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Our Changing Financial System

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New York Chapter of the American Statistical Association in
New York City on April 30, 1976*

The topic for this session—our changing financial system—is most timely. Of course, it might be said that it would be timely at any point in our history. Change is always with us, and our financial system has always been changing—more or less. But there are periods when change in some areas of our lives and institutions is more rapid, more pervasive, more forceful, than at other times, and it seems to me that our financial system is now and has been in the midst of such a period.

These changes, and the problems and prospects they have created, have been the subject of a good deal of public attention in recent months. There is no doubt that the attention is warranted and that there should be concern about the future course of change in the financial system. Perhaps what is not as well recognized, however, is that where we are today is the result of a profound, but subtle, process of change that began at least ten years ago. More recently, national and international economic developments of the last few years have had a particularly strong impact on our financial system. Only by understanding these changes in their longer perspective can we assess the implications of our present state of affairs for the future.

Anyone looking back over the period of the 1960's cannot fail to be impressed by the rapidity of the growth of the banking industry during these years and the speed and scope of the banking innovations that were introduced. The incentives for such growth, change, and experimentation are not hard to identify. The expansion of worldwide production and trade required increased financial services. Even more significant were the gathering forces

of inflation, fueled in part by rising levels of governmental expenditures. Those inflationary pressures greatly magnified the underlying demand for bank credit.

Further, during these same years, the level of financial sophistication of bank customers advanced considerably. On one side, corporate treasurers—spurred by rising interest rates and competitive pressures—developed more sophisticated techniques in the utilization of bank services. On the other, consumers increased their demands for financial services and astute bankers recognized that consumer finance was a vast and growing market.

In the face of expanding demand for financial services, the concept of liability management gradually took hold among many of the nation's banks. With traditional sources of deposits past their peak of growth, these institutions turned to new instruments, new sources of funds, and new approaches to money management. The negotiable certificate of deposit provided banks with a marketable instrument to compete for interest-sensitive funds at fixed maturities tailored to specific investor needs. Federal funds activity swelled, as the nation's large banks sought to mobilize and put to work idle pockets of cash that were available throughout the country. The Euro-currency markets, with their huge pools of dollars accumulated in part from United States payments deficits, were viewed as a viable source of liquidity.

It was only natural, with the increasing internationalization of world production and markets, especially the growth of United States multinational corporations, that United States banks would become increasingly international minded in their operations. United States banks

developed sources of funds abroad, actively sought the overseas business of firms they served at home, and expanded their lending to foreign firms and governments. They greatly expanded their networks of foreign branches and subsidiaries, forging new links with the Euro-dollar and foreign currency markets. At the same time, foreign banks responded, though to a lesser degree, to the attraction of opportunities in the United States.

While these developments were rooted in the expanding financial needs of the world economy, the response of our major banking institutions also began to be influenced by certain attitudes that were relatively new to banking. The rapid growth of the banking industry was accompanied by the accession to managerial authority of a new breed of banker. Often these were individuals, trained in modern business management methods, who were willing to experiment aggressively to improve the profit performance of their organizations and who, for better or worse, had no personal exposure to the banking traumas of the 1930's. Moreover, these changes and experiments occurred at a time when the bank regulatory atmosphere was conducive to expansion and wider competition.

The combination of expanding markets, a more aggressive bank management philosophy, and generally accommodative regulation during the 1960's sparked a new dynamism in banking, as banking organizations expanded both their markets and their products. Banks were faced with increased competition from the commercial paper market, which provided a direct channel for short-term borrowing and investment by nationally known firms. In this environment, banks ventured further into term lending. Perceiving expanded possibilities for lucrative lending in real estate, many bankers enlarged their real estate activities, some by sponsoring REITs or otherwise forming relationships with these rapidly growing, new financial intermediaries. Seeking new opportunities to diversify, the more aggressive banking institutions formed one-bank holding companies which, until the 1970 Bank Holding Company Act Amendments, were not subject to the requirements of Federal bank holding company laws.

As the bank holding company movement took hold, the possibilities were soon recognized for expansion into such financially related fields as consumer and commercial finance, equipment leasing, and mortgage banking. These activities could be pursued by nonbank affiliates without the geographic limitations that apply to commercial banking. The momentum of expansionary forces introduced added competition to a number of areas of finance. Moreover, it has carried banks to the outer edge of activities, such as automatic investment and dividend reinvestment plans, private placements, and syndications

of debt or equity, that the securities industry had considered its own province since the passage of the Glass-Steagall Act.

In many respects, the new dynamic posture of banking was a positive development. It engendered increased flexibility in our banking system, helping to ensure that financial resources would be allocated efficiently over a wide range of economic and financial activities. But I think it is also fair to say that the expansive philosophy on the part of a number of banks during the 1960's reflected an overexuberance born of an inflationary psychology that should have been recognized as unsustainable. In many cases, inflation helped to bail out both lenders and investors who, in earlier times, would have had to pay a price for the inefficiencies and cost overruns of those they financed. From this point of view, one of the most pernicious aspects of the inflation was the number of apparent success stories it created and the lure it set out for expansion plans that might best have been left in the drawer.

Most bankers recognized that rapid expansion would greatly increase demands on the managerial skills and financial resources of their organizations. Many of those that became active in liability management, therefore, sought to develop expertise in money management. Those that engaged in the more specialized forms of finance such as factoring, leasing, and foreign exchange lending and trading sought experts in those fields. Many of our nation's large banking organizations established staffs of economic and financial experts to aid in management decisions. And, while these changes met some of the new demands that expansion placed on bank management, they also contributed to overconfidence. They fostered the expectation that the timing and depth of economic reverses could be anticipated accurately and that necessary remedial measures could be taken in time to avert severe damage. Yet, as the 1960's came to a close and inflation began to outrun even the most pessimistic forecasts of a few years earlier, it seems clear, in retrospect, that the expansionary wave of the prior ten years was beginning to impose strains on bank liquidity, capital, and management that could not go on indefinitely.

Inflation also hurt other members of the financial community and the investing public. The thrift industry, which became increasingly exposed to disintermediation as interest rates soared, sought relief through wider deposit and lending powers. The securities industry underwent upheaval, as antiquated back-office facilities collapsed and inadequate capital forced retrenchment or merger for several well-known firms. Insurance company portfolios declined in value, as sharply higher interest rates exacted

a heavy toll of both stock and bond prices. The investing public, including many individuals that could ill-afford it, suffered substantial losses from investments in common stock that they had hoped would provide better protection against inflation than fixed-dollar claims such as bonds or life insurance.

As we entered the 1970's, our financial system began to be buffeted by a succession of shocks and strains that few observers would have thought possible in so short a span of time. In 1970, the Penn Central crisis seriously disrupted the commercial paper market and unsettled our financial system. In 1973, the failure of the United States National Bank of San Diego, followed shortly afterward by a forced merger of the Beverly Hills National Bank, was a disturbing sign. Then, in 1974, the failure of the Franklin National Bank dealt a heavy blow to confidence in our financial system. The failure of the Herstatt Bank in Germany at around the same time suggested that banking difficulties had infected the international markets. Meanwhile, the \$20 billion United States REIT industry, which was heavily indebted to banks, began to sustain large losses and was soon on the brink of collapse. And the drastic jump in oil prices threatened major, adverse economic and financial consequences. All of these events raised serious doubts about the ability of the free world's financial institutions to continue to function effectively.

It must be remembered, too, that this very adverse sequence of events struck our economy and financial system at a time when accelerating inflation and then recession were having a pervasive and profoundly negative effect on economic activity both at home and abroad. Many borrowers, especially those in the real estate industry, were severely hurt by increases in production costs and soaring interest rates, as well as energy scarcities—all of which served to undermine the economic foundations of their ventures. It is no wonder that the quality of bank credit deteriorated throughout the nation. And, I might add, more recently the crisis in New York municipal finance caused new and unforeseen pressures for our banking system.

That the financial difficulties did not culminate in an even more severe economic setback than we had is a tribute to the effectiveness of our built-in stabilizers in cushioning the impact of recession. It also speaks well for the monetary and fiscal measures that were taken to end the decline as swiftly as possible. The responsible actions of bankers to avoid a cascade of customer failures significantly contributed to economic and financial stability.

It seems clear to me that the shocks and strains of the past few years have constituted the most serious threat to domestic and international financial stability we have

experienced in a long time. But I also think it would be a mistake to use these difficulties either to generalize about weaknesses in our nation's banking institutions or as evidence of a need for radical changes in our financial system. It should be recognized, first of all, that our financial institutions have proved to be extraordinarily resilient and durable. The number of banking failures has been quite small, and the consequences of each have been kept within reasonable bounds. Overall, our banking institutions have held up well despite the nation's recent steep slide into recession.

It is true, of course, that the past few years have seen some serious problems emerge for the United States banking industry, problems that merit the careful attention of both bank supervisors and the banking industry. Inflation and recession have created many more problem loans in our banking system than would be healthy for the long run. Yet, in viewing the credit situation at banks across the nation, we believe that the problems are far from insurmountable and many, if not most, of them are on the way to being resolved. In my view, the banking industry has reacted responsibly and constructively to get its problem loans on the right track. I feel reasonably sure that efforts to work out problem loans will keep the losses to a minimum that is well within the capacity of our banking system to absorb.

I believe that many bankers have gained a deeper understanding of the circumstances and decisions that led to the present state of events. The extremely difficult few years we have just come through represent an important watershed for bankers. The extravagances and excesses of earlier years have left a deep impression, and I doubt that those mistakes will soon be forgotten.

Nonetheless, it is understandable that the Congress, the public, and the bank regulatory agencies should scrutinize and take stock of our present position to determine what, if any, structural or regulatory changes may be desirable in our banking system as we approach the 1980's. Several proposals for change have already been brought before the Congress. One thrust of those proposals is to assist the thrift industry by expanding its powers, thus eliminating many of the present differences between the powers of banks and thrift institutions. In my personal view, a change of this type might be desirable. However, any such change should be approached gradually and phased in over time, so as to minimize the transitional effects, while at the same time ensuring that management attention is not diverted from the pressing current problems of working out the difficulties that have developed over the past several years. Some proposals would revise the role and structure of the Federal Reserve System to reduce its inde-

pendence from the day-to-day pressures of the political arena. I think that there are serious risks to our economy in making monetary policy susceptible to recurring political pressure. It seems to me that far-reaching changes should not be made without a searching appraisal of their impact on our financial system and economy.

There are, fortunately, many promising signs today of economic recovery. We should not overreact to our problems and saddle our nation's banking system with new adjustment burdens while recovery is still under way. Our financial institutions, thanks in part to the protective legislation enacted during the 1930's, have stood the test of the recent past. We can and should afford ourselves the opportunity to probe and analyze the soft spots in our financial system and to implement considered changes based on convincing evidence of need.

I would like to turn now to an issue that has been the subject of intense interest on the part of investors and the general public in the past few months. That is the disclosure of confidential information concerning the financial position of certain of our nation's major banks and the ongoing reporting of bank financial information that hitherto has been unavailable. There is, I might say, a certain irony in the attention focused recently by the press on a relatively few "problem" banks at a time when the peak intensity of the difficulty had already passed. It is no accident that many temporary difficulties have been resolved without shock to public confidence. In approaching the question of financial reform, I would hope that we would avoid the kind of oversensitivity to banking problems that could work to discourage unduly the vital function of risk taking by banks. To do so would rob our national economy of the venture capital that is essential for the enlargement of our productive potential and the growth of our job markets.

Yet, we fully understand and appreciate a legitimate need for insight by the public into the current and prospective financial condition of our nation's banking institutions. We believe the public is entitled to relevant, up-to-date information on the financial condition of banks and bank holding companies. However, I think these needs will be met through the very considerable increase which is now being made in the frequency and degree of detail in the regular bank and bank holding company reports that must be provided to the bank regulatory agencies and the public. There is a substantial job to be done in evaluating how this information can best be employed to appraise the financial condition of banks and bank holding companies. In the meantime, I think it would be advisable to move cautiously with respect to new requirements or procedures for the reporting by banks of finan-

cial information. There have recently been growing pressures in the accounting field to require banks to make substantial loss provisions in connection with certain types of loans that have been revised, restructured, or exchanged for underlying assets to ease financial pressure on the borrowers, in many cases to improve the prospects for repayment. I would hope that these accounting approaches are subjected to wide discussion before any hard and fast rules are established.

I believe the lessons of the financial storms of the past few years suggest how we ought to revise and improve our financial system. I think most bankers would agree that a strengthening of bank capital, liquidity, and earnings should get top priority as we approach the 1980's, and it is already evident that progress is being made in these areas. The resolution of difficulties at individual institutions is getting prompt attention. Retrenchment and regrouping to strengthen bank management and financial positions seem to be in progress throughout the banking industry, as we would expect during a period of slack demand for loans.

Bankers will face a dilemma, however, as the economy picks up momentum and the demand for credit increases. A new acceleration in the rate of bank growth could bring with it a renewed stretching of bank capital and liquidity. Commercial banks, I think, must balance their expansion plans against tightened standards of financial prudence. There will need to be explicit recognition that there are limits on the extent to which expanding loan demand can be financed through increased dependence on interest-sensitive funds and that a new upsurge in loans requires growth of capital in a balanced manner. The strategy and tactics of the renewed commercial bank expansion that may lie ahead should include a careful appraisal of dividend policies and plans for infusions of capital through new issues of stock and subordinated debt. It seems to me that a much tougher stance by bankers with respect to loan commitments and other contingent liabilities will be in order, despite customer demands for accommodation.

I think the last few years suggest that it may pay in the long run to pass up some opportunities for expansion or short-term profits in order to avoid undue additional risks. This will not be easy to do, especially if competitive pressures increase. For example, powerful new competition in banking could be expected to emerge from the granting of checking powers to thrift institutions throughout the nation. Even if the thrift industry does not obtain checking powers, electronic payments technology will probably erode whatever remains of the traditional distinctions between demand and savings accounts.

In an environment in which the traditional boundaries for banking functions become blurred, it would be natural for banks to attempt to maintain their forward momentum by further expanding and diversifying into new markets, new products, and new technologies. Yet, the limits on expansion and diversification for an industry in which the public has so large a stake must be given careful study in light of the consequent demands on management and the necessary supporting resources. I would question the wisdom of most new incursions into nonbanking areas where banks have little knowledge or expertise and certainly into financial areas where past incursions have brought grief, such as the securities activities of the 1920's.

Bank supervisors have an important job of assisting in the development of realistic and widely acceptable standards that can be used to evaluate bank capital, liquidity, and overall risk. Wide agreement on those standards will help banks to avoid the danger zone of excessive risk. Bank supervisors also have a responsibility to assist the Congress in developing a means for measuring supervisory performance. This is not an easy task. For example, effective supervision does not necessarily mean the preservation of all financial institutions whatever the circumstances. It seems clear to me that good supervisory performance should not be measured primarily by the extent to which bank failures are prevented. If there were no failures over a period of years, it could mean that banks were not serving the needs of business firms and consumers.

We certainly do not want to constrain banking organizations to the point of preventing them from providing for the vital credit needs of our economy. This means that banks should be expected to have an improved capacity for measuring and managing risk. And we should

be prepared to tolerate some bank failures or consolidations in cases where bank management persistently has proved ineffective and the damage is too great to repair. At the same time, widespread bank failures clearly would be damaging to public confidence and would be an undesirable consequence of market discipline. In any case, the Federal Reserve is intensifying its efforts to expand the scope and improve the effectiveness of supervisory and examination procedures. Our aim is to increase our capacity to spot deterioration at an early stage and to suggest corrective measures that could help banking institutions remain effective and viable. In addition to its regulatory responsibilities, the Federal Reserve has a strong interest in a sound and resilient banking system because monetary policy operates on and through banks.

Monetary policy must always be formulated with consideration for the consequences of policy actions on banks and other financial institutions. For the present, the easing of inflationary pressures in our nation's economy has enabled the Federal Reserve to pursue a generally accommodative monetary policy which, along with the respite from strong inflationary pressures, has provided commercial banks with an opportunity to strengthen their capital and liquidity.

Maintaining this strength as the nation's economy advances further and as loan demand develops renewed vigor will require banks to keep a close watch on their lending policies and on their ability to handle reasonable risks. This attitude of prudence on the part of the nation's banks would do much to improve the effectiveness of monetary policy in adjusting flexibly to changing economic conditions and thus help to keep our economy on a sustainable path of growth.

The Strategy of Monetary Control

Editor's Note: The following is adapted from the annual report for 1975 submitted to the Federal Open Market Committee by Alan R. Holmes, Executive Vice President of the Federal Reserve Bank of New York and Manager of the System Open Market Account, and by Peter D. Sternlight, Vice President of the Bank and Deputy Manager for Domestic Operations of the System Open Market Account. Sheila Tschinkel, Adviser, and John S. Hill, Senior Economist, were primarily responsible for the preparation of the report. The authors are indebted to Ann-Marie Meulendyke, Anne Rowane, and Eleanor Martin for their assistance.

Monetary policy in 1975 sought to promote a sustainable economic recovery while at the same time helping to damp down inflation and to reduce fears of its rapid reappearance. It succeeded in establishing the financial preconditions for a long-lasting expansion and complemented the vigorous stimulus of Federal tax actions to increase personal disposable income. The economy, after suffering the deepest recession in the postwar era, began to recover as consumer buying rose and inventory liquidation tapered off. By the year-end, the recovery was well along a normal trajectory and the rate of inflation had been reduced significantly. Confidence was growing that the expansion could continue for an extended period without reigniting more severe inflation, provided monetary and fiscal policy continued to be shaped toward that objective.

The course of monetary policy during the year was influenced importantly by the unwinding of the accumulated strains of the preceding boom and by massive shifts in financial flows that reflected the recession itself. The size of the Federal Government's financing—which ultimately reached \$85 billion in the year—periodically led to concern among observers that market congestion might impede the recovery at some stage. The financing was in fact accomplished without undue difficulty, as an accommodative monetary policy and slack private loan demand enabled banks to rebuild their high-quality assets. Corporate business worked to restore its strained liquidity by borrowing heavily in the bond market and repaying bank loans, as its inventories were sharply reduced in the first half of the year. The banking system emerged with a sig-

nificant volume of problem loans and placed increased emphasis on credit quality. A number of state and local government instrumentalities were unable to borrow in the markets at all because of the lack of confidence in their financial strength. Consumers continued to save at a high rate, and it was hard to assess the significance for monetary policy of changes in their distribution of savings among money and other liquid assets especially after the Federal tax rebates of May.

Early in the year, the Federal Open Market Committee (FOMC) began a practice of focusing explicitly on a longer time horizon in formulating its policy approach, in response to a Joint Resolution of the Congress (House Concurrent Resolution 133). In April, the Committee adopted annual growth ranges for the monetary and credit aggregates. In recent years it had used such ranges for some of the aggregates, specified for six-month time horizons, to quantify the leverage it wished to exert on the economy. The Committee's announcement of its choice of a 5 to 7½ percent growth for M_1 and related ranges for M_2 , M_3 , and the bank credit proxy helped to focus the national discussion of policy. While some critics believed that these ranges were too low, the economy's rebound—accompanied by an especially large rise in money velocity—tended to mitigate such criticism by the year-end. Also, the FOMC's observed efforts to implement its broad goals contributed importantly to the lessening of inflationary expectations during the year.

In the early part of the year, monetary policy continued to encourage a resumption of moderate monetary

growth, contributing to a sharp fall in interest rates in the process. (Rates of growth of monetary and credit aggregates are presented in Chart I.) By mid-March, such expansion appeared in progress. Short-term interest rates leveled off temporarily, while long-term rates began to rise as concern mounted that huge Treasury financing demands would compete with other demands and force higher rates all around. A substantial bulge in bank deposits emerged in the second quarter. When growth strengthened substantially beyond earlier expectations, it appeared to reflect more than just the temporary and

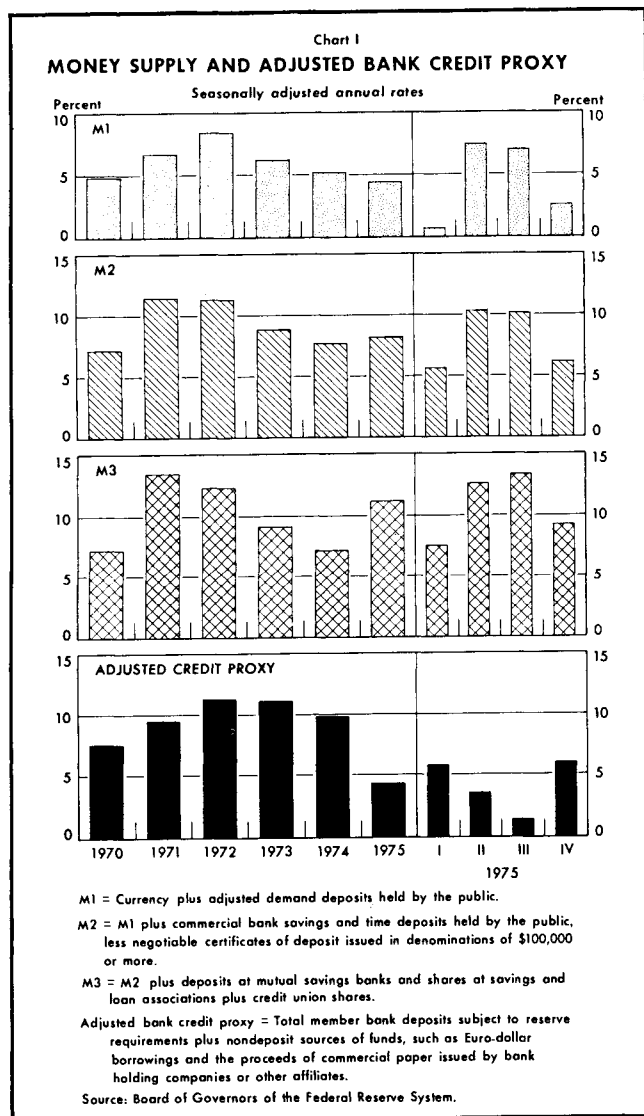
anticipated impact of tax refunds and transfer payments. By June, it appeared that excessive monetary expansion would indeed continue if current bank reserve and money market conditions were maintained in the face of the expansive forces then at work in the economy, and the FOMC permitted some firming in such conditions.

In the course of the third quarter, interest rates rose, growth in the aggregates decelerated, and other information on the economy suggested that the recovery itself was gaining momentum. Meantime, the New York City fiscal situation was causing widespread concern in the financial markets. Some felt that spending by some municipalities would be affected if they were to encounter difficulty in borrowing. Renewed concern over the viability of financial markets and institutions began to diminish the benefits of stronger liquidity positions. While the atmosphere in the credit markets weakened, the slowdown in money growth alleviated worries about inflation. Starting in October, the Federal Reserve adopted a somewhat more accommodative reserve policy which contributed to a fairly rapid decline in short-term rates of interest. Late in the year, a Federal program to provide seasonal aid to New York City relieved the problem immediately facing that city and reduced market concern.

THE STRATEGY OF POLICY FORMULATION

THE EVALUATION OF LONG-RUN OBJECTIVES. The experiences over the year illustrated the complexities of making policies and of formulating strategies for their implementation. Since 1970, the FOMC has made use of the money supply measures to define the general outlines of its policy objectives and to guide open market operations between Committee meetings. The Committee's decision-making and policy-implementation process pays particular attention to the variables over which monetary policy has the most direct control and examines the degree to which they influence the timing and shape of economic developments. The Committee seeks to take account of shifts in economic behavior, whether arising from policy actions or other forces, which may be altering previously observed relationships. These behavioral relationships are part of a generalized economic framework which can be used to examine incoming data to obtain information on the economic outlook and changes in the framework itself.

Monetary policy influences the economy by affecting the cost and availability of money and credit. In formulating a policy strategy, the Committee considers the expected relationships among monetary growth rates, credit conditions, the liquidity of key economic sectors, and output,



employment, and prices. The FOMC then has to devise an operational strategy for carrying out its policy. When the Committee chooses a strategy of implementation, it weighs how System actions that affect reserve availability will, in turn, affect the assets and liabilities of financial institutions and the public demand for them. The resultant responses to System policy are related to past, present, and expected movements in interest rates. The effects of changes in policy are then transmitted to monetary and credit flows and, ultimately, to resource utilization.

A complex economy has many sectors and developed markets, which interact to affect economic activity. There are feedbacks between sectors and markets that take time to work through the financial and economic system. A change in System posture with respect to reserve provision affects the behavior of money, the level and term structure of interest rates, and economic activity with a lag. The reaction of participants in the economic process to changes in policy and other developments involves consideration of the costs of making adjustments in behavior. The timing and magnitude of these responses often differ from historical patterns. Past data serve only as a guide to the significant relationships that constitute the economic structure.

Some shifts in the demand and supply functions for money seem to have been under way during 1975. Changes in attitudes toward the liquidity of financial assets and the development of alternative money substitutes seem to have affected the way that transactions volume and interest rates fed through to the demand for money. Uncertainty about behavioral relationships and the magnitudes of the forces that drive them makes it necessary to sift incoming data for its potential information content. The greater the uncertainty, the larger a divergence relative to expectations has to be to make the decision maker willing to act on the basis of what appears to be new information. When data are volatile or the degree of confidence in postulated relationships is low, unexpected deviations can contain very little information in a short time period. In these circumstances, the data have to be collected and tracked for a longer period of time than otherwise. As 1975 wore on, policymakers became increasingly concerned that the relationship of M_1 to economic activity was becoming less dependable.

SHORT-RUN OPERATIONAL STRATEGIES. The Committee's operational strategy is designed to be responsive to incoming information in a way that fosters the long-run objectives. At each meeting, the Committee examines patterns for bank reserves and interest rates that are expected, over time, to be consistent with the intended growth in the money stock measures. It seeks to take

account of the forces already in motion and their likely impact on money over the period ahead. Unexpectedly rapid, or slow, growth could suggest that modification of the current operational posture is needed to lead toward desired long-run objectives. The Committee's instructions to the Manager specify a stance with respect to reserve provision and how the Desk should vary it in response to deviations in money growth.

In its operating instructions the Committee tended for most of the year to place the most emphasis on M_1 , though the broader money stock measures were also used. The FOMC established ranges of tolerance for M_1 and M_2 growth that reflect influences on their behavior in the short run and serve as reference points against which incoming data on these aggregates can be gauged. The ranges cover growth in each measure over a two-month period, consisting of the month of the meeting and the ensuing month. When there is uncertainty about the economic factors that are affecting money growth, the Committee has often used a fairly wide band of 3 to 4 percentage points on an annual-rate basis. This may also be done when past growth has been unusually slow or fast and some deviation in the opposite direction is acceptable. When the direction of reserve behavior and interest rates over the long run is deemed clear, the Committee often raises or lowers the bounds of the ranges for the aggregates to reduce the likelihood of responses by the Manager that are not in keeping with these expectations.

Incoming data on, and projections of, the aggregates are compared with their ranges each week to determine the Desk's posture with respect to reserve provision and the Federal funds rate. The Manager's response to undesired behavior is constrained by a range of permissible variation in the weekly average Federal funds rate. The range usually centers around a rate believed at the time of the meeting to be consistent with the long-run objectives for the aggregates. In addition to the range on the Federal funds rate, the Committee guides the Desk on the emphasis it should place on other policy considerations, such as conditions in domestic and/or international financial markets. Information received between Committee meetings may indicate inconsistencies among the group of policy specifications or reveal significant new developments. When this occurs, the FOMC may modify its original instructions to produce a stronger or weaker response to the behavior of the aggregates.

In implementing open market policy, the Manager assesses and responds to new data, chiefly financial flows. Since such data are highly disaggregated and cover short periods of time, it is often difficult to extract useful

information from them. Information on the aggregates is used to develop objectives for the Trading Desk. The time horizon at the Desk is short, as the aims for reserve availability in the banking system are framed in terms of the statement week. In deciding on the manner and timing of open market operations, the Desk evaluates a broad range of data on and projections of reserve demands and supplies. It combines these statistical estimates with information revealed by a continuous monitoring of the market for bank reserves. The Desk's procedures involve an understanding of underlying short-run behavioral relations which make up a framework for evaluating its observations.

MONETARY POLICY IN 1975

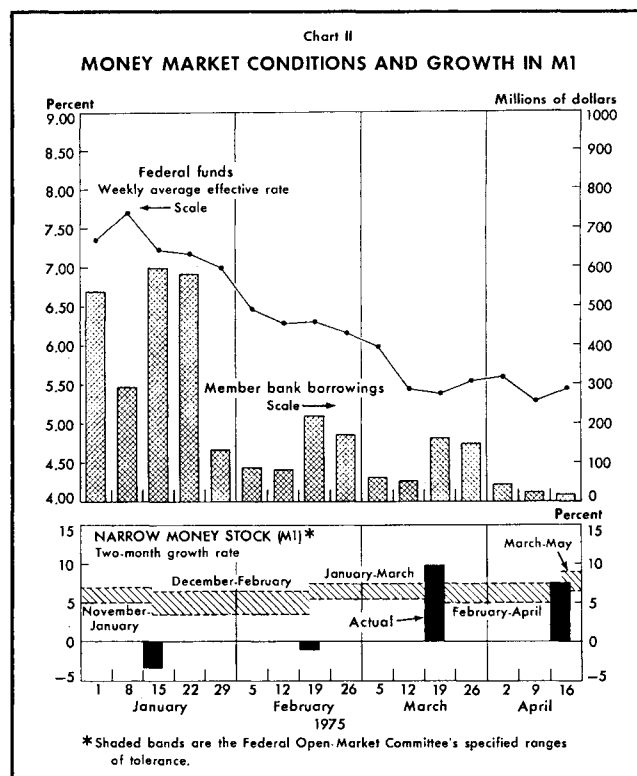
The following discussion highlights significant developments over the past year and focuses on the information available to the FOMC at several key points to provide examples of the Committee's policymaking procedures.

JANUARY TO MID-APRIL. When the year began, monetary policy was in the midst of a stimulative phase in order to counter the built-up forces of recession. Real gross national product (GNP) was declining, and projections suggested that economic activity would continue to recede in the first half of the year. Information on the behavior of prices suggested some moderation in the rate of increase, but unemployment was rising.

To encourage faster monetary and credit expansion, the discount rate was reduced from 7¾ percent to 6¼ percent in three steps during the first quarter and reserve requirements were also cut. The narrowly defined money supply (M_1) had expanded at a 4.7 percent rate in the fourth quarter of 1974. While the System acted to increase the availability of nonborrowed reserves and the Federal funds rate fell from about 8½ percent at the end of December to 5½ percent by mid-March, money growth slowed a bit further in the first quarter of the year.

The decline in the funds rate prompted other short-term market rates to fall substantially as well, and growth in the broader money supply measures accelerated over this interval. Bond yields fell for a while, but greatly enlarged public and private borrowings and concern about the creditworthiness of some state and local government instrumentalities worked to limit these declines.

By March, M_1 was beginning to grow at a substantial pace (see Chart II). While expansion had initially appeared to be below or within the tolerance ranges set at the first two FOMC meetings of the year, M_1 then seemed to be exceeding the ranges agreed upon at the March meeting.



M_2 and M_3 began to increase at relatively rapid rates. At that point, the Account Manager under normal circumstances would have permitted the Federal funds rate to begin rising, but the Committee on March 27 instructed him to treat 5½ percent as the approximate upper limit for the weekly average for the time being, in view of weakness in the economy and of sensitive conditions in the financial markets, especially the bond markets. Still, at the end of the first quarter, it was generally believed in the marketplace that the scope for further interest rate declines was limited.

MID-APRIL TO MID-SEPTEMBER. The information available for the Committee meeting in April showed a mixed picture. This meeting is reviewed more intensively in this report, because it provides an interesting illustration of how a broad range of information can be used to deal with the conflicts and uncertainties inherent in policymaking.

Data for the first quarter indicated that the rate of decline in industrial production was slowing, that economic activity was likely to recede only a little further, and that

the rise in the price level was moderating. Inventory liquidation had remained rapid, but it seemed likely that the reduction in stocks would taper off and provide a boost to the expected recovery. However, the near-term outlook for a substantial improvement in the unemployment rate was bleak, and strong upward pressure on wages was still evident.

On the financial side, business demands for short-term credit continued weak, though corporate bond financing to strengthen liquidity was exceptionally large. As business loans were repaid, banks absorbed a sizable volume of new Treasury issues. Growth in M_1 and M_2 appeared to be strengthening markedly. Apparently, the effects on money demand of earlier declines in interest rates were being bolstered by the accelerated payments of tax refunds, which were adding to income flows. There was widespread concern in the securities markets about the ability to meet the very heavy financial needs of the Treasury without crowding out the private borrowing that was likely to develop as the economy moved strongly into recovery.

Taken together, the range of information suggested that the economy was likely to begin to recover soon but that the turning point had not yet been reached. It appeared that the recovery could be sluggish because demand in several important sectors, such as automobiles and housing, was likely to remain weak for some time. Moreover, there was considerable uncertainty about how much stimulus would arise from the recently enacted program of Federal tax rebates and increases in transfer payments and about how soon consumer spending would begin to respond. The Committee wanted to encourage the expanded financial flows necessary to facilitate an upturn, but it was also mindful that overly rapid monetary growth, if sustained, could revive inflationary fears and be detrimental to the economy in the future.

To frame policy over a longer horizon, the Committee at this time began formulating objectives for four measures of the aggregates in terms of growth ranges for annual periods. The ranges selected were 5 to 7½ percent for M_1 , 8½ to 10½ percent for M_2 , 10 to 12 percent for M_3 , and 6½ to 9½ percent for the bank credit proxy. In the near term, growth in money was expected to be more rapid even if prevailing money market conditions were to be maintained. The Committee was prepared to accept a temporary acceleration in monetary expansion, adopting tolerance ranges of 6½ to 9 percent and 9½ to 11¾ percent for M_1 (see Chart III) and M_2 , respectively, over the two months ending in May. The range of variation specified for the Federal funds rate was 4¾ to 5¾ percent, roughly surrounding the prevailing money market conditions.

The implementation of the policy directive adopted in April illustrates how the Manager assesses and responds to data available after FOMC meetings. While estimates of M_1 showed adequate growth in the first few weeks after the meeting, by early May it appeared that expansion for April and May combined would be at a rate that was close to the bottom of the tolerance range. Projected growth in M_2 was revised steadily lower over the intermeeting period, and by the final week it fell somewhat below the range.

Against this background the System sought to provide nonborrowed reserves somewhat more readily, but acted cautiously awaiting further data to confirm the initial signs of monetary weakness in order to avoid exaggerated market effects during a period of heavy Treasury financing. Participants were preparing to bid for a sizable volume of issues in the quarterly Treasury refunding, and an aggressive easing of reserve objectives during such a period could have had a stronger influence than warranted by the information available to the Desk.

The Desk encountered difficulty in achieving some easing in the money market, and the Federal funds rate rose after the April meeting rather than declining as was expected. There was the usual uncertainty about the projected impact on the supply of nonborrowed reserves from the market factors not under the System's control. At one point these uncertainties were compounded by an interruption in the wire transfer systems for funds and securities. The Desk made record volumes of transactions over the period, buying \$1.1 billion of Treasury coupon issues and \$2.6 billion of bills outright and adding \$2.8 billion of reserves, on average, through repurchase transactions in the market.¹ Bank demands for nonborrowed reserves were increasing, partly because of the growth of required reserves, and the System wanted at least to meet such needs. At the same time, the supply of nonborrowed reserves was being drastically reduced by inflows of cash to Treasury balances at Federal Reserve Banks.²

¹ On days when the Desk was arranging repurchase agreements, its transactions took into account short-term investment orders of customers. It made matched sale-purchase transactions between the System and their accounts, rather than arrange two types of repurchase contracts in the market at the same time.

² In 1975 massive open market operations were needed to offset the impact of intramonthly swings in Treasury cash balances at Reserve Banks. The Treasury had been intensifying its efforts to minimize its cash holding at commercial banks. Generally, balances at Reserve Banks rose sharply toward the end of each month. The buildup in balances was particularly large just after the mid-April tax date.

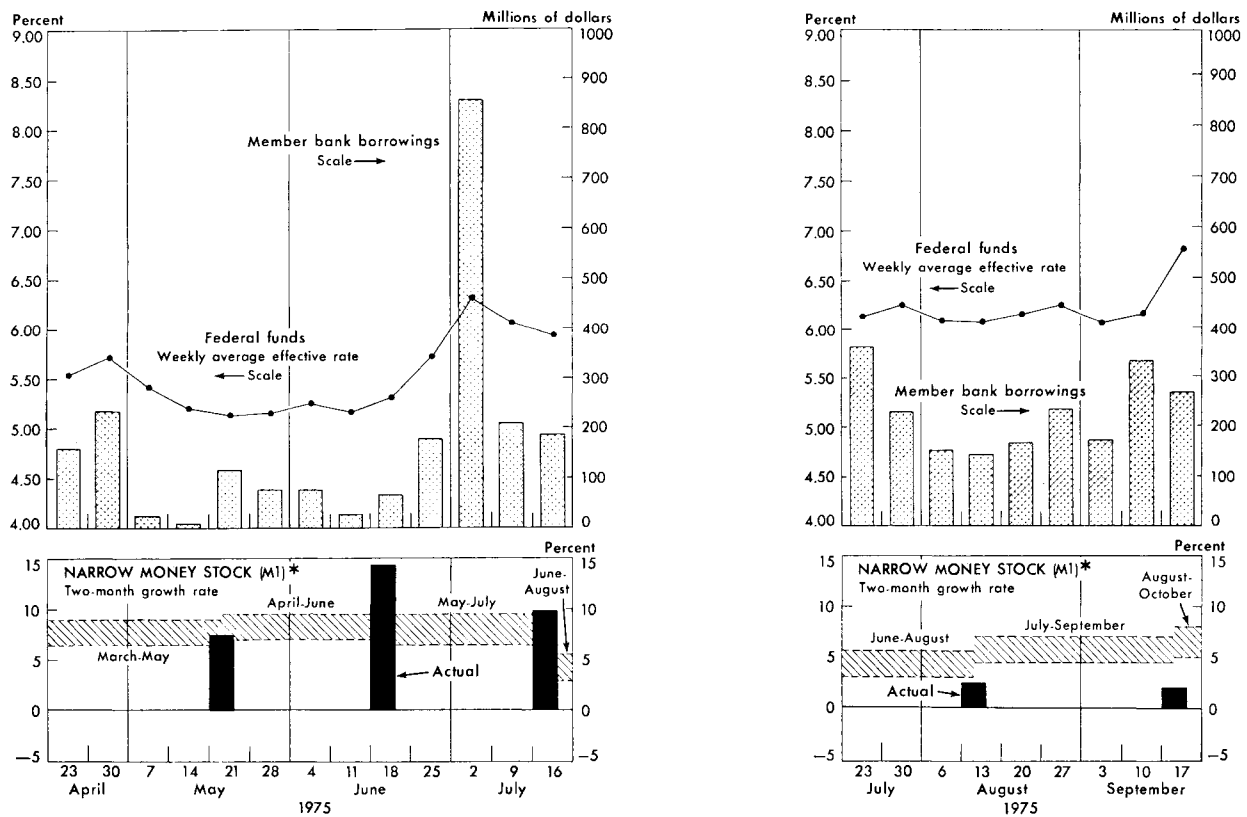
The average effective Federal funds rate increased from 5.44 percent in the April 16 week to a peak of 5.71 percent in the final week of the month. It began to decline thereafter, and trading generally fell into the 5 to 5¼ percent preferred range just before the May FOMC meeting.

Desk actions were also guided by the FOMC concern about developments in the financial markets. Interest rate expectations had reflected some anticipation that Treasury borrowing needs would exert upward pressure and that the more rapid money supply growth toward the end of the first quarter would be followed by a tightening of System policy. The yield increases were particularly apparent in the municipal bond market in view of the financial troubles of New York City and the Urban Development Corporation of New York State. As both the slowdown

in money growth and the Desk's encouragement of a lower Federal funds rate became evident, the securities market began to improve dramatically. The Treasury's disclosure that its near-term borrowing needs were turning out lower than anticipated earlier gave the rally a strong boost, particularly in the Government securities market. The refunding and other recent Treasury issues encountered good demand, partly because banks continued adding to portfolio holdings as loans were repaid in volume. Nevertheless, the schism between issues of different quality in the municipal market became more pronounced and some local instrumentalities began to have difficulty in raising needed cash.

Over the period, the Desk had responded to weaker than anticipated growth in money supply though its actions

Chart III
MONEY MARKET CONDITIONS AND GROWTH IN M1



* Shaded bands are the Federal Open Market Committee's specified ranges of tolerance.

were conditioned by the desire to avoid exaggerated reactions to a modest change in System objectives. It was not clear whether the deceleration in the aggregates indicated a significant weakening in the economy, a shift in money demand, or a temporary aberration in the data. The cautious response by the Desk would work to counter a slowing in money growth, but given its limited nature it would not be difficult to offset should growth soon rebound.

Later on in the quarter, data showed that expansion of M_1 was accelerating to a greater degree than had been expected to result from the impact of tax rebates and stepped-up Government transfer payments. When M_1 continued to run substantially above expectations, the System acted in late June to restrain reserve growth. The Federal funds rate had been fluctuating around $5\frac{1}{4}$ percent in an FOMC prescribed range of 5 to 6 percent. Following a rise in this rate, yields in the securities markets adjusted sharply upward.

The funds rate rose to about 6 percent in early July and, though the FOMC agreed on June 26 to amend the upper constraint on this rate from 6 to $6\frac{1}{4}$ percent, the Manager did not need to use the additional leeway as incoming data suggested some weakening in the aggregates. At the July meeting, an analysis suggested that growth in money and credit was likely to slow considerably but this could be temporary, given an apparent strengthening of the economy. There were some differences within the Committee about how best to respond to incoming monetary data in view of its erratic behavior and the difficulty of assessing the special factors that were continuing to distort the observed growth. There were uncertainties about the underlying strength of the economy and the impact of relatively high levels of market interest rates at the current stage of the business cycle. While the Committee retained the earlier annual longer run growth ranges for the aggregates, it placed them on a quarterly average basis for the year ending in the second quarter of 1976 in view of the erratic movements of monthly figures on money balances. For the near term, the FOMC agreed to maintain prevailing money market conditions provided that growth in monetary aggregates appeared to be slowing substantially from the bulge in the second quarter.

While the Manager responded to initial indications of higher than desired monetary expansion after the July meeting, newer data soon suggested a deceleration to rates of growth within the ranges specified by the Committee, and the Desk sought steady conditions of reserve availability. Federal funds traded generally in a $6\frac{1}{8}$ to $6\frac{1}{4}$ percent range until early September. At that time, growth

was relatively slow, compared with the short-run ranges specified at the August meeting. But the FOMC agreed on September 5 that the Manager should be instructed to maintain current money market conditions in view of the likelihood of a strengthening in demands for money and credit and the prospect that any decline in the Federal funds rate might have to be reversed shortly.

MID-SEPTEMBER THROUGH DECEMBER. The economic data available at the September FOMC meeting contained several indications that a vigorous recovery was in prospect. At the same time the outlook for price inflation had worsened somewhat. It was expected that the relatively strong expansion in nominal GNP would add to demands for money and credit over coming months. Conditions in the securities markets had become somewhat unsettled, partly because of the escalating problems of New York City and worries about the difficulties facing some other municipal borrowers.

In view of this outlook, the Committee adopted aggregate specifications that were likely to be consistent with little change or a possible firming of money market conditions over the ensuing month (see Chart IV). Some members advised action to achieve a modest firming whenever feasible without disrupting markets, as it would help restrain monetary growth later on. But others preferred not to firm policy on the basis of projections that such growth would exceed desired rates over the long run, though they would act promptly if and when actual growth accelerated substantially. The FOMC established a 6 to 7 percent allowable range of variation for the Federal funds rate at this meeting, compared with a $5\frac{3}{4}$ to 7 percent range set in August.

Initial data received after the September meeting seemed to suggest that M_1 was indeed strengthening and the Manager sought to encourage a slight firming in money market conditions with the objective of moving the Federal funds rate up toward the midpoint of its range of tolerance. But the estimates were revised down, and by early October it appeared that growth would again fall below desired rates. In view of the pronounced weakening and the unsettled conditions in the municipal bond market, the Committee on October 2 instructed the Manager to aim immediately to reduce the funds rate to $6\frac{1}{8}$ percent and then to 6 percent shortly thereafter. The FOMC also agreed to reduce the lower constraint on this rate to $5\frac{3}{4}$ percent.

This response reflected the recognition that emerging strains in the financial sector could jeopardize the economic recovery. Investor concern about the safety of assets was growing, including a measure of market concern about the New York City banks because of their close associa-

tion with New York City and State problems. Even though prospects for loan growth continued weak and further interest rate declines seemed in store, the New York City banks bolstered liquidity by selling additional certificates of deposit (CDs), sometimes at rates equal to or exceeding those paid by other major money center banks, in contrast to the usual pattern in which major New York banks pay slightly lower rates than most others.

Over the closing months of the year, interest rates fell to lower levels than had been anticipated earlier though money growth remained sluggish. At the same time, the short-run behavior in M_1 was even more volatile than usual. Incoming deposit data were difficult to interpret, and the outlook for the two-month growth rates was often revised significantly.

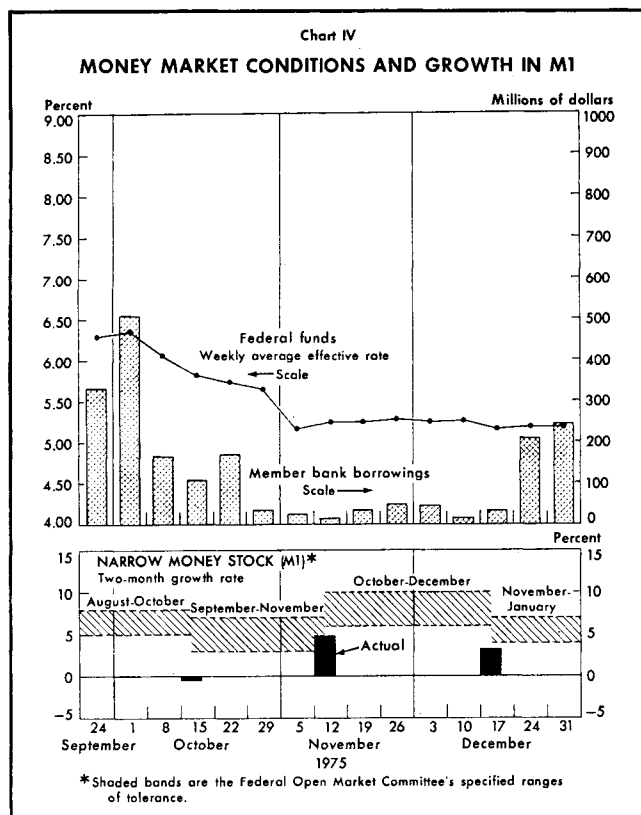
At its October meeting, the Committee retained its longer run annual growth rate range for M_1 , which now extended through the third quarter of 1976. It also reduced the bottom end of such ranges for M_2 and M_3 by 1 percentage point to allow for pressures on market

interest rates stemming, in part, from heavy Treasury borrowing which might serve to moderate inflows of time and savings deposits. At that and the subsequent meeting, the FOMC reduced the allowable range of variation for the Federal funds rate. While growth in monetary aggregates fell short of the two-month ranges, this was not evident until late in the period after the October meeting and the decline in the funds rate was slowed. The funds rate then hovered around $5\frac{1}{4}$ percent over the last part of November before edging down to $5\frac{1}{8}$ percent in mid-December.

At the December meeting, evidence suggested that flows of money into corporate savings accounts, as a result of a recent regulatory change, were depressing growth in M_1 . There was considerable uncertainty about the size of this effect on demand deposits and whether it would alter the public's demand for money. In view of these problems, many members preferred to make the Manager's response less sensitive to incoming data on monetary aggregates. The Committee instructed the Desk to maintain prevailing bank reserve and money market conditions, with the Federal funds rate around $5\frac{1}{4}$ percent, unless growth in the aggregates deviated significantly from the midpoints of their ranges. Subsequent data suggested that growth in M_1 was falling well short of its range of tolerance, and the Manager again moved to seek a more accommodative reserve climate as the year drew to a close.

The Manager's actions in the closing months of 1975 were attuned to the developing strains in the banking system. Investors became sensitive to the quality of bank assets—especially bank holdings of certain municipal securities and categories of loans that involved perceived risks of loss. The bankruptcy of W. T. Grant focused additional attention on loan quality, and many banks bolstered their reserves for potential loan losses. For a while, CD rates rose considerably relative to rates on Treasury bills as some investors sought to place funds in the safest of financial assets. While the rate differentials later narrowed to a more typical spread, investors remained selective in their CD holdings. Bank desire to improve liquidity in the latter part of the year may have affected their willingness to make loans. In turn, this may have contributed to the slow growth of demand deposits.

Programs were enacted for New York City in December that enabled it to reduce interest payments on outstanding securities and to refund maturing bonds. Plans included seasonal loans by the Federal Government for a three-year period. While the immediate problems were resolved, the markets were concerned that the moratorium that had been adopted for some New York City notes could affect the demand for municipal securities more generally.



SUMMARY AND CONCLUDING COMMENTS

Developments in 1975 illustrated the difficulties of controlling the aggregates and raised some questions about how objectives for these measures should be established and evaluated. Expansion in M_1 for the full year decelerated to a 4.4 percent rate as its behavior was unusually sluggish in the first and final quarters. The annual growth was slower than might have been expected based on past experience in similar stages of the business cycle. But looking at broader deposit aggregates, financial flows, and markets, the expansion of liquidity in the economy appeared ample. Growth in consumer-type deposits was relatively strong and M_2 increased by 8.2 percent, up from 7.7 percent in 1974. Declines in interest rates gave rise to substantial deposit inflows to thrift institutions so that growth in M_3 accelerated from 7.1 percent to 11.1 percent.

While there was much concern that the financial needs of the Treasury would thwart private efforts to rebuild

Table I
TOTAL DEBT RAISED IN CREDIT MARKETS, BY SECTOR

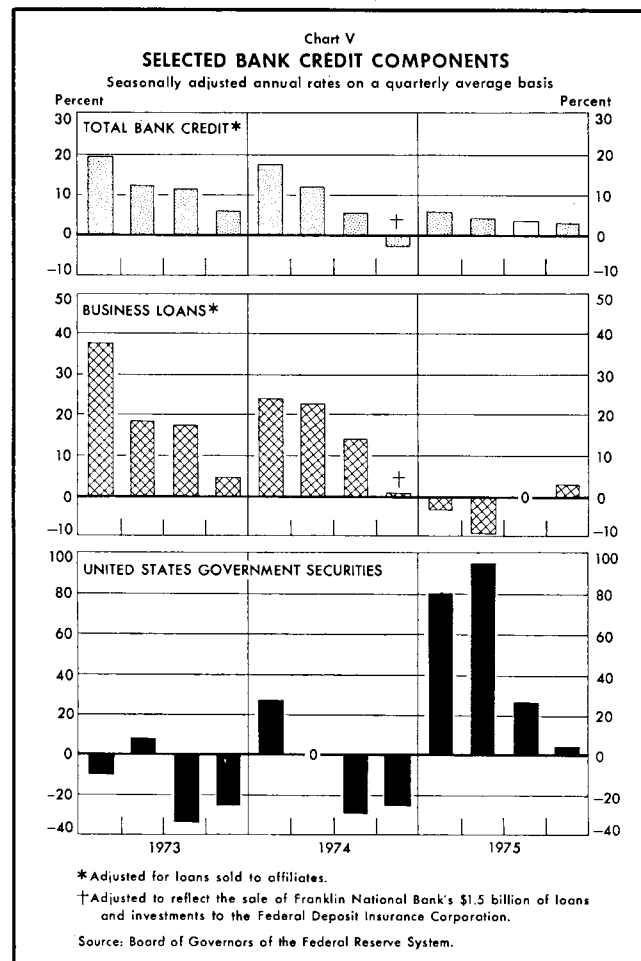
Sector	1970	1971	1972	1973	1974	1975
Billions of dollars						
United States Government						
Treasury securities*	12.9	25.6	17.4	9.7	12.0	85.2
Agency securities	8.2	3.8	6.2	19.6	21.4	10.1
State and local government	11.2	17.6	14.4	13.7	17.4	15.4
Corporate and foreign bonds	23.8	24.8	20.2	12.5	23.3	34.5
Mortgages	26.4	48.9	68.8	71.9	54.5	54.6
Short-term and all other†	17.9	28.4	58.4	103.9	83.9	— 2.7
Total	100.4	149.1	185.4	231.3	212.5	197.1
Percentage of total raised						
United States Government						
Treasury securities*	13	17	9	5	6	43
Agency securities	8	2	3	8	10	5
State and local government	11	12	8	6	8	8
Corporate and foreign bonds	24	17	11	5	11	18
Mortgages	26	33	37	31	26	28
Short-term and all other†	18	19	32	45	39	— 2
Total	100	100	100	100	100	100

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

* Includes nonmarketable debt, savings bonds, loan participations not elsewhere included, and financing of budget agency debt. Government National Mortgage Association (GNMA)-guaranteed securities backed by mortgage pools are included in the agency securities category.

† Includes consumer credit, business loans, other loans not elsewhere classified, open market paper, and repurchase agreements.

Source: Estimated from flow-of-funds data of the Board of Governors of the Federal Reserve System.



liquidity, this did not occur. The Federal Government borrowed a record \$85 billion over the year, compared with \$12 billion in 1974 (see Table I).³ At the same time, corporations sold an unprecedented \$30 billion of bonds. But these increases in supplies were absorbed more readily than had been expected, in part because net demands on the credit markets and the banking system were reduced (see Chart V). Internal corporate cash flows were strong, and this enabled corporations to reduce short-term borrowing substantially. The \$10 billion net

³ Relative to the size of the economy, Treasury borrowing was much smaller in 1975 than in some years during World War II.

paydown of private short-term debt, due entirely to a reduction in business borrowing, stood in marked contrast to the \$70 billion rise in such obligations the year before.

Banks also took steps to improve their liquidity. As business loans were repaid in substantial volume and other loan demand was weak, banks acquired sizable amounts of Treasury securities (see Chart V and Table II). They bought \$29 billion, compared with a net liquidation of \$3 billion in the previous year, as the stimulative monetary policy induced deposit inflows. Aside from rebuilding their investment portfolios, banks reduced their reliance on funds purchased in the CD market for the first time in six years. The drop in CDs was reflected in a slowing of growth in the bank credit proxy. Savings and loan associations repaid advances to the Federal Home Loan Banks, thereby enabling this agency to repay debt. Thrift institutions increased their holdings of Treasury securities and mortgages in response to good deposit inflows.

Table II
ACQUISITIONS OF FEDERAL GOVERNMENT SECURITIES,
BY SECTORS

Sector	1970	1971	1972	1973	1974	1975
Billions of dollars						
Federal Reserve System						
Treasury securities*	5.0	6.8	0.8	8.7	3.0	5.7
Agency securities	—	0.5	0.8	0.6	2.8	1.4
Commercial banks						
Treasury securities	6.9	3.1	2.4	— 8.8	— 2.6	29.1
Agency securities	3.5	3.8	4.1	7.6	3.6	1.2
Other financial						
Treasury securities	1.1	— 1.7	2.3	— 1.1	2.5	18.8
Agency securities	2.7	4.3	4.8	2.0	3.2	8.0
Private domestic nonfinancial						
Treasury securities	— 11.1	— 8.6	1.6	7.4	6.7	21.6
Agency securities	2.1	— 5.4	0.1	11.4	11.4	— 0.6
Foreign†	9.1	26.3	8.4	0.3	3.6	7.8
All other	1.8	0.3	— 1.7	1.3	— 0.7	2.4
Total‡	21.1	29.4	23.6	29.4	33.5	95.4
Percentage of total acquisitions of Federal Government securities						
Federal Reserve System						
Treasury securities*	24	23	3	30	9	6
Agency securities	—	2	3	2	8	1
Commercial banks						
Treasury securities	33	10	10	— 30	— 8	31
Agency securities	17	13	17	26	11	1
Other financial						
Treasury securities	5	— 6	10	— 4	7	20
Agency securities	13	15	20	7	10	8
Private domestic nonfinancial						
Treasury securities	— 53	— 29	7	25	20	23
Agency securities	10	— 18	1	39	34	— 1
Foreign†	43	89	36	1	11	8
All other	8	1	— 7	4	— 2	3
Total‡	100	100	100	100	100	100

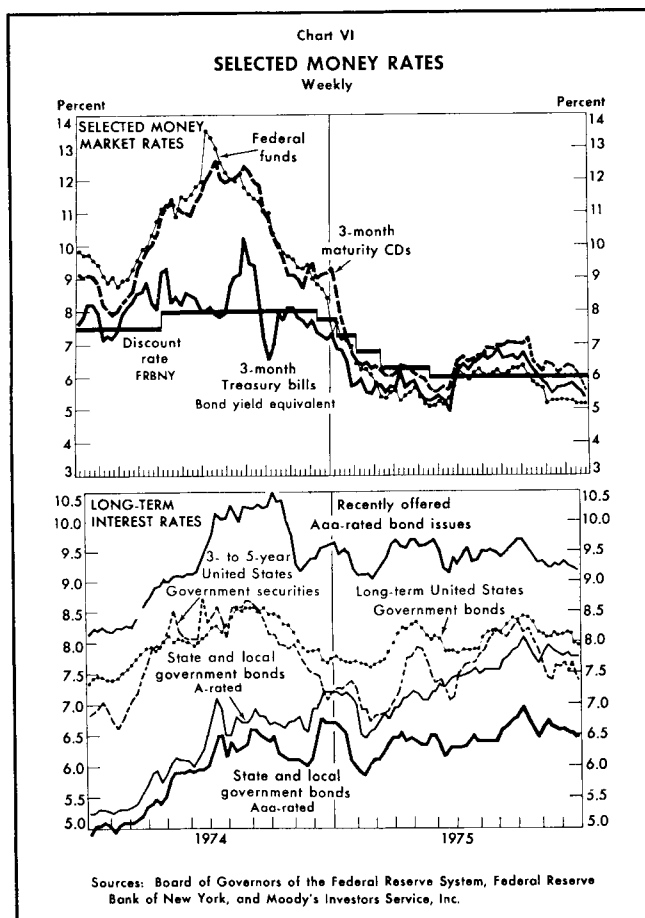
Note: Because of rounding, figures may not add to totals.

* See Table I for explanation of Treasury securities category.

† Breakdown between Treasury and Federal agency securities not available.

‡ For breakdown between Treasury and agency securities, see United States Government sector on Table I.

Source: Estimated from flow-of-funds data of the Board of Governors of the Federal Reserve System.



Interest rate movements over the year (see Chart VI and Table III) were influenced by the shape of credit flows and by responses to System policy. The decline in the Federal funds rate and its temporary rise over the summer was followed by similar changes in other short-term rates. The Federal funds rate declined from around 7¼ percent in early January to about 5⅜ percent in the final week of the year. Treasury bill rates declined by about 1¼ percentage points to 5.18 percent for the three-month issue. Rates on private short-term investments

declined by even more as supplies shrank. The yield curve became steeply upward sloping, particularly for Treasury issues, as financing in the intermediate to longer term area was relatively heavy (see Chart VII). While rates on Treasury issues due in five years or longer ended the year slightly higher on balance, those on Federal agency issues declined somewhat, mostly reflecting the relative behavior of supplies of these issues. In private debt markets, yields generally declined, though the extent of the drops depended on investor attitudes toward the safety and quality of the securities.

Events in 1975 once more demonstrated that there are no simple rules for formulating and implementing a policy strategy. Policymakers continually seek to take into account the effect of new developments on the relationships among monetary aggregates, interest rates, and ultimate economic objectives in framing policy. While an understanding of these important interactions develops over time, the implications of incoming data and the kinds of responses they should generate in the short run remain a critical question in formulating policy strategies.

It is often not possible from month to month to isolate

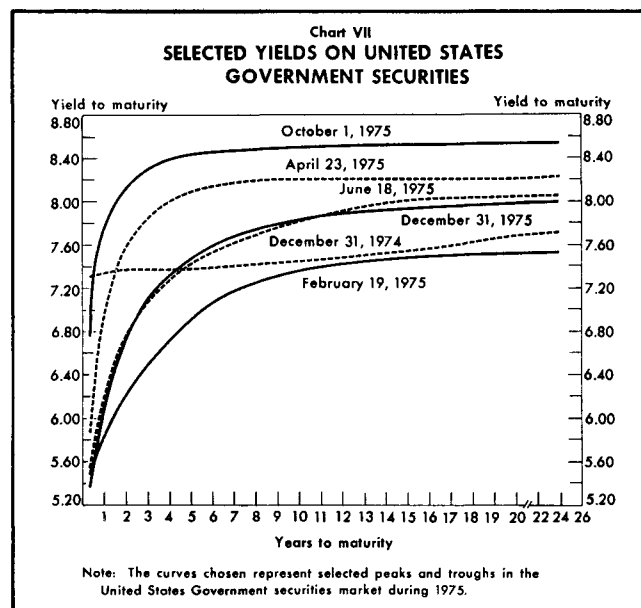


Table III
SELECTED INTEREST RATES
In percent

Rates	1974	1975				
	Dec. 31	Feb. 19	Apr. 23	June 18	Oct. 1	Dec. 31
Short-term						
Federal funds—weekly average effective rate	7.35	6.29	5.54	5.31	6.36	5.18
Three-month Treasury bill: Average bond yield equivalent	7.34	5.56	5.83	4.91	6.77	5.36
Discount rate—Federal Reserve Bank of New York	7.75	6.75	6.25	6.00	6.00	6.00
Three-month certificates of deposit	9.25	6.49	6.25	5.55	7.01	5.68
Long-term						
United States Government securities (3- to 5-year)	7.26	6.71	7.90	7.14	8.21	7.28
Treasury bond due 1993-98	7.75	7.59	8.30	7.85	8.43	7.93
Recently offered Aaa-rated utility bonds	9.67	9.08	9.71	9.14	9.70	9.10
State and local government bonds: Aaa-rated	6.70	6.00	6.45	6.30	6.92	6.45
A-rated	7.20	6.55	7.20	7.40	8.05	7.76

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

the impacts of particular supply and demand forces which are affecting the behavior of the several monetary aggregates. In 1975, M_1 growth was at times dominated by short-run influences, such as the massive tax rebate and refund program. It was not clear at the time whether the rapid expansion in the spring suggested an upturn in transactions demand or if demand deposit balances were temporarily boosted by the pattern of the Treasury's payments to the public. When the New York City fiscal crisis came to the fore, changes in attitudes about the quality of money and credit market instruments seem to have affected the desired composition of portfolios of liquid assets as well as the willingness of banks to supply loans and to acquire interest-bearing deposits.

Over a longer horizon, institutional and regulatory changes affect the properties of monetary assets. Using 1975 again as an example, a change in Regulation Q that permitted banks to issue savings deposits to small businesses appears to have altered the way that some firms manage cash balances and the amounts of demand deposits needed to finance their transactions. Over the near term, it probably retarded the growth of M_1 relative to that of M_2 . In situations like these, it becomes difficult to assess the appropriateness of a particular long-run objective for a monetary aggregate and how the Desk should respond to incoming data on money when it diverges from expectations.

As the year drew to a close, these uncertainties led the Committee to take steps that reduced the responsiveness of the Manager's stance to short-run changes in M_1 growth. In early 1976, the FOMC also began to place additional emphasis on M_2 as one of the determinants of open market actions. These refinements in policy strategies constituted part of a response to changes in underlying economic relationships. At the same time, uncertainties about the long-run significance of developments affecting the demand for, and supply of, money and its relationship to economic activity are likely to persist.

It seemed evident, as the year drew to a close, that the performance of the economy was improving and that the relatively slow growth in M_1 had probably been due to a downward shift in the public's demand for this aggregate. Thus, the behavior of a particular monetary measure cannot substitute for an appraisal of the economy as a whole in the formulation and implementation of policy. And 1975 seemed to confirm that policymakers' judgment, based on an extensive range of information, is more effective than invariant rules for guiding the behavior of policy instruments.

The Business Situation

Economic activity in the United States has risen at a brisk pace in recent months. Real gross national product (GNP) advanced at a robust 7.5 percent annual rate in the first quarter, marking the fourth consecutive increase since its low point in early 1975. A major impetus to the economy's first-quarter growth was provided by consumers who bought substantially larger quantities of various goods and services, sharply increasing their purchases of new cars. In addition, a sizable thrust was provided by a turnaround in inventory investment, as businesses began to replenish their stock of inventories. Looking toward the future, many economists expect residential construction activity to pick up further as employment increases and consumer incomes continue to rise. Moreover, it is unlikely that there will again be a sharp deterioration in the net export position, as occurred in the first quarter when the United States upswing outpaced that in other countries. Changes in conditions in the labor market during the first quarter reflected the rapid expansion in the level of production. Compared with the previous quarter, about $\frac{3}{4}$ million more workers held jobs in the nonfarm sector and the unemployment rate dropped almost a full percentage point. Employment showed further strong gains in April but, due to a large increase in the size of the labor force, the unemployment rate remained at 7.5 percent. Other indicators of labor market conditions such as the average duration of unemployment, however, have continued to improve.

Accompanying the first-quarter rebound in economic activity was an unexpectedly dramatic deceleration in the rate of increase in prices. The GNP implicit deflator, the broadest measure of prices in the economy, rose at the lowest rate in nearly four years. Moreover, the behavior of the wholesale and consumer price indexes confirmed the marked slowing in inflation. Most of the recent decrease in inflation, however, resulted from drops in food and energy prices. Since these declines are not expected to continue, some acceleration in the rate of inflation would seem likely over the near term. Indeed, at the wholesale level, April data show a sizable increase in farm prices. Nevertheless, worries about a possible return to the inflation rates seen in 1974 have largely disappeared.

From a somewhat longer term perspective, the rate of wage gain is important for the price outlook. Some of the recent news on wage increases has been mildly encouraging, but most of the major wage contracts scheduled for 1976 have yet to be negotiated.

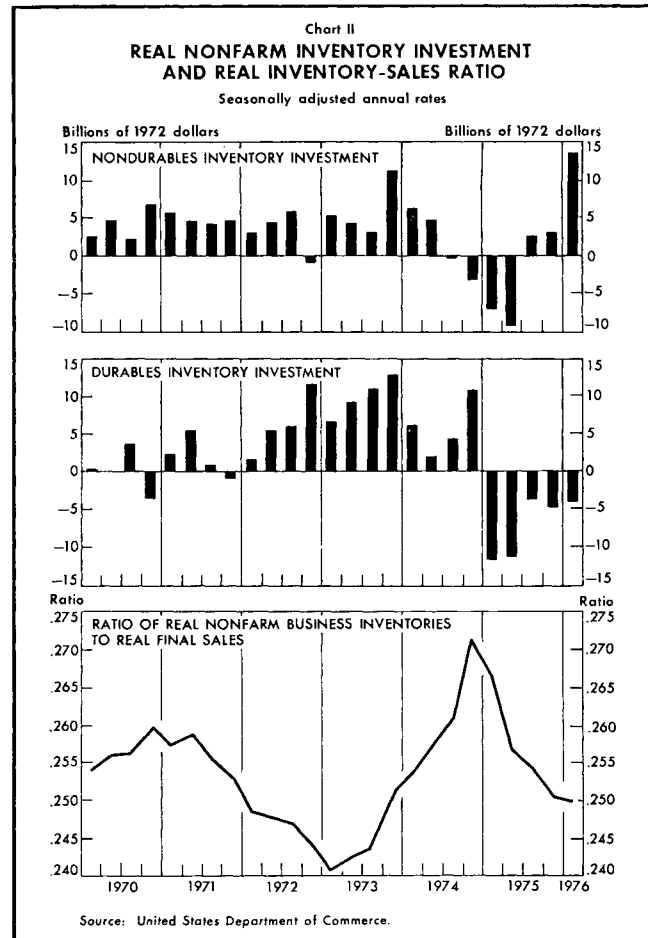
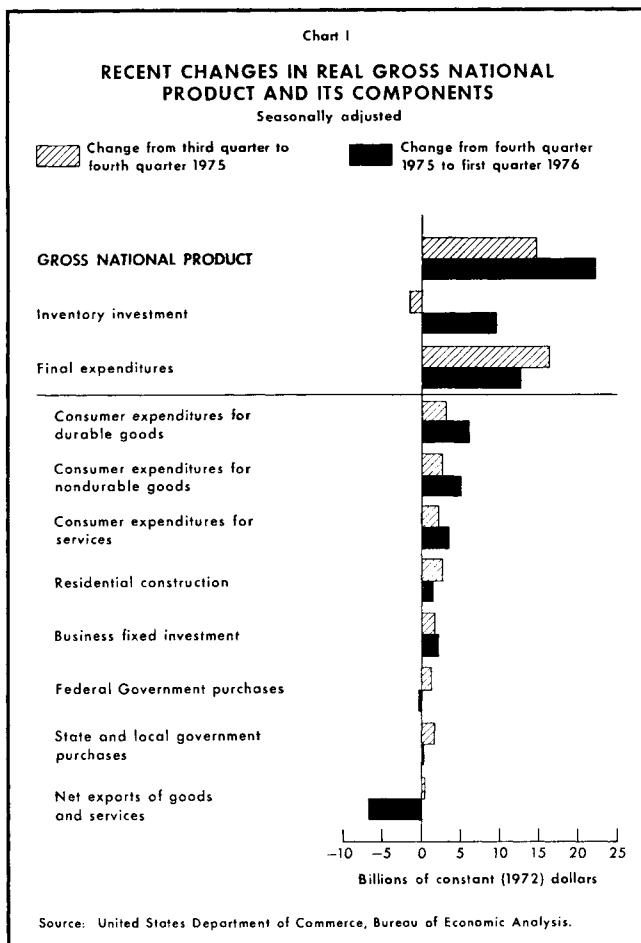
GNP AND RELATED DEVELOPMENTS

According to preliminary estimates, output of final goods and services in physical terms increased at a rather sharp 7.5 percent annual rate during the first quarter. This solid advance marked the fourth consecutive gain in real output and dispelled remaining doubts about the sustainability of the recovery. The level of economic activity has now regained almost all of the ground lost in the steep recession. However, since both the labor force and capacity have grown in the interim, the potential level of output is well above the current level, leaving room for further sizable increases in production. The first-quarter expansion largely reflected a sharp increase in inventory investment and a sizable advance in consumer purchases of both durable and nondurable goods and services. Although most other components also showed gains (see Chart I), net exports declined.

In the first quarter of this year, many business firms began to refurbish their depleted stocks of inventories and the swing from liquidation to accumulation accounted for half of the growth in real GNP. The Commerce Department's preliminary estimates, which are based on incomplete inventory data, indicate that the shift toward accumulation was attributable to businesses which produce nondurable goods (see Chart II). It appears that the excessive inventories held by producers of nondurables in 1974 had been worked off by the end of 1975. In fact, in some industries producing nondurable goods, modest accumulation had begun in the second half of 1975. It is not surprising that the nondurable goods sector, which was the first to begin liquidation of excess stocks, would be the earliest to resume inventory accumulation. In contrast, firms manufacturing durable goods began their inventory reductions somewhat later, and

liquidation continued into the early part of the first quarter. The latest monthly data, however, indicate that in February and March durables manufacturers began to build inventories once again. As a result of the massive inventory reduction during 1975 and the pickup in final sales, the overall ratio of inventories to final sales has declined significantly and, by the first quarter of 1976, the ratio of nonfarm business inventories to final sales had fallen close to pre-recession levels. With inventory stocks now at a fairly comfortable level, inventories will have to grow at about the same rate as sales for firms to have large enough stocks of materials, goods in process, and finished goods to operate efficiently.

Consumer spending, which has provided the major stimulus in the upturn, continues to contribute strength to the rebound of production. In the first quarter, consumer purchases of goods and services in real terms ad-



vanced at a 7.5 percent annual rate, the largest rate of increase posted since late 1972. Much of the recent surge in consumption has been accounted for by the rebirth of buyers' interest in new cars. Unit sales of domestic models rose to an average of 8.7 million in the January-March period, about 10 percent above the average sales in the final quarter of 1975 and some 22 percent over 1975 as a whole. In April, sales of domestic cars advanced again, reaching a seasonally adjusted 9 million unit annual rate. The resurgence of auto demand has been primarily for standard- and intermediate-size domestic models. The industry, having misjudged the demand mix this year, is apparently near capacity production of these models, and the inventories of autos, which overall are now low relative to sales, are reportedly even lower for these suddenly popular models. Sales of the generally smaller imports, on the other hand, have been very

sluggish, holding steady at an annual rate of 1.3 million units, and their share of total United States auto sales has ebbed to about 13 percent, down sharply from the over 20 percent share they had early in 1975. While the resurgence in automobile demand shows every sign of continuing, a production bottleneck could conceivably arise this summer, if the United Rubber Workers' strike against the tire producers becomes prolonged. Automakers say their stocks of rubber-related products could sustain production for only several weeks.

The pickup in sales of autos and other big-ticket items provides tangible evidence of improving consumer confidence. The slowing of inflation, recovery in employment and incomes, and the rebound of equity prices all have fostered a more optimistic outlook and have encouraged spending. The consumer sentiment index of the University of Michigan jumped sharply in the first quarter and now stands close to the level reached before its plunge during the recession-inflation environment of 1974-75.

Undoubtedly, the improvement in consumer sentiment has also played a role in the demand for new houses. Residential construction activity increased at an annual rate of 14.4 percent in the first quarter of 1976. Moreover, since work on new housing units continues for several months and is typically heaviest in the three months after the unit has been started, the recent rate of housing starts and new permits issued suggests that further gains can be expected in the second quarter of this year. Housing starts rebounded sharply in February and remained close to this higher level in March. At 1.44 million units annually, housing starts in March were more than 50 percent above their low point in early 1975. Nevertheless, the industry is operating far below its pre-recession level, with construction of multifamily dwellings particularly depressed. Multifamily housing starts (each apartment is counted as a unit) fell substantially during the first quarter, though several factors suggest that building may strengthen during coming months. Permits for new units, particularly multifamily units, showed gains in the first quarter. In addition, the rate of absorption of new units has picked up recently. Mortgage commitments at savings and loan associations, one of the leading indicators of future building activity, have risen 4.4 percent since the final quarter of 1975, reaching their highest levels since mid-1973. In general, the current and near-term outlook on mortgage money availability is favorable, as savings and loan deposit flows have remained high.

Though business investment in fixed capital remains well below its previous peak, there was a significant increase in real expenditures on business equipment and structures during the first quarter: business fixed invest-

ment in real terms grew at a 7.7 percent annual rate. Surveys of planned plant and equipment expenditures carried out earlier in the recovery had indicated that little or no growth in real expenditure could be expected during 1976, but some of these surveys did predict a first-quarter surge. The McGraw-Hill spring survey shows that firms have revised upward spending plans, and other new surveys may show upward revisions as a result of a brighter outlook for demand and improved financial conditions. The early months of 1976 saw rising equity prices, coupled with moderating long-term interest rates, and a resurgence of internally generated funds. With the economy's solid performance reducing many uncertainties about future demand, the likelihood of an advance in capital outlays appears to be improved. Although capacity utilization rates remain relatively low in most industries, firms may begin to undertake modernization expenditures. During the past few years, the types of equipment and structures that business firms find best suited to their needs have been radically altered by the changing relative price of energy as well as by the impact of environmental legislation. It has been argued that firms' responses to these changing conditions were delayed by the recession and that the next few years may find them modernizing their stocks of plant and equipment, thus adding to investment demand.

The sharp deterioration in net exports in the beginning of 1976 reflected a surge in imports at the same time that exports declined. The strong rise in imports was largely attributable to the rapid expansion in economic activity and personal incomes in the United States which increased the demand for all types of goods and services including those produced abroad. In explaining the fall in exports, some analysts point to the fact that the timing of grain shipments to the Soviet Union accounted for some of the declines and that much of the remaining fall was concentrated in the highly volatile civilian aircraft and parts category. Others note that last summer's appreciation of the dollar may have contributed to the decline in exports as well as to the strong rise in imports. Looking to the near future, there are some indications that economic growth of some of the major American trading partners is picking up. This coupled with a more normal rate of expansion in the United States makes it unlikely that further sizable declines in net exports will occur.

Government purchases of goods and services contributed little to the latest rise in aggregate demand. Federal expenditures actually edged down in real terms, as the increase in nondefense expenditures failed to offset the decline in defense spending. The latest information on orders for defense goods indicates that defense spending is

likely to be up in the near future so that the level of Federal spending will probably be more stimulatory in coming months. At the state and local levels, spending increases were substantially smaller than in the final quarter of 1975. Apparently reacting to taxpayer resistance to higher levies, state and local payroll employment grew at less than one third of its recent rate. With long-term financing costs high and voter resistance to new bond issues widespread, municipal construction dropped.

As personal incomes are continuing to grow rapidly and the outlook for business expenditures is brightening, there now seems little doubt that the recovery will persist.

PRICES

By virtually every broad measure of price change, inflation has slowed markedly in recent months. As measured by the implicit GNP price deflator, prices of goods and services advanced at a 3.7 percent annual rate in the first quarter, down sharply from the 6.8 percent increase recorded in the previous three-month period and the 8.8 percent rise in 1975 as a whole. The rate of growth of the fixed-weight price index for GNP—which, unlike the GNP deflator, is unaffected by shifts in the composition of output—also showed a sharp deceleration. The fixed-weight deflator rose at an annual rate of 3.9 percent in the initial quarter of 1976, compared with 7.2 percent in the final quarter of 1975.

Consumer prices, as measured by the overall consumer price index, increased at a moderate 4.5 percent pace on a quarterly average basis during the first quarter, compared with a 6.5 percent rate of increase in the fourth quarter of last year. The first-quarter rate of inflation was the lowest recorded since the end of 1972. A closer look at the behavior of the components, however, suggests that temporary factors helped to retard inflation in recent months. During the first quarter, food prices declined for the first time in more than eight years, falling at an annual rate of 2.4 percent. At the same time, consumer energy prices dropped at a 5.4 percent annual rate, reflecting in part the impact of recent legislation. Excluding these items, the behavior of prices has been less favorable. The price of consumer services rose at a 10.5 percent annual pace, while the prices of commodities other than food and energy grew at a 5.4 percent rate. While inflation has cooled significantly from its 1974 rate, the magnitude of price increases for services and commodities other than food and energy during recent months makes it clear that the underlying trend rate of inflation remains above the first-quarter experience. If, as widely expected, the outright declines in food and energy prices are replaced

by modest increases, the overall rate of inflation will certainly accelerate in the near term. Such movements will not signal an increase in the trend rate of inflation but rather the absence of large, temporary rates of decline in the prices of food and energy.

In April, wholesale prices of farm products and of processed foods and feeds rose 2.8 percent, thereby recovering half the decline of the past five months. This turnabout caused the overall wholesale price index to rise 0.8 percent despite the sustained decline in power and fuel prices, which fell 0.4 percent. The wholesale prices of industrial commodities continued to advance, climbing a relatively moderate 0.3 percent in April. During the first four months of the year, wholesale industrial prices rose at an annual rate of less than 3½ percent, down substantially from the 9.2 percent rate in the last half of 1975. The surge in prices of farm products and of processed foods and feeds in April suggests that the slide in retail food prices is probably near an end. Wholesale prices of consumer goods other than food, however, edged down in April for the second consecutive month. This development suggests a near-term continuation of relatively modest rates of increase in consumer prices of goods other than food.

WAGES, PRODUCTIVITY, AND EMPLOYMENT

The recent data indicate that there was some moderation in wage pressures in the early months of 1976. The average hourly earnings of private nonfarm production and other nonsupervisory workers, adjusted to exclude the impact of interindustry shifts and of overtime in manufacturing, rose at a 6.2 percent annual rate during the first quarter, the smallest quarterly increase in the last three years. And the first-quarter major collective bargaining settlements indicate a slight reduction in the rate of increase of wages and benefits. The average first-year wage and benefit gain negotiated in the first-quarter settlements covering 5,000 or more workers was 9.5 percent, down from last year's 11.4 percent increase, and the teamster settlement reached in April, which covered 450,000 workers, called for a first-year increase in wages and benefits of slightly over 9 percent. To be sure, a substantial part of the 4.2 million workers whose contracts are slated to expire in 1976 have yet to negotiate new agreements, so that bargains struck in the coming months will be more important for overall wage costs. There are a few signs that these wage increases may be moderate. High unemployment in some sectors has apparently altered several unions' bargaining strategy. For example, in the depressed construction industry, wage increases have been moderate and,

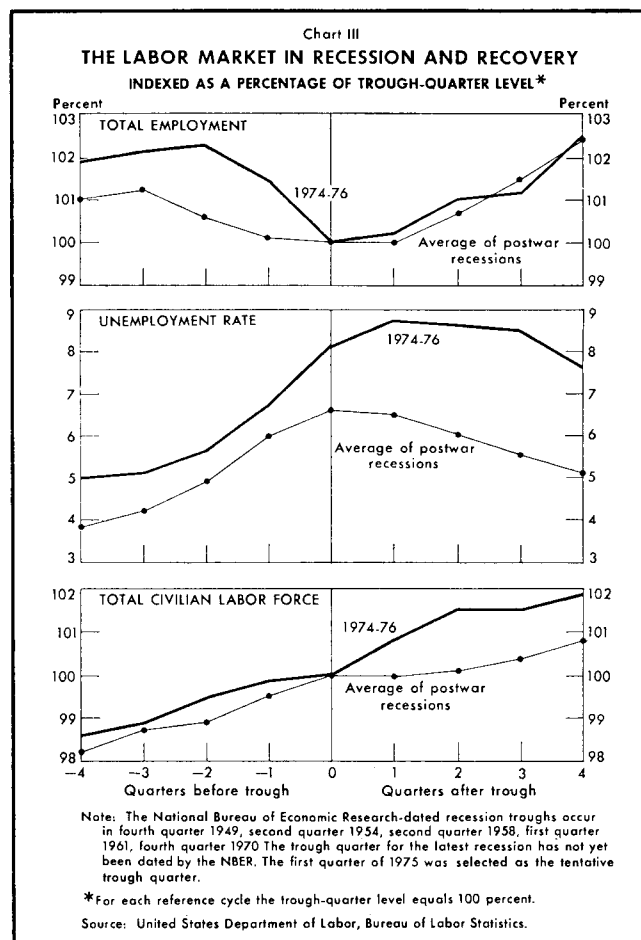
indeed, a few unions have even accepted pay cuts in order to be more competitive with nonunion workers. In addition, the United Auto Workers, who are involved in the largest settlement of the year, have announced that job security rather than wage increases will be the primary bargaining issue.

Productivity, as measured by output per hour worked in the private nonfarm economy, increased at a 3.3 percent annual rate in the first quarter of this year after declining in the fourth quarter of 1975. Over the last four quarters, productivity has risen at a rapid 4.9 percent rate. Increased productivity usually occurs at the beginning of an economic upturn, so that the recent pattern was expected. The brisk increase in productivity, coupled with moderate increases in labor compensation per hour worked, has greatly reduced cost pressures. Over the four previous quarters, unit labor costs in the private nonfarm economy rose just 2.4 percent.

The rapid upturn of economic activity has resulted in a marked increase in employment. Compared with the final quarter of 1975, $\frac{3}{4}$ million additional workers were employed in the nonfarm sector. Some had been recalled from layoff, and others had found new jobs. This led to a dramatic 0.9 percent fall in the percentage of the labor force who were unemployed. In April, labor market conditions overall continued to improve. Nonfarm payroll employment climbed by 350,000 persons, as most sectors of the economy expanded their work forces. According to the survey of households conducted monthly by the Bureau of Labor Statistics, total civilian employment rose 700,000 in April. A roughly equal spurt in the civilian labor force prevented the strong employment gains from being reflected in the unemployment rate, which remained at 7.5 percent. However, other measures did show further improvement in labor market conditions. For example, the percentage of the labor force unemployed for more than fifteen consecutive weeks fell another 0.2 percentage point, continuing the sharp decline in extended unemployment that began in January.

The conditions in the labor market over the course of the recent downturn and recovery have been somewhat different from the experience in other recessions (see Chart III). Early in the downturn, many firms felt that the decline in economic activity would be mild. They therefore retained a relatively large fraction of their work force and maintained production, allowing inventories to build up. Thus, early in the recession, employment held up well when compared with typical postwar recession experience. Then, as events made it clear that a sales recovery was not going to materialize as quickly as expected, firms found themselves faced with a massive overhang of

undesired inventory and they began layoffs, causing employment to drop rapidly. Since its low point in the first quarter of 1975, however, the recovery in employment has been very similar to typical postwar recession experience. In the early part of previous recoveries, however, high unemployment rates induced a falloff in the rate of labor force growth. This phenomenon appears to have been largely absent during the recent cycle. It is not clear why labor force growth has remained so strong. Perhaps the decline in real wages that many nonfarm wage earners experienced led additional family members to seek jobs, or maybe extended unemployment benefits have kept individuals in the labor force who would otherwise have dropped out in discouragement. In any event, the large increase in the size of the work force in this recovery has meant that the unemployment rate has fallen more slowly than it had in past postwar upturns.



The Money and Bond Markets in April

Interest rates in the money and bond markets declined through most of April but posted sharp increases near the end of the month. According to market analysts, good news on inflation played a part in the declines in long-term rates in March and early April. In mid-April, however, new reports confirmed that a brisk economic recovery was under way, and long-term rates began to rise. Thereafter, underwriters encountered difficulty distributing some new corporate debt issues, which had been priced when market conditions were more favorable. Toward the end of the month, amid reports of substantial growth in the monetary aggregates, many investors came to believe that the Federal Reserve might have adopted a less accommodative stance and money market rates rose sharply. Yields on state and local government debt declined on average for the second straight month.

On April 28, the Treasury announced plans for its current quarterly refinancing. The amount of new cash to be raised and the maturity composition of the offerings were in line with what investors had expected and had little effect on yields in the debt markets. The Treasury ultimately raised \$3.4 billion in new cash and refunded \$4.1 billion of maturing publicly held debt.

Preliminary estimates of the narrowly defined money stock (M_1) indicate a rapid acceleration in its growth during April. Growth in the more broadly defined money stock (M_2) also increased sharply. Further declines in large negotiable certificates of deposit (CDs) outstanding, however, held the bank credit proxy to a modest advance.

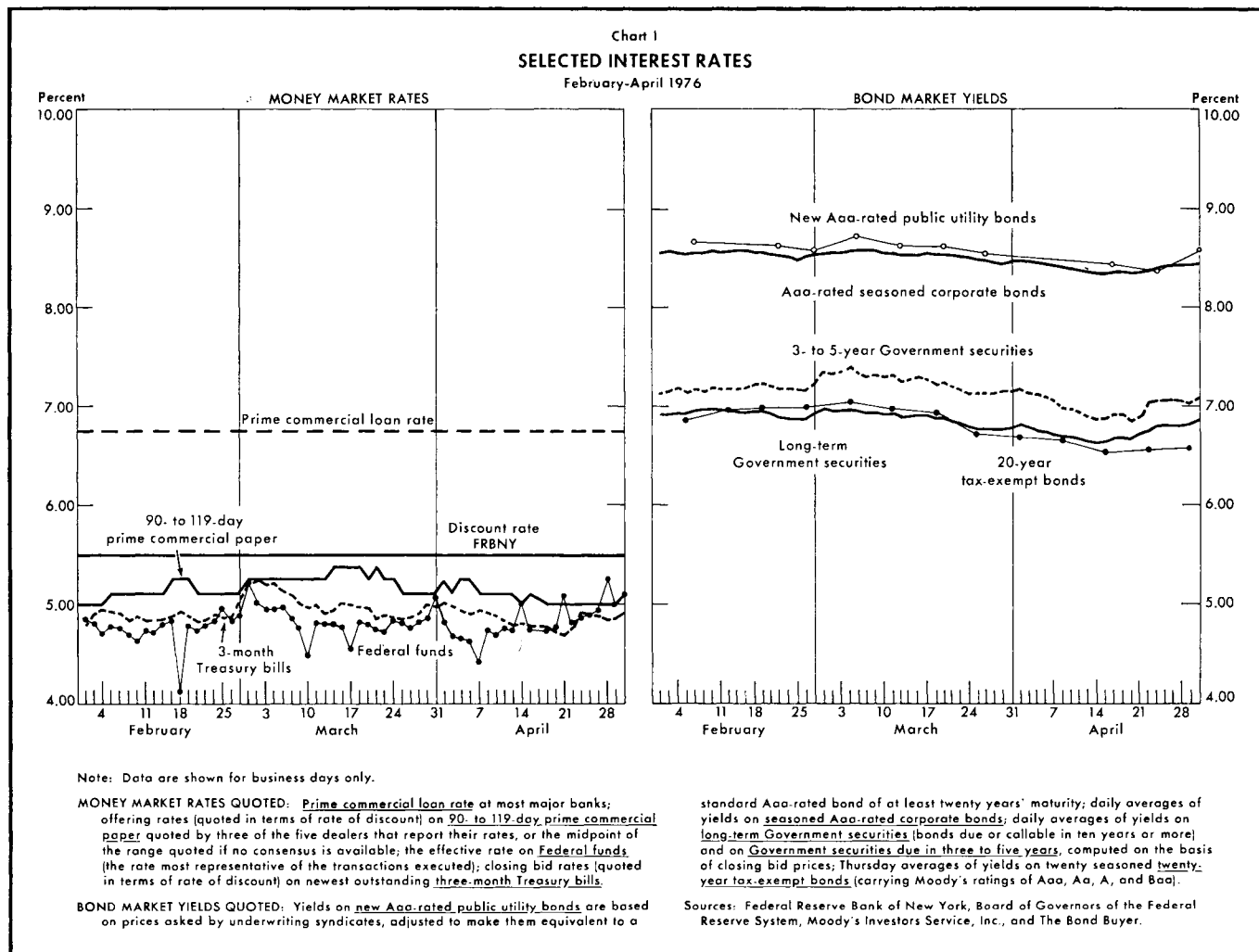
THE MONEY MARKET AND THE MONETARY AGGREGATES

Interest rates on money market instruments ended April little changed on balance, as downward movements during most of the month were reversed by sharp increases in the final week. The effective rate on Federal funds averaged 4.82 percent over the month as a whole. While this was 2 basis points below the average of the previous month, in the final statement week the average rate rose 15

basis points over its average in the previous week to 4.93 percent (see Chart I). At the end of April, yields on 90- to 119-day dealer-placed commercial paper were $5\frac{1}{8}$ percent, about the same as at the end of March. Rates on 90-day bankers' acceptances fell by 15 basis points during April to 5.03 percent. The average yield in the secondary market on 90-day CDs closed the period at 5.13 percent, down 6 basis points. Member bank borrowings from the Federal Reserve during the month continued at about frictional levels (see Table I), as other money market interest rates remained well below the discount rate.

The demand for business loans was again weak in April, and commercial paper outstanding increased only moderately. Commercial and industrial loans at large commercial banks, including loans sold to affiliates, fell by \$1.3 billion over the four statement weeks ended April 28. The average increase in these loans during April was about \$1 billion in the previous five years. Even in comparison with other postwar economic recovery periods, the demand for business loans has been very weak. Usually business loans increase in the upturn, but since April 1975, about when this recovery started, business loans have declined by 3.8 percent. Some economists attribute this weakness to the large volume of internal funds currently available to corporations. Others point to the fact that inventory accumulation, which is frequently financed by bank loans, has begun rather late in this recovery. The decline in business loans has led, in turn, to the substantial runoff in large negotiable CDs observed in recent months and to an increase in bank holdings of Government securities. Most banks have not, however, responded to the weak bank loan demand by lowering the prime lending rate, which remained at $6\frac{3}{4}$ percent through the end of April. One major bank did lower its prime rate to $6\frac{1}{2}$ percent on May 3.

Preliminary data indicate that growth in the monetary aggregates accelerated sharply in April. During the four-week period ended April 28, seasonally adjusted M_1 —private demand deposits adjusted plus currency outside commercial banks—grew at an annual rate of 9.8 percent over its average in the four-week period ended thirteen



weeks earlier. This brought M_1 growth to 6.2 percent over its four-week average level ended fifty-two weeks earlier (see Chart II). The recent high rate of money stock growth has been in part attributable to exceptionally rapid expansion of currency in circulation. In the four-week period ended April 28, currency grew at an annual rate of 14.6 percent from its four-week average level ended thirteen weeks earlier whereas demand deposits adjusted, the other component of M_1 , rose at an 8.1 percent annual rate. Growth in M_2 — M_1 plus time deposits other than large negotiable CDs—grew at an annual rate of 12.8 percent from the four-week period ended thirteen weeks earlier. Over the same period, the bank credit proxy—total member bank deposits subject to

reserve requirements plus certain nondeposit sources of funds—rose by only 2.2 percent at an annual rate, as the volume of CDs continued to decline.

THE GOVERNMENT SECURITIES MARKET

Yields on most Federal Government securities closed the month at about the same levels as at the end of March, after declining through midmonth and then reversing course toward the end of the month. Early in April, the market rallied in response to news of continued moderation in inflation and to downward revisions of projected Treasury borrowing in the months ahead. The optimistic price information released in April included the relatively modest first-

quarter increase in the GNP deflator as well as continued moderation in the rate of rise of the wholesale and consumer price indexes. The Treasury's need for new cash in the remainder of the fiscal year is slated to be lower than originally anticipated because expenditures had been overestimated. Later in the month, many investors began to believe that the Federal Reserve had adopted a less accommodative policy stance and this prompted price declines throughout the market.

Treasury bill rates declined during most of the month. The average accepted rates on three- and six-month bills at the regular weekly auction on April 19 were 4.76 percent and 5.09 percent, respectively (see Table II). At the last auction in March, the three-month bill yield had been 17 basis points higher and the six-month bill yield had been 24 basis points higher than at the April 19 auction. Market sentiment was bolstered by the redemption without replacement of \$4.7 billion of bills maturing on April 22, including \$2.5 billion of fourteen-day cash management bills. However, with firmer Federal funds trading near the end of the month, rates in the secondary market climbed and three- and six-month bills were sold at yields of 4.91 percent and 5.23 percent in the month's final auction. At the regular monthly auction on April 29, the Treasury raised an additional \$750 million in new cash with an offering of \$3.2 billion of 52-week bills. The issue sold at an average rate of 5.65 percent, down 14 basis points from the rate obtained on March 31. Interest rates on three- and six-month bills ended the month at 4.91 percent and 5.29 percent, respectively, about 6 and 7 basis points below their levels at the end of the previous month.

Returns on Government coupon issues moved down over the first half of April and then increased in the last half, a pattern similar to that shown by the rates on private debt. The upturn of long-term interest rates prior to any rise in short-term rates was attributed by some market observers to news on the recent brisk pace of economic recovery. They argued that this unexpectedly high rate of economic recovery caused upward revision in estimates of what short-term interest rates would be in the near future and thus made investors demand a higher return for holding long-term issues.

In early May the Treasury sold the three coupon issues which comprised its May refunding package. Auctions were conducted on May 4 for \$2 billion of 23½-month notes and on May 7 for \$800 million of the reopened issue of 23¾-year bonds with 7½ percent coupons. Yield bids on the notes averaged 6.61 percent, and a 6½ percent coupon was provided on the issues sold. The average price in the auction of bonds resulted in a yield of 8.19 percent.

Table I
FACTORS TENDING TO INCREASE OR DECREASE
MEMBER BANK RESERVES, APRIL 1976

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

Factors	Changes in daily averages— week ended				Net changes
	April 7	April 14	April 21	April 28	
"Market" factors					
Member bank required reserves	+ 371	— 111	— 715	+ 21	— 434
Operating transactions (subtotal)	+3,639	+1,158	—4,377	— 189	+ 231
Federal Reserve float	+ 453	— 29	+ 480	— 277	+ 627
Treasury operations*	+3,440	+1,902	—3,546	— 850	+ 946
Gold and foreign account	— 31	+ 16	+ 29	— 6	+ 8
Currency outside banks	— 436	— 829	—1,105	+1,015	—1,355
Other Federal Reserve liabilities and capital	+ 213	+ 98	— 236	— 72	+ 3
Total "market" factors	+4,010	+1,047	—5,092	— 168	— 203
Direct Federal Reserve credit transactions					
Open market operations (subtotal)	—4,396	—1,273	+4,844	+ 138	— 687
Outright holdings:					
Treasury securities	—2,379	—1,592	+2,791	+1,230	+ 50
Bankers' acceptances	— 7	— 16	— 16	— 6	— 45
Federal agency obligations	—	—	—	—	—
Repurchase agreements:					
Treasury securities	—1,513	+ 297	+1,672	— 851	— 395
Bankers' acceptances	— 289	+ 24	+ 296	— 190	— 159
Federal agency obligations	— 208	+ 14	+ 101	— 45	— 138
Member bank borrowings	— 13	+ 38	— 23	+ 14	+ 16
Seasonal borrowings†	—	—	—	+ 1	+ 1
Other Federal Reserve assets‡	+ 129	+ 263	+ 261	— 40	+ 613
Total	—4,280	— 973	+5,083	+ 111	— 59
Excess reserves§	— 270	+ 74	— 9	— 57	— 262
	Daily average levels				Monthly averages
Member bank:					
Total reserves, including vault cash§ ...	33,580	33,775	34,481	34,403	34,060
Required reserves	33,449	33,560	34,275	34,254	33,885
Excess reserves§	131	215	206	149	175
Total borrowings	24	62	39	53	45
Seasonal borrowings†	10	10	10	11	10
Nonborrowed reserves	33,556	33,713	34,442	34,350	34,015
Net carry-over, excess or deficit (—)¶ ...	157	66	59	42	81

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

* Includes changes in Treasury currency and cash.

† Included in total member bank borrowings.

‡ Includes assets denominated in foreign currencies.

§ Adjusted to include waivers of penalties for reserve deficiencies in accordance with the Regulation D change effective November 19, 1975.

|| Average for four weeks ended April 28, 1976.

¶ Not reflected in data above.

From April 29 through May 5, subscriptions were accepted for ten-year notes with 7⅞ percent coupons at par. All subscriptions for under \$500,000 made with a 20 percent cash downpayment were accepted. A total of \$4.7 billion of these notes was sold. This ten-year note issue was the first under recent legislation extending permissible note maturities from seven to ten years.

Spreads between the interest rates on Government agency issues and those on Treasury issues have remained quite narrow. In explaining this, market analysts pointed to the small supply of agency issues, reflecting the highly liquid position of thrift institutions which reduced the need of these institutions to sell mortgages in secondary markets. Near midmonth, the Federal Intermediate Credit Banks (FICB) placed \$1,044.5 million of consolidated bonds maturing February 1, 1977 at 5.60 percent, raising \$157.0 million in new cash. The Banks for Cooperatives (BC) issued \$409.5 million of short-term consolidated bonds maturing May 3, 1976 at 5.20 percent. On April 15, the Government National Mortgage Association issued \$335.9 million in mortgage-backed thirty-year securities, of which

Table II
AVERAGE ISSUING RATES
AT REGULAR TREASURY BILL AUCTIONS*

In percent				
Maturity	Weekly auction dates—April 1976			
	April 5	April 12	April 19	April 26
Three-month	4.957	4.830	4.763	4.909
Six-month	5.293	5.068	5.089	5.230
	Monthly auction dates—February-April 1976			
	February 4	March 3	March 31	April 29
Fifty-two weeks	5.572	6.010	5.781	5.645

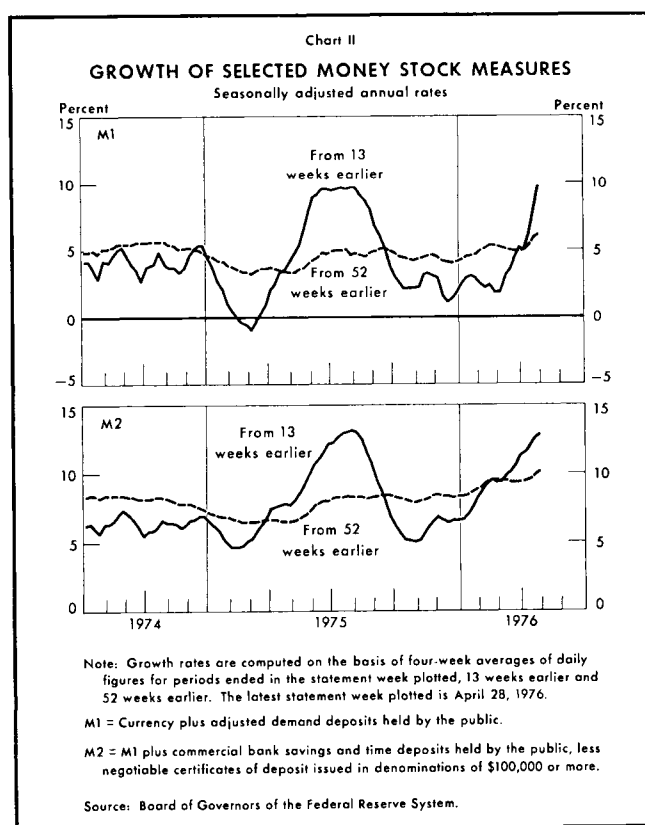
*Interest rates on bills are quoted in terms of a 360-day year, with the discounts from par as the return on the face amount of the bills payable at maturity. Bond yield equivalents, related to the amount actually invested, would be slightly higher.

\$175.3 million of 7¼ percent pass-through securities was issued at 7.85 percent and \$160.6 million of 7½ percent pass-through securities was sold at 7.87 percent. In addition, farm credit financing around midmonth, the BC issued \$410 million of six-month bonds at 5.2 percent and the FICB issued \$1,045 million of nine-month bonds at 5.6 percent. The rate on the FICB issue was down from 6.1 percent on the March issue and lower than any such issue in the past year. The Department of Housing and Urban Development placed \$271 million of notes to finance urban renewal projects at an average interest rate of 2.92 percent, the lowest rate for such a financing since November 1972.

OTHER SECURITIES MARKETS

In the corporate bond market, the sharp rally that began in the previous month continued through mid-April. During the first half, corporate obligations benefited from the reports of slower inflation, the outlook for less Treasury borrowing, and a small number of new corporate issues. The rally extended to medium-quality issues, as news of strong economic recovery reduced investors' worries about risk. In the latter part of the month, prices declined and some issues, which had been priced earlier and remained in syndicate, did not sell well. Rates on municipal bonds continued to decline over most of the month but stabilized late in the period.

In new issue activity, the bellwether financing of the month was a \$450 million issue of Aaa-rated telephone



debentures. The forty-year securities were priced shortly after midmonth to yield 8.29 percent. Reflecting the extent of the rally, this return was 27 basis points below a similar issue sold the month before. Distribution of the large offering began successfully, but corporate bond prices fell while some of the bonds were still in underwriters' hands. Syndicate price restrictions were removed shortly thereafter, and the bonds sustained a sharp price drop in the secondary market, bringing the return to 8.47 percent about one week after the issue date. In a key industrial offering, \$250 million of Aaa-rated thirty-year debentures was quickly placed with investors just after midmonth at a yield of 8.02 percent. Another Aaa-rated offering in March provided an 8.57 percent return, although that issue had been very generously priced and had a longer effective maturity.

A sizable amount of new tax-exempt obligations of

state governments was sold at competitive bidding during April. Two \$125 million bond issues rated Aaa/AA (Moody's/Standard & Poor's) met good receptions. State of Oregon bonds provided returns from 4.1 percent in 1981 to 5.6 percent in 1994, while State of Tennessee bonds yielded from 3.2 percent in 1977 to 5.6 percent in 1996. Both issues were placed at rates well below an Aaa-rated state offering in mid-February, which returned from 4.20 percent in 1979 to 5.90 percent in 1991. Bond obligations of the State of Ohio, rated Aa/AA and totaling \$45 million, were reoffered at yields ranging from 3.5 percent in 1977 to 6.75 percent in 2001. The Bond Buyer index of twenty bond yields on twenty-year tax-exempt bonds fell 14 basis points over the month to 6.55 percent, continuing the declines posted over March. The Blue List of dealers' advertised inventories rose by \$48 million to close the month at \$797 million.