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The Problem of Securities Thefts*

STATEMENT BY RICHARD A. DEBS
Vice President, Federal Reserve Bank of New York

We at the Federal Reserve welcome the study by the Permanent Subcommittee on Investigations of the problem of securities thefts. We share its concern about the gravity of the problem, and we're most hopeful that the present study will focus attention on the problem and result in constructive measures toward its resolution.

The Federal Reserve Bank of New York has an interest in this problem in three respects. In the first place, as a Federal Reserve Bank we have a direct interest in the safety and security of banks and the banking system, and in sound banking practices. Second, as the Federal Reserve Bank responsible for implementing monetary policy by means of open market operations in the Government securities market, we have a direct interest in the effective functioning of that market. Finally, as fiscal agent of the United States, we have an overall interest in all Government securities transactions, particularly with respect to Government financing and the management of the public debt.

As a reflection of our particular interests in these matters, our principal concern—and our experience—relates primarily to United States Government securities and the Government securities market—which means, in effect, marketable Treasury and Federal agency instruments—and my statement today focuses mainly on such securities. However, the Federal Reserve is also concerned with the problem of securities thefts as it relates to other types of securities and securities markets—corporate and municipal securities—and references will also be made to those securities to the extent that we have become involved.

It may also be useful to note at this point that the main problem in the area of Government securities is the theft of bearer instruments, reflecting the fact that practically all of the marketable public debt is in bearer form. This is not the case, of course, with respect to corporate securities; nor does it apply to United States savings bonds, which are not considered marketable instruments and which do not constitute part of the Government securities market.

As a general indication of the kind of volume and velocity of transactions that we are concerned with in the Government securities market, attached is a table setting forth some statistics that should serve to illustrate the overall dimensions of our operations in Government securities.

GOVERNMENT SECURITIES

The problem of thefts of bearer Government securities did not become acute until the latter half of 1969, when there was a dramatic increase in the incidence and magnitude of such thefts. Within a couple of weeks of each other, one New York City bank reported a loss of $2.1 million in Government securities, and another reported a loss of $1.6 million. Shortly thereafter, a third bank reported a loss of $13.2 million. That made a grand total of about $17 million reported missing in a period of little over a month, and in New York City alone. By the end of 1969 the total value of Government securities reported to us as missing in New York City—including reports from brokerage houses as well as banks—was about $20

* Statement before the Permanent Subcommittee on Investigations of the Committee on Government Operations of the United States Senate, June 25, 1971. Mr. Debs has responsibility for the Bank's Government Bond and Safekeeping Operations. He is also chairman of a Federal Reserve System Subcommittee on Fiscal Agency Operations, which acts as liaison between the Federal Reserve Banks and the Treasury Department with respect to Reserve Bank operations conducted as agent for the Government.

ANALYSIS OF UNITED STATES GOVERNMENT SECURITIES ACTIVITY AT THE FEDERAL RESERVE BANK OF NEW YORK IN 1970

Marketable debt obligations	Pieces (in thousands)	Amount (in millions of dollars)
Original issues	1,917	209,558
Servicing*	6,195	782,727
Redemptions	2,883	169,781
Total transactions handled	10,995	1,162,066
Average daily activity	44	4,648
Telegraphic transfers	312	269,000
Coupons paid	3,155	1,633
Safekeeping accounts†		
Deposits and withdrawals	763	182,366

* Includes such transactions as denominational exchanges, wire transfers, exchanges of coupons for registered securities, etc.
† Includes various corporate and municipal securities.

million, and the total for the country as a whole, as reported to the Treasury, exceeded $30 million.

It was obvious that we all had a serious new problem on our hands. As we saw it, there were two basic ways to approach the problem. The first—which required immediate action—was how to recover the securities already stolen. The second—of longer term application and importance—was how to prevent securities being stolen in the first place.

MEASURES FOR RECOVERY

In reviewing the first question—measures for the recovery of stolen securities—it appeared to us that there was then no centrally coordinated system for distributing current information on missing Government securities within the financial community. Lists of stolen securities were distributed from time to time, depending on the efforts of the institutions suffering the loss, but for the most part the lists were not distributed widely throughout the country and, since they could not be kept up to date, they soon became obsolete.

As for the Reserve Banks, traditionally their role with respect to Government securities had been limited to their responsibilities as fiscal agents of the United States, carrying out the instructions of the Treasury Department. Prior to 1958, the Treasury had maintained various lists of certain Government securities reported as missing or stolen by individuals throughout the country, and it distributed such lists to the Reserve Banks. Over the years, however, the maintenance of the lists presented difficult operating problems—particularly as the volume of Treasury securities increased—and it also involved complicated legal questions for the Treasury as the issuer of the securities. In view of these problems, in 1958 the Treasury discontinued the distribution of the list and instructed the Reserve Banks to terminate the maintenance of the list.

When we reviewed the situation with the Treasury in the fall of 1969, it appeared that it would be impracticable for the Treasury to try to reinstitute the former procedures to meet the acute problem that had developed as of that time. In view of the magnitude of that problem, however, it was clear that the Reserve Banks had a direct and immediate interest in the matter, apart from their responsibilities as fiscal agents of the United States; they had a concern in the problem as it affected the banking system, and also as it affected the Government securities market, through which monetary policy is implemented. Accordingly, with those interests in mind, we began to develop a new kind of procedure—we call it a "checklist procedure"—for maintaining a surveillance for Government and agency securities reported as stolen or missing from the financial community.

The procedure was first initiated at the Federal Reserve Bank of New York in December 1969, and was gradually coordinated with similar procedures established at other Reserve Banks. By the summer of 1970, a uniform system had been developed for use by all thirty-six Federal Reserve Banks and Branches throughout the country. The operation of the national system is described in detail in a circular letter issued by the Federal Reserve Bank of New York dated October 23, 1970. Similar letters were issued by the other eleven Reserve Banks.

The object of the checklist procedure is to maintain a current list of stolen securities at all Reserve Bank offices, based on reports received from banks and other financial institutions throughout the country. Up-to-date information is promptly circulated to all Federal Reserve offices, by wire, through the Federal Reserve Bank of New York, which acts as the coordinating bank for the System. With the list, each Reserve Bank office is able to check securities received at the office. Each office also serves as a clearing house for information on stolen securities within its own territory. It is prepared to answer legitimate inquiries regarding stolen securities, and is also prepared to facilitate prompt contact with the appropriate law-enforcement authorities, including the local police as well as the Federal Bureau of Investigation (FBI).

The basic aim of the checklist procedure is to discover securities on the checklist; in the words of our circular letter, "whenever a listed security is discovered, the Federal Reserve office will inform the appropriate law-enforcement agency, as well as the Treasury and other

interested parties, of the discovery so that they may act promptly in taking whatever steps they may deem necessary. The Federal Reserve's primary function is to inform the appropriate parties of the discovery of a listed security as promptly as possible".

In general, the checklist is intended to supplement existing procedures. It is no substitute for the normal reporting of crimes to the appropriate law-enforcement agencies. The procedure was established within the framework of existing Treasury regulations and is based on full cooperation with the FBI and the local police.

Experience with the checklist to date indicates that it has been fairly successful in achieving its limited objectives. At the New York Reserve Bank alone, we have had hundreds of inquiries involving stolen securities, and we have been involved in about thirty cases in which the checklist procedure was instrumental in the discovery of stolen securities. At least seven other Federal Reserve offices have been involved in similar cases.

Apart from the fact that the checklist procedure has led to the recovery of securities, we believe that one of its principal benefits is simply the fact that it exists. The fact that the community is aware that the Federal Reserve Banks are now checking for missing securities, and that they serve as a central clearing house for information, insuring the prompt relay of such information to the authorities, should serve as a deterrent to the criminal elements dealing in such securities.

I might note at this point that there have been other developments during the last year or so that should also serve to discourage Government securities thefts, and hopefully help to continue the recent decrease in the incidence of such thefts. Such developments—most of which have already been referred to in these hearings—include (1) cooperative efforts among the various sectors of the financial community to cope with the problem—reflecting in general an increased awareness and concern within the community—including for example, the work done by the Banking and Securities Industry Committee (BASIC) and related groups, such as the Joint Industry Control Group and the Joint Bank-Securities Industry Committee on Securities Protection; (2) as a result of such cooperative efforts, the development of the Securities Validation System, the data bank on stolen securities recently put into operation as a commercial venture by Sci-Tek, Inc.; (3) better utilization of the FBI's National Crime Information Center (NCIC); (4) changes in Treasury administrative procedures designed to speed up the processing of Government securities; and (5) the good record of recovery of stolen Government securities, in large part as a result of the efforts of the banks suffering the losses, in cooperation with the insurance companies and the law-enforcement agencies; an outstanding example is the record of recovery in the Morgan Guaranty case.

LONGER TERM SOLUTIONS

The checklist procedure, and similar measures for reporting stolen securities, are designed to recover missing securities. Much more important, of course, are measures designed to prevent or minimize the loss of securities in the first place. At the Federal Reserve Bank of New York, we have been working on such measures in two areas. The first is the Bank's Government Securities Clearing Arrangement; the second is the book-entry procedure for Government securities, in use at all Reserve Banks.

Securities Clearing Arrangement. The Government Securities Clearing Arrangement was developed by the New York Reserve Bank several years ago as a means of reducing to a minimum the need for the physical handling of securities in transactions involving the major New York City banks active in the Government securities market. In brief, the Clearing Arrangement permits each of the participants to send and receive Government securities to and from any other participant, and to and from any other Federal Reserve District throughout the country, by means of transfer messages entered into terminals in its premises, with only a single net settlement of the physical securities involved at the end of the day. Instead of requiring the banks to make deliveries of the physical securities underlying each transaction—to or from the New York Reserve Bank or to or from any other participating bank—the Clearing Arrangement's net settlement procedure requires only one delivery, and only of the net amount of securities due to or from a bank at the end of the day. Obviously, such a procedure greatly reduces the need to handle physical securities, and thus the exposure to loss. As an indication of the volume involved, during the last twelve months, there was a total of 300,000 transfers, representing about $390 billion, processed through the Clearing Arrangement; as a result of the offsetting of transactions through the clearing process, about 75 percent of this amount, or $290 billion, did not involve any physical securities.

Until recently, the Clearing Arrangement was based on low-speed teletype equipment. At the present time, we are completing a process of conversion to new high-speed equipment, based on a new computer switch at the New York Reserve Bank, which is integrated with the Federal Reserve System's new national communications network. With the new equipment, we expect to increase greatly the volume and velocity of securities transfers processed through the Clearing Arrangement, and that in itself

should reduce further the need to handle physical securities. More important, however, is the capability we will have for integrating the Clearing Arrangement with the book-entry procedure, thereby achieving almost complete automation in Government securities operations and reducing to a minimum the need for any handling of physical securities.

Book-entry procedure. Several references have been made to the book-entry procedure during the course of these hearings. In brief, the book-entry procedure is a system under which a definitive Government security—the piece of paper representing a Government obligation—is eliminated, and the obligation is recorded on the computerized books of a Federal Reserve Bank. In this respect, the book-entry procedure is the optimal solution to the problem of thefts of Government securities—as well as the problem of counterfeiting such securities—for it eliminates the security. Beyond that, however, it provides the key to the ultimate automation of all Government securities operations.

The creation of the book-entry system has not been easy. Nor is the system completed. It has been a gradual process of conversion, with much more to do. Without going into detail, it is enough to say that the conversion of each class of security account has presented new and different legal problems, tax questions, and operational complications. These are a reflection of the fact that for centuries the law, commercial practices, and traditions governing transactions in securities—including, for example, sale, purchase, assignment, negotiation, endorsement, hypothecation, delivery, taxation, and creditors' rights—have all been based on the existence of a piece of paper having intrinsic value. Under the book-entry procedure, that piece of paper no longer exists. In this respect, the book-entry procedure is indeed a revolutionary concept, and it should be no wonder that its continuing development must be a gradual process.

The first phase of the process began on January 1, 1968, after several years of study by the Federal Reserve and the Treasury. At that time, the procedure was applied to the securities owned by member banks and held in custody at their Federal Reserve Banks. The procedure was then gradually extended to cover other types of accounts held at the Reserve Banks. By 1970, most of these accounts had been converted; the next step in the program was to go beyond the securities already held at the Reserve Banks, and to convert the securities held in custody by the member banks themselves for account of third parties. It was recognized that this step in the program marked an entirely new direction in the further expansion of the book-entry procedure, and it was expected that it would take the banks a considerable amount of time to complete the process of conversion.

INSURANCE CRISIS

That was the situation that existed as of December 1, 1970, when the so-called "insurance crisis" emerged in the Government securities market. The Subcommittee has already heard testimony on that problem, but I would like to review it for a moment from the point of view of the Federal Reserve and as an example of the serious consequences that can result from the underlying problem of securities thefts.

Beginning in 1969, particularly with the sharp increase in Government securities thefts in the latter half of that year, the insurance companies active in this field became more reluctant to continue their coverage of such securities. Unfortunately, despite some of the measures developed during 1970, the dollar amounts of the thefts continued at a relatively high level during most of the year. For 1970 as a whole, losses of marketable Government securities reported to the Treasury amounted to over $30 million.

The insurance companies were obviously concerned about the amount of those thefts. They were just as concerned, however, by the fact that they could not recover on claims filed with the Treasury until after the maturity date of the missing securities, even in cases where it appeared that the securities would never be presented for redemption and even where the company was willing to sign a bond of indemnity. The reason for this was that the Treasury did not have the legal authority to provide relief on such claims before the maturity of the missing security.

As the Subcommittee has heard, as a result of this situation, a major insurance company announced plans in December 1970 to exclude all bearer Government securities from its blanket bond coverage for dealers and brokers and to limit severely its coverage on such securities held by money center banks in New York City. Since the company was a predominant carrier in this field, it became immediately obvious that, if it were to proceed with its plans, which were to become effective early in January—and even if no other insurance companies followed suit, which at that time was doubtful—there would be most severe consequences for the Government securities market. Many of the major institutions which constitute the market—including the nonbank primary dealers, the bank dealers, and the clearing banks—carried coverage by that company. Without adequate coverage, it was entirely possible that the banks and dealers affected would terminate their handling of Government securities. If they

were to do so, the market would cease to function effectively.

These developments served to dramatize a very fundamental fact that is usually taken for granted—the fact that an effective and efficient Government securities market is essential to the national economy. From the point of view of Government, it is essential for Government financing and the general management of the public debt. From the point of view of the Federal Reserve, it is essential as the means through which monetary policy is implemented, the tool that is used to affect the level of money and credit in the economy. To perform effectively, the Government securities market must have depth and breadth; it was obvious that the market could not perform effectively without the participation of many of the major institutions that comprise the market.

It was in the light of these considerations that the New York Reserve Bank undertook a program in December 1970 designed (1) to provide for contingency planning to ensure the continued functioning of the Government securities market in the event that major participants terminated their securities operations because of inadequate insurance coverage and (2) to reduce the risk of thefts of Government securities by accelerating the further expansion of the book-entry program, thereby encouraging the insurance companies to continue their coverage. At the same time, the Treasury undertook a complementary program (1) to facilitate the further expansion of the book-entry procedure, including the resolution of certain tax questions by the Internal Revenue Service and (2) to accelerate the time within which relief on stolen securities could be granted.

In the light of such a program, a decision was made by the insurance company to continue coverage for the banks affected, on a curtailed basis, for a period of ninety days, at the conclusion of which the situation would again be reviewed. Coverage was not extended, however, for bearer Government securities held by dealers and brokerage firms.

During the ninety-day period, the Treasury proposed legislation in the Congress to permit it to accelerate the granting of relief on stolen securities—such legislation was subsequently enacted as Public Law 92-19, approved May 27, 1971—and substantial progress was made in implementing the program for further extending the book-entry procedure. It was against the background of these developments that the insurance company, as the Subcommittee knows, decided to negotiate with the banks concerned to continue coverage beyond the ninety-day period.

As for the brokerage firms, it appears that there has been a general trend, by most of the insurance companies active in the field, to exclude coverage on bearer Government securities while they are in the premises of the firm. The net effect of such a development has been that the brokerage firms affected either enter into arrangements with banks for the custody and handling of their Government securities or else they decide to terminate their business in such securities. Hopefully, as the problem of Government securities thefts is brought under control, insurance coverage on bearer Government securities will again be generally available to those brokerage firms that wish to handle such securities for their customers.

As the Subcommittee knows, there are indications that the measures thus far taken may have had an effect of containing the problem of Government securities thefts. Treasury records indicate that the level of such thefts has been relatively low so far this year—about $3 million in the first five months, with less than $500,000 from financial institutions in New York City. While it is too early to draw any optimistic conclusions from these figures, we are all hopeful that the trend will continue.

Over the long run, of course, the best solution is the book-entry procedure. At this point, we are in the process of extending the procedure to securities owned by customers of banks. The current status of the program is described in our circular letter of April 26, 1971. As indicated in that letter, we have started with the large New York City banks—those that have been most exposed to the problem of insurance coverage—and we expect the program to be available for all member banks throughout the country within a matter of months. At the present time, over $125 billion in Treasury securities is in book-entry form, with $110 billion of that amount at the Federal Reserve Bank of New York. Thus, well over one half of the $230 billion of Treasury securities outstanding in bearer form—those most vulnerable to theft—is in book-entry accounts. Gradually, as the banks bring in their customer securities, we expect that a major portion of the remainder of the $230 billion will be converted to book-entry form and that ultimately there will be relatively few pieces of paper in existence evidencing a Government debt obligation.

In New York City, we can foresee the day—not too long distant—when virtually all transactions in the central Government securities market will be effected through the Government Securities Clearing Arrangement by means of entries on computer terminals in the premises of the participating banks, with little need ever to handle—or even issue—a piece of paper representing a Government security. The transmission and accounting will be done by computer, and billions of dollars in Government securities will flow to and from all sectors of the market through our

computer switches. Obviously, this will greatly assist in eliminating the present problem of thefts in the Government securities market.

OTHER SECURITIES

BOOK-ENTRY SYSTEMS

It is just as obvious that some kind of book-entry computer system or systems for corporate and municipal securities would also help solve the problem of thefts of those securities as well. However, the obstacles to be overcome in the corporate and municipal area are quite complex and require considerably more study. In the case of Government securities, we have been working on the problem for many years and have been fortunate in having to deal with only one issuer—the United States Government—and only one body of applicable law—Federal law. In the case of corporate and municipal securities, there are thousands of issuers, and the laws of fifty states to contend with. Nevertheless, despite the obstacles, it would appear that this is the direction in which the financial community must go, and indeed there has been significant progress in moving forward in this direction. The establishment of the Central Certificate Service is clearly a step in this direction and, as the Subcommittee knows, there have been many studies of proposals for the further immobilization or ultimate elimination of stock certificates.

While we are not in a position to judge the relative merits of the various proposals under consideration, it seems to us that the ultimate objective should be the reduction to a minimum of transactions requiring the processing and exchange of pieces of paper having intrinsic value. Based on our experience with the book-entry procedure, we do not expect that the financial community can achieve this objective overnight; much more work and time is required. As a Federal Reserve Bank, we of course have an interest in the effective functioning of all financial markets, and we are prepared to offer whatever assistance we can in moving forward in this direction.

MEMBER BANK PRACTICES

In addition to our general interest in the long-term possibilities of developing some kind of book-entry systems for the corporate and municipal securities markets, we also have a specific interest in the problem of stolen corporate and municipal securities—and that is the extent to which banks subject to our supervision may become involved with such securities.

In general, a bank may become involved in a stolen security case where (1) the security is stolen from its custody or (2) the bank receives a stolen security in the course of its business, such as collateral for a loan. The Federal Reserve has developed rules and standards applicable in such cases to state member banks, and the Federal Reserve Bank examiners review compliance with such rules and standards during the course of their examinations.

One of the basic rules requires that every bank subject to Federal Reserve supervision should report any apparent violation of the Federal banking laws to its Federal Reserve Bank. Such reports are then forwarded to the local United States Attorney and to the Department of Justice. An example of the standards applicable to cases in which securities are offered to a bank as collateral is set forth in a Federal Reserve System letter on the subject dated March 3, 1971. During their examinations, the Federal Reserve Bank examiners determine whether such standards are being applied by the member banks.

We are continuing to study this question, particularly in the light of the valuable information produced as a result of these hearings, with a view to determining how our standards may be improved to ensure that banks maintain adequate safeguards against the risk of loss of securities as well as the risk of accepting stolen securities in the course of their business.

In this connection, the Federal Reserve has for some time been of the view that it would be desirable to have some kind of coordinated, centralized, and current checklist and information system on corporate and municipal securities available for direct and immediate access by the financial community. As one possibility for such a system, we have worked with the Joint Bank-Securities Industry Committee on Securities Protection in its project for a data bank on stolen securities. As the Subcommittee knows, this is the project that has been developed by Sci-Tek, Inc., as the Securities Validation System. Following a pilot program, the system began on-line operations last month. We are continuing to watch its progress, and are hopeful that the basic concept can be developed into a useful tool for the financial community.

LEGISLATIVE RECOMMENDATIONS

In response to the Subcommittee's offer, we have reviewed, in the light of our experience and responsibilities, the possible need for legislation to assist in dealing with the problem of securities thefts. On the basis of our review, we do not believe that legislation is necessary in more than one or two areas at this point in time.

With respect to the Reserve Bank checklist procedure for Government securities, no legislation appears necessary for its continued operation or future development.

However, our experience with the procedure has indicated that it might be helpful, primarily to clarify the jurisdiction of the FBI, to enact Federal legislation to make the theft of a Government security a crime in itself, rather than limit Federal jurisdiction to cases involving thefts from banks or cases in which stolen securities having a value of $5,000 or more are transported in interstate or foreign commerce. Such a proposal has already been discussed in the course of these hearings, and we would support its further consideration.

With respect to a data bank or centralized information system on stolen corporate or municipal securities available to the financial community, we would favor the development of such a system. It does not appear, however, that Federal legislation is necessary to facilitate such development. If it should appear that at some future date such legislation would be helpful, we would trust that it would be given favorable consideration.

With respect to commercial bank practices in connection with stolen securities, we believe that the present banking laws are adequate and permit the Federal bank supervisory agencies sufficient authority and flexibility to deal with the problem of securities thefts. The Federal Reserve will continue to study the matter with a view to determining the extent to which further administrative action may be desirable.

With respect to the corporate and municipal securities markets, we would favor in principle any proposal that would reduce to a minimum—whether by immobilization or elimination of the securities—the need to process and exchange pieces of paper having intrinsic value. At this point, it does not appear that Federal legislation is necessary to move forward in the development of such a program. In any case, much more study of this question is essential before legislative action—whether on a Federal level or a state level—can be taken. Depending on the ultimate outcome of the Subcommittee's present investigation, perhaps the Subcommittee may wish to consider means of facilitating such a study, whether by legislation or otherwise.

With respect to the book-entry procedure, it does not appear that legislation is necessary at this point to proceed further with our program. Nor do we see the need for legislation to extend the program to Federal agency securities, a step which is planned for the near future by means of administrative action. However, in view of the rather revolutionary nature of the book-entry concept, it may well be that at some point in time legal questions may arise that might best be resolved by Federal legislation. In such event, we hope we would be able to seek the assistance of this Subcommittee in support of such legislation and in support of the book-entry concept in general.

The Business Situation

Business activity continues to recover at a rather slow pace in a highly inflationary atmosphere. Gross national product (GNP), after adjustment for price inflation, advanced at a seasonally adjusted annual rate of 3.7 percent in the second quarter, well below the growth rate registered at the similar stage of each of the three other post-Korean war business recoveries. The most recent monthly data, moreover, do not suggest any immediate change in the rate of recovery. In June, new orders for durable goods declined, industrial production remained virtually stable, and the rise in personal income (net of the increase in social security benefit payments) was smaller than in May. On the other hand, retail sales in June showed another sizable improvement according to the advance report, thus sustaining the strength that had emerged earlier in the quarter. Housing starts also rose further in June, and the continued high level of newly issued building permits implies that some additional upward movement in starts may be forthcoming. The underlying inventory situation seems conducive to a more expansionary pace of inventory spending, inasmuch as inventory-sales ratios in most sectors are at comfortable levels. However, the rundown of strike-hedge steel inventories is likely to limit the overall rate of inventory investment during the coming months.

Recent price developments continue to be thoroughly disappointing. Aside from some temporary moderating influences, there is little, if any, evidence of a slowing in the rate of inflation. In fact, during the most recent months, both consumer and wholesale industrial prices have been climbing more rapidly than they did earlier in the year. Cost pressures, moreover, remain very strong.

GROSS NATIONAL PRODUCT

According to preliminary estimates by the Department of Commerce, the market value of the nation's output of goods and services rose by $19.7 billion during the second quarter to a seasonally adjusted annual rate of $1,040.5 billion. This gain was a shade higher than the average advance over the previous two quarters, the first of which was depressed by the automobile strike and the second considerably swollen by the subsequent rebound in auto production. Slightly more than half of the GNP growth in the April-June period took the form of higher prices, leaving the rise in real GNP at a 3.7 percent annual rate.

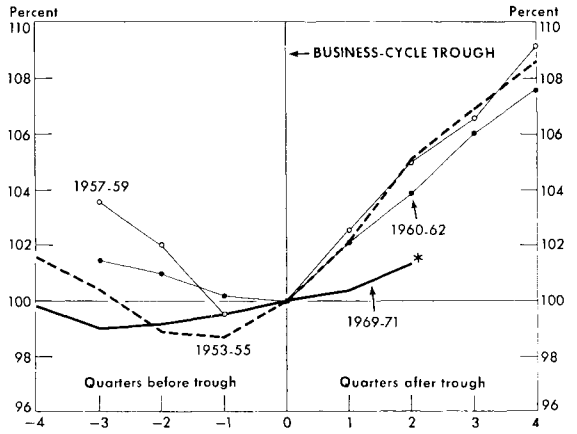
Since the fourth quarter of last year, which has been tentatively identified by the National Bureau of Economic Research as the trough quarter of the contraction, real output has grown at a 5.8 percent annual rate. However, the magnitude of the rise in real GNP over this period is biased upward because economic activity in the fourth quarter was, as noted above, temporarily depressed by the automobile strike. With certain allowances for the effects of the strike, the growth rate in real GNP since the cyclical trough has been about 1½ percent, or 3 percent in annual rate terms. Whatever the precise impact of the auto strike, it is clear that the upswing in real GNP in the two quarters since the cyclical trough has been very modest by comparison with the experience in the three other post-Korean war recovery periods. For example, over the two quarters following the troughs of the 1953-54 and the 1957-58 recessions, real GNP expanded by about 5 percent, or at an annual rate of 10 percent. Similarly, two quarters after the 1960-61 recession bottomed out, advances in real GNP amounted to a substantial 4 percent, or an 8 percent annual rate (see Chart I).

Recent movements in the Federal Reserve Board's index of industrial production (which has been substantially restructured and revised)[1] also attest to the slow tempo of recovery. After having risen 0.7 percent in April and again in May, it edged upward in June by only 0.1 percent. Despite the added thrust provided by strike-related gains in automobile and steel production, the overall rise in industrial output since last November has been a modest 4.3 percent, thus leaving the index in June 4.4 percent

[1]See "Industrial Production—Revised and New Measures", *Federal Reserve Bulletin* (July 1971), pages 551-76.

Chart I

REAL GROSS NATIONAL PRODUCT IN FOUR ECONOMIC CONTRACTIONS AND RECOVERIES



Note: The business-cycle troughs, as identified by the National Bureau of Economic Research, are August 1954, April 1958, February 1961, and November 1970 (tentative).

* Adjusted at the Federal Reserve Bank of New York for the impact of the automobile strike.

Source: United States Department of Commerce.

below the pre-recession peak attained in September 1969. Sharply reduced levels of steel production will retard the growth of the overall index in the near future, as consumers work off their strike-hedge inventories of raw or semifinished materials.

During the second quarter, current-dollar final expenditures, i.e., GNP net of inventory investment, climbed $18.2 billion, about equal to the average of the two preceding quarters. This second-quarter rise in final expenditures was paced by a large $15.5 billion advance in consumer spending, as outlays for services and in particular nondurable goods posted considerable increases. The second-quarter gain of $2.4 billion in consumer spending on durables stemmed partly from an advance of $1.4 billion in outlays on automobiles and parts. The latter, in turn, reflected to a large extent the continued strength in sales of imported cars.

Over the first six months of 1971, sales of new domestic passenger cars were running at a seasonally adjusted annual rate of 8.3 million units (see Chart II). This figure, although well ahead of the total for 1970, was somewhat below the 8.5 million units averaged over 1968 and 1969. In contrast, total auto sales, at just under 10 million units during the first six months of this year, have surpassed the 1968-69 average of 9.6 million units. The difference is accounted for, of course, by the dramatic increase in sales of imported cars. Imports were selling at a 1.8 million unit annual rate in June and at a 1.7 million rate in the second quarter as a whole. This brought their share of the new car market to approximately 18 percent in June, the highest on record except for the strike-distorted final months of last year. Data for July show the rate of sales of domestic autos the same as during the first half of the year, with imports selling at a 1.6 million unit pace.

The large second-quarter rise in consumer spending recorded in the GNP accounts had been suggested by developments in retail sales over the quarter. The preliminary data for June—which could be sharply revised—indicate considerable further strengthening in retail purchasing at the end of the quarter. Indeed, these statistics show that total retail sales advanced by a hefty 1.6 percent in the month, with all major categories sharing in the gain. The June increase followed large upward revisions in the data for each of the three preceding months.

Even with the sizable advance in personal consumption outlays in the second quarter, consumers stepped up their rate of savings. As a consequence, the ratio of personal savings to disposable or after-tax income climbed to 8.3 percent from 8.1 percent.[2] Much, if not all, of this second-quarter rise can be traced to the increase in social security benefit payments that occurred in June. Since the new benefits were retroactive to January 1, the June payments included lump-sum payments for the earlier months of the year as well as the permanent increase in benefits. In the aggregate, this added about $5½ billion (at an annual rate) to second-quarter disposable income. However, the checks probably were received too late in the quarter to affect consumer spending appreciably, with the consequence that the savings rate increased significantly. Nevertheless, the rate was very high even aside from this factor. Indeed, over the six quarters ended in the April-June period, the savings rate averaged 8 percent in contrast to an average of about 6¼ percent over the post-Korean war period as a whole.

[2] Along with the preliminary GNP data for the second quarter, the Department of Commerce released its annual revisions of the GNP and related data for the last three years. In terms of the spending aggregates, most of the revisions were small. However, reflecting an upward revision in personal income and a downward revision in consumer spending, both the level of personal savings and the savings ratio were revised upward by significant amounts. For example, on the basis of the earlier estimates, the savings rate for 1970 was 7.3 percent whereas the revised data show the rate at 7.8 percent.

Spending on residential construction registered another strong advance in the second quarter, rising by $2.9 billion to a record seasonally adjusted annual rate of $39.3 billion; this was 37 percent above the recent low registered during the third quarter of 1970. The prospects for continued gains in home building seem good despite some firming of mortgage market conditions. In June, housing starts totaled 1.98 million units at a seasonally adjusted annual rate. This was the largest volume in any single month of this year and raised housing starts for the second quarter as a whole to a 1.95 million rate, the highest since the third quarter of 1950. Although building permits issued in June backed off somewhat from their very high May reading, the volume of permits for the second quarter as a whole points to the likelihood of a further increase in housing starts in coming months.

In contrast to the thrust provided by residential construction, business fixed investment in the second quarter advanced only at a slim $1.8 billion annual rate as a result of a $2.0 billion gain in outlays on producers' durable equipment and a small decline in outlays on structures. This served to confirm the rather sluggish outlook for capital spending suggested by various surveys, such as the 2.7 percent gain for 1971 indicated by the most recent Department of Commerce-Securities and Exchange Commission survey. Moreover, the already remote possibility that business fixed investment spending would strengthen in the coming months has been further diminished by other recent developments. As measured by the Federal Reserve Board's index of industrial production, output of business equipment slipped in June in continuation of a long decline dating from September 1969. The Federal Reserve also disclosed that manufacturing firms were operating at a low, seasonally adjusted 73.2 percent of their capacity during the April-June period, down from the 78 percent averaged over the first three quarters of 1970 which were relatively free from the effects of the automotive strike.

Inventory accumulation amounted to an estimated $4.7 billion (annual rate) in the second quarter. However, this figure is still quite preliminary, being based on partial returns for the months of April and May. Analysis of inventory movements in recent quarters is complicated by actual and potential labor disputes, but it appears that stockpiling in anticipation of a steel strike accounted for a sizable portion of the second-quarter accumulation. The runoff of these steel stocks in the coming months will, of course, act as a drag on overall inventory spending. Apart from the steel inventory situation, however, the inventory picture is good, with the inventory-sales ratios for all businesses and for most major sectors at comfortable levels. This contrasts with the situation at the turn of the year, when stocks were somewhat high relative to sales.

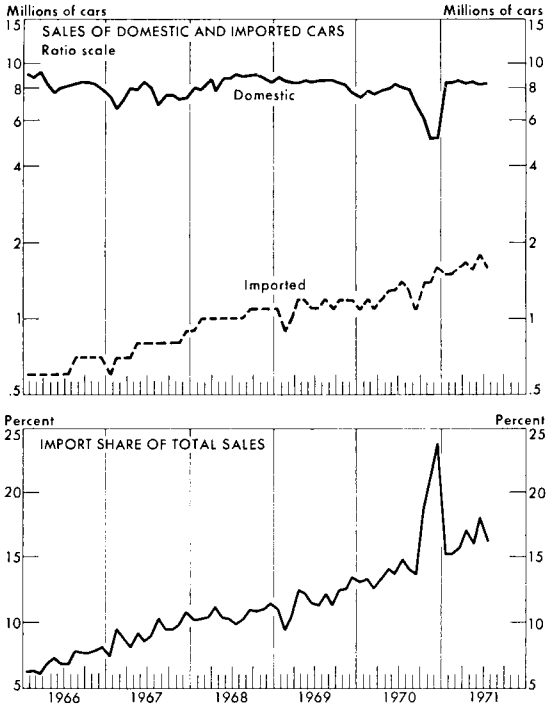
Government purchases of goods and services contributed $2 billion (annual rate) to the second-quarter GNP advance. Federal outlays dropped by $0.7 billion, as a $1.0 billion contraction in defense outlays was only partially offset by a small gain in the nondefense categories. Since peaking in the third quarter of 1969, Federal defense expenditures have fallen by an average of $1 billion per quarter, so that even a leveling-off would serve to bolster GNP growth. In this regard, there are some tentative indications that the prolonged contraction in defense outlays may have run its course. For example, based on the Federal Reserve Board's index of industrial production, defense and space equipment output increased for the second consecutive month in June, although it was still 29 percent below the peak reached in August 1968.

State and local government spending rose at an annual rate of $2.7 billion in the second quarter, as the overall advance was held down by an apparent decline in outlays on structures and capital-type goods. This latter drop was

Chart II

NEW CAR SALES

Seasonally adjusted annual rates



Sources: Seasonally adjusted imported car sales data are from the United States Department of Commerce. Domestic car sales data are gathered from industry sources and are seasonally adjusted at the Federal Reserve Bank of New York.

probably a statistical fluke, since the very heavy volume of state and local borrowing in recent quarters is almost certainly providing an impetus to outlays on structures. Moreover, the Emergency Employment Act of 1971, which was signed into law during July, will increase Federal grants to state and local governments by an additional $1 billion during the current fiscal year. In turn, state and local spending will rise as these funds are used to provide public service jobs for the unemployed. Thus, state and local outlays could show larger gains over the coming quarters.

Net exports of goods and services, according to still incomplete data, plummeted from a $4.2 billion annual rate in the first quarter to a scant $0.1 billion in the April-June period as a result of a large spurt in imports and some slippage in exports. This sharp decline in net exports produced a $4.1 billion drag on the overall rise in GNP. The Commerce Department noted that imports of raw materials had increased, partly in anticipation of a steel strike. Observers point out that steel imports could subside substantially in the second half of this year, since foreign steel sellers may already have exhausted their voluntary quotas on 1971 shipments to the United States.

PRICES, WAGES, AND PRODUCTIVITY

Price developments during the second quarter reflect a combination of some major setbacks in the struggle against inflation and a few very tentative and isolated gains. On balance, there are virtually no signs of a significant lessening in the pace of inflation. The most comprehensive available measure of price movements, the GNP deflator, slowed to a 4.2 percent annual rate of increase in the second quarter, down from the 5.3 percent rate of the January-March period. This deceleration is an overstatement, however, since the first-quarter deflator was given a temporary boost by the Federal pay raise, which accounted for roughly 1 percentage point of the increase in that period. Moreover, since the deflator is a weighted average of many component price indexes, with the weights being determined by output in each current quarter, shifts in the composition of output can obscure underlying price trends. Both the final quarter of last year and the first period of 1971 were substantially affected by the huge swings in the durable consumption goods component, which exaggerated the pace of inflation in the fourth quarter and may have understated it in the first quarter. In the second quarter of 1971, a continuing shift in the composition of output toward relatively low-priced items may have resulted in a further overstatement of the extent to which inflation moderated. Using the output weights from the year 1958—the only full-year period for which such data are available—in an attempt to abstract from these compositional movements indicates that the annual rate of increase in the deflator during the April-June period was 5 percent rather than the 4.2 percent indicated by the current weights scheme. Although somewhat of an improvement from the 5.8 percent change (1958 weights) in the first quarter (after excluding the Federal pay raise), the 5 percent figure is not much lower than the 5½ percent advance averaged over the four quarters of last year. A similar deflator that uses weights from the fourth quarter of 1965 leads to essentially the same results.

Wholesale price changes must be interpreted as extremely discouraging. Movements in the overall index have been dominated by the erratic behavior of agricultural prices. Despite a July decrease, prices in the farm products, processed foods, and feeds category have advanced at a seasonally adjusted annual rate of 4.2 percent thus far this year, in contrast to their 1.2 percent decline during all of 1970. More significant, however, are the movements in prices of wholesale industrial commodities. These increased at an annual rate of 2.8 percent in the first quarter and 5.2 percent in the second quarter, and soared upward at an 8.4 percent rate in July. During 1970, such prices had risen by 3.6 percent.

Consumer prices made a poor showing in June, when the seasonally adjusted index spurted ahead at a 5.5 percent annual rate. This was somewhat below May's very high 6.7 percent upsurge, but considerably above the 3 percent advance registered over the first four months of this year. The Bureau of Labor Statistics' mortgage interest rate index declined for the sixth consecutive month in June and again retarded the rise in total consumer prices. Over the first half of 1971, the total consumer price index rose at a 4 percent annual rate, but without the benefit of declining mortgage rates it would have advanced at a rate of about 5 percent.

Movements in wages and salaries have provided little or no relief from inflationary pressures. Measured from a year earlier, the index of seasonally adjusted compensation per man-hour for the private nonfarm economy grew by a rapid 7.9 percent in the second quarter of 1971, the largest increase since the closing quarter of 1968. Output per man-hour rose by 3.5 percent from the second quarter of 1970 to the second quarter of 1971, a gain somewhat more modest than was experienced at similar stages of previous economic recoveries since the Korean war. As a consequence, labor costs per unit of output rose 4.2 percent, representing a definite slowdown from the peak year-to-year increase registered in the first quarter of 1970. Nevertheless, unit labor costs are still rising at an excep-

tionally rapid rate. This upward movement, moreover, contrasts with declines in parallel periods of previous cycles. By the second quarter after the cyclical trough, unit labor costs had fallen 2.7 percent following the 1953-54 recession, 0.4 percent after the 1957-58 contraction, and 1.2 percent subsequent to the 1960-61 downturn. These earlier declines resulted from somewhat more rapid rates of productivity growth than we have had this time and substantially smaller advances in compensation per man-hour.

The latest Bureau of Labor Statistics survey shows that the rate of increase in wages and benefits under major collective bargaining agreements was smaller during the first half of 1971 than for the full year 1970. The mean life-of-contract wage and benefit changes negotiated from January through June was 8.3 percent per year for all industries, in contrast to 1970's 9.1 percent. However, these data, which exclude possible cost-of-living wage increases, do not warrant the conclusion that there has been a slowdown in the pace of the advances. Manufacturing contracts signed during the first six months of this year provided for slightly larger average wage rate increases than last year. Moreover, very few construction labor agreements were included in the first six months' data, even though a large number normally occur during the April-June quarter. These construction settlements may well show up in the surveys covering the latter half of this year, giving an upward push to the figures for that period. In addition, the hefty settlements recently reached in primary metals, transportation, and communications will leave their imprint on the figures gathered for the third quarter of this year.

The rapid rise in labor costs has occurred despite the continuing generally soft condition of labor markets. A mixed picture emerges from the most recent data. According to the July survey of nonagricultural establishments, seasonally adjusted payroll employment declined by 200,000 workers, the second consecutive monthly decrease. Only about one fourth of this drop can be traced to the increase in the number of persons involved in work stoppages for the entire survey week. The July household survey, on the other hand, which counts striking workers as employed and further differs from the payroll survey in terms of coverage and seasonal adjustment techniques, indicated a rise in employment of 500,000. Since the seasonally adjusted labor force grew by 700,000 persons, the unemployment rate rose to 5.8 percent, up from the June figure of 5.6 percent which is believed to have been artificially depressed by seasonal adjustment problems.

Recent Monetary and Bank Credit Developments

During the second quarter of 1971, the growth rate in the narrow money supply, M_1,[1] accelerated while the rates of expansion of most other major monetary aggregates became more moderate. The quickened growth of M_1 reflected a step-up in demand deposit growth, although this may have been exaggerated somewhat by data-reporting and seasonal adjustment problems. On the other hand, time and savings deposit growth at both commercial banks and thrift institutions tailed off from the record-shattering pace of the first quarter, partly because rising market interest rates induced investors to channel funds into—or not to switch out of—alternative investments. As a consequence, the rate of growth of the broader money supply measures, M_2 and M_3, slowed somewhat. On balance, however, the rates of growth in all the money supply measures remained relatively high by historical standards.

The adjusted bank credit proxy and total bank credit, like M_2 and M_3, advanced more moderately in the second quarter, with the slowdown in the proxy resulting principally from the deceleration in both CDs and other time and savings deposits. The growth rate of the proxy, however, was considerably less than the growth rates of the money supply measures. This was attributable primarily to the fact that the proxy—unlike the other measures—includes nondeposit sources of funds and Government deposits, both of which declined during the quarter. As in earlier quarters, most of the strength in total bank credit reflected increases in bank holdings of securities, although bank purchases of tax-exempt securities slowed considerably. Business loan demand remained sluggish, as corporate borrowers continued to raise large amounts of funds in the capital markets.

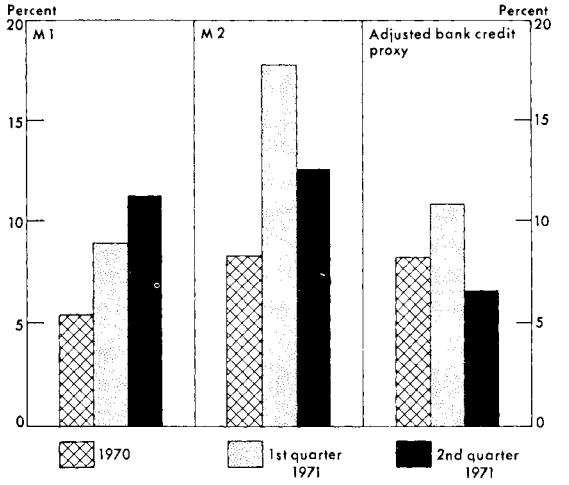
THE MONEY SUPPLY MEASURES

During the second quarter of 1971, the narrowly defined money supply, M_1, expanded at a seasonally adjusted annual rate of 11.3 percent (see Chart I). This advance, coming on the heels of the 8.9 percent gain registered in the first quarter, pushed the rate of growth in M_1 for the first six months of the year to 10.3 percent. The rise in the money supply over the first half of this year has been extraordinarily rapid. As a comparison, over the decade of the 1960's the narrow money supply expanded at a compound rate of only 3.6 percent per year. Of course, some acceleration in the growth of the money stock may be desirable in the early stages of business recoveries, but the rise in M_1 since November has been much stronger than that experienced in similar intervals following the three previous recessions. On the other hand, the income velocity of money has not increased so much in this recovery as it did in the early stages of the

Chart I

CHANGES IN MONETARY AND CREDIT AGGREGATES

Seasonally adjusted annual rates



M1 = Currency plus demand deposits held by the public.

M2 = M1 plus commercial bank savings and time deposits held by the public, less negotiable certificates of deposit in denominations of $100,000 or more.

Adjusted bank credit proxy = Total member bank deposits subject to reserve requirements plus nondeposit sources of funds, such as Euro-dollar borrowings and the proceeds of commercial paper issued by bank holding companies or other affiliates.

Source: Board of Governors of the Federal Reserve System.

[1] For definitions of M_1, M_2, and the adjusted bank credit proxy, see Chart I. M_3 equals M_2 plus mutual savings bank deposits and savings and loan association shares.

three preceding recoveries. Part of the advance in M_1 can be explained by policy actions during the first quarter, which were designed to bring about a more rapid growth in the money stock in order to compensate for the shortfall in growth that occurred during the fourth quarter of 1970 in the wake of the General Motors strike. While this factor may explain part or all of the acceleration in the growth in M_1 during the first quarter, the reasons for the further step-up in growth over the April-June interval are not so apparent.

The complexities involved in the measurement of the money supply are such that a clear explanation of the reasons for the rapid growth of M_1 in the second quarter is difficult to establish, even in retrospect. There is some evidence that much of the growth in demand deposits materialized at "country" member banks and at nonmember banks. Data-reporting problems are particularly troublesome at nonmember banks, since complete reports of deposit levels are made only twice a year. Complications arising from the removal of seasonal variations from the money stock data may be another source of error.

The new Federal Reserve Board survey of demand deposit ownership[2] sheds some additional light on the recent behavior of the money supply. Data from this survey report levels of gross demand deposits held by financial businesses, nonfinancial businesses, consumers, foreigners, and all others. Since these data are not seasonally adjusted, and are available only for one year, meaningful analysis of quarterly changes in the pattern of deposit ownership is quite difficult. Over the full year ended June, the data do indicate that demand deposits held by consumers rose considerably faster than total deposits, accounting for more than 50 percent of the aggregate deposit increase. The more rapid rise in consumer demand deposit holdings is consistent with the stepped-up pace of consumer transactions that emerged over this period. However, the rapid increase in these deposits may also reflect some precautionary deposit building, as consumers reacted to the uncertainties of rising unemployment and inflation.

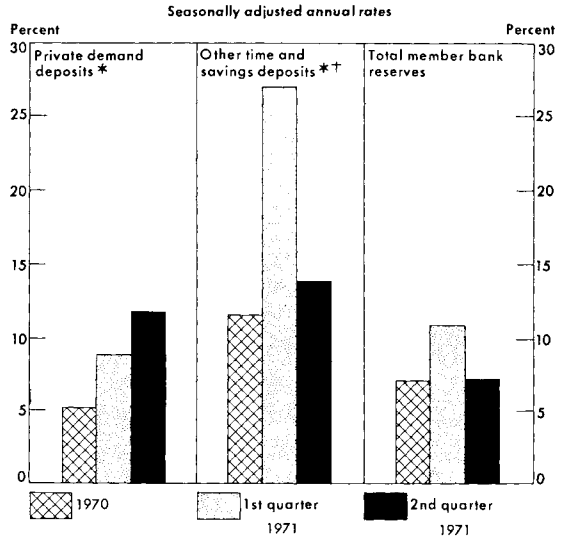
Whatever the role of these various factors in contributing to the advance in the money supply, it must be recognized that the growth of member bank reserves—at least through May—was also rapid, thereby facilitating a sharp rise in the money stock. For example, in the period between March and May, nonborrowed reserves and total reserves expanded by 11.1 percent and 10.0 percent, respectively, little changed from the rates of growth that prevailed in the first quarter. The growth of reserves was particularly strong in May in the face of the uneasy financial market conditions that emerged at the time of the Treasury's May refunding. The international financial crisis and investor concern about the size of upcoming Government and corporate financing needs, along with renewed worries about inflation, amplified the pressures in the financial markets. In June, however, member bank nonborrowed reserves declined at a seasonally adjusted annual rate of 6.2 percent, as the Federal Reserve sought to counteract the unexpectedly rapid increase in the money supply in the preceding months. Consequently, for the quarter as a whole the growth rates in nonborrowed reserves and total reserves were 5.3 percent and 6.7 percent, well below the first-quarter rates of 11.0 percent and 10.9 percent.

The acceleration in the rate of growth of the narrow money supply, and particularly its demand deposit component, at the same time that the growth of member bank reserves was slowing down can be explained in part by the concentration of the increase in demand deposits at country banks. Required reserve rates are almost always lower at country banks than at reserve city banks, so that a given input of reserves can support a larger volume of demand deposits at country banks than at reserve city banks. A second factor explaining the development was a shift in the mix of new deposits in the second quarter relative to the first quarter (see Chart II). In the January-to-March period, the demand deposit component of M_1 expanded by 8.9 percent while time and savings deposits other than large CDs grew by 27.0 percent. Thus, a relatively large share of the growth in reserves was used to support the huge increase in time deposits. In the second quarter, the growth of time deposits tailed off sharply to 13.5 percent while demand deposit growth accelerated somewhat to 11.8 percent. As a consequence, in the three months ended June, a substantially larger share of the additional reserves was supporting demand deposit growth than in the previous period.

Because of the slowdown in the rate of growth of time and savings deposits, there was also some reduction in the rate of expansion of M_2. This measure posted a 12.6 percent seasonally adjusted annual rate advance during the three months ended June. In the first quarter, M_2 had advanced 17.8 percent. Although the increase in time and savings deposits other than CDs remained strong by historical standards, the second-quarter 13.9 percent seasonally adjusted annual rate of growth was significantly below the rates of gain experienced in the first quarter.

[2] Details of this survey are reported in the *Federal Reserve Bulletin* (June 1971), pages 456-67.

Chart II
CHANGES IN DEPOSITS AND RESERVES
Seasonally adjusted annual rates



* Deposits at all commercial banks.

† Excluding negotiable certificates of deposit in denominations of $100,000 or more.

Source: Board of Governors of the Federal Reserve System.

This more moderate growth probably in part reflected increases in market interest rates during the quarter that induced investors to channel savings into other instruments. In response to these developments, a number of major commercial banks increased the rates paid on passbook and term savings to the maximum permitted under Regulation Q ceilings.

Deposit inflows to the thrift institutions were also less strong during the second quarter relative to the first quarter. According to the preliminary estimates, deposit inflows at savings and loan associations and mutual savings banks during the three months ended June expanded at a 17.6 percent seasonally adjusted annual rate. While this growth rate was very strong compared with past years, it represented a considerable slowing from the first quarter when thrift institution deposits rose by 24.0 percent. Reflecting the slower growth of time deposits, M_3 posted a 14.8 percent gain in the quarter, compared with a rise of 19.0 percent in the first three months of the year.

ADJUSTED BANK CREDIT PROXY AND NONDEPOSIT LIABILITIES

The adjusted bank credit proxy grew moderately in the second quarter, rising at a seasonally adjusted annual rate of 6.5 percent. This followed a gain of 10.9 percent during the first three months of the year. Thus, for the six months ended June the growth rate in the proxy was a shade under 9 percent. In light of the very rapid growth in M_1 and M_2 over this same period, the slower growth rate in the proxy may appear inconsistent. However, virtually all of the disparity can be explained by the behavior of United States Government deposits and of nondeposit sources of funds, primarily commercial bank liabilities to foreign branches and bank-related commercial paper. In total, these items declined by $9 billion on a seasonally adjusted annual rate basis over the first six months of the year. Since they are included in the proxy but excluded from M_1 and M_2, the declines in these components retarded the growth of the proxy relative to the money supply measures.

The deceleration in the rate of growth of the proxy in the second quarter from its pace in the first quarter can be traced in part to the previously noted slowdown in the growth rate of commercial bank time and savings deposits other than large CDs. Beyond this, however, the growth of large CDs continued to slacken, Government deposits declined, and the runoff of nondeposit liabilities persisted. Over the quarter as a whole, CD growth at weekly reporting banks totaled $800 million, seasonally adjusted, the smallest such quarterly gain since Regulation Q ceilings on these deposits were suspended last summer (see Chart III). The overall growth in CDs for the quarter was held down as a result of their absolute decline in April, when many corporations apparently used maturing CDs to meet their tax obligations. Rising market interest rates forced banks to raise their CD offering rates substantially in order to attract such funds. The rate most often quoted for maturities of sixty to eighty-nine days increased by 175 basis points over the quarter.

Reflecting in part the strength in private deposit flows, bank reliance on nondeposit sources of funds continued to diminish (see Chart III). Liabilities to foreign branches, the major nondeposit source of funds, fell in April and May by $1,858 million and $735 million, respectively.[3] The decline in April was, to a large extent,

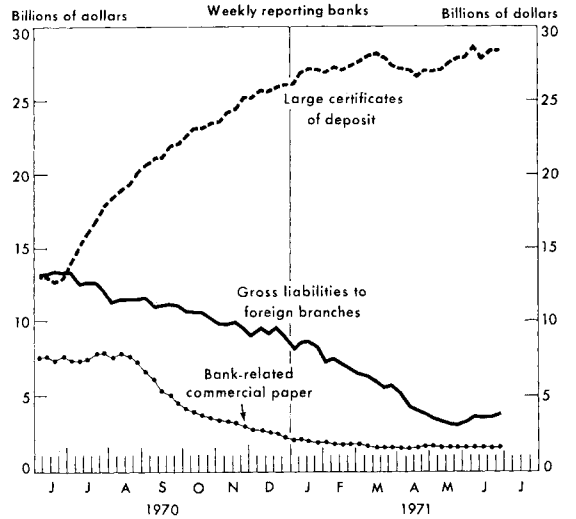
[3] The data on liabilities to foreign branches reported here differ from the data printed in the *Federal Reserve Bulletin* in several ways. The series used in this article is based on weekly averages of daily figures rather than Wednesday levels. Moreover, it includes liabilities to branches in United States possessions, territories, Puerto Rico, and overseas military installations. These and other minor adjustments yield a series of liabilities that are subject to the reserve provisions of Regulation M. The series in the *Bulletin*, on the other hand, is directed toward the balance-of-payments impact of the liabilities.

a reflection of the Treasury's $1.5 billion issue of three-month certificates of indebtedness to foreign branches of United States banks. These instruments, like the two special note issues sold earlier by the Export-Import Bank, were designed to absorb Euro-dollars in order to reduce any adverse international developments resulting from the rundown of liabilities to foreign branches. Holdings of these securities issues can be counted in the calculation of the reserve-free base. This allows the banks to run down their liabilities to foreign branches by the amount of the securities purchased without incurring a future reserve penalty should they start to rebuild such liabilities. Since April 9, the outstanding volume of special securities has remained at $3 billion, as the first Export-Import Bank note issue of $1.0 billion was rolled over on April 26 and the second $0.5 billion Export-Import Bank note issue was replaced by a Treasury certificate of indebtedness on June 1.

In June, liabilities to foreign branches reversed direction, growing by $782 million during the month to $3,870 million. This represented the first monthly increase since the middle of 1970. The reversal presumably occurred because Euro-dollar rates declined over the month, as foreign exchange speculative pressures eased and some dollars flowed from foreign official coffers back into the market, while at the same time domestic short-term rates continued to rise. This eliminated much of the rate disadvantage of Euro-dollars; indeed, at times Federal funds rates exceeded Euro-dollar overnight rates by a substantial amount. In most cases, banks were able to increase their borrowings of Euro-dollars without being subject to the 20 percent marginal reserve requirement, inasmuch as they were permitted to use the cushion provided by their holdings of special note issues. The second major nondeposit source of funds, bank-related commercial paper, showed little change over the quarter. At the end of June, the total amount of bank-related paper outstanding was $1,733 million, $616 million below the 1970 year-end level.

Chart III

LARGE CERTIFICATES OF DEPOSIT AND NONDEPOSIT SOURCES OF FUNDS



Sources: Board of Governors of the Federal Reserve System; Federal Reserve Bank of New York.

BANK CREDIT

The total volume of all commercial bank credit outstanding posted a moderate gain over the three months ended June, advancing at a 7.4 percent seasonally adjusted annual rate after adjustment for loan transactions with affiliates (see Chart IV). Although this increase was not so rapid as the 12.2 percent rate of the first quarter, it was roughly in line with the behavior of bank credit in 1970 as a whole, when an 8.0 percent expansion was recorded. Following the pattern of other recent quarters, much of the overall strength in bank credit reflected a rise in securities holdings by the commercial banks, the latest expansion amounting to 13.6 percent. On the other hand, total loans remained decidedly on the sluggish side. Indeed, total commercial bank loans adjusted for net sales to affiliates from banks' loan portfolios rose at a seasonally adjusted annual rate of about 4 percent (see Chart IV).

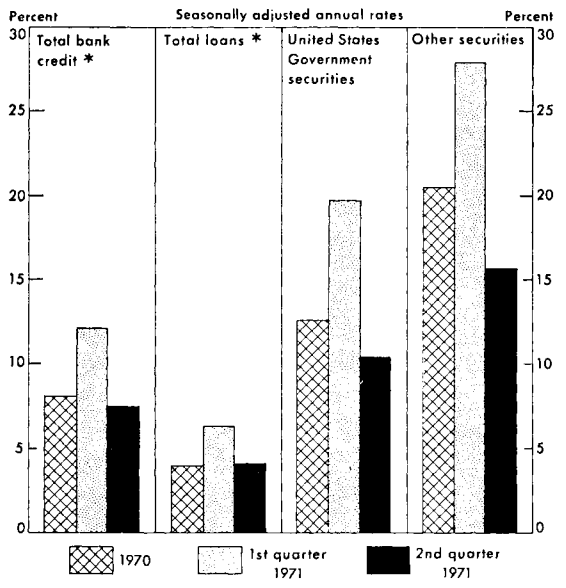
The dominant factor holding down the rate of advance of overall bank lending has been the continued weakness in business loans. Over the three months ended June, business loans adjusted for net loan sales grew by slightly less than 3 percent. Moreover, in the seven months following the November 1970 business-cycle trough, the rise in business loans was only 1.8 percent, and even this growth rate may be overstated since the level of loans in November was probably artificially depressed by the automobile strike. Sluggishness in the behavior of business loans in the early months of a recovery is not, however, unusual. For example, over the seven months following the business-cycle troughs of April 1958 and February 1961, business loans expanded at seasonally adjusted annual rates of 2.0 percent and 2.8 percent, respectively.

The recent weakness in business loans has several causes. On the one hand, the recovery in business activity to date has been of modest proportions. Beyond this, corporate tax liabilities have been depressed by the low levels of corporate profits. Perhaps more importantly, it appears that the cash flows provided by maturing CDs

Chart IV

CHANGES IN BANK CREDIT AND ITS COMPONENTS

ALL COMMERCIAL BANKS



* Adjusted to include net sales to affiliates from banks' loan portfolios.

Source: Board of Governors of the Federal Reserve System.

and maturing tax anticipation bills, especially in the month of April, were large enough relative to tax liabilities to reduce business dependence on bank loans for funds to pay taxes. The single most important consideration, however, has been the continued corporate preference for bond financing. While the volume of new corporate bond flotations in the second quarter dropped below the record-shattering pace of the first three months of the year, the $7.2 billion (seasonally adjusted) of new corporate offerings was still very high by past standards.

Aside from business loans, most other major categories of bank lending showed some strengthening in the second quarter. Indeed, consumer, real estate, and agricultural loans all advanced more rapidly than in either of the two preceding quarters. The only absolute decline was posted in the usually volatile securities loan category.

Investment holdings of the commercial banks continued to advance in the second quarter, but at a substantially slower pace than was experienced in the preceding several quarters. For the three months ended June, investment holdings grew at a 13.6 percent seasonally adjusted annual rate, whereas the rate of gain over the preceding three months had been 24.6 percent. United States Government securities holdings advanced by 10.4 percent over the quarter (see Chart IV). However, this advance was primarily a reflection of their strong rise during the last statement week in June, when the Treasury sold $2¼ billion of 6 percent notes with full Tax and Loan Account privileges.

The reduction in the pace at which banks acquired "other securities", primarily tax-exempt state and local government issues, was particularly dramatic. From the end of July 1970 to March 1971, these securities holdings had advanced at a seasonally adjusted annual rate in excess of 30 percent as banks absorbed a major share of the massive volume of new issues of tax-exempt state and local securities. In contrast, during the second quarter of 1971 the increase in bank holdings of other securities tailed off to 15.7 percent, and the 8.9 percent June advance was the smallest monthly increase in almost a year.

The Money and Bond Markets in July

Uneasiness over the persistence of inflationary pressures in the economy and the further rapid growth of the money supply pervaded the financial markets during July. Short-term interest rates rose over the month, as the Treasury embarked on heavy seasonal borrowing and the Federal Reserve reduced the provision of nonborrowed reserves. Long-term corporate interest rates edged higher, too, despite a tapering-off in sales of new issues. Municipal bond yields, however, receded until late in the month, when they worked higher.

On July 15 the Board of Governors of the Federal Reserve System approved a ¼ percentage point increase to 5 percent in the discount rate at four Federal Reserve Banks, and the remainder followed shortly thereafter. The increase in the discount rate was intended to bring it into better alignment with short-term interest rates—commercial banks had raised their prime lending rate by ½ percentage point about two weeks earlier—and also to signal the Board's continuing concern over substantial cost-push inflation. The widely anticipated changes in the discount and prime rates had only a minor impact on the financial markets in July, given the sharp climb in market rates during the preceding months. Despite the restraint imposed by the System on nonborrowed reserves, the narrow money supply, M_1, continued to expand very rapidly in July. The broad money supply, M_2—which includes the public's holdings of commercial bank time and savings deposits other than large certificates of deposit (CDs)—posted only a moderate gain, and growth of the adjusted bank credit proxy was also moderate.

In the Government securities market, much of the attention during the month centered on the Treasury's refunding of $5.06 billion in notes and bonds maturing in August. On July 21, the Treasury announced that it would offer a four-year three-month note priced to yield 7.06 percent and a ten-year bond priced to yield 7.11 percent in exchange for the maturing issues. The Treasury also indicated that it would accept cash subscriptions up to a maximum of $10,000 from private individuals for the ten-year bond. Preliminary results of the refunding, announced on July 30, indicated an attrition of $1.4 billion or 33.6 percent. At the conclusion of the financing, the Treasury disclosed that it would cover the attrition and raise additional cash by auctioning $2.5 billion of a new eighteen-month 6½ percent note.

THE MONEY MARKET

The money market firmed significantly in July, as the System provided reserves more reluctantly. Nonborrowed reserves rose by only $102 million (not seasonally adjusted)—which is but a small fraction of the normal seasonal rise in July—following the $553 million decline in June. On a seasonally adjusted basis, nonborrowed reserves dropped by $325 million in July, after a $160 million decline in June. At the same time, member banks relied more heavily on the discount window to obtain reserves. Indeed, during the second and third statement weeks in July, when reserve city banks were heavy borrowers over each weekend, borrowings approached or exceeded $1 billion. For the month as a whole, borrowings averaged $830 million (see Table I), up sharply from the June level of $514 million. Reflecting this rise, net borrowed reserves rose by $354 million to $658 million, the largest reserve deficit in about a year.

As bank reserve positions tightened during the month, banks continued to bid more aggressively for Federal funds, putting upward pressure on the rate in this market. Thus, the average effective rate on Federal funds during July rose by 40 basis points to 5.31 percent. Among other market rate changes, major commercial banks lifted their prime lending rates to 6 percent, up from the 5½ percent level that had prevailed since late April. This action, which followed the Independence Day holiday, had been widely anticipated in the markets and was the culmination of the broadly based uptrend in money market rates that had occurred during June. Also in July, dealers increased their offering rates on prime four- to six-month commercial paper by 13 basis points, while dealers' secondary market offering rates on three-month CDs rose by about 20 basis

points. No net changes occurred in the rates on bankers' acceptances or on ninety-day sales finance company paper (see Chart I). Three-month Euro-dollar rates rose by about 19 basis points from June 30 to July 30.

Table I

FACTORS TENDING TO INCREASE OR DECREASE MEMBER BANK RESERVES, JULY 1971

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

Factors	Changes in daily averages—week ended				Net changes
	July 7	July 14	July 21	July 28	
"Market" factors					
Member bank required reserves	+ 24	— 213	— 391	+ 114	— 466
Operating transactions (subtotal)	— 386	— 476	— 40	+ 562	— 340
Federal Reserve float	+ 378	+ 213	+ 24	— 427	+ 188
Treasury operations*	— 54	— 244	+ 176	+ 204	+ 82
Gold and foreign account	— 4	+ 8	— 4	+ 29	+ 29
Currency outside banks	— 616	— 483	— 336	+ 811	— 624
Other Federal Reserve liabilities and capital	— 90	+ 30	+ 100	— 56	— 16
Total "market" factors	— 362	— 689	— 431	+ 676	— 806
Direct Federal Reserve credit transactions					
Open market operations (subtotal)	+ 451	+ 34	+ 613	— 381	+ 717
Outright holdings:					
Treasury securities	+ 166	+ 208	+ 25	+ 27	+ 426
Bankers' acceptances	+ 1	— 3	— 4	+ 1	— 5
Repurchase agreements:					
Treasury securities	+ 207	— 134	+ 537	— 386	+ 224
Bankers' acceptances	+ 30	— 17	+ 47	— 2	+ 58
Federal agency obligations	+ 47	— 20	+ 8	— 21	+ 14
Member bank borrowings	— 89	+ 330	+ 131	— 577	— 205
Other Federal Reserve assets†	+ 45	+ 53	+ 11	+ 31	+ 140
Total	+ 407	+ 417	+ 755	— 929	+ 650
Excess reserves	+ 45	— 272	+ 324	— 253	— 156
	Daily average levels				**Monthly averages**
Member bank:					
Total reserves, including vault cash	30,313	30,254	30,969	30,602	30,535‡
Required reserves	30,036	30,249	30,640	30,526	30,363‡
Excess reserves	277	5	329	76	172‡
Borrowings	661	991	1,122	545	830‡
Free, or net borrowed (—), reserves	— 384	— 986	— 793	— 469	— 658‡
Nonborrowed reserves	29,652	29,263	29,847	30,057	29,705‡
Net carry-over, excess or deficit (—)§	160	165	3	116	111‡

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

* Includes changes in Treasury currency and cash.

† Includes assets denominated in foreign currencies.

‡ Average for four weeks ended July 28.

§ Not reflected in data above.

Market observers continued to scrutinize the published statistics on the monetary aggregates during July, although weekly and even monthly movements of these series are often erratic and are generally known to be very difficult to interpret. On July 16, published statistics indicated an unusually large $3.2 billion rise in the money supply for the statement week ended July 7. Although the money supply dropped by $1.3 billion in the subsequent week, growth for the month was nonetheless strong. The daily average money supply (M_1) rose in July at an 11.2 percent seasonally adjusted annual rate, following the 11.3 percent rise in the money supply over the second quarter. Commenting on these developments in his July 23 testimony before the Joint Economic Committee, Chairman Arthur Burns indicated that these rates of growth are higher than is necessary or desirable over any length of time to sustain healthy economic expansion. He also noted that the Federal Reserve has already taken some steps to promote a more moderate rate of monetary expansion.

Following the pattern that emerged in the second quarter, most of the other monetary aggregates grew at markedly more moderate rates in July than did M_1. The broader measure of the money supply, M_2—defined to include M_1 plus commercial bank savings and time deposits other than large CDs—continued to slacken, with July growth estimated at an 8.5 percent seasonally adjusted rate as compared with the 11.0 percent rise in June. The slower expansion of M_2 in July resulted largely from the weaker inflows of savings and time deposits other than large CDs. Time deposit growth in July was roughly half that occurring in the second quarter of 1971. The adjusted bank credit proxy—member bank deposits subject to reserve requirements plus certain nondeposit sources of funds—rose at a 7.6 percent seasonally adjusted annual rate in July, slightly above the expansion rate that occurred in the second quarter. One factor tending to retard the growth of the proxy relative to M_1 and M_2 has been a steep rundown in Government deposits, which are not included in M_1 or M_2. Large CDs, which are included in the adjusted proxy but not in M_2, rose by about $737 million at the twelve weekly reporting banks in New York City, as some banks continued to bid aggressively for funds from this source.

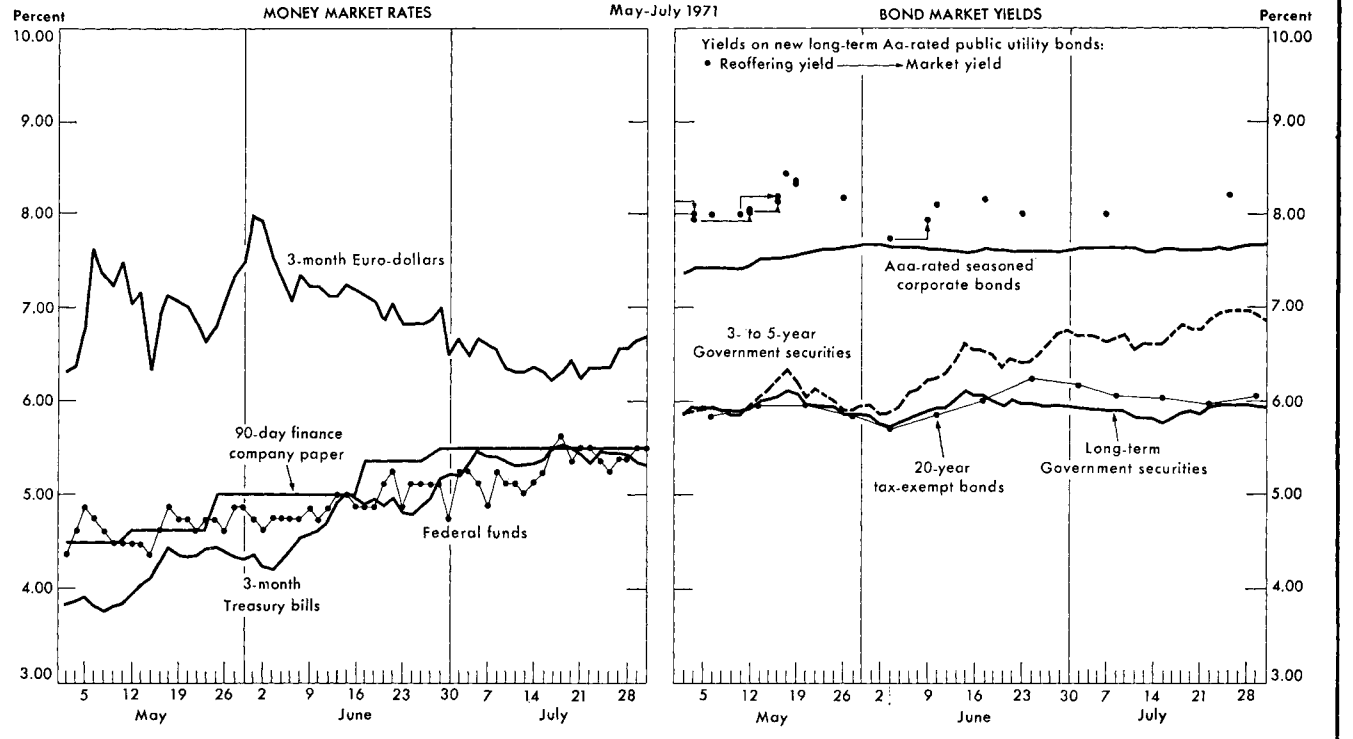
THE GOVERNMENT SECURITIES MARKET

The rapid growth of the money supply, the rise in the discount rate, and firming money market conditions at midmonth all contributed to a generally cautious atmosphere in the market for United States Government securi-

Chart I

SELECTED INTEREST RATES

May-July 1971



Note: Data are shown for business days only.

MONEY MARKET RATES QUOTED: Bid rates for three-month Euro-dollars in London; offering rates for directly placed finance company paper; the effective rate on Federal funds (the rate most representative of the transactions executed); closing bid rates (quoted in terms of rate of discount) on newest outstanding three-month Treasury bills.

BOND MARKET YIELDS QUOTED: Yields on new Aa-rated public utility bonds (arrows point from underwriting syndicate reoffering yield on a given issue to market yield on the same issue immediately after it has been released from syndicate restrictions); daily averages of yields on seasoned Aaa-rated corporate bonds; daily averages of yields on long-term Government securities (bonds due or callable in ten years or more) and on Government securities due in three to five years, computed on the basis of closing bid prices; Thursday averages of yields on twenty seasoned twenty-year tax-exempt bonds (carrying Moody's ratings of Aaa, Aa, A, and Baa).

Sources: Federal Reserve Bank of New York, Board of Governors of the Federal Reserve System, Moody's Investors Service, and The Weekly Bond Buyer.

ties during July. Market participants were also concerned about the potential size of cash financing needs by both the Treasury and the Federal agencies over the months ahead. Although the long-anticipated increase in the bank prime lending rate to 6 percent and the subsequent rise in the discount rate removed one element of uncertainty, the approach of the Treasury's August refunding became another restraining influence. The anticipation of the announcement of the financing terms on July 21 and the subscription period for the new offerings were dominant influences on market activity during much of July, though participants generally believed that the refunding operation would foster a steady tone in the money market.

In the refunding, the Treasury offered holders of $5.06 billion of 4 percent bonds and 8¼ percent notes maturing August 15 the right to exchange their holdings for a new 7 percent four-year three-month note or a ten-year 7 percent bond. The new notes and bonds were priced to yield about 7.06 percent and 7.11 percent, respectively. In addition, the Treasury accepted cash subscriptions from individuals up to a maximum amount of $10,000 for the new bonds. This offering was the Treasury's first attempt to market a long-term maturity under the recent Congressional authorization permitting the Treasury to sell up to $10 billion in bonds without regard to the 4¼ percent interest rate ceiling on these issues.

Trading in the new issues was sluggish, some sales

of the "rights" issues appeared, and prices weakened, reflecting market expectations that a large budget deficit in the current fiscal year would result in subsequent offerings of new issues at still higher rates. Preliminary results of the refunding, announced on July 30, confirmed the generally sluggish market reception of the new issues. Of the $4.12 billion of publicly held issues, $251 million was exchanged for the new ten-year bond and $2.48 billion for the new note, leaving $1.39 billion to be redeemed for cash. Individual investor cash subscriptions for the ten-year bond totaled $192 million. The relatively high 33.6 percent attrition in the exchange operation appeared due in part to the wide dispersal in holdings of maturing issues and to the absence of an "anchor"—or relatively short-term issue—in the refunding package. At the same time that the Treasury announced the preliminary refunding results, it also scheduled an auction of $2.5 billion of eighteen-month 6½ percent notes for August 5, to be issued August 16.

Over the first half of July, yields on Government coupon securities trended moderately lower. The steady tone of the long- and intermediate-term sectors of the market reflected in part strong technical conditions prevailing in this interval. Over the second half of the month, however, yields moved higher and the return on issues maturing in three to five years reached 6.85 percent on July 30, 10 basis points above the end-of-June level, while long-term yields declined to 5.94 percent, down 3 basis points over the month. The climb in intermediate- and long-term yields after midmonth reflected, in part, market adjustment to the refunding and reports of an acceleration in consumer prices in June.

Treasury bill rates fluctuated widely over July but closed the month at levels above those prevailing at the end of June. Contributing to the upward pressure on bill rates in early July was an expanded supply of bills emanating from an increase in the weekly volume of bills auctioned, from tax anticipation bills auctioned on June 30, and from a rise in foreign central bank sales. Therefore, bidding was weak in the first weekly bill auction of the month (advanced to Friday, July 2, because of the Independence Day holiday), resulting in a wide range of prices among the accepted tenders. Average issuing rates for the new three- and six-month issues were set at 5.47 percent and 5.61 percent, respectively (see Table II), 39 and 34 basis points above the rates set in the last auction in June. At these higher rates, stronger interest developed in the July 12 auction, bringing average issuing rates on the three- and six-month maturities down by 9 and 13 basis points, respectively, from the prior week's levels.

The announcement of the hike in the discount rate on July 15, press reports of a sharp jump in the money supply for the week ended July 7, and a marked tightening displayed in published bank reserve statistics resulted in renewed concern over the future course of interest rates, and a cautious tone once again pervaded the market. Bidding in the July 19 auction established average issuing rates for the new three- and six-month bills at 5.55 percent and 5.72 percent, respectively, up 17 and 24 basis points from the levels of the week earlier. Subsequently, overall activity grew quiet and rates eased lower, as participants awaited the Treasury's refunding announcement on July 21. With the approach of the refunding, prospects for the bill sector were brightened by the possibility of some reinvestment demand stemming from the attrition. Furthermore, the absence of a short note issue in the refunding package was a source of some encouragement, and relatively strong interest developed in the bill auction on July 26. Fairly aggressive bidding reflected considerable bank interest, and tenders were accepted within a very narrow range of prices. Average issuing rates for the new three- and six-month bills were set at 5.55 percent and 5.83 percent, respectively, 1 and 11 basis points above the rates set one week earlier. Most bill rates moved lower in the final days of July. Over the month on balance however, rates on bills of less than three months' maturity rose by 21 to 34 basis points, while most longer bill rates generally rose by 20 to 55 basis points.

Table II

AVERAGE ISSUING RATES*
AT REGULAR TREASURY BILL AUCTIONS

In percent

Maturities	Weekly auction dates—July 1971			
	July 2	July 12	July 19	July 26
Three-month	5.467	5.376	5.546	5.554
Six-month	5.614	5.483	5.724	5.833
	Monthly auction dates—May-July 1971			
	May 27	June 24	July 27	
Nine-month	4.688	5.425	5.944	
One-year	4.790	5.567	5.953	

* 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.

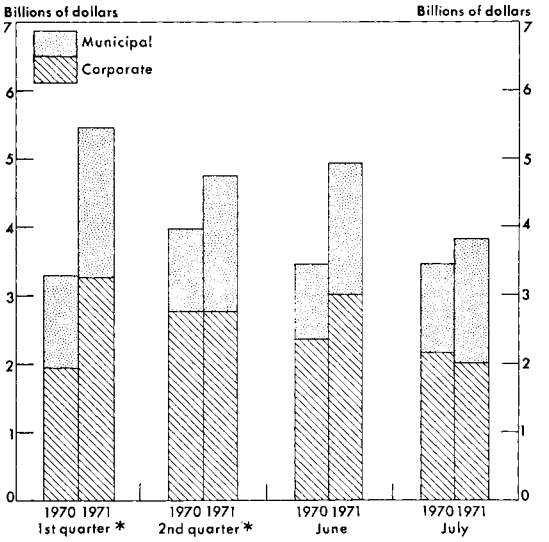
OTHER SECURITIES MARKETS

Activity in the markets for corporate and tax-exempt securities presented a contrasting picture during July. While enthusiastic investor reception of a huge municipal offering early in the month set the stage for subsequent price advances in the tax-exempt sector, the disappointing placement of a key telephone offering typified the fairly indecisive performance in the corporate sector. The market was characterized by the usual summer lull, and the $3.8 billion volume of new corporate and tax-exempt financings fell short of the average monthly flotations in the first and second quarters of this year (see Chart II). The calendar of new issues was nevertheless sizable by comparison with the average monthly volume over the first three quarters of 1970.

After yields on tax-exempt securities had advanced in June to the highest levels of 1971, several new offerings attracted enthusiastic investor demand in early July. On July 7, the largest financing ever undertaken by a city set the pace of activity when New York City sold $357 million of lower medium-grade securities. The city incurred a net annual interest cost of 7.58 percent, the highest in its history. At a record return to investors for a New York City issue, the bonds sold out by the end of the day. Following this event, many other state and local government issues encountered excellent receptions at lower yields. Reflecting the downtrend in yields during the month, *The Weekly Bond Buyer's* twenty-bond yield index recorded a drop in each of the first three weeks of July, and then rose to 6.05 percent on July 29, still 14 basis points below the July 1 level.

After the general increase in the bank prime lending rate, corporate bond prices stabilized and moved higher in moderately active trading. The discount rate advance had been largely discounted earlier, and thus had only a minor effect on the market. A relatively light calendar of new issues buoyed prices, and participants awaited a key telephone company offering scheduled for July 13. The New York Telephone Company sold $150 million Aaa-rated refunding mortgage bonds, with the yield to investors established at 7.90 percent, 10 basis points above the return on a comparable issue marketed three weeks earlier. Though the terms of the financing were almost exactly as predicted by market analysts, market reception was surprisingly lukewarm, as investors resisted attempts to hold yields below 8 percent. This issue was released from price restrictions on July 19, when dealers sought to reduce the backlog of unsold high-grade utility bonds, and the yield jumped to 8.01 percent.

Chart II
CORPORATE AND MUNICIPAL BOND OFFERINGS



* Average monthly volume in the quarter.
Sources: Securities and Exchange Commission; Board of Governors of the Federal Reserve System.

In the wake of the poor investor reception given the New York Telephone bonds, prices of outstanding issues receded. On July 20, a key $100 million Aaa-rated utility issue came to market, bearing a 7.95 percent return to investors, and this offering also encountered a discouraging initial investor response. These bonds were released from price restrictions about a week later, and the yield rose to about 8.13 percent. In contrast, on the following day a major competitively offered utility issue was quickly sold out but at a yield which was 10 basis points above the return on a comparable security marketed a week earlier.

Only two Aa-rated utility offerings came to market in July, attesting to the slow pace of market activity during the month. The first was offered on July 7 and carried an 8 percent yield, which was identical to the return on a comparable issue sold two weeks earlier. The second key utility offering was the most important corporate financing in the last week of July. The new bonds met a poor investor reception, though they were priced to yield 8.20 percent. The jump of 20 basis points above yields on the earlier offerings was an indication of the general rise in corporate bond yields as July drew to a close.

Real Estate Investment Trusts: An Appraisal of Their Impact on Mortgage Credit

By LEON KOROBOW *and* RICHARD J. GELSON*

The rapid growth of Real Estate Investment Trusts (REITs) during 1968-70 provides another illustration of the ability of financial institutions and markets to make adaptive changes in the face of severe liquidity pressures and credit scarcities. These investment companies operate under the Real Estate Investment Act of 1960, which exempts the trusts from corporate income and capital gains taxation, provided they pay out nearly all their income. A fundamental objective of the legislation is to facilitate real estate investment by granting trusts the same tax advantages enjoyed by regulated investment companies, such as mutual funds, which invest mainly in corporate equities and bonds. The legislation also encourages REITs to seek wide ownership of their shares, thus promoting broad-based participation in the ownership of real estate assets.

Tax advantages alone, however, do not explain the recent flurry of activity in the formation of trusts or the blossoming interest in the sponsorship of new trusts by banks, life insurance companies, and mortgage companies. Why these trusts have met with such recent success in a market in which the major financial intermediaries have had long experience can be explained by a variety of institutional, regulatory, and economic factors.

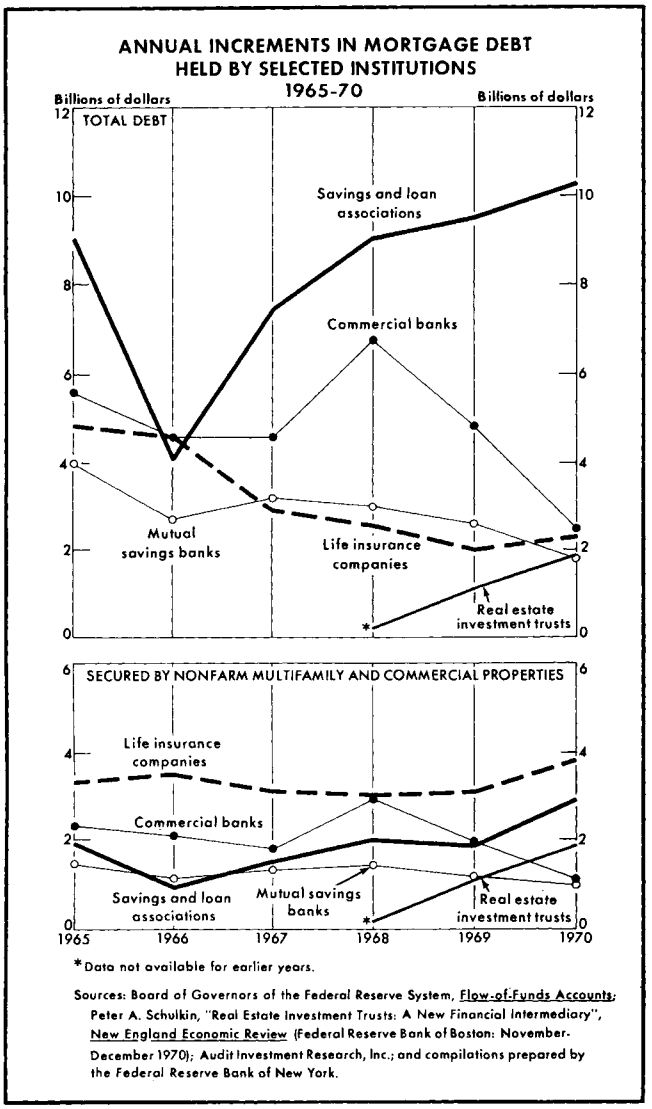
RECENT MORTGAGE MARKET DEVELOPMENTS

The increasing participation of REITs as specialized lenders and investors in the real estate industry can best be understood in the context of the particularly adverse impact that financial stringencies have had on mortgage markets. The intense liquidity strains of 1969 and 1970 created new opportunities for profitable intermediation by these trusts, which face no restrictions on the interest rates they can pay on borrowings and, therefore, are able to compete more effectively for funds than other institutional lenders. Frequently, their funds have been obtained at high cost, but the trusts have been in a position to select the most promising investments while their favored tax status facilitates the payment of an attractive after-tax yield.

The REITs' improved opportunities arose in part because commercial banks curtailed sharply the dollar growth of their mortgage assets (see chart) in response to heavy demand for business loans. In view of the increased difficulties the banks faced in obtaining funds from both deposit and nondeposit sources, it was not surprising that many of them either shifted prospective mortgage customers to REITs with which they had working relationships or sold the trusts a part of their mortgage loans. The sales provided the banks with new funds and helped meet REIT needs for portfolio assets. Bank sponsorship of new trusts facilitated such timely transactions. In addition attractive fees and service charges became available through the advisory relationship that often accompanied sponsorship. Such income at times may have reflected REIT profits on investments that could not have been made by the banks directly because of various regulations.

The portfolio preferences of life insurance companies which typically hold long-term assets, also were changing during this period. Investment in home mortgages was handicapped, in part, by state-imposed interest rate ceilings and by the limits specified in Federal home-loan guarantee programs, although "points" or fees and service charges helped boost effective rates. Consequently, life insurance companies restructured their total mortgage assets to meet the substantial demand for conventional

* Chief, Financial Statistics Division, and economist in that division, respectively.



nortgages on multifamily and commercial properties. These types of mortgages generally represent borrowing by business firms, and in many states such borrowing is ubject to less severe regulation of interest charges compared with regulation of rates on home mortgages. Moreover, life insurance companies, like the banks, were alert to the possibility of expanding profitable operations without financial strain through sponsorship of REITs. Thrift institutions have also evidenced some interest in trusts, regarding them as a potential device for improving their competitive position in the mortgage market.

During 1968-70, most of the growth in REIT assets reflected proliferation of new trusts that absorbed sizable amounts of existing mortgage debt from other lenders. Consequently, it is impossible to regard the entire increase in REIT holdings of mortgages as a net addition to the overall increase in such outstanding debt. Moreover, it is argued below that the trusts' use of market borrowings to finance the acquisition of debt on commercial and multifamily properties, on balance, probably contributed to a diversion of funds away from home mortgages.

LEGAL AND REGULATORY STATUS OF REITS

To qualify for special tax treatment, REITs must distribute at least 90 percent of their ordinary income to their shareholders, derive not less than 75 percent of their gross income from real estate transactions (e.g., rents, interest on mortgages, and sales of property) and hold at least 75 percent of their assets in the form of real estate loans and property, cash, and Government securities. The shares of a REIT must be issued to no fewer than one hundred persons, and the holdings of five or fewer individuals cannot exceed 50 percent of the total.[1] In addition, REITs must function as investors in, rather than managers of, real estate and they may not hold property primarily for resale.[2] When the trusts so qualify, the income and capital gains they distribute are taxed only when received by their shareholders. These provisions permit the trusts to offer returns that are attractive to investors in the low to moderate income-tax brackets.

REITs face relatively few restrictions by Federal regulatory authorities. In fact, the Board of Governors of the Federal Reserve System has included the advising of REITs among those activities which are appropriate for a bank holding company.[3] Thus, commercial bank sponsorship of a REIT appears to be on firm ground.

The REITs have wide latitude in the issuance of equity

[1] See Public Law 86-779, Section 10, September 14, 1960, which added Sections 856-58 to Chapter 1, Subchapter M, of the Internal Revenue Code of 1954.

[2] For a detailed description of the operations of various types of trusts, see Peter A. Schulkin, "Real Estate Investment Trusts: A New Financial Intermediary", *New England Economic Review* (Federal Reserve Bank of Boston: November-December 1970).

[3] Acting under the authority of the Bank Holding Company Act Amendments of 1970, the Board of Governors has amended Regulation Y (applicable to bank holding companies' interests in nonbanking activities) and has determined that it is proper for a bank holding company to act as, or to retain or acquire an interest in a company which acts as, an investment or financial adviser to a REIT. See Board of Governors of the Federal Reserve System, *Bank Holding Companies, Amendments to Regulation Y,* Section 222.4 (Nonbanking Activities).

or debt instruments (except, of course, that they cannot accept deposits). Moreover, the existence of an advisory relationship between a commercial bank and a REIT has not constituted affiliation for purposes of Regulation D. Consequently, borrowing by REITs through the commercial paper market has not been subject to reserve requirements even when the proceeds are used to purchase an asset from the bank adviser (see appendix). The trusts must observe local usury laws, but they are not inhibited by regulations concerning the geographic areas in which they may operate, the size of the loan to a particular borrower, or its quality. However, some states have imposed very tight restrictions on the sale of shares by a REIT. These regulations appear to have discouraged the marketing of REIT shares in these areas, although it is not clear that they are an effective hindrance to REIT lending.

The conditional tax exemption granted REITs by the 1960 legislation has tended to inspire caution on the part of trust managers to avoid transactions that might lead to an adverse Treasury ruling on a trust's tax status. The proliferation of new trusts suggests, however, that the legal qualifications are not a significant roadblock. On the other hand, the rapid growth of REIT activity has led interested observers to express concern over the price a trust might pay should it fail to qualify for tax exemption in a particular year. The question has arisen, for example, whether a REIT's tax-exempt status might be jeopardized by sales of participations in mortgage loans originated by the trust or by sales of property received through foreclosure. Critics of the REIT industry cite potential conflicts of interest between trust and sponsor, especially where the latter is a bank, as the basis for more stringent official regulation. It seems likely, however, that the various doubts over the ability of REITs to serve their shareholders' interests and meet the requirements and objectives of the 1960 act will be resolved gradually without the need for further legislation.[4]

PROFILE OF THE INDUSTRY

The newer REITs, such as the trusts sponsored or advised by commercial banks, life insurance companies, or mortgage companies, largely hold mortgage debt (both short and long term). However, many trusts have invested a sizable amount in direct ownership of real properties. The overwhelming preference of the newer trusts for mortgages partly reflects the financial orientation of the sponsors, who may wish to avoid the actual or potential risks and problems associated with direct ownership of real property.

The flurry of activity in REITs between 1968 and 1970 added more than one hundred new institutions to the sixty-one trusts already operating. At the end of 1970, the assets of a group of 114 trusts whose dollar volume is believed to account for over 90 percent of the industry total, amounted to $4.3 billion (see Table I).[5] Close to $2.5 billion of this amount reflected the assets of institutions formed during 1969 or 1970. Commercial-bank-sponsored REITs bulked the largest among the newer trusts. Such institutions held nearly $850 million of assets, or almost 20 percent of the $4.3 billion total. Another $600 million, or about 14 percent, was accounted for by trusts sponsored by life insurance companies, and

Table I

ASSETS OF 114 REAL ESTATE INVESTMENT TRUSTS

December 31, 1970

Type of trust	Number	Assets	
		Dollar volume (in millions)	Share of total (in percent)
Independent trusts	59	1,780	41.3
Trusts sponsored or advised by:			
Commercial banks	22	847	19.7
Life insurance companies	8	596	13.8
Mortgage companies	13	415	9.6
Financial conglomerates	12	672	15.6
Total	114	4,310	100.0

Source: Peter A. Schulkin, "Real Estate Investment Trusts: A New Financial Intermediary", *New England Economic Review* (Federal Reserve Bank of Boston: November-December 1970), pages 4-5.

[4] For example, the Comptroller of the Currency recently ruled that a national bank's trust department may not make investments in a REIT when the bank is the investment adviser or sponsor, or has other relationships that may possess elements of a conflict of interest.

[5] Information on the number of trusts in existence is obtained largely from announcements of new issues. Moreover, no time series is published for assets and liabilities of REITs. Data for a subset of 114 institutions have been compiled at the Federal Reserve Bank of Boston by Schulkin, *op. cit.*, pages 4-5.

a further $400 million, or around 10 percent, by REITs that are advised by mortgage companies. The remaining 57 percent consisted of the assets of trusts which are not closely linked to banks, insurance companies, or mortgage companies.

REITs have resorted to public offerings of both debt and equity instruments for initial capital. They have attempted to appeal simultaneously to investors who may be attracted either by a high current yield or by the prospect of capital appreciation. Consequently, the offerings frequently have taken the form of units that consist of shares of beneficial interest coupled with either warrants or convertible debentures. Very often the price of the unit is low enough to attract investors holding relatively small amounts of funds.

The success with which REITs have been able to draw funds from the capital markets is suggested by the upsurge of their securities flotations during the years 1968-70 (see Table II). Only six issues, amounting to $91 million, were offered in the three years 1961-63 and none in the next four years. The pace began to accelerate in 1968, however. In both the equity and longer term debt markets, REIT offerings absorbed increased shares of the new issues market. By 1970, REIT equity issues constituted almost 11 percent of the total offered, compared with 1 percent in 1961. Debt issues accounted for 2.4 percent in 1970, compared with none nine years earlier. This growth was remarkable in view of the keen competition for funds and very high borrowing costs in recent years.

Although capital issues remain a source of funds for expansion, REIT managers have been alert to the possibilities of short-term borrowing, particularly from banks. Bank lines of credit are perhaps equally important as a prerequisite for the issuance of commercial paper. Examination of the prospectuses of many newly formed REITs indicated that bank credit totaling several hundred million dollars was arranged, partly to provide coverage for prospective commercial paper issues. In some cases, sponsoring organizations agreed to guarantee a specific amount of commercial paper issued by a REIT, and it is clear that several bank holding companies have increased their issuance of commercial paper to finance the real estate operations of nonbank subsidiaries or affiliates. It is likely that the sales of such paper may well become a model for future REIT financing patterns.

IMPACT ON MORTGAGE DEBT

During the three years ended December 1970, when total mortgage debt increased by about $83 billion, REITs added an estimated $3.2 billion to their holdings of mortgage debt. This increase raised the level of the trusts' mortgage assets to an estimated $3.8 billion (see Table III).[6] By the end of 1970, commercial-bank-sponsored trusts held about $900 million, those sponsored by life insurance companies about $600 million, mortgage-company-sponsored trusts some $400 million, and other REITs about $1.9 billion. These estimates clearly indicate that aggregate REIT mortgage assets holdings are very small in relation to the total stock of mortgage debt. How-

Table II

CAPITAL ISSUES OF REAL ESTATE INVESTMENT TRUSTS*

Period	Equity			Debt		
	Number of issues	Dollar volume (in millions)	Share of public offerings of all new corporate issues (in percent)	Number of issues	Dollar volume (in millions)	Share of public offerings of all new corporate issues (in percent)
961	3	39.3	1.0	0	0	0
962	2	40.5	2.3	0	0	0
963	1	11.4	0.8	0	0	0
964-67	†	†	†	†	†	†
968	4	69.3	1.5	2	27.5	0.3
969	30	899.9	10.7	2	70.0	0.5
970	29	938.8	10.8	21	611.7	2.4

Publicly underwritten issues of $10 million or more.

None issued.

ources: William B. Smith and Benjamin R. Jacobson, "Real Estate Investment Trusts: In the Money and Here to Stay", *Real Estate Forum* (October 1970), page 27; Audit Investment Research, Inc., *Realty Trust Review* (February 1971), page 11; and *Federal Reserve Bulletin*.

[6] The lack of comprehensive time series on REIT assets necessitated a considerable amount of estimating to obtain total REIT holdings of real estate mortgages and particularly the time pattern of the increments. For example, the trusts frequently extend construction and development loans which are secured by first mortgages. It is also possible that occasionally other types of construction financing may be provided by REITs. In the latter instance, the credit being supplied would be more closely akin to a business loan than to a mortgage obligation. However, based on information gained from many REIT prospectuses and from modest informal surveys, the trust assets estimated from data on new capital issues were assumed to be held in the form of mortgages on multifamily and commercial properties. A moderate upward adjustment then was incorporated to account for the growth of such assets obviously financed from sources other than new capital issues. This adjustment was necessary to integrate the information on new issues with various data covering outstanding levels of REITs' total assets and mortgage assets. Any upward bias introduced by these procedures may be partially offset by the above-noted incomplete coverage of REIT assets holdings. Thus, the estimated totals may not be very far from the actual amounts.

ever, the trusts added increasing amounts of mortgage debt to their portfolios during 1968-70, whereas commercial banks and mutual savings banks curtailed their mortgage lending and life insurance companies' acquisitions steadied.

By 1970, the annual growth of REITs' mortgage assets increased to $1.9 billion. In contrast, the absolute increase in commercial bank holdings of mortgage debt slowed markedly to $2.5 billion, the growth at mutual savings banks slipped to $1.8 billion, and life insurance companies added a relatively stable $2.3 billion. Only savings and loan associations increased the pace of their mortgage investments, adding $10.3 billion. Inasmuch as the available information strongly indicates that the REITs' mortgage assets are virtually all secured by multifamily and commercial properties (nonhome), it is obvious that their impact was greatest in that sector. In 1970, the trusts' estimated total acquisition of nonhome mortgage debt far exceeded the increments in such assets reported by commercial banks ($1.1 billion) and mutual savings banks ($1.0 billion). However, it was well below the amounts added by life insurance companies ($3.8 billion) and by savings and loan associations ($2.9 billion).

Table III

ANNUAL INCREMENTS IN PRIVATE FINANCIAL INSTITUTIONS' HOLDINGS OF TOTAL MORTGAGE DEBT AND OF MORTGAGE DEBT SECURED BY NONFARM MULTIFAMILY AND COMMERCIAL PROPERTIES

In billions of dollars

Holdings of mortgage debt	1968	1969	1970	Amount outstanding December 31, 1970
Total mortgage debt in the United States:				
All types	27.4	28.6	27.0	453.6
Multifamily and commercial	10.1	11.2	12.3	142.7
All private financial institutions' holdings:				
Total	22.4	21.5	20.5	377.9
Multifamily and commercial	9.9	9.7	12.0	125.3
Real estate investments trusts:				
Multifamily and commercial*	0.2	1.1	1.9	3.8
Trusts sponsored or advised by:				
Commercial banks†	0.0	0.1	0.8	0.9
Life insurance companies†	0.0	0.1	0.5	0.6
Mortgage companies†	0.0	0.2	0.2	0.4
Other	0.2	0.7	0.4	1.9
Commercial banks:				
Total	6.7	4.8	2.5	72.5
Multifamily and commercial	2.9	2.0	1.1	26.2
Life insurance companies:				
Total	2.5	2.0	2.3	74.3
Multifamily and commercial	3.0	3.1	3.8	42.1
Savings and loan associations:				
Total	9.0	9.5	10.3	150.6
Multifamily and commercial	2.0	1.9	2.9	25.3
Mutual savings banks:				
Total	3.0	2.6	1.8	57.9
Multifamily and commercial	1.4	1.2	1.0	20.5
Other private financial:‡				
Total	1.0	1.5	1.7	18.8
Multifamily and commercial	0.4	0.4	1.3	7.4

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

* The figures shown are those for total trust mortgage assets, but it is believed that virtually all trust mortgages are secured by multifamily and commercial properties.

† No such trusts were believed operating in 1968.

‡ Includes credit unions, private pension funds, state and local government retirement funds, nonlife insurance companies, mortgage companies, and banks in territories and possessions.

Sources: Flow-of-Funds Accounts data, adjusted to allow fully for the estimated mortgage holdings of real estate investment trusts. The latter figures were obtained from the Federal Reserve Bank of Boston's *New England Economic Review* (November-December 1970) and from unpublished estimates of Audit Investment Research, Inc. Where no asset data were available, the dollar values of capital issues were used as approximations. All data are as of the year-end.

Although REITs' mortgage lending obviously was becoming increasingly important relative to other mortgage lenders during the last few years, the trusts' loans probably, at least in part, simply reallocated the existing supply of mortgage credit. A study of the behavior of private financial institutions' shares of mortgage obligations during the recent period of heightened REIT activity sheds some light on this matter. The market share of aggregate mortgage debt and of debt on multifamily and commercial properties held by various types of financial institutions is shown in Table IV for the years 1968-70.

It is significant that the portion of aggregate mortgage debt held by private financial institutions declined from 84.4 percent at the end of 1968 to 83.3 percent two years later, despite the increasing pace of REIT activity. In contrast, the share of debt on commercial and multifamily properties rose from 86.9 percent to 87.8 percent.[7] REITs increased their share of lending in this latter sector ever more, from 0.7 percent at the end of 1968 to 2.7 percen by the end of last year. The failure of private financial institutions' share of total debt to rise suggests that the growtl of REIT assets did not entirely represent a net contributio to the growth of aggregate mortgage debt.

Although a REIT may engage in portfolio transaction with an institution other than its adviser, a rough approxi mation of the impact of trust operations on each of th major types of mortgage lenders may be obtained b

[7] The cited behavior of the share of mortgage debt held t private financial institutions fully reflects the upward adjustme made in the Flow-of-Funds data to include REIT mortgage lendir in the debt totals held by private financial institutions.

Table IV

PRIVATE FINANCIAL INSTITUTIONS' SHARES OF TOTAL MORTGAGE DEBT AND OF MORTGAGE DEBT SECURED BY NONFARM MULTIFAMILY AND COMMERCIAL PROPERTIES

Holdings of mortgage debt	1968	1969	1970
	Amount outstanding (in billions of dollars)		
Total mortgage debt in the United States:			
All types	398.0	426.6	453.6
Multifamily and commercial	119.2	130.4	142.7
	Share of totals (in percent)		
All private financial institutions' holdings:			
Total	84.4	83.8	83.3
Multifamily and commercial	86.9	86.9	87.8
Real estate investment trusts:			
Multifamily and commercial §	0.7	1.5	2.7
Trusts sponsored or advised by:			
Commercial banks	0.0	0.1	0.6
Life insurance companies	0.0	0.1	0.4
Mortgage companies	0.0	0.2	0.3
Other	0.7	1.1	1.3
Commercial banks:			
Total	16.4	16.4	16.0
Multifamily and commercial	19.4	19.2	18.4
Life insurance companies:			
Total	17.6	16.9	16.4
Multifamily and commercial	29.5	29.4	29.5
Savings and loan associations:			
Total	32.9	32.9	33.2
Multifamily and commercial	17.2	17.2	17.7
Mutual savings banks:			
Total	13.4	13.2	12.8
Multifamily and commercial	15.4	15.0	14.4
Other private financial:			
Total	3.9	4.0	4.1
Multifamily and commercial	4.8	4.7	5.2

Note: See Table III for sources and other footnote references.

§ As a share of all types of mortgage debt in the United States, the REITs' holdings accounted for 0.2 percent in 1968, 0.4 percent in 1969, and 0.8 percent in 1970.

viewing jointly the mortgage debt held by the trust and its sponsor or adviser. For example, pooling the mortgage-lending activity of banks and bank-sponsored trusts in the nonhome sector indicates that the combined share declined from 19.4 percent at the end of 1968 to 19.0 percent by the end of 1970. Similarly, commercial banks' portion of total mortgage debt decreased from 16.4 percent to 16.2 percent if the lending by bank-sponsored trusts is included. It is clear that commercial banks used the funds obtained from REITs and other nondeposit sources primarily for purposes other than to finance mortgage loans.

Life insurance companies' share of nonhome debt was little changed between 1969 and 1970. Moreover, the portion of such assets held by these companies and their sponsored trusts rose from 29.5 percent to 29.9 percent during that period. In contrast, the life insurance companies' share of total mortgage debt dropped from 17.6 percent to 16.4 percent, the decline resulting mainly from a reduction in home mortgage lending.

Insufficient data preclude a similar analysis of the effect of REIT activities on lending by mortgage companies, which function largely as mortgage brokers but also may invest in such assets. However, mortgage companies account for only a very small part of total mortgage debt and for that reason are included in the category "other private financial" institutions in Tables III and IV.

Not many thrift institutions have acted as sponsors to or advisers of REITs and, so far as is known, they have not engaged in any significant volume of portfolio transactions with REITs. The availability of funds from the Federal Home Loan Bank Board enabled savings and loan associations to increase their portion of nonhome debt from 17.2 percent at the end of 1968 to 17.7 percent two years later and to raise their share of total mortgage debt from 32.9 percent to 33.2 percent. Without recourse to such funds, mutual savings banks sustained a decline in their portion of nonhome mortgages from 15.4 percent to 14.4 percent and in total mortgage debt from 13.4 percent to 12.8 percent.[8] These reduced shares were substantially the result of the adverse deposit flows the mutual savings banks experienced as rising market rates of interest placed thrift deposits at an increasing competitive disadvantage, although in part the decline also reflected a portfolio shift by these institutions in favor of higher yielding corporate securities.

The data on which these various shares are based leave much to be desired. They do suggest, however, that REITs probably helped to insulate the market for nonhome mortgages, to some extent, from the adverse impact of the recent monetary stringency. Principally, this insulation resulted from the REITs' use of funds obtained in the capital markets to acquire mortgages secured by multifamily and commercial properties. Interest on such instruments was subject, as noted earlier, to much less

[8] Although mutual savings banks are eligible for membership in the Federal Home Loan Bank System, only a small number of such banks have chosen to be members and the amount of funds advanced to these institutions has not been large.

restriction, compared with the usury limits on conventional home mortgages in many states and on debt issued under Federal home-loan-guarantee programs. Moreover, the REITs' demand for mortgage assets enhanced the marketability of nonhome debt held in the portfolios of other mortgage lenders. To some degree, however, the REIT sales of debt and equity instruments probably contributed to the diversion of funds from thrift institutions and from mortgage markets.

FUTURE PROSPECTS

During the relatively short period of their activity, REITs have demonstrated their skill at intermediating profitably between mortgage borrowers and lenders of funds in a highly strained monetary environment that tended to discourage the participation of some of the major mortgage lenders. It is to be expected that the recent renewal of heavy deposit flows to thrift institutions and the greatly improved liquidity position of other mortgage lenders will increase the competitive pressures on REITs. However, the trusts, which generally tend to be high-cost operations, will concurrently benefit from the greatly improved availability of bank credit and market sources of funds.

The improved liquidity situation may well delay the implementation of any latent plans by thrift institutions to enter the field of sponsors of REITs. Recently, only one REIT of substantial size was sponsored by a savings institution. However, thrift industry spokesmen have recognized the possibilities for widening the base of their operations through sponsorship of REITs.

Despite changing monetary conditions, the trusts are likely to remain attractive vehicles for real estate and mortgage investments. Commercial banks, in particular, may well continue to regard a relationship with a REIT as potentially rewarding over the longer term. Not the least of the advantages afforded by sponsorship of a trust are the opportunities for bank portfolio adjustments to be financed indirectly by REIT borrowings through open market instruments. Other substantial advantages follow from the advisory fees a bank may earn, the possibility of providing a customer indirectly with a larger loan than the bank itself could extend because of regulatory limits on the size of any one loan, and the capacity to meet demands which the bank alone could not fill because of restrictions on acceptable collateral or other regulatory limitations. Bank sponsorship of trusts may be viewed, therefore, as a further and undoubtedly viable development in the trend toward increased activity by banking organizations over a widening range of financial services.

APPENDIX: A NOTE ON THE EFFECT OF REITS ON BANK CREDIT STATISTICS

The trusts' borrowing operations and portfolio transactions can present problems in the measurement of bank credit similar to those created by commercial banks' resort to other nondeposit sources of funds in 1969-70. During that period, the effective impact of Regulation Q ceilings prevented banks from competing for funds through deposit instruments. Consequently, many banks initially turned to the Euro-dollar market and then to affiliated institutions or parent organizations that had access to market sources of funds without being subject to interest rate ceilings (or reserve requirements) on borrowed funds. A foreign branch of a United States bank thus was able to borrow in the Euro-dollar market and pass the money to the head office, or the bank's affiliate could issue commercial paper, without encountering any such restrictions. The proceeds of the commercial paper were used largely for acquiring loans from the bank; in this way, outstanding bank credit was shifted to the books of the affiliate while freeing bank resources to finance new loans.

Banks' incentives to make further use of such nondeposit sources of funds have been reduced, following the imposition of marginal reserve requirements on banks' Euro-dollar borrowings in October 1969 and the placing of reserve requirements in September 1970 on the proceeds to the bank from commercial paper issued by bank affiliates.[9] As noted earlier, transactions by commercial-bank-sponsored REITs are not subject to these regulations, even though a REIT's purchase of a mortgage asset from a bank may be financed in much the same way (*i.e.*, through commercial paper sales) as a purchase of a bank loan by a bank affiliate, and has much the same effect on a bank's lending capacity as an affiliate's purchase. Of course, it may be argued that a commercial bank sale to a REIT with which the former has no explicit relationship is hardly different from any market sale of an asset by a bank. However, when the transaction involves a trust that the bank has sponsored, or with which the latter has an advisory relationship, the

[9] Board of Governors of the Federal Reserve System, Amendment to Regulation M, Section 213.7 (*Reserves Against Foreign Branch Deposits*); Federal Reserve Bank of New York, Circular No. 6593, August 21, 1970 (*Regulation D: Amendment, Supplement, and Interpretation,* including Part 204 on commercial paper of bank affiliates).

sale may hold more significance within a broadened definition of the banking system.

Nonetheless, because bank-sponsored trusts are not considered affiliated institutions, few attempts have been made to gather data on their credit-creating activities. Such credit creation is not covered by the adjustments incorporated in member bank data to obtain accurate current estimates of bank credit growth. One measure used to obtain such estimates is the "adjusted bank credit proxy", which encompasses the credit extended by the bank as well as the credit generated by affiliated institutions.[10]

At present, the adjusted proxy estimates the total volume of loans extended by banks and their affiliates by adding to the original bank data the total amount of commercial paper issued by the parent organization or affiliate of a bank. These commercial paper issues have come to be known as bank-related paper. If the proceeds of such paper are used by the affiliate to purchase a loan from the bank, and the issue of paper was for less than thirty days, the bank must meet demand deposit reserve requirements against these proceeds. The bank must meet time deposit requirements against funds obtained from longer term issues. (No reserve requirements are applicable to commercial paper proceeds which are not shifted to the bank but are used instead to finance the operations of a parent organization's nonbank subsidiaries.) Because the proxy includes both reservable and nonreservable bank-related paper, it reflects the associated outright loan sales concluded between parent organization and affiliated bank plus the credit-creating activities of the parent organization through its nonbank affiliates.

The failure of the indicators of bank credit to blanket those REITs that are sponsored by banks can have adverse short-term effects on these indicators inasmuch as bank sales to trusts can amount to several hundred million dollars. In fact, data on nondeposit sources of funds filed by weekly reporting banks with Federal Reserve Banks suggest the total outstanding volume of bank sales of real estate debt to REITs may amount to as much as $1 billion.

[10] For a definition of the adjusted bank credit proxy, see this *Review*, page 178, Chart I; see also Federal Reserve Bank of Cleveland, "Bank Credit Proxy", *Economic Review* (February 1971), pages 3-10.