

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 re-appearance. It succeeded in establishing the financial pre-conditions 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.

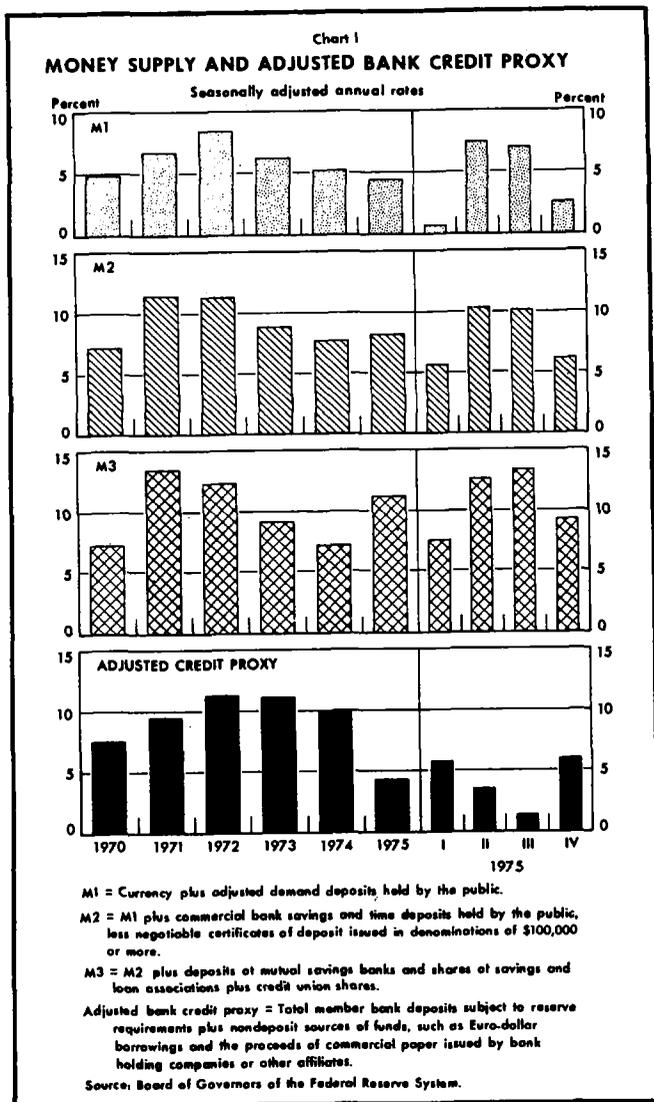
Early in the year, the Federal Open Market Committee (FOMC) began a practice of focusing explicitly on a longer time horizon in formulating its policy approach, in response to a Joint Resolution of the Congress (House Concurrent Resolution 133). In April, the Committee adopted annual growth ranges for 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

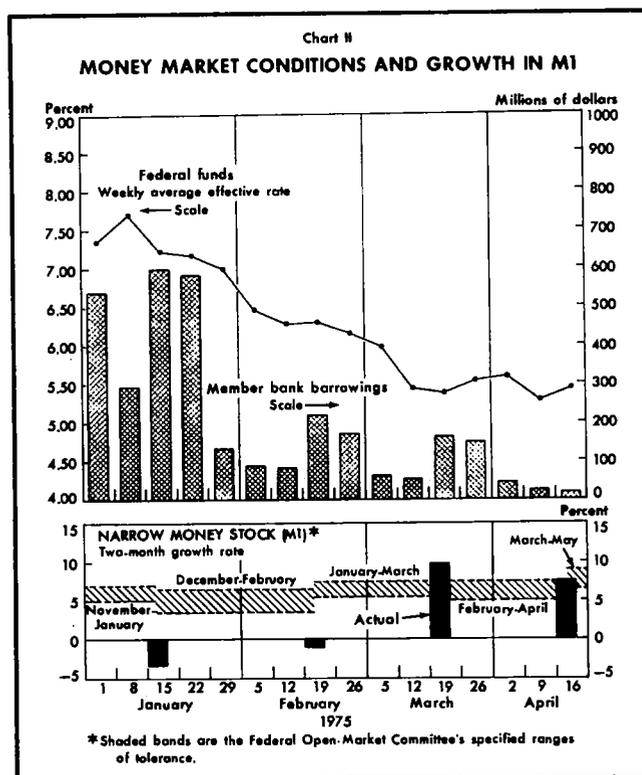
The following discussion highlights significant developments over the past year and focuses on the information available to the FOMC at several key points to provide examples of the Committee's policymaking procedures.

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 (M₁) 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, M₁ 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, M₁ then seemed to be exceeding the ranges agreed upon at the March meeting.



M₂ and M₃ 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.

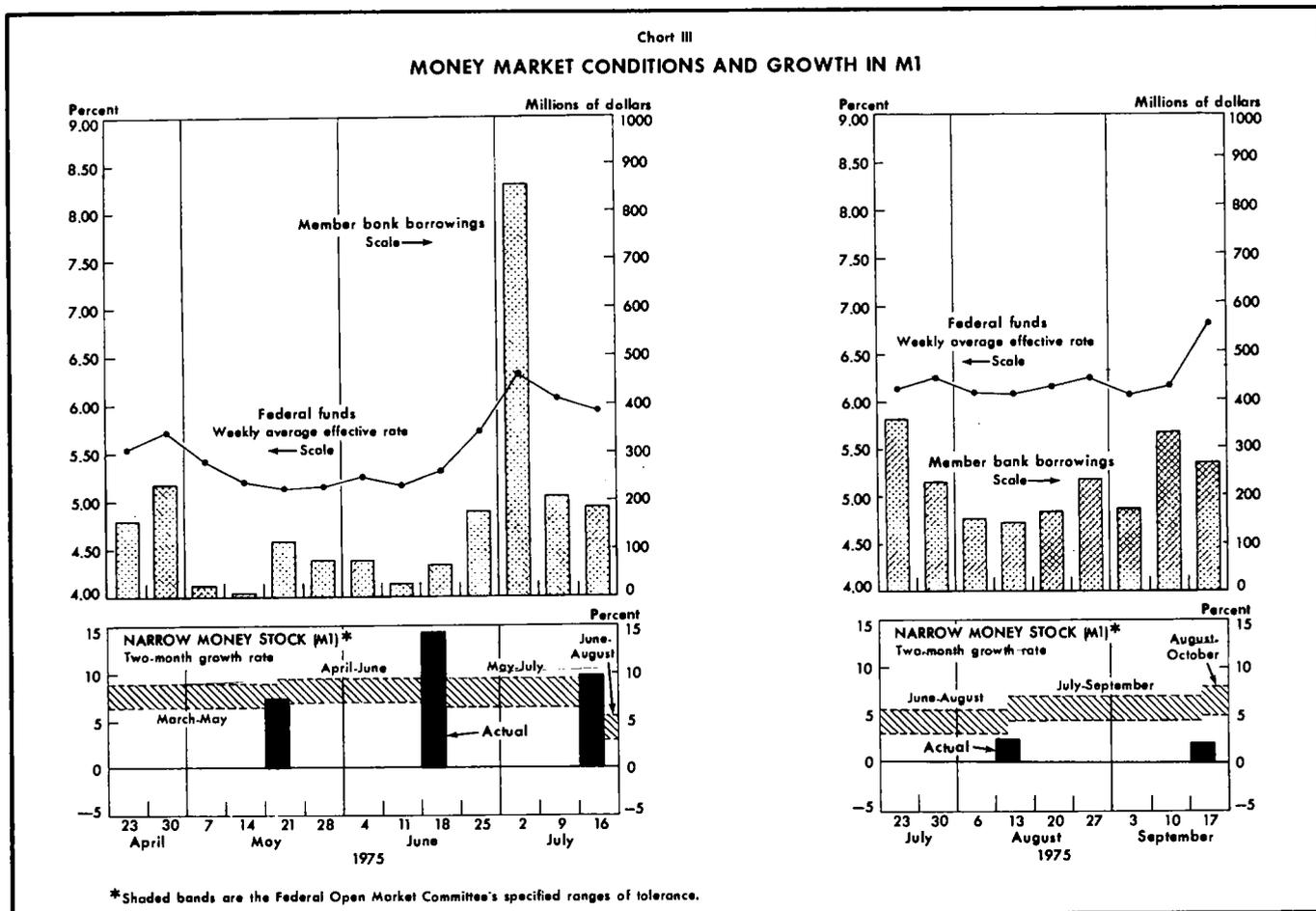
² In 1975 massive open market operations were needed to offset the impact of intramonthly swings in Treasury cash balances at Reserve Banks. The Treasury had been intensifying its efforts to minimize its cash holding at commercial banks. Generally, balances at Reserve Banks rose sharply toward the end 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 5½ 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



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 $5\frac{1}{4}$ 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.

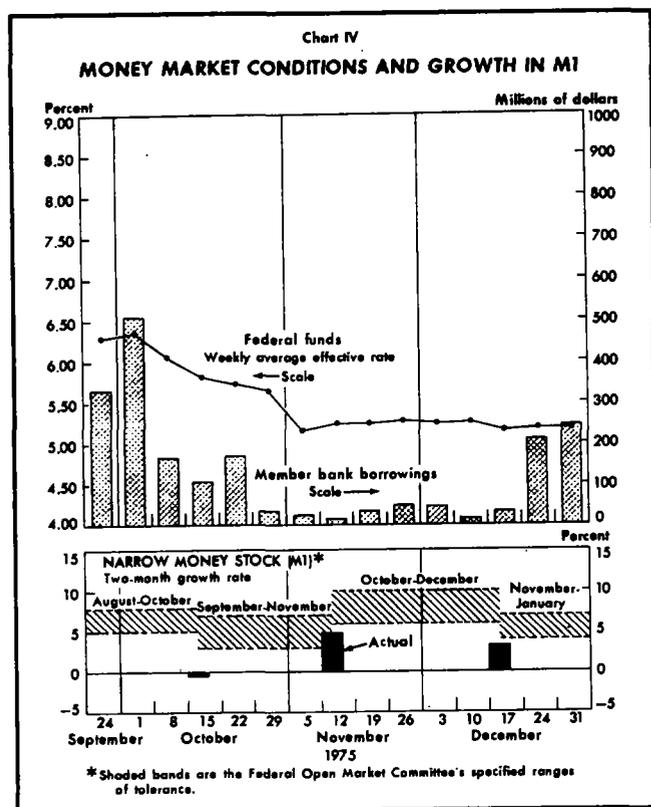
At its October meeting, the Committee retained its longer run annual growth rate range for M_1 , which now extended through the third quarter of 1976. It also reduced the bottom end of such ranges for M_2 and M_3 by 1 percentage point to allow for pressures on market

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 $5\frac{3}{16}$ 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

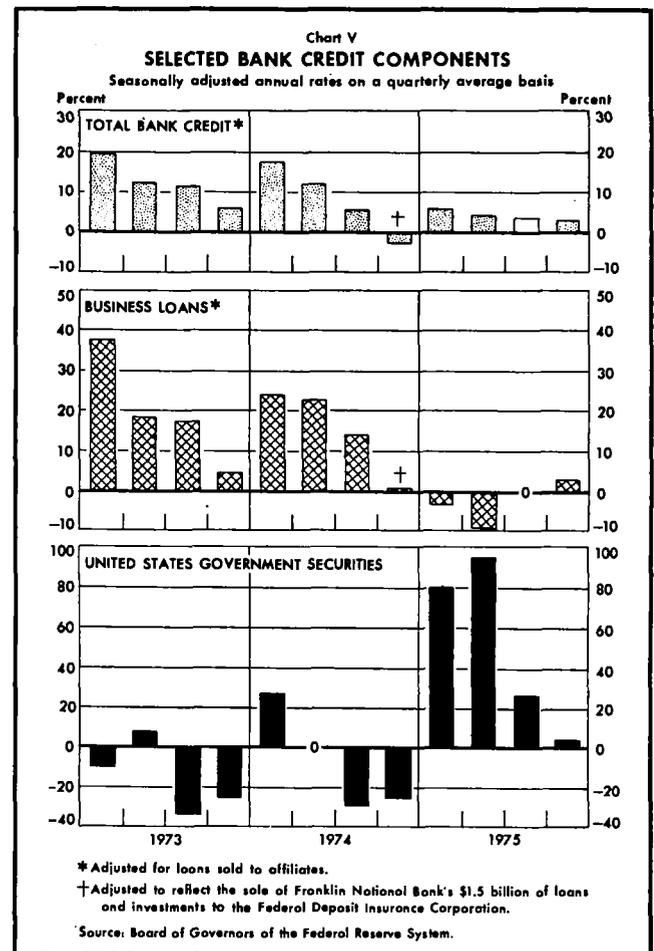
Sector	1970	1971	1972	1973	1974	1975
	Billions of dollars					
United States Government						
Treasury securities*	12.9	25.6	17.4	9.7	12.0	85.2
Agency securities	8.2	3.8	6.2	19.6	21.4	10.1
State and local government	11.2	17.6	14.4	13.7	17.4	15.4
Corporate and foreign bonds	23.8	24.8	20.2	12.5	23.3	34.5
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.

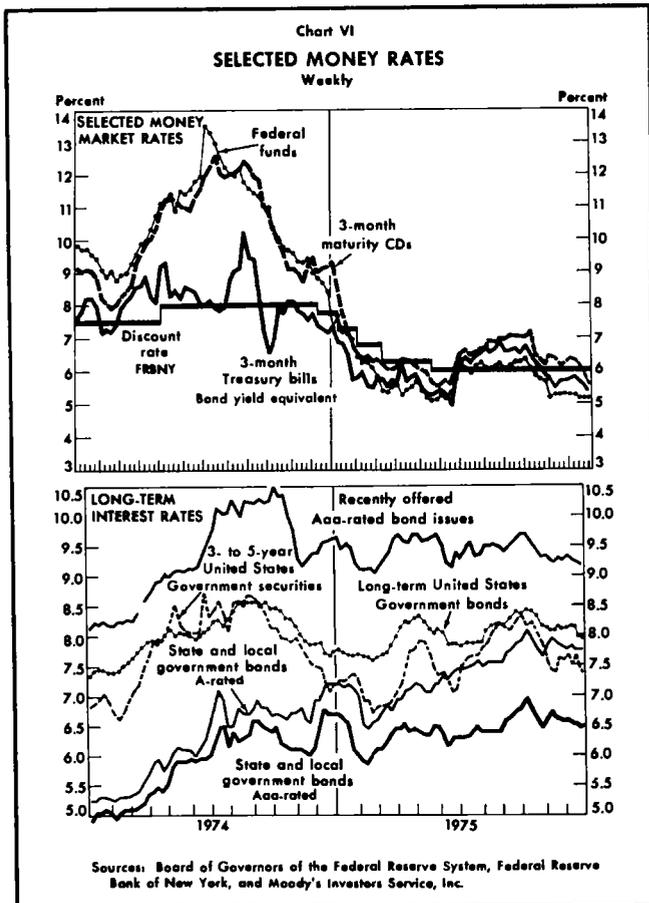
Table II
ACQUISITIONS OF FEDERAL GOVERNMENT SECURITIES, BY SECTORS

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 5½ percent in the final week of the year. Treasury bill rates declined by about 1¾ 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

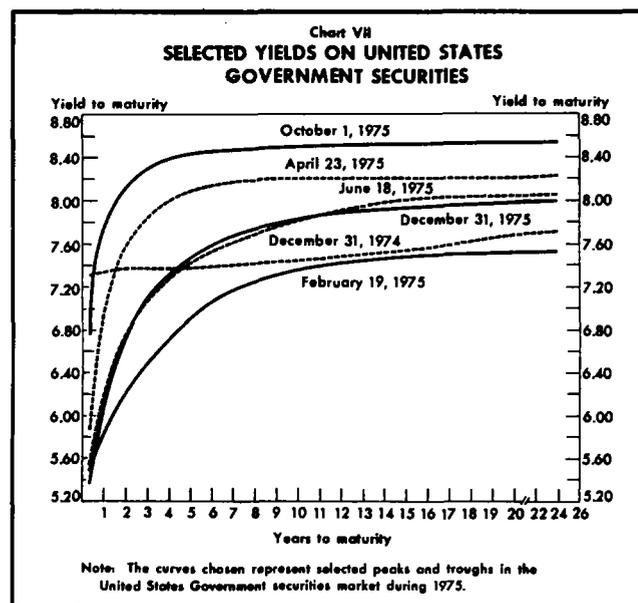


Table III
SELECTED INTEREST RATES
In percent

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.