdings of dollars may even decline, as foreigners' demand for dollars to deposit in the Euro-dollar market may cause central banks to supply dollars to their exchange markets. Since foreign central banks tend to invest the bulk of their dollar holdings in United States Treasury securities, either a diversion of potential dollar balances from monetary authorities or a diminution of their existing holdings occurs largely at the expense of foreign official investments in Treasuries. Moreover, the retention or expansion of dollar balances in the hands of private holders benefits the official reserve transactions balance of the United States. However, some foreign central banks may suffer unwelcome losses in their own reserves as a result of developments in the Euro-dollar market. And if they take monetary action in an effort to reduce the outflows of funds, rates in their own money markets may escalate to levels that are undesirable for domestic reasons.

These substitutions and balance-of-payments effects are also likely to occur when central banks decide on their own initiative for reasons of domestic or international monetary policy either to deposit funds in the Euro-dollar market or to enter into swap transactions with their commercial banks. Especially if attractive swap rates are available, foreign commercial banks will make substantial

use of such facilities and convert large amounts of domestic-currency assets into dollar balances. Such injections of foreign official funds into the market often add significantly to supply availabilities and tend to reduce upward pressures on Euro-dollar rates or even to lower rate levels. As a result, United States banks are likely to take on larger Euro-dollar balances through their branches than they would have acquired in the absence of these official injections of funds. Thus, the monetary reserves of foreign central banks are channeled through the Euro-dollar market to United States banks, and this country's official reserve transactions balance is thereby improved.¹

The transformation of demand deposits into branch balances in head offices does not change United States banks' total reserves, but it does reduce the level of their aggregate required reserves, since overseas branch balances in head offices are not subject to reserve requirements. This fact has to be taken into account if, as is often done, current changes in bank credit are estimated on the basis of changes in deposits subject to reserve requirements. Moreover, the banking system as a whole can carry a somewhat larger amount of earning assets on the basis of a given amount of reserves. Since the banks that obtain balances from their branches typically are in a net reserve deficiency position and tend fully to employ available funds, their additional reserves are likely to be reflected immediately in a bank credit increase or reduced borrowings from other sources rather than in larger excess reserves. In other words, these banks' acquisition of reserves through the Euro-dollar operations of their branches increases the utilization of the banking system's reserve base, as do Federal funds purchases from those banks that are less fully invested.

The banks that have direct access to the Euro-dollar market through their foreign branches are in a position to increase their share in total member bank reserves. If they were to abstain from absorbing Euro-dollar balances, most of the underlying funds would be invested by foreign central banks in the United States money market and would therefore be more widely dispersed throughout the banking system. Of course, to the extent that foreign central banks place their dollar gains in

¹ Some branch funds in head offices may originate in shifts of private foreign investments from the New York money market to the Euro-dollar market. In that event, the official reserve transactions balance would not be improved. But the evidence indicates that such shifts are not likely to occur when rates in the New York money market are relatively high. And when money market rates in this country are low in relation to Euro-dollar rates, the banks have little incentive to increase their liabilities to their branches.

time deposits with American banks, these balances would be largely held with the same banks that acquire funds through their branches. To be sure, banks without branches may borrow Euro-dollar balances from foreign banks, and such borrowings are also exempt from Regulation Q ceilings and reserve requirements. But the branch route to Euro-dollars is more convenient and, in the long run, probably less expensive. Moreover, it allows access to a much larger volume of funds than banks can or would wish to secure through borrowings abroad. And only the larger banks in the United States have the credit standing that would enable them to obtain sizable dollar balances from foreign banks.

For individual banks with overseas branches, the availability of still another liability market of great breadth provides additional elbow room for portfolio and reserve adjustments. Inasmuch as the Euro-dollar market is subject to influences emanating from prevailing climates in foreign money markets, its supply-demand balance at any one particular point in time may differ greatly from that in the New York money market. Money market tightness here may be accompanied by relative ease in the Euro-dollar market. United States banks that find it undesirable or are unable to liquidate securities at such times, or are unable to add to their outstanding C/D's because of interest rate limitations by the Federal Reserve, may find a ready alternative source of funds in branch balances. But, even in the absence of pressure or regulatory interference in domestic money markets, access to Euro-dollars offers additional opportunities to minimize portfolio adjustment costs—as does resort to the national C/D market. Moreover, the very knowledge that they are able to fall back on the Euro-dollar market, and to use it in addition to or as an alternative to other liability markets, may induce portfolio managers to carry larger amounts of loans relative to aggregate deposits, and fewer liquid assets relative to aggregate assets, than they would otherwise consider prudent.

Monetary policy has had to take into account the buildup of overseas branch deposits in United States banks, and now continuously weighs the various implications and consequences of current and prospective changes in these placements. During periods of balance-of-payments pressure, the effect of branch deposits in head offices on the net demand for the dollar in foreign exchange markets is, of course, a matter that deserves particular attention. Nor

can policy makers overlook the ways in which their decisions are transmitted through branch operations in the Euro-dollar market to foreign money markets and reflected in foreign monetary reserve changes, notably in countries that are under balance-of-payments pressure themselves. Now that banks in this country have become a major receptacle for the liquidity reserves of foreign commercial banks, the United States authorities have added reason to take an interest in foreign money market conditions. Similarly, they have additional reason to concern themselves with the Euro-dollar operations of those central banks that use the market as a major channel for making adjustments in their own monetary reserve positions. Indeed, prospective developments in the Euro-dollar market are now regularly discussed at the monthly meetings of central banks at the Bank for International Settlements (BIS) in Basle. The Federal Reserve's interest in the market is also demonstrated by the fact that Reserve credit has repeatedly been provided to the market through activation of the System's swap line with the BIS which now amounts to \$1 billion. Under this arrangement the BIS can draw dollars from the Reserve System for placement in the Euro-dollar market.²

On the domestic side, the Federal Reserve System must be concerned with the redistribution of reserves arising from the access of banks with overseas branches to balances that other banks find it difficult or impossible to attract. It must also take into account shifts in the banks' aggregate demand for reserves as they acquire reserve-exempt balances. Furthermore, it must make allowance for the increased ability of the money market banks—the major source of business loans to large corporate borrowers—to fall back on the Euro-dollar market whenever the interest rate ceilings impair the banks' ability to obtain funds in the national market for C/D's. Indeed, now that some of the major commercial banks in the United States look beyond this country's borders for funds with which to make adjustments in their liquidity and reserve positions, a new and significant dimension has been added to central banking in the United States.

² For a description of these operations, see Charles A. Coombs, "Treasury and Federal Reserve Foreign Exchange Operations", this *Review* (March 1968), pages 38-52.

The Business Situation

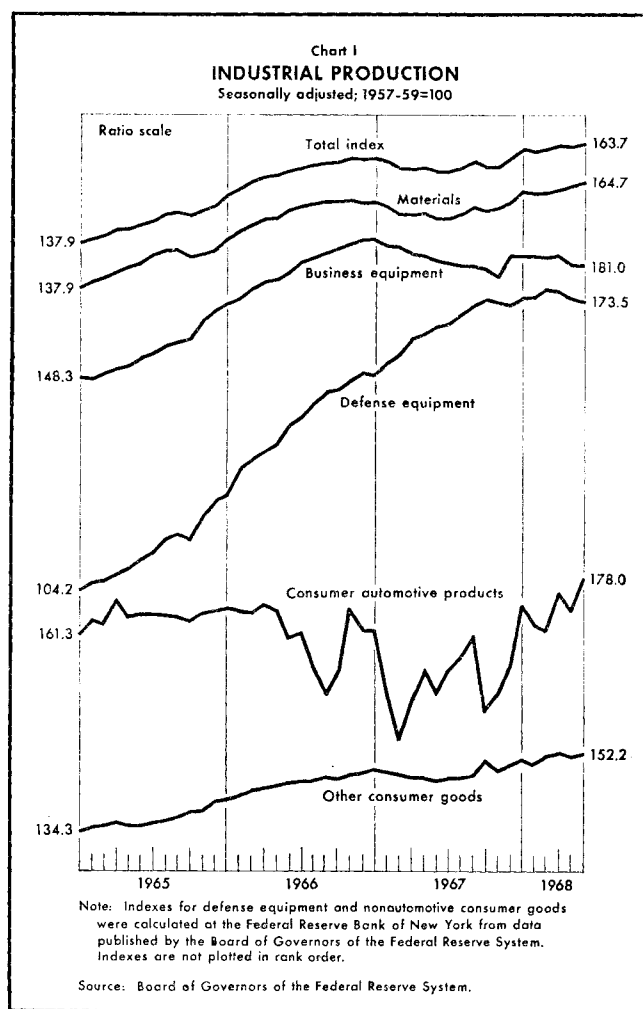
Business activity was strong as the first half of 1968 drew to a close. Production and employment were at record levels, but cost and demand pressures on prices remained excessive. At the same time, the United States balance-of-payments deficit continued to be substantial and the international financial markets were subject to renewed uncertainties. Against this background, the Congress passed and the President signed the long-awaited fiscal restraint package, including a 10 per cent surcharge on personal and corporate income taxes and a reduction in budgeted Federal spending. These measures should begin to relieve the demand pressures in the economy quite promptly. Bringing existing cost pressures under control will, however, be a slower and more difficult matter.

Industrial production moved up sharply in May from an April level that had been restrained in part by civil disorders. Automobile production provided a major stimulus to May output, and the assembly rate continued to run at a high level in June. With output expanding, the flow of income to consumers registered a sharp gain, paced by wages and salaries in manufacturing. Retail sales also advanced in May, as sales of automobiles and other consumer durables posted good gains. Although the number of housing units started fell sharply in May, this series is quite erratic and building permits for new housing remained at a high level. Labor market conditions remained extremely tight, with the unemployment rate holding at its fifteen-year low of 3.5 per cent in May. Consumer prices advanced again at a rapid 4 per cent annual rate in May, while wholesale prices, according to the preliminary report, climbed at a 2 per cent rate in June.

PRODUCTION, ORDERS, AND CONSTRUCTION

Industrial output in May reached a new high. The Federal Reserve Board's seasonally adjusted production index rose 1.2 percentage points to a record 163.7 per cent of the 1957-59 base (see Chart I). Auto assemblies—up 10 per cent to an annual rate of 9.4 million units—gave the manufacturing index a substantial boost, and assemblies remained at a high 9.3 million unit rate in June. Automobile production has been running ahead of sales,

as auto makers build up inventories in anticipation of a steel strike. Output of other consumer goods also expanded strongly in May. The production of industrial materials advanced sharply, since the index of iron and steel output climbed 4.2 percentage points. A high level of operations in the steel industry is expected to continue to bolster the industrial production index in June, as pressure builds to fill orders before the August strike deadline.



The rate of materials output in May was also strengthened by the further recovery of copper production from strike-reduced levels. Equipment production edged downward because the defense equipment component, which has been falling since February, continued to decline. Business equipment production, however, remained at its April level.

The pace of inventory accumulation is providing strong support for industrial production. In contrast to the first quarter of 1968—when a strong rise in consumer demand apparently held inventories below intended levels—April saw businesses adding substantially to stocks. Total inventories of manufacturing and trade firms expanded by a seasonally adjusted \$1.3 billion in April, compared with a monthly average of only \$370 million in the first quarter. Most of the expansion was accounted for by manufacturers and retailers. At the retail level, the growth in auto dealers' stocks was responsible for about two thirds of the increase. While data on inventories in trade firms is not yet available for May, manufacturers' inventories did expand further in May but at a more moderate rate. The April step-up in inventory investment was associated with a modest rise in the inventory-sales ratios of retailers and of durables manufacturers, but the slower May inventory expansion, coupled with a sizable gain in sales, brought the manufacturers' ratio down to the lowest level since 1966.

The volume of new orders received by durables manufacturers rose 1.7 per cent in May to a seasonally adjusted \$25.6 billion. Gains in the primary metals, machinery and equipment, and auto industries led the advance, while the defense-oriented industries experienced a decline. The so-called "defense" orders series includes all orders received by the aircraft industry, and the strong March increase and the subsequent sharp April and May declines were mainly due to a heavy concentration of commercial aircraft bookings in March. Excluding the defense products industry, durables orders advanced by 5 per cent in May. New orders excluding transportation equipment have remained roughly on a plateau this year, somewhat below the extraordinary December peak but significantly above earlier months of 1967. Since durables manufacturers' shipments in May exceeded the volume of new orders, the orders backlog dropped back somewhat from its April peak, but remained at a high \$80.9 billion.

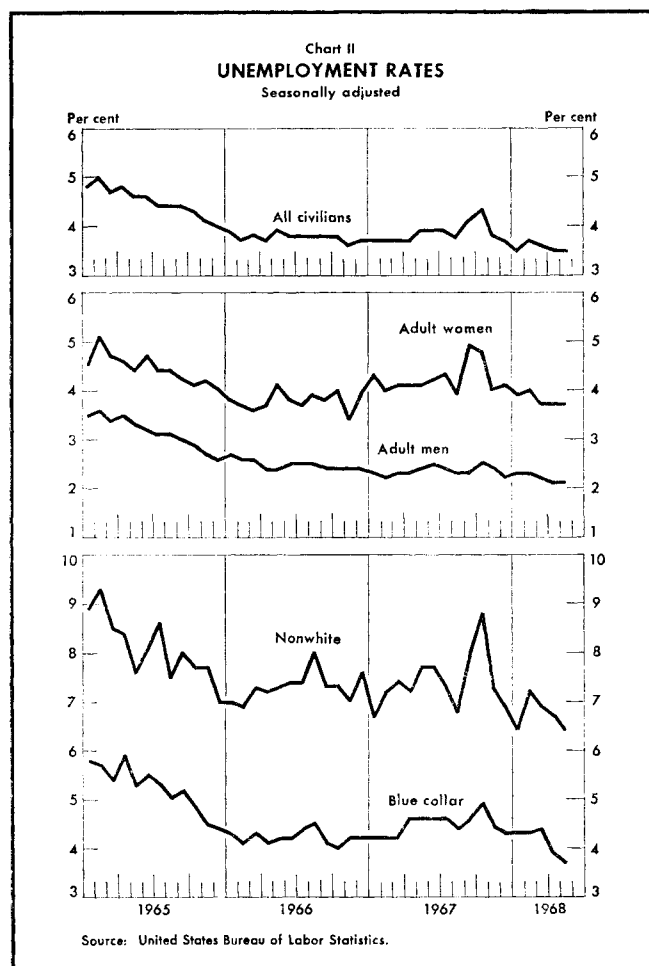
The latest Government survey of business capital spending plans indicates that 1968 outlays on plant and equipment will be 6.7 per cent above last year's level, compared with an anticipated 5.8 per cent increase reported by the preceding survey three months earlier. The new survey, taken by the Department of Commerce and the Securities

and Exchange Commission in late April and early May, shows 1968 plant and equipment expenditures at a record \$65.8 billion. The latest survey findings, as well as the solid \$2.2 billion gain registered in the first quarter, indicates that plant and equipment spending has made a substantial recovery from the pause following the 1964-66 capital investment boom. The survey indicates outlays dipping slightly in the second quarter to an annual rate of \$64.6 billion, and then rising by \$1.45 billion in each of the final two quarters. While the planned expansion of capital outlays in 1968 is widespread, projected gains are largest in nonmanufacturing industries. This concentration is understandable in view of the relatively moderate rates at which manufacturing capacity has been utilized during the past year.

Indicators of activity in the residential construction sector—which had shown considerable strength in the first four months of this year—gave conflicting signals in May. Private nonfarm housing starts, an admittedly erratic series, fell sharply from the high April level to a seasonally adjusted annual rate of 1.3 million units. Some decline in housing activity might well be expected in view of the relatively tight conditions that have been prevailing in the mortgage market over past months. Nevertheless, the number of building permits issued for new private housing declined only moderately in May, suggesting that a sustained sharp fall in housing starts is probably unlikely. Moreover, private nonfarm residential construction outlays continued to advance in May. The recently passed tax and spending package may relieve some of the pressures in the capital markets and make a larger supply of funds available to institutions specializing in mortgage lending.

EMPLOYMENT, INCOME, AND CONSUMER DEMAND

The number of workers on the payrolls of nonagricultural establishments was unchanged from April to May, as strikes in the construction and telephone industries offset increases in wholesale and retail trade, services, and state and local government—the three categories of employment that consistently have shown the most growth in the last few years. While manufacturing payroll employment was virtually unchanged from the April level, the manufacturing workweek bounced back from a sharp dip in April which had reflected the effects of civil disturbances and religious holidays. The workweek in manufacturing averaged a seasonally adjusted 40.6 hours, up from 40 hours in April; overtime averaged 3.4 hours, up from 2.8 hours in April. The increases brought the workweek and overtime back about in line with their March levels.



Unemployment in May remained at 3.5 per cent of the civilian labor force, the lowest rate since 1953. The unemployment rate has fluctuated in the narrow range between 3.5 and 3.7 per cent for the past six months (see Chart II). It has been nearly fifteen years since the rate remained for so long a period at such a low level. Tightening of the labor market over the past year has been clearly reflected in declining unemployment rates for specific groups of workers. The rate for adult men, unchanged in May from April's 2.1 per cent, was at the lowest level since June 1953; it was 2.4 per cent a year ago. The adult women's rate, also unchanged from April at 3.7 per cent, was down from 4.1 per cent a year earlier. The decline in unemployment has improved the position of some of the groups that had been suffering rather persistent joblessness. The blue-collar unemployment rate of 3.7 per cent was down from 3.9 per cent in April and 4.6 per

cent a year earlier. Joblessness among nonwhites fell back in May to the record low 6.4 per cent registered in January of this year, down from 6.7 per cent in April and 7.7 per cent a year ago. The fact remains, however, that the nonwhite unemployment rate has persistently been about twice as high as that for white workers.

Rising wage rates helped boost personal income in May by \$4.2 billion to a seasonally adjusted annual rate of \$674.0 billion. The largest advance occurred in the category of wages and salaries that rose \$2.9 billion, more than double the April increase which had been dampened by the telephone industry strike and by civil disturbances. According to the Commerce Department, about half of the May wage and salary rise was accounted for by manufacturers' pay boosts. A longer workweek also contributed to the wage and salary gain in manufacturing.

Retail sales apparently resumed their upward climb in May with a 1.1 per cent advance to a near-record level of \$27.9 billion, seasonally adjusted, according to the preliminary report of the Department of Commerce. The April decline, which occurred against a background of civil disorders, was the first since last October. The May gain was paced by a 2 per cent advance in the automotive group. Car sales climbed again in June to 8.8 million units at a seasonally adjusted annual rate. Reflecting the rise in consumer spending, consumer instalment credit in May advanced sharply, largely as a result of a rapid increase in automobile and personal loans.

PRICE AND COST DEVELOPMENTS

Prices and costs continued their upward spiral in May. The consumer price index rose at an annual rate of 4.0 per cent—bringing the gain since May 1967 to 4.1 per cent, the largest annual increase in sixteen years. All the major components of the consumer price index showed large increases in May. The nonfood commodities index advanced at an annual rate of 3 per cent, while prices of services rose at a 4½ per cent annual rate, as health, housing, and recreation costs moved higher. The upturn in wholesale food prices this year was reflected in a substantial rise in retail food prices.

At the wholesale price level, preliminary data for June indicate a further 2.2 per cent annual rate advance to 108.7 per cent of the 1957-59 base, with industrial wholesale prices renewing their upward movement. After nine months of large increases, industrial commodities prices eased in May, as copper prices fell from strike-inflated levels. In June, however, this index turned upward again, rising by 0.2 percentage point. Agricultural prices show a mixed pattern in June. Farm products prices, which had jumped

4.7 percentage points from December to May, fell back 1.3 percentage points in June, but wholesale prices of processed foods and feeds continued to climb strongly.

Labor costs rose again in May. The combination of a modest decline in output per man-hour and an increase in hourly compensation, in part due to an increase in overtime payments, pushed the index of unit labor costs

in manufacturing up 0.2 percentage point to a record 109.6 per cent of the 1957-59 average. Unit labor costs in manufacturing have advanced at an annual rate of 5½ per cent in the first five months of this year, following the rapid 4 per cent increase in 1967. Bringing mounting labor costs under control is a difficult but important goal of the recently enacted fiscal restraint measures.

The Money and Bond Markets in June

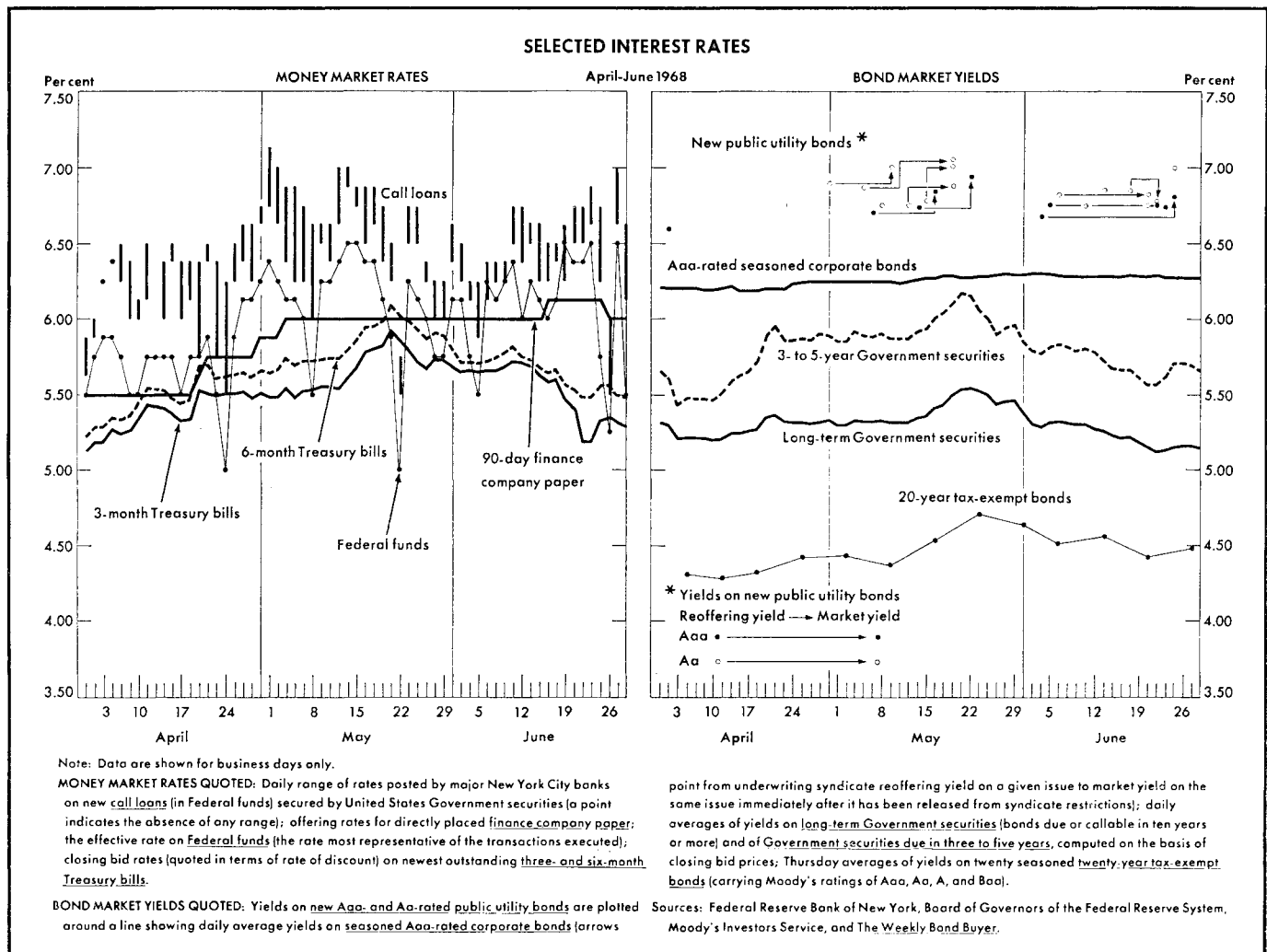
Yields on long-term securities declined through most of June from the record levels reached in late May. This sharp decline largely reflected the credit market's increasing confidence in the likelihood of favorable Congressional action on the proposed fiscal restraint package, which included a 10 per cent income tax surcharge and a cut in budgeted Federal spending for fiscal 1969. After the House of Representatives voted its approval of the legislation on June 20, thereby assuring passage, market yields drifted somewhat higher. Investment demand remained light, while profit taking by dealers in United States Government securities was widespread. Despite the weakening in the market toward the end of the month, however, yields on Treasury coupon securities closed the month substantially below end-of-May levels—18 basis points in the intermediate maturity area and 23 basis points in the long-term area. By comparison with their late May peaks, average yields on Treasury issues were about 51 and 39 basis points lower, respectively, in the intermediate- and long-term maturity range (see right-hand panel of chart). The affirmative House vote on the tax legislation helped relieve the congestion in both the corporate and tax-exempt markets, which had been restrained earlier in June by heavy debt offerings. Toward the end of the month, however, a degree of pressure returned to these markets, as the volume of tax-exempt offerings expanded and substantial additions were made to the July calendar of both corporate and tax-exempt financing.

Treasury bill rates also declined sharply in June, but rates on most other short-term money market instruments were unchanged to slightly higher. Bank reserve positions were under sustained pressure during the month. The effective rate for Federal funds generally remained above the

discount rate, and this premium rose as high as 1 per cent at times. The large New York City banks generally continued to quote Regulation Q ceiling rates on large-denomination negotiable certificates of deposit (C/D's). However, other issuers of money market instruments did not lower rates on balance over the month, so that C/D's remained at a yield disadvantage relative to bankers' acceptances, commercial paper, and finance company paper. At midmonth, the city banks experienced a fairly large attrition of C/D's as about half of such instruments maturing on the quarterly tax date were not renewed. As a result of the sharp yield declines in the Government securities market, however, C/D's had achieved a yield advantage over three-month Treasury bills by the latter part of June.

THE GOVERNMENT SECURITIES MARKET

Prices of Treasury coupon securities were marked sharply higher on the first trading day of June in a continuation of the favorable market reaction to a speech by President Johnson on the May 30 Memorial Day holiday. The President had indicated that he would reluctantly accept the recommendation of a joint Senate-House Committee for a \$6 billion reduction in Federal expenditures budgeted for fiscal 1969 in combination with a 10 per cent tax surcharge. With a major deterrent to the passage of the long-awaited income tax legislation thus removed, prices rose sharply. The market enthusiasm soon wavered, however, when significant investment demand failed to appear, and dealers embarked on profit taking. Additional downward pressure on prices came from the heavy volume of new corporate and Federal agency securities scheduled to be marketed during the month.



On June 6 the House Ways and Means Committee announced a postponement of the tax vote until June 19 or 20. This further delay in the long-awaited tax legislation injected a temporary note of caution into the market which, however, was dispelled later on the same day by a statement of Committee Chairman Mills expressing confidence that the tax-spending package would be adopted. Subsequently, between June 6 and June 20, when the tax measure was finally passed by the House, prices of Treasury coupon issues drifted moderately higher. However, activity in the market was generally light, and trading was largely professional.

After the passage of the income tax legislation, there was heavy swapping activity by commercial banks. Prices of intermediate-term Treasury securities declined, largely

in response to profit taking by market professionals while prices of long-term issues edged irregularly higher. For the month as a whole, prices of Treasury issues rose by about $\frac{3}{4}$ point in the intermediate maturity area and 2 points on long-term issues. (President Johnson signed the fiscal restraint bill into law on June 28.)

The Treasury announced on June 26 that it would auction \$4 billion of tax anticipation bills on Tuesday, July 2, for delivery and payment on Thursday, July 11. Of the total, half will mature on March 24, 1969 and half on April 22, 1969. Commercial banks will be permitted to make payment by crediting Treasury Tax and Loan Accounts. The Treasury also indicated that it plans to continue adding \$100 million to each weekly sale of six-month bills, probably through the end of the current cycle which

extends through the October 10 delivery date.

Treasury bill rates declined sharply at the beginning of June, as a broad investment demand reinforced the market strength resulting from the President's statement on the income tax proposal. With demand centering in the longer bill issues, the rate differential between three-month and one-year Treasury bills narrowed rapidly to about 6 basis points from 25 basis points near the end of May. In the regular weekly auction of bills on June 3, bidding was aggressive, particularly for the longer issue, and average issuing rates on the three- and six-month issues declined to 5.649 per cent and 5.699 per cent, respectively (see Table III), about 5 and 17 basis points below the rates in the previous auction.

Soon after that auction, however, a somewhat nervous tone developed in the bill market. The changed market atmosphere was partly attributable to the announced delay in the House vote on the tax measure and partly to technical factors. Money market conditions had become firmer, and dealers, whose awards of the new bills auctioned on June 3 had not been fully distributed to investors, were apprehensive about the additional market supply of bills expected around the quarterly dividend and tax dates. Moreover, it was widely expected that the Treasury would meet its need for additional cash in July through the sale of tax anticipation bills. Consequently, the issuing rates established in bidding for new bills on June 10 were somewhat above those set a week earlier. Around the income tax date the market tone improved, and bill rates entered an irregular downward trend. After midmonth, there was strong demand from the Federal Reserve System in the course of supplying reserves and from the holders of tax anticipation bills who redeemed for cash on June 24 bills not tendered in payment of income tax liabilities. The passage of the income tax legislation by the House, as well as commercial bank buying prior to the quarterly statement date, contributed further to market optimism over the final week of June. At the close of the month, the three- and six-month bills were bid at 5.30 per cent and 5.48 per cent, respectively, down 38 and 31 basis points from rates at the end of May.

The pattern of price movements in the market for Federal agency securities during June was similar to that in other sectors of the capital market. Prices scored impressive gains over the month, despite a large increase in the volume of agency flotations. Included in the month's offerings were two large issues to raise new cash—\$500 million of 6½ per cent participation certificates of the Export-Import Bank due in 1971 and \$300 million of 6.30 per cent one-year Federal Home Loan Bank bonds, both priced at par. Other large offerings, partly to retire out-

standing securities, were \$279 million of a 6¼ per cent fifteen-month loan of the Federal land banks and \$409 million of 6¼ per cent nine-month debentures of the Federal intermediate credit banks, both priced at par. The yield on the latter issue, offered on June 19, was 20 basis points lower than that on a similar offering by the same agency on May 21, when capital market yields were at record highs. Virtually all the agency offerings of the month were well received by investors.

OTHER SECURITIES MARKETS

The corporate and tax-exempt bond markets shared in the generally optimistic mood which pervaded the money and capital markets at the opening of June. However, the heavy calendar of new corporate offerings for the month and the prospect of an upsurge in the municipal calendar tended to counteract the favorable effect of President Johnson's statement regarding the pending income tax legislation. Thus, price increases on outstanding issues were relatively moderate, amounting to one point or less, and new bonds reoffered at yields slightly higher than those on comparable recent offerings made a fairly poor market showing. The corporate and tax-exempt sectors were also adversely affected in early June by the postponement of voting on the income tax legislation in the House and by the announced suspension of trading on major stock exchanges on three days of the month—June 12, 19, and 26 as well as on July 5. The trading suspensions forced the rescheduling of several corporate offerings. During the first part of the month, a few corporate and tax-exempt bond financings were postponed or reduced in size due to market conditions.

After midmonth, a bullish tone reappeared in the markets, reflecting both optimism over the approaching tax legislation and an expansion in demand. Moreover, it was expected that the corporate calendar would decline seasonally in July. In the corporate market a \$75 million Aa-rated public utility issue, carrying five-year call protection, reoffered on June 18 to yield 6.85 per cent, was fully distributed to investors by June 20 when the House voted its approval of the tax measure. On June 21, distribution was finally completed on a utility issue which had been in underwriters' hands since June 5. The issue, a \$150 million Aaa-rated offering of forty-year telephone bonds carrying five-year call protection, had previously moved sluggishly at a reoffering yield of 6.75 per cent.

Similarly, activity revived strongly in the tax-exempt market with the approach of the House vote on the tax measure. Prices of outstanding issues advanced, and a

Table I
FACTORS TENDING TO INCREASE OR DECREASE
MEMBER BANK RESERVES, JUNE 1968

In millions of dollars; (+) denotes increase,
(—) decrease in excess reserves

Factors	Changes in daily averages— week ended on				Net changes
	June 5	June 12	June 19	June 26	
"Market" factors					
Member bank required reserves*	— 187	+ 41	— 243	— 340	— 729
Operating transactions (subtotal)	+ 11	— 155	+ 121	— 627	— 650
Federal Reserve float	+ 39	+ 36	+ 236	— 83	+ 228
Treasury operations†	+ 305	— 36	— 206	— 16	+ 47
Gold and foreign account	— 146	+ 137	+ 11	15	— 13
Currency outside banks*	— 472	— 352	+ 140	+ 245	— 439
Other Federal Reserve accounts (net)‡ ..	+ 286	+ 57	— 58	— 758	— 473
Total "market" factors	— 176	— 114	— 122	— 967	— 1,379
Direct Federal Reserve credit transactions					
Open market instruments					
Outright holdings:					
Government securities	+ 30	— 10	+ 241	+ 947	+ 1,208
Bankers' acceptances	— 2	— 3	+ 1	+ 1	— 3
Repurchase agreements:					
Government securities	—	+ 261	— 153	+ 38	+ 146
Bankers' acceptances	—	+ 26	— 3	+ 42	+ 65
Federal agency obligations	—	+ 29	— 14	+ 51	+ 66
Member bank borrowings	— 5	— 81	— 14	+ 143	+ 43
Other loans, discounts, and advances.....	—	—	—	—	—
Total	+ 23	+ 220	+ 60	+ 1,224	+ 1,527
Excess reserves*	— 153	+ 106	— 62	+ 257	+ 148

Member bank:	Daily average levels				
	June 3	June 10	June 17	June 24	June 26
Total reserves, including vault cash*	25,339	25,404	25,585	26,182	25,628§
Required reserves*	25,122	25,081	25,324	25,664	25,208§
Excess reserves*	217	323	261	518	330§
Borrowings	759	678	664	807	727§
Free (+) or net borrowed (—) reserves*	— 542	— 355	— 403	— 289	— 397§
Nonborrowed reserves*	24,580	24,726	24,921	25,375	24,901§

System Account holdings of Government securities maturing in:	Changes in Wednesday levels				
	June 3	June 10	June 17	June 24	June 26
Less than one year	+ 161	+ 771	+ 550	+ 248	+ 1,730
More than one year	—	—	— 398	+ 85	— 223
Total	+ 161	+ 771	+ 242	+ 333	+ 1,507

Note: Because of rounding, figures do not necessarily add to totals.

* These figures are estimated.

§ Average of four weeks ended on June 26.

† Includes changes in Treasury currency and cash.

‡ Includes assets denominated in foreign currencies.

Table II
RESERVE POSITIONS OF MAJOR RESERVE CITY BANKS
JUNE 1968

In millions of dollars

Factors affecting basic reserve positions	Daily averages—week ended on				Averages of four weeks ended on June 26*
	June 5	June 12	June 19	June 26*	
Eight banks in New York City					
Reserve excess or deficiency (—)†.....	23	16	35	35	27
Less borrowings from					
Reserve Banks	75	36	93	84	72
Less net interbank Federal funds					
purchases or sales (—).....	320	447	640	516	481
Gross purchases	1,164	1,255	1,399	1,346	1,291
Gross sales	844	808	759	830	810
Equals net basic reserve surplus					
or deficit (—)	— 372	— 467	— 698	— 565	— 526
Net loans to Government					
securities dealers	684	620	734	542	645

Thirty-eight banks outside New York City					
Reserve excess or deficiency (—)†	32	11	21	13	19
Less borrowings from Reserve Banks	182	178	94	216	168
Less net interbank Federal funds purchases or sales (—)	551	701	897	513	665
Gross purchases	2,193	1,997	2,233	2,081	2,126
Gross sales	1,642	1,296	1,336	1,568	1,461
Equals net basic reserve surplus or deficit (—)	— 702	— 869	— 970	— 716	— 814
Net loans to Government securities dealers	151	121	127	56	114

Note: Because of rounding, figures do not necessarily add to totals.

* Estimated reserve figures have not been adjusted for so-called "as of" debits and credits. These items are taken into account in final data.

† Reserves held after all adjustments applicable to the reporting period less required reserves and carry-over reserve deficiencies.

Table III
AVERAGE ISSUING RATES*
AT REGULAR TREASURY BILL AUCTIONS

In per cent

Maturities	Weekly auction dates—June 1968			
	June 3	June 10	June 17	June 24
Three-month	5.649	5.713	5.578	5.238
Six-month	5.699	5.790	5.633	5.485
	Monthly auction dates—April-June 1968			
	April 23	May 23	June 25	
Nine-month	5.665	6.086		5.745
One-year	5.663	6.079		5.731

* Interest rates on bills are quoted in terms of a 360-day year, with the discounts from par as the return on the face amount of the bills payable at maturity. Bond yield equivalents, related to the amount actually invested, would be slightly higher.

substantial proportion of the new tax-exempt securities offered during the period was successfully distributed to investors. During the final week of June, however, investors showed increasing resistance to new offerings of both corporate and tax-exempt bonds which were aggressively priced to yield 5 to 10 basis points less than yields available on comparable offerings in the previous week. The weaker market tone stemmed in part from an expansion of the calendar for July. At the close of the month the Blue List of dealers' advertised inventories stood at \$669 million, considerably above the \$513 million level at the end of May. Over the month, *The Weekly Bond Buyers'* average yield series of twenty seasoned tax-exempt bonds (carrying ratings ranging from Aaa to Baa) fell sharply to 4.48 per cent from 4.64 per cent at the end of May. The average yield on Moody's Aaa-rated seasoned corporate bonds declined by 2 basis points over the month to 6.27 per cent.

BANK RESERVES AND THE MONEY MARKET

The underlying tone of the money market was quite firm in June. Average net borrowed reserves of all member banks deepened somewhat to \$397 million for the four statement weeks ended on June 26 (see Table I) from \$380 million in May. Transactions in Federal funds were generally executed at rates well above the discount rate, but the effective rate for these funds ranged widely, declining to $5\frac{1}{4}$ per cent on one occasion and rising as high as $6\frac{1}{2}$ per cent on others. Variations in the degree of pressure in the money market mainly reflected the management of reserve positions by the "country" banks, which alternately accumulated excess reserves and released these surpluses to the Federal funds market. On average, the country banks carried about the same excess reserves in June as they had in May and continued to borrow heavily from their Reserve Banks. Average borrowings of member banks, in the aggregate, were \$727 million in the four statement weeks ended in June, virtually unchanged from May.

Reserve positions of the major money market banks deteriorated markedly over the first three statement weeks of June under the impact of a sharp rise in the financing needs of United States Government securities dealers at the start of the month, heavy borrowing by businesses and

sales finance companies through the quarterly corporate dividend and income tax period, and a substantial runoff of maturing C/D's in the tax week itself. The city banks continued to tap the Euro-dollar market for supplemental funds but on a very limited scale, compared with that in the last three weeks of May when average borrowings from overseas branches rose about \$650 million. The average basic reserve deficit of the eight New York City money market banks climbed to \$698 million in the statement week ended on June 19 (see Table II) from the \$135 million level to which it had fallen in the last May statement week. In the final week of June, the basic reserve deficit shrank to \$565 million as loans to Government securities dealers contracted.

Rates posted by the major New York City banks on call loans to Government securities dealers were adjusted moderately higher through mid-June, as dealer borrowings mounted and the banks were subjected to the usual tax-period demands. Late in the month, new call loans were generally quoted at a range of $6\frac{1}{2}$ to $6\frac{3}{4}$ per cent, compared with 6 to $6\frac{1}{4}$ per cent near the end of May. Dealer offering rates on bankers' acceptances and on prime commercial paper were unchanged during June. In sharp contrast, rates on short-term Euro-dollars dropped precipitously before leveling off around midmonth, while rates on Treasury bills declined rapidly after a moderate markup early in June.

Large New York City banks generally continued to offer the maximum interest rates permissible under Regulation Q on large-denomination negotiable C/D's during June. In the three-month maturity area, C/D offering rates were lower than yields on competing types of money market instruments through midmonth, but higher than Treasury bill rates in the latter half of the period. In the longer maturity area, however, C/D's held a yield advantage over Treasury bills throughout the month. In the statement week ended on June 19, the large commercial banks sustained net redemptions of \$424 million of C/D's, out of the approximately \$825 million that matured on the June 17 tax date. With the sharp decline in Treasury bill rates, however, C/D's became more competitive, and the reporting banks added \$235 million to their outstanding C/D's in the final week of June. Outstanding C/D's declined by \$279 million, net, over the four weeks ended on June 26; total maturities for the month were estimated at \$5.4 billion.

Recent Capital Market Developments

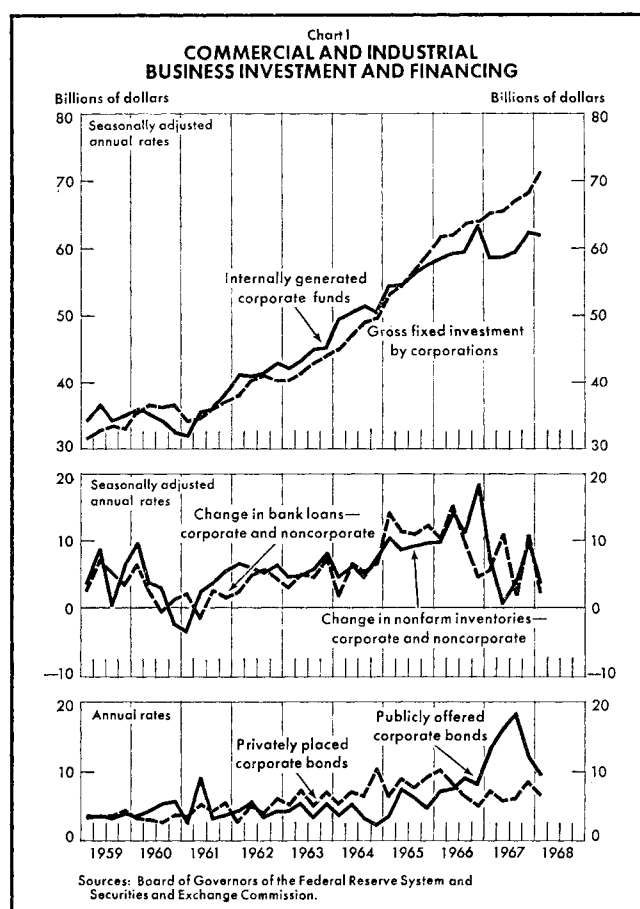
The nation's capital markets were subjected to strong pressures during the first six months of 1968, and interest rates pushed through their 1967 peaks. It was not until late June that the Congress enacted legislation incorporating a 10 per cent income tax surcharge on individuals and corporations and a reduction in budgeted Federal spending. Consequently, monetary policy had to bear the entire burden of economic restraint throughout the first half of the year. Evidence of greater monetary stringency was reflected in the deepened net borrowed reserve positions of commercial banks, increases in the Federal Reserve discount rate in March and April, and an increase of $\frac{1}{2}$ percentage point in required reserves on member bank demand deposits, effective in January. The impact of uncertainty over the timing and dimensions of fiscal restraint on the expectations and actions of both borrowers and lenders was compounded by the ebb and flow of optimism over negotiations for a peace settlement in Vietnam. Moreover, the pressures on interest rates from the rapidly growing domestic economy were reinforced by the impact of the gold crises and rising apprehension in foreign markets concerning the stability of the dollar.

While demands for funds by nonfinancial business abated slightly from the record levels of 1967, business needs remained high when viewed in the perspective of earlier years. The large Federal deficit resulted in an increase in outstanding Treasury indebtedness during the first half of the year, a period normally marked by debt retirement. Borrowing by state and local governments declined slightly from the record amounts of 1967, but nevertheless remained strong. Consumer credit rose sharply, reflecting increased purchases of automobiles and other durable goods. Aggregate mortgage lending, while slightly below the pace of the second half of 1967, was maintained at a generally high level in spite of gradually rising pressure on the principal suppliers of these funds.

BUSINESS FINANCE

Expenditures by nonfinancial corporations for fixed investment rose sharply during the first quarter of 1968 (see

Chart I). During the same period, the major sources of internally generated funds—retained earnings and capital consumption allowances—declined slightly on balance. Nevertheless, demands for external long-term financing moderated during the quarter and, indeed, for the entire first half of 1968. In particular, during the first six months of 1968, corporate bond flotations (gross publicly offered and privately placed issues) approximated \$9 billion, about \$2½ billion less than the record six-month



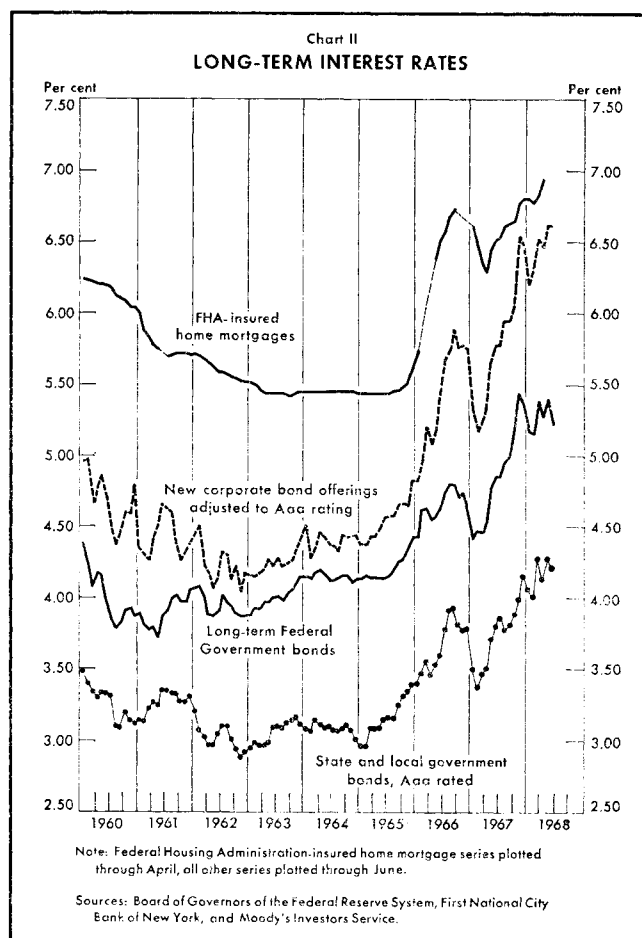
volume of the second half of 1967. While the volume of privately placed issues continued to trail substantially that of publicly offered issues, some recovery of private placements from the depressed levels of early 1967 appears to have been registered.

The moderation in corporate demands for external financing is attributable to a number of factors. Corporations were under less pressure to use long-term financing for building up liquidity positions. The ratio of cash and United States Government securities to total current liabilities—a widely used measure of corporate liquidity—stood at 24.4 per cent at the end of the first quarter of 1968, about 1 percentage point above the 1967 low point reached in the third quarter of that year. Furthermore, during the first half of 1968, corporate income tax payments were relatively low by comparison with 1967, reflecting the accelerated payments in that year.

The strong consumer demand evident during the first quarter of 1968 slowed the rate of inventory accumulation and thus moderated business demands for short-term financing. Reflecting this, during the first three months of the year business loans by commercial banks expanded at a pace somewhat below the 8.2 per cent seasonally adjusted annual rate of growth during the second half of 1967; however, the apparent step-up of inventory accumulation during the April to June quarter may have contributed to a somewhat sharper expansion of business borrowings. In addition, the commercial paper market continued to play a significant role in corporate financing during the first half of this year, although the rate of growth in outstanding paper was well below the rapid expansion during early 1967.

As a result of restrictions imposed on investments by United States business firms in their foreign subsidiaries, these subsidiaries were forced to place substantially greater demands on foreign capital markets. During the first half of 1968, affiliates and subsidiaries of United States companies issued more than \$1 billion of bonds in the European markets, mostly denominated in dollars and convertible into the common stock of the United States corporations. The volume of these flotations was more than double that for the entire year 1967 and, in large measure, represented a shift of demands for funds away from domestic sources.

Some of the record volume of corporate securities flotations in late 1967 almost surely consisted of offerings accelerated in anticipation of tighter market conditions in the early part of 1968. As the new year progressed such expectations were realized, and interest rates were pushed higher while uncertainty concerning the tax increase legislation mounted. Indeed, yields on both out-



standing and newly issued corporate bonds exceeded the peak levels reached in late 1967 (see Chart II). These movements reflected effects of both monetary tightening and the heavy volume of financing by all sectors. Rates in excess of 7 per cent on new high-quality issues were witnessed, and at the higher rate levels direct purchases by individuals became an important source of funds in the market.

The flow of new equity market issues—especially from corporations making initial common stock offerings to the public—accelerated sharply during the first six months of 1968. Gross issues of common and preferred stocks amounted to an estimated \$2 billion in the January to June period, compared with slightly more than \$1 billion during the same period last year.

The President's announcement on March 31 of a limited de-escalation of the Vietnam war provided the impetus for a sharp rise in stock prices and trading activity. Stan-

dard and Poor's broad-based index of 500 New York Stock Exchange common stock prices rose more than 10 per cent to 99.58 during the second quarter, while trading activity on this exchange averaged 14.3 million shares daily—a rise of almost 41 per cent from the average turnover during the first quarter of the year. Prices on the American Stock Exchange and in the over-the-counter market increased even more sharply in greatly expanded trading activity. The pace of trading became so hectic that the major stock exchanges and the over-the-counter market decided to close one day a week from mid-June through the end of July to facilitate the handling of accumulated paper work. Concern with the rising speculation in the securities markets prompted the New York and American Stock Exchanges to make extensive use of special margin requirements in their efforts to moderate such activities. In March, the Board of Governors of the Federal Reserve System tightened its controls over the use of credit to finance the purchase of securities by extending margin requirements to convertible bonds and to stock market loans from most previously unregulated lenders. In addition, in early June the Board of Governors increased the minimum downpayments on purchases of listed stocks and convertible bonds by 10 percentage points to 80 per cent and 60 per cent, respectively.

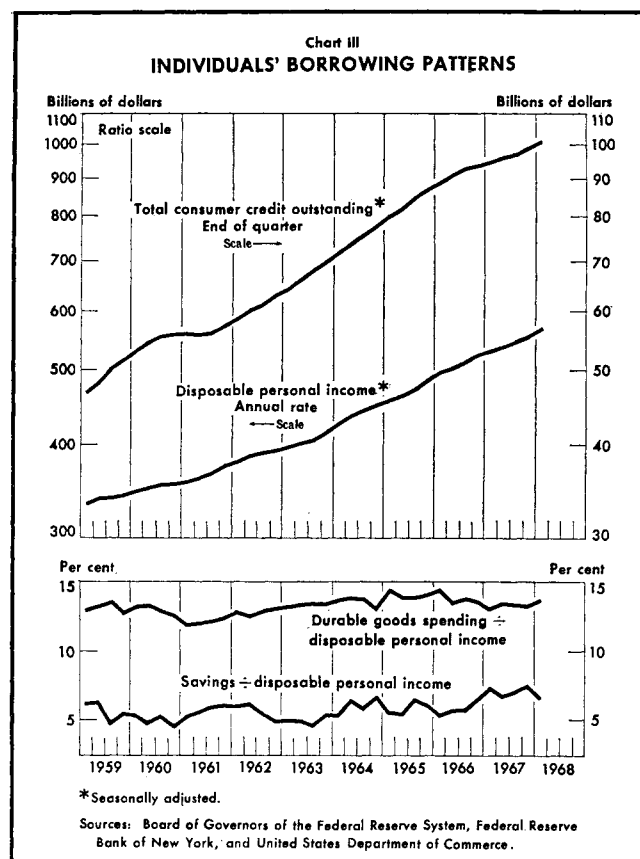
CONSUMER AND MORTGAGE FINANCE

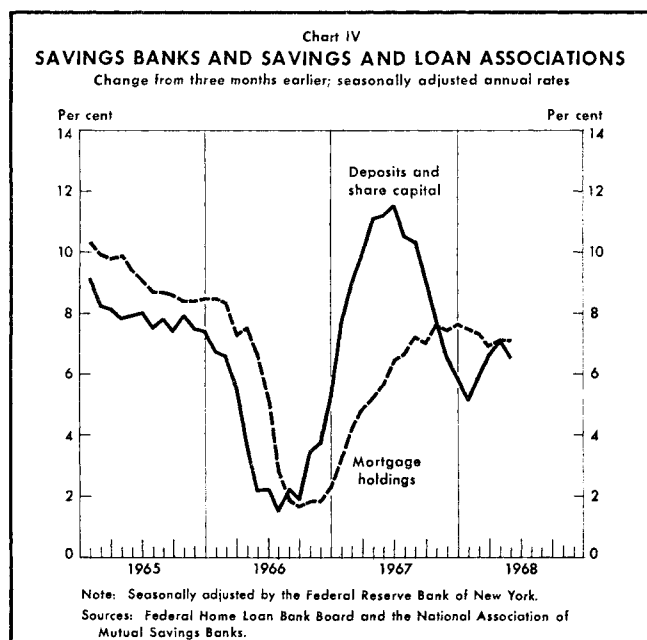
Outstanding consumer credit rose by \$3.4 billion (seasonally adjusted) during the first five months of 1968. On an average monthly basis, this increase exceeded by about 62 per cent the expansion of such credit during the second half of 1967 (see Chart III). Clearly, the impetus for this development was a strong surge of consumer spending, especially for durable goods. During the first quarter of the year, total consumer spending mounted by a record \$17 billion, about \$3 billion greater than the rise in disposable personal income.

As a result of the sharp expansion in consumer spending, the savings ratio declined to 6.6 per cent during the first quarter of 1968, $\frac{1}{2}$ percentage point below the average rate during 1967. This development plus the increased attractiveness of credit market instruments, especially Government securities, resulted in a diminished flow of funds to thrift institutions. During the first five months of this year, total savings capital and deposits at savings and loan associations and mutual savings banks grew at a seasonally adjusted annual rate of approximately $6\frac{1}{2}$ per cent, 4 percentage points below the growth during the comparable period in 1967 but well above that during the January to May period in 1966 (see Chart IV). De-

posit growth at mutual savings banks in the first five months was only about 10 per cent lower than that during the same period a year earlier, while at savings and loan associations the growth was about half that of the comparable months of 1967. The more aggressive promotion of premium-rate, longer maturity savings instruments, particularly at savings and loan associations, undoubtedly slowed outflows of funds in the face of rising market yields.

In spite of the moderation in the inflow of funds to savings and loan associations, these institutions continued to expand mortgage holdings at a pace comparable to the last half of 1967. Pressure on liquidity positions eventually emerged, however. During the January to May 1968 period, savings and loan associations obtained about \$300 million in advances from Federal Home Loan Banks, while during the last six months of 1967 the rise in borrowings was only \$85 million. At mutual savings banks, in contrast, the expansion of mortgages has been weak since mid-1967. Restrictive ceilings on mortgage interest rates imposed by usury laws in several of the states in which these institutions operate have induced the diver-





sion of a high proportion of their new funds into corporate bonds. However, several states have recently liberalized these ceilings, a move which should increase the relative attractiveness of mortgage lending. Furthermore, the ceiling rate on Federally insured mortgages was raised in early May from 6 per cent to 6¾ per cent, although the new rate is currently below levels prevailing in the secondary market for Federal Housing Administration-insured mortgages.

A notable development to improve the responsiveness of mortgage prices in the secondary market to changes in credit conditions was the adoption during the first half of 1968 by the Federal National Mortgage Association (FNMA) of a system of auctioning commitments (bearing maturities of three, six, and twelve months) to purchase new mortgage loans. Under the former system, which involved mortgage transactions at administratively fixed prices, the volume of mortgages purchased by FNMA was determined largely by the sellers, mainly mortgage bankers. In contrast, the auction system now permits FNMA to set the volume of mortgage purchases and thus have greater control over the magnitude and timing of its financing operations. In its initial weekly auction in May, FNMA invited tenders for commitments to purchase \$40 million of mortgages, and by late June the weekly offering had risen to \$90 million. The average three-month commitment price for mortgages declined through the third week in June, but since then prices have recovered somewhat.

GOVERNMENT FINANCE

The Treasury placed strong demands on the financial markets during the first half of the year—a period that is ordinarily marked by some reduction of Government debt. The Treasury's net cash borrowing from the public—including the banking system and the Federal Reserve—is estimated to have reached almost \$3 billion during the first half of 1968, a sharp contrast to the net redemption of more than \$8 billion of publicly held securities in the same period of 1967. The volume of marketable Treasury securities held by the public rose slightly during the first half of 1968, whereas during the same period of 1967 the amount of such securities held by this sector declined by about \$7 billion. Part of this increase of Treasury securities was offset by lower sales of certificates of participation in Federal loans. In the first half of 1968 the net increase of public holdings of these certificates was about \$700 million less than the additions during the comparable period of 1967.

Issues of Government agencies (not directly guaranteed) also expanded sharply during the first half of 1968. Net new issues of these securities totaled more than \$1 billion during this period, a marked difference from the net redemption of about the same amount of agency securities during the first six months of 1967. One factor in this reversal was the pattern of financing by Federal Home Loan Banks whose borrowings amounted to about \$600 million in the first half of 1968, compared with a reduction of indebtedness which exceeded \$2 billion a year earlier. This in turn reflected heavy repayment of advances by savings and loan associations in the earlier year and increased borrowings by this sector during 1968.

Yields on both newly issued and outstanding Government securities rose to new peaks during the second quarter of the year, although they moved down somewhat after mid-May. In a May financing operation, the Treasury issued fifteen-month and seven-year notes with a coupon rate of 6 per cent—the highest coupon on a publicly offered Treasury obligation since 1920—and during the month the average yield on newly issued Treasury bills rose to the highest point for any fully guaranteed Treasury security since the Civil War. In addition, the Treasury recently increased the interest rates on Series E and H savings bonds and the "freedom shares" in an effort to increase the attractiveness of these securities.

New issues of state and local government securities exceeded \$7 billion during the first half of 1968 and were only about \$400 million below the volume of new flotations during the first half of 1967. The flow of new tax-exempt securities was expanded during the early part of

1968 by the accelerated flotation of many industrial revenue bonds which were moved ahead in anticipation of the just-enacted removal of the income tax exemption on interest earned on issues of such securities exceeding \$1 million in size and initiated after May 1, 1968.

The market for tax-exempt securities was quite congested during much of the past six-month period, as investors were increasingly reluctant to make new commitments. In 1967 commercial banks had lent strong support to this market by purchasing almost 90 per cent of the net increase in state and local obligations, but in the first quarter of the year this proportion declined to 66 per cent, and commercial banks made no significant additions to their holdings of municipal securities during the second quarter.

ROLE OF THE BANKING SYSTEM

According to preliminary data, during the first quarter of 1968 the volume of net funds raised by all non-financial borrowers totaled about \$100 billion (seasonally adjusted annual rate), down from \$106 billion during the second half of 1967. The commercial banking system supplied 20.7 per cent of this total, a sharp decline from the 39.5 per cent that the banks accounted for during the second half of 1967. However, the drop in commercial bank lending activity was accompanied by a rise in direct unintermediated lending by the private nonfinancial sectors—mainly households and businesses—which supplied about 47 per cent of the net funds raised by all non-financial borrowers.

In an environment of reserve stringency the expansion of commercial bank credit slowed markedly during the first six months of 1968. The net rise of approximately 6.5

per cent at a seasonally adjusted annual rate was sharply below the 12.5 per cent growth registered during the last half of 1967. The principal impact of credit restraint fell upon commercial bank holdings of United States Government and municipal securities, both of which grew at a rate only about one third of the strong expansion during the second half of last year. Net loan extensions declined slightly from the earlier period, although the drop was not so pronounced as that for investments. A rise in business loan expansion early in the second quarter was apparently associated with increased inventory accumulation; consumer loan volume was strong throughout the first half in response to a sharp increase in consumer spending, primarily for automobiles and other durable goods; and real estate lending maintained the 10 per cent growth rate in evidence since mid-1967.

Reflecting the pattern of rising yields on competitive market instruments, total daily average time and savings deposits held by commercial banks grew at a seasonally adjusted annual rate of 5.0 per cent during the first half of 1968, sharply below the 12.6 per cent rise during the preceding half-year period. The Board of Governors raised the interest rate ceilings on time certificates of deposit greater than \$100,000 at the time of the discount rate increase in April,¹ and commercial bank offering rates subsequently moved up to the new ceilings—which range from 5½ to 6¼ per cent. At the increased rates the volume of certificates issued by large banks changed little on balance during May and June.

¹ For additional information regarding the new ceilings, see this *Review* (May 1968), page 97.