Monetary Policy and Open Market Operations in 1982

Monetary policy in 1982 was directed at continuing to restrain inflation while providing a foundation for sustainable economic growth. Substantial progress was made in reducing inflation. The pace of price increase slowed, by some measures, to less than one third that seen at its peak. However, economic activity, which had sagged sharply late in 1981, began 1982 on a weak note and showed little vigor over most of the year. At the year-end, the economy seemed poised for recovery, with much of the inflationary momentum of earlier years wrung out, though financial market participants remained deeply concerned by prospects of huge Federal budget deficits projected for 1983 and beyond Open market operations during the year took place against a background of financial strain and concern about the creditworthiness of borrowers, both domestic and international. The year was punctuated by several prominent financial failures which highlighted the desirability of reforms in market practices and of increased Federal Reserve surveillance of the Government securities market.

The Federal Reserve's selection and pursuit of monetary growth objectives was complicated by two developments during the year. One was an apparently strong precautionary demand for liquidity in the highly uncertain economic and financial climate. Over the year, the velocity of money declined to an unusual extent, even for a recessionary period. For another, flows of funds associated with regulatory decisions and institutional arrangements distorted the monetary data, particularly M-1, in the fourth quarter. In responding, the Federal Reserve benefited from the credibility it had gained in its sustained effort to break the inflationary momentum of the 1970s. The markets accepted the logic of permitting money growth above the Federal Open Market Committee's (FOMC's) ranges for a time and of placing less emphasis on M-1 in reaching decisions late in the year.

As it turned out, M-1 grew by 8.5 percent from the fourth quarter of 1981 to the fourth quarter of 1982, compared with the FOMC's growth range of 2½ to 5½ percent.[1] Through the third quarter, M-1 was only

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[1] This report uses the definitions of the aggregates as they applied in 1982, as well as the seasonal factors and benchmarks in place at the time In February 1983, new benchmarks and seasonal factors were introduced In addition, two changes were made to the definitions of the broader aggregates For one, balances in IRA (individual retirement accounts) and Keogh plans at depository institutions and money market mutual funds were removed from the monetary aggregates For another, balances in tax-exempt money market funds, which were not previously included in the aggregates, were treated in a similar fashion to taxable money market funds balances in general purpose and broker/dealer funds entered at the M-2 level, balances in institution-only funds entered at the M-3 level Under the new definitions, growth of M-2 came out very slightly above the upper end of the FOMC's range at 9 3 percent, while M-3 grew 10 1 percent The month-to-month pattern of M-1 growth was modified somewhat, but for the year as a whole the rate of growth did not change

Chart 1

Annual Range and Actual Growth of M-1

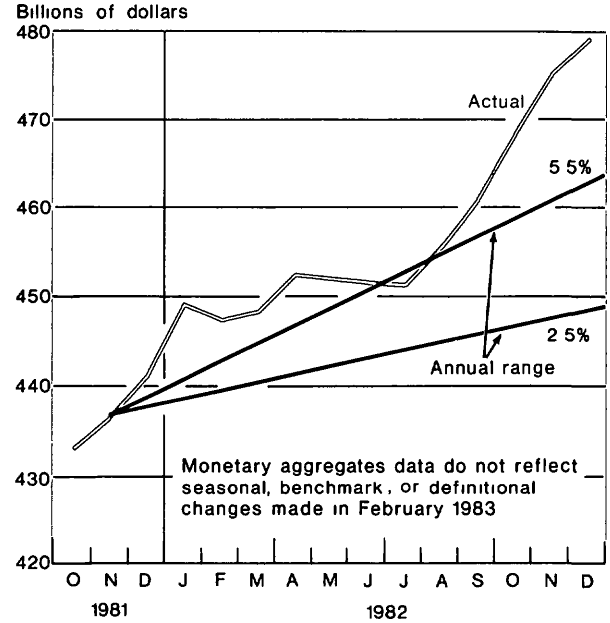


Chart 2

Annual Range and Actual Growth of M-2

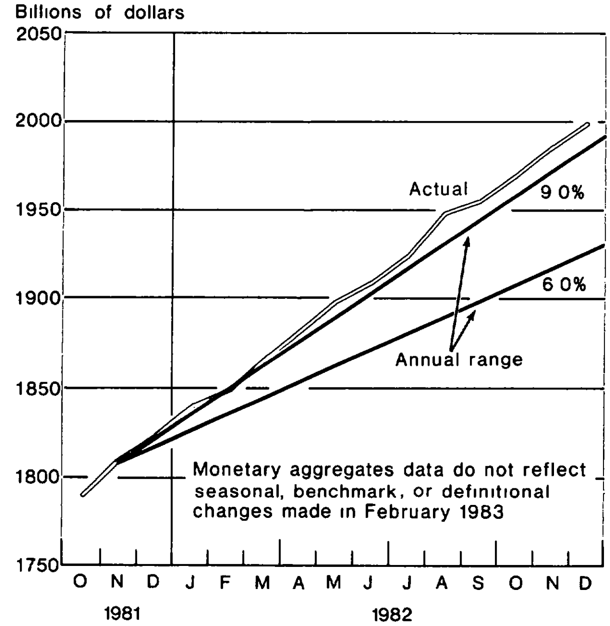


Chart 3

Annual Range and Actual Growth of M-3

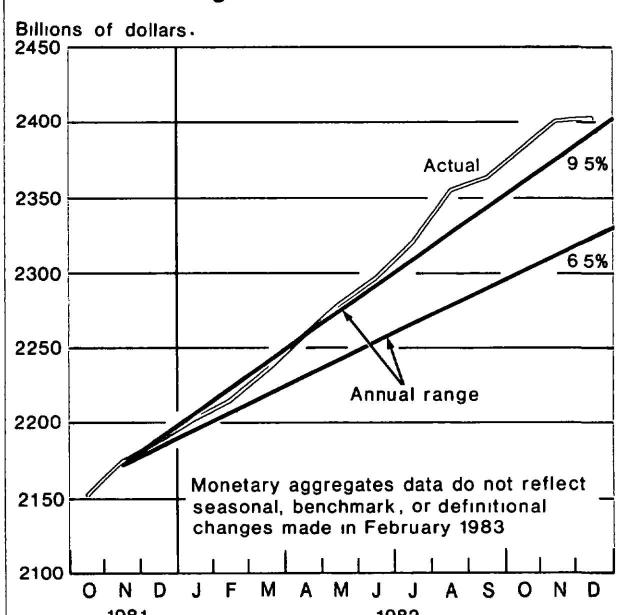
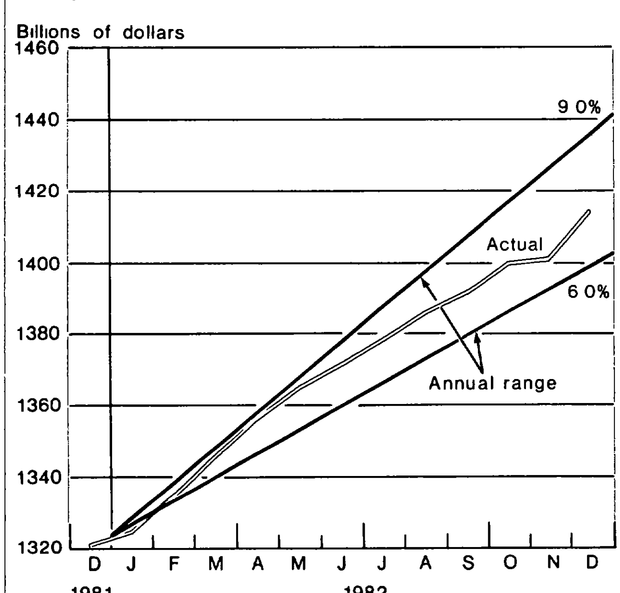


Chart 4

Annual Range and Actual Growth of Bank Credit



slightly above its range, expanding at a 5.8 percent rate from the last quarter of 1981. There was a particular surge in M-1 in the fourth quarter, as it grew at about a 16 percent rate. In part, the more rapid growth reflected shifts of funds out of maturing all savers certificates (ASCs) beginning in October, preparation by consumers and businesses for new deposit accounts initiated late in the year, and a response to lower interest rates. M-2 expanded by 9.8 percent over the year, somewhat above its 6 to 9 percent growth range. M-3 also exceeded somewhat its range of 6½ to 9½ percent, growing by 10.3 percent. Meantime, bank credit increased by 7.1 percent and ended the year within its associated range of 6 to 9 percent (Charts 1-4).

Interest rates rose very early in the year amid the Federal Reserve System's response to money growth late in 1981 and in January 1982 that was above the FOMC's objectives. But rates generally remained below their previous peaks and showed little change over the rest of the first half. Meantime, money growth moderated, with M-1 working back within its range by midyear while the broader aggregates were only slightly over path at that point. Against this background, and also in light of renewed recessionary forces and fragile financial markets in the second half, a more accommodative Federal Reserve posture was appropriate in the latter part of the year, leading to a substantial decline in rates (Chart 5). The amount of discount window borrowing generated by the reserve paths dropped noticeably, and beginning in July the Board of Governors of the Federal Reserve System approved seven cuts in the discount rate, by ½ percentage point each time, reducing the rate to 8½ percent in mid-December.

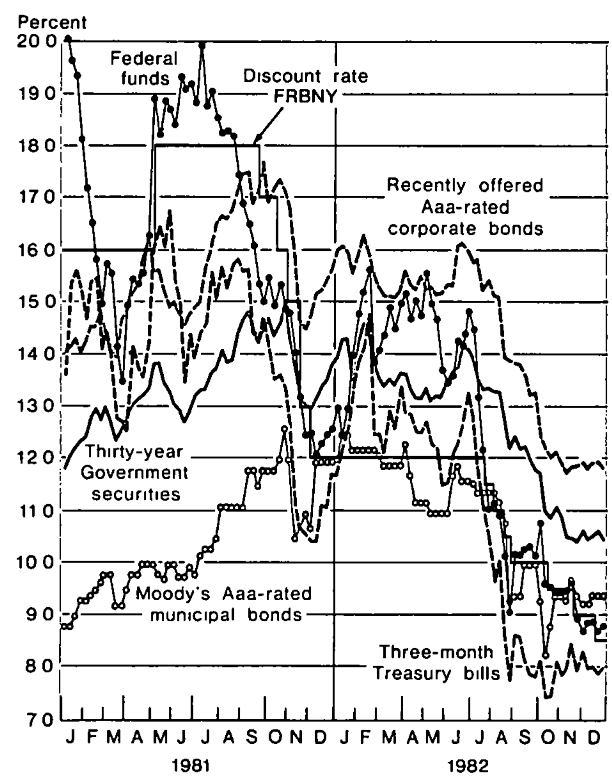
The economy

The nation labored in an extended recession during 1982. Real gross national product (GNP) fell by about 1 percent from the last quarter of 1981 to the final quarter of 1982. Indeed, taking a longer run view, the level of real activity at the end of the year was slightly below the level at the end of 1979, as a sharp but brief recession in 1980 was followed by a short-lived recovery. Consumer spending grew at a modest pace in 1982. With unemployment rising and confidence falling, consumers displayed a marked reluctance to take on debt and often held back on purchases of durable goods. Sales of domestically produced automobiles fell to the lowest level in many years, and spending on other durables declined in real terms. Only late in the year did activity in the interest-sensitive sectors show some life, as mortgage interest rates fell and auto makers offered attractive financing rates. During the year, businesses found their inventories uncomfortably high and production was cut back below levels needed to meet current demand. With factory utilization rates down, firms saw little need to spend on plant and equipment. Real spending on capital projects declined substantially.

U.S. trading partners were also in recession. Composite industrial production among six major industrialized nations abroad declined, putting a crimp in U.S. exports. Moreover, the dollar was strong during much of the year, reducing the competitiveness of U.S. goods. Developing nations, many of which relied on commodities exports, also met setbacks resulting from disinflationary forces in the industrialized nations. The current account balances of oil-exporting nations eroded, as oil consumption declined due to the widespread recession and the conservation of oil stemming from the more than tenfold increase in the price of oil in the last decade. Nonoil-developing countries also suffered from the slack demand in the industrialized nations, and their current

Chart 5

Selected Interest Rates



account balances remained in deficit. Some developing nations that had been able to borrow readily in earlier years found lenders reluctant to maintain the flow of new credit or, in some cases, to roll over maturities. The adjustment process required the cooperation of private lenders and official lending agencies but, with debt service large and increasing as a percentage of export earnings, forced retrenchment became widespread.

The good news was that inflation subsided appreciably in 1982. The rate of consumer price inflation fell for the third year in a row. The consumer price index rose slightly less than 4 percent from December 1981 to December 1982, the lowest increase since 1972 when price controls were in effect. In 1979-80 the rates of increase had been around 12 to 14 percent. Part of the decrease reflected declines in the cost of home ownership, energy, and food—typically volatile components. Eliminating some of the volatile items to get an "underlying" rate of inflation suggests a more moderate pattern of disinflation. Nevertheless, the progress was substantial. Unit labor costs in the private nonfarm economy rose by 4.8 percent in the period from the fourth quarter of 1981 to the fourth quarter of 1982, about half the increase in 1981. In part, this reflected a slower rise in compensation per hour worked as well as a welcome increase in productivity, compared with a virtually flat performance in 1981. Many analysts felt that both the moderation in compensation and the productivity gains would continue in 1983 and would serve to dampen inflationary forces further. On the other hand, there was widespread concern that large budget deficits, persisting long into a recovery period, could undermine the progress on inflation and impair the recovery process.

Monetary policy and implementation

Longer run objectives

In February the Committee adopted the annual monetary growth ranges it had tentatively set in July 1981. In doing so, it noted that M-1 had grown fairly rapidly in late 1981 and into early 1982. It seemed possible that this bulge reflected a temporary shift in consumers' preferences toward holding highly liquid balances as a precautionary measure in the uncertain economic and financial environment. The rapid growth had taken place in a period of rising interest rates and declining real output. Much of the increase consisted of an expansion in negotiable order of withdrawal (NOW) accounts, which show less transaction activity than demand deposits. Since M-1 was well above its fourth-quarter 1981 average early in 1982 and because growth for 1981 as a whole had been fairly slow, the Committee indicated that an outcome in the upper part of its 2½ to 5½ percent range would be acceptable.

At the same time, the Committee expected that M-2 growth would come out near the upper end of its 6 to 9 percent range. A significant part of individuals' savings was included in M-2, and it seemed possible that increased incentives to save could boost growth. The range represented somewhat slower growth than that actually achieved in 1981, continuing the FOMC's efforts to restrain money growth and inflation. (The growth range for M-3—6½ to 9½ percent—represented a marked slowing, compared with growth of slightly over 11 percent in 1981) However, later in the year, as the recession continued and inflation declined sharply, the FOMC accepted somewhat faster growth to foster economic recovery.

After its opening bulge, M-1 grew at a very modest pace well into the year. By July it was back within the annual growth range, while M-2 and M-3 hugged the top ends of their ranges through midyear. In July the Committee reaffirmed its ranges for 1982 but adopted a more flexible approach toward its growth objectives. The FOMC noted the continuing strong demand for liquidity that it had seen earlier in the year, as NOW accounts made up a substantial portion of first-half M-1 growth. For the balance of the year, the FOMC noted that growth around the top end of the ranges would be fully acceptable. In addition, growth above the top end of the ranges would be tolerated for a time if it appeared that precautionary demands for liquidity were contributing to strong demands for money. Late in the year, with distortions arising in M-1, the Committee retained the broad framework of monetary targeting but placed greater emphasis on the broader aggregates.

Shorter run objectives

The Committee's flexibility extended to its selection and pursuit of shorter run growth objectives. For the most part it continued to specify short-run growth objectives designed to bring the aggregates back over a period of a few months toward their stipulated ranges. At the same time, the Committee did not find it so necessary in an environment of economic weakness and receding inflation to respond strongly to every temporary surge in money growth. At times, it chose monetary growth rates for the intermeeting paths that allowed for temporary deviations in money growth.

For example, at the March meeting, the Committee adopted a 3 percent growth rate for M-1 from March to June, a rate that would bring M-1 back close to the annual growth range. However, because of uncertainties about the seasonal adjustment of money in April, which is heavily influenced by flows of funds related to tax payments, the Committee allowed for fairly rapid growth of M-1 in April, while maintaining a 3 percent objective for the quarter. The Committee thus guarded against a situation in which a "blip" in the money supply would lead, through the reserve path procedures, to a temporarily more stringent provision of nonborrowed reserves and a brief but sizable increase in borrowing and market pressures.

M-1 did indeed show a substantial increase for the month of April as a result of a run-up early in the month; it then retreated late in the month. Because the paths had allowed for rapid growth in April, the mix of borrowed and nonborrowed reserves was altered only moderately. The markets reacted well throughout this episode. The widely anticipated spurt in money, viewed by many as tax related, did not rekindle inflationary expectations. The Federal funds rate remained about 15 percent while most other rates, including long-term bond yields, fell over the month. The market seemed to appreciate that quick responses to every deviation were not necessary to the credibility of the System's long-term commitment to moderate money growth and to dampen inflation.

Late in the year the FOMC adapted the short-run objectives in light of developments deemed likely to cause severe distortions in the money data At the October meeting, the Committee concluded that M-1 was not likely to be a reliable guide to policy over the near term. Consequently, the money objectives for the fourth quarter were specified in terms of growth of M-2 and M-3 at rates of 8½ to 9½ percent (later, in November, put at 9½ percent).

The unreliability of M-1 arose from two sources. In October about $31 billion of twelve-month ASCs matured, suggesting a transitional impact on M-1 as funds were redistributed to other assets. Over the rest of the fourth quarter, another $10 billion in ASCs was set to mature, presenting the same difficulty in assessing how much of the observed increases in M-1 reflected temporary parking of funds, transactions balances, or liquidity preferences. Concentrating on M-2 abstracted from these distributional problems.

Another impending influence undermining reliance on M-1 was the Congressional mandate to permit depository institutions to offer new Federally insured accounts similar to and competitive with money market mutual funds. Since the new account—eventually called the money market deposit account (MMDA)—had certain restrictions on access, it would not be treated as a transaction deposit in M-1 but would be included in M-2 The new law also permitted the introduction of other accounts without access restrictions, which were included in M-1. Therefore, it appeared that M-1 could be either augmented or diminished by reallocations of funds, depending on the introduction of the new accounts, the attractiveness of the accounts with and without access restrictions, the rates offered on the alternatives, and the allure of insurance. Temporary parking of funds in M-1 accounts preparatory to placement in MMDAs was also considered a possible distorting factor. While M-1's usefulness over the near term was questionable, most of the reallocation was expected to take place within M-2, possibly making it a more reliable policy guide, but in fact the MMDAs proved to be so popular that by the final weeks of 1982 and into early 1983 M-2 was being substantially distorted.

The extraordinary popularity of MMDAs followed as a consequence of aggressive initial bidding for these accounts by depository institutions after their introduction on December 14. A few institutions briefly offered rates over 20 percent, more than double the rates paid by money market funds The MMDAs attracted about $90 billion during their first two weeks and in excess of $200 billion by the end of January 1983. A substantial part of these inflows represented switching from other components of M-2 (including noninstitutional money market funds) and some from M-3. However, some of the inflows also represented switching from market instruments, although the proportion was difficult to gauge with any precision.

Implementation

Open market operations in 1982 continued to be aimed at achieving nonborrowed reserve levels stemming from the reserve-path targeting procedures. These procedures, more fully described elsewhere,[2] are sketched here After each meeting the staff derived total reserve levels consistent with the growth of aggregates voted by the Committee. First, it applied the relevant required reserve ratios to the desired levels of reservable deposits in the aggregates. To this were added the required reserves needed for the projected growth of certificates of deposit (CDs), Treasury balances, and other non-M-2 liabilities. An expectation for excess reserves was added to these required reserve levels to make up the intermeeting total reserve path. The intermeeting nonborrowed reserve path was obtained by subtracting from the total reserve path the level initially assumed by the Committee for borrowing. The total reserve path essentially reflected the

[2] See for example Paul Meek, *U S Monetary Policy and Financial Markets* (Federal Reserve Bank of New York, 1982); "Monetary Policy and Open Market Operations in 1980", this *Quarterly Review* (Summer 1981) pages 56-75, and "Monetary Policy and Open Market Operations in 1979", this *Quarterly Review* (Summer 1980), pages 50-64

demand for reserves consistent with the Committee's monetary objectives, while the nonborrowed reserve path embodied the System's supply schedule.

Each week the actual levels and projected behavior of money and reserves were compared with the Committee's specifications and the reserve paths. As money and the associated demand for reserves tended to rise above (fall below) the total reserve path, then the supply of reserves tended to result in a higher (lower) level of borrowing. Because of administratively controlled access to the Federal Reserve discount window, raising or lowering the pressure to borrow was transmitted to the market for overnight lending of reserves, the Federal funds market. As banks, for example, were forced to the window, they turned more aggressively to the funds market and bid up the funds rate. The opposite happened when banks found that nonborrowed reserves were more plentiful. Over time, banks' efforts to adjust their balance sheets and the associated money market pressures worked toward returning money growth to the desired rates.

With the shift in emphasis to M-2 late in the year, the paths reflected primarily the M-2 growth rate approved by the FOMC; variations in M-1 were accommodated. In the weekly reevaluation of the paths, when M-2 ran above its indicated growth rate, the paths usually generated additional borrowing commensurate with the overrun. When M-2 growth appeared slower than the Committee was prepared to see, the paths tended to generate a reduction of borrowing.

The use of M-2 in this way tended to produce more muted responses since the average level of required reserves was about 2 percent of the average level of M-2, compared with a ratio of about 9 percent for M-1. Moreover, the extent of any "automatic" response depended on the distribution of strength among different types of deposits, since some nontransactions balances have low reserve requirement ratios and many have none at all. Consequently, there was a need for discretionary adjustments to the paths to generate appropriate variations in reserve pressure. In the closing weeks of the year and into January 1983, when there was very substantial shifting of funds associated with the introduction of MMDAs and new super NOW accounts, the paths were adjusted weekly to accommodate the ongoing shifts and in effect to maintain the initial-path borrowing level contemplated at the December meeting.

Judgmental adjustments to the paths were also made on a few occasions over the first part of the year to speed the return of money growth to the desired rate. In January the nonborrowed reserve path was lowered to apply more pressure on the banking system when money growth was unacceptably rapid. In July, two upward adjustments were made when money proved to be unexpectedly weak. Such judgmental shifts were also made to avoid situations when a mechanical adherence to the path procedures could produce unwanted results. Thus, when money growth was acceptably above the rates incorporated in the paths in September, the nonborrowed reserve path was raised to prevent a shift toward even higher borrowing levels than those that had emerged. From time to time, adjustments to the nonborrowed reserve path were also made when it appeared that there were shifts in the demand for borrowing or that computer-related problems pushed borrowing to unintended levels.

Over the second half of the year the Committee gradually lowered the initial level of borrowings used in drawing the path. By the end of the year the implied borrowing level was about $200 million, and the Federal funds rate was generally expected to trade around the discount rate. By using this approach, the Committee avoided Federal funds trading far below the discount rate, as had happened in the spring and early summer of 1980 when path borrowing fell to $75 million to $100 million. The approach used in late 1982 tended to focus market attention on the discount rate. Sentiment waxed bullish or bearish on prospects for such cuts, usually with each cut generating expectations of further cuts.

The actual focus of System open market operations was attainment of an average level of nonborrowed reserves for each statement week. Projections of nonborrowed reserves availability remained subject to error. On average, the reserve forecast errors were little changed from the 1981 experience. The average absolute forecast error at the beginning of the week was a little over $600 million and declined over the week to about $130 million on the last day. Given the short-term ebb and flow of funds in the banking system from day to day and week to week, the Trading Desk relied extensively on temporary injections and absorptions of reserves to try to hit the objective. Repurchase agreements (including those arranged on behalf of both the Federal Reserve System and foreign central bank customers) and matched sale-purchase transactions in the market amounted to about $310 billion, compared with about $270 billion in the previous year. The number of market entries fell, however, to 143 from 153 in the previous year. The Desk used outright transactions to address seasonal and secular reserve needs, such as supporting the growth of currency in circulation. Outright purchases of Treasury securities amounted to $19.9 billion, slightly over half in the market and the rest from foreign accounts. Outright sales of securities in the market and to foreign accounts totaled $8.6 billion, while redemptions came to $3.2 billion. On a net basis, outright holdings increased by $8.1 billion.

The financial markets

Interest rates moved up early in the year and then showed little net change over the rest of the first half of the year. In the latter part of 1982 they fell, as private credit demands softened with the economy while inflationary pressures receded and monetary policy was more accommodative On the other hand, borrowing by the Treasury and state and local bodies was extremely heavy, far surpassing that of earlier years Nevertheless, a surge in public borrowing late in the year was accommodated at the lower yields that reflected the state of the economy Throughout much of the year, the atmosphere in the credit markets was fragile, reflecting several financial failures and anxieties about the possibility of other problems

Rates varied over a moderate range in the early part of the year The System's pursuit of its nonborrowed reserves objectives in January primarily affected the short-term markets The three-month bill rate at auction rose from 11.69 percent in late December 1981 to the year's high of 14.74 percent in February, while longer term rates rose slightly The credit markets showed little overall trend through the end of June Business demands for short-term credit remained strong However, that demand did not so much reflect spending for investment purposes as it did efforts to maintain working capital in a poor business climate

The financial markets rallied dramatically over the summer Short-term yields fell the farthest, as is typical of recessions (Chart 6). The Federal funds rate fell from the area of 15 percent in late June to around 10 percent two months later (Chart 7). The relaxation of pressure in the money market reflected the decline in discount window borrowing imposed on banks by the Federal Reserve The discount rate was lowered in four stages from 12 percent to 10 percent by late August.

Treasury bill rates fell sharply. The three-month rate dropped by 5 to 6 percentage points over the summer. The market for short-term private debt, notably bank CDs, was beset by several worries and the overall rate declines during the summer were somewhat smaller than those on Treasury debt. Early in July, Penn Square Bank, N A., in Oklahoma failed as a result of losses on energy-related loans Several large banks in other parts of the country also suffered losses on loans they had purchased from Penn Square Bank Investors holding the CDs of some of

Chart 6

Yield Curves for Selected U.S. Treasury Obligations

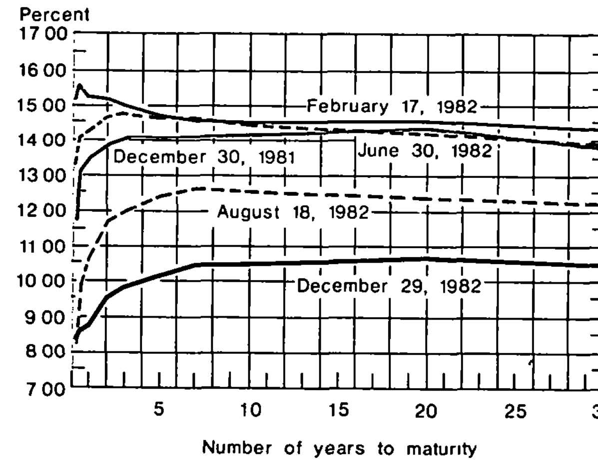
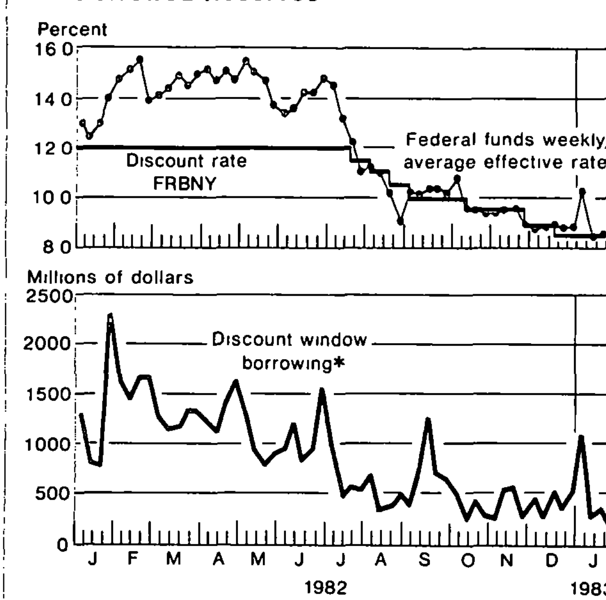


Chart 7

Money Market Conditions and Borrowed Reserves



*Excludes extended credit borrowing

those banks became reluctant to maintain those holdings, so that yields on their CDs rose well above those of other major banks. Later in the summer, when the foreign loans of banks worried the markets, Treasury issues—considered the safest and most liquid of securities—attracted demand. The spread between the yield on three-month bills and three-month CDs widened to about 3 percentage points from an average of about 1 percentage point earlier in the year. The anxieties associated with both sets of problems gradually quieted down over the rest of the year, as it appeared that the problems with energy loans at major banks would be manageable while progress was made in restructuring the loans of certain hard-pressed nations. By the end of the year the yield spread had narrowed to about ½ percentage point.

Long-term rates declined more gradually, as businesses restructured their balance sheets by selling long-term debt and paying down short-term debt. Business loans and commercial paper issuance dropped over the latter part of the year, while bond issuance expanded considerably Late in the year, corporations also tended to rely more on long-term bonds than on intermediate-term issues, as investors became more willing to extend out along the upward sloping yield curve to improve their returns. For the year, gross proceeds from the public issuance of bonds by corporations amounted to about $43 billion, compared with about $38 billion in 1981, even though issuance early in the year had fallen well below that in the early part of 1981.

Treasury borrowing expanded sharply to finance a widening deficit, which in part reflected the effects of the recession on spending and receipts. The Treasury raised about $160 billion of new cash through issuance of marketable debt in 1982, up from about $90 billion to $100 billion in the two previous years. Participants expressed concern about the extent of the financings and the market's ability to absorb the debt. While a sizable amount of paper was floated in the third quarter when rates fell sharply, rates flattened out in the fourth quarter when the rapid pace of sales continued and market participants came to feel that further accommodative moves by the Federal Reserve might be nearing an end. The Treasury placed heavy reliance on the coupon sector where new cash raised amounted to about $95 billion. The Treasury continued to use its regular schedule of coupon offerings although a few long-term bond issues had to be omitted when the legal limit was reached on its ability to sell bonds with interest rates over 4¼ percent. After the limit was enlarged in the summer, bond sales resumed in September.

Gross issuance of tax-exempt bonds was very large as well. States and localities tapped the intermediate- and long-term sectors for about $76 billion, compared with about $48 billion in 1981. Activity was particularly hectic toward the close of the year, as borrowers attempted to sell issues before the legislated introduction of mandatory registration of tax-exempt securities. Issuers felt the cost of registration would be considerable. (In the "lame duck" session of the Congress in December, the registration deadline was postponed until mid-1983.)

Financial problems

Several incidents in the spring and summer cast a long shadow over the market for Treasury securities. The first of these was on May 17, when Drysdale Government Securities, Incorporated (Drysdale) failed to make sizable accrued interest payments on Treasury securities "borrowed" through reverse repurchase agreements. The interest payments, reported to be about $190 million, were to be made mainly through Chase Manhattan Bank and, to a lesser extent, through Manufacturers Hanover Trust Company and United States Trust Company to a number of dealer firms from which the securities had been obtained. The inability of Drysdale to make good on its transactions, along with an initial report that Chase would not cover the amount owed, caused considerable concern over the possibility that a number of major Wall Street firms might suffer severe losses. This threatened to disrupt the orderly functioning of trading and the securities clearance process as well as to undermine the ability of dealers to continue to function in a jittery marketplace.

In actions addressed specifically to the Drysdale problem, the New York Reserve Bank (1) hosted an informational meeting on the evening of May 17, initiated by Chase, between Chase and several dealer firms involved in the Drysdale problem, (2) held a meeting on May 18 with the New York Clearing House banks in which the Federal Reserve expressed its concern about the orderly functioning of the markets and noted its role as lender of last resort to commercial banks facing unusual liquidity demands, (3) informed primary dealers of the meeting with the Clearing House banks, and (4) held the securities and funds transfer wires open later than usual to facilitate the workings of the market. In meeting reserve needs on Tuesday and Wednesday of the May 19 statement week, the Desk acted a bit more promptly than usual to fill projected reserve needs and to forestall undesired financing pressures.

The crisis was substantially relieved on May 19 when Chase announced that it would make good on the interest owed on transactions that were made through it and would assume Drysdale's positions to unwind them (Manufacturers Hanover and United States Trust had already announced a similar policy on interest payments.) On May 20, the Desk informed dealers that for the next few days the FOMC would permit a more flexible policy in lending them securities from the System Open Market Account. The expanded facility, intended to ease the unwinding of very large short positions taken over from Drysdale by other market participants, was continued until May 28.

Drysdale had built up very large positions by "borrowing" securities under repurchase agreements (RPs) in a manner that tended to generate working capital. Dealers frequently employ RPs in which they sell securities temporarily, against payment of money, and agree to repurchase them at a later date. This transaction is called a reverse RP from the viewpoint of the firm temporarily obtaining the securities and is commonly employed as a means of "borrowing" securities to cover a short sale. Under the standard market practice at the time, the firm receiving securities under an RP paid funds equal to the market price of the securities but without allowing for the accrued interest on coupons. Drysdale used RPs to borrow Treasury coupon securities with high accrued coupon payments coming due. It then sold the securities short, receiving the market value of the securities *including* the value of the accrued coupon. By establishing large short positions in high coupon issues, Drysdale was able to generate excess cash, which in turn provided the margin necessary to set up long positions through purchases of securities financed through RPs. At the time the firm failed, Drysdale had gross short positions of about $4 billion and gross long positions of about $2½ billion. Apparently because of trading losses in its position management, the firm had lost the working capital obtained through the reverse RP stratagem and was thus unable to meet its obligations to pay the value of coupons coming due May 17. This little known and inadequately capitalized firm was able to build up such large positions by arranging its transactions through intermediaries (primarily Chase Manhattan Bank) who saw themselves in a passive role and did not appreciate the risk exposure involved. Firms providing the securities considered themselves to be dealing with Chase (or the other banks) rather than with the undisclosed party on the other side of the banks' transactions (*i.e.*, Drysdale).

In August, following general agreement within the dealer community, the Federal Reserve Bank of New York began taking account of the value of the accrued coupon when arranging RPs. The Bank also informed reporting dealers that it expected them to include the value of the accrued coupons when they arranged RPs with their customers beginning in early October. This change in market practices was quickly accepted, and the changeover occurred with virtually no problems. The Bank also took a number of other steps to improve market practices and to enhance its monitoring of the markets. It strengthened the unit devoted to surveilling the dealers and market developments, appointing a senior officer to head the group and expanding its size. The Bank notified the dealers that it planned to review standards of capital adequacy. It addressed the problem of credit exposure in "when issued" trading (*i.e.*, forward trading in not-yet-issued securities for delivery on the date of issue), proposing to the dealers several alternative methods of reducing the exposure.

While the Drysdale episode dramatized the importance of credit evaluation of counterparties in RPs and the necessity for proper collateralization of these agreements, another problem later in the summer pointed out the importance of liquidity in RPs. In August, Lombard-Wall, Inc., filed for bankruptcy while it had sizable amounts of RPs outstanding. In handling the affairs of the company, the court required many of the firm's RP customers to hold the securities rather than to sell them out. The standard market view of the RP had been that the party holding the securities could sell them if the other party failed to perform, thereby being assured of liquidity at the maturity of the contract and protection against the possibility of adverse price movements on the securities. Reflecting its concern about the legal status of RPs, the Federal Reserve Bank of New York filed an *amicus curiae* brief with the court handling the Lombard-Wall case, arguing that it is preferable for the orderly functioning of national financial markets that RPs be regarded as purchase and sale transactions rather than as secured loans, the unwinding of which might be subjected to a stay in bankruptcy proceedings.

Meantime, uncertainties about the RP instrument prompted a number of participants to reconsider their involvement in providing funds in that market. A few found other investment outlets for their funds, such as short-term bills; others restricted the number of parties they dealt with, and some pursued a diversification among firms. While there did not seem to be a severe lasting impact on the total size of the RP market, in the closing months of 1982 and into 1983 the RP rate tended to run higher in relation to other short-term rates than might otherwise have been expected. Legislation to preserve the traditional characteristics of RPs in bankruptcy proceedings was introduced in the Congress late in 1982 but failed to win passage when the bill it was attached to did not gain final approval. Similar legislation was introduced in early 1983.

Conducting open market operations

January through March

Open market operations early in the year were conducted against a background of strong money growth which began in late 1981 and spilled over into 1982. As the year began, the System resisted the undesired strength of the monetary aggregates through the Trading Desk's pursuit of a nonborrowed reserve path which was lowered several times to speed the return of money growth to within the longer term ranges specified by the Committee. By early February, incoming data indicated that money growth was moderating.

At its December 21, 1981 meeting, the Committee had specified growth for the November-March period at annual rates of 4 to 5 percent for M-1 (redesignated from M-1B) and 9 to 10 percent for M-2 (table). The target for M-1, consistent with an earlier Committee decision, no longer reflected the shift adjustments for conversion of outstanding interest-bearing assets into NOW accounts. In setting the M-1 target, the Committee took account of the relatively rapid growth that had already taken place through the first part of December and concluded that actual money growth might need to be evaluated in light of the behavior of NOW accounts. The Committee assumed an initial level for adjustment and seasonal discount window borrowing of $300 million for constructing the nonborrowed reserve path.

Money growth in January ballooned as a $10 billion increase during the first week of January did not wash out over the month. M-2 growth rose moderately above its January path. With the aggregates showing considerable strength, the demand for total reserves moved well above the total reserve path for the period, the six weeks ended February 3. As the period progressed, the nonborrowed reserve path was lowered in three stages by a total of $303 million relative to the total reserve path to accommodate temporary bulges in borrowing and to speed the return of money to path. Borrowing consistent with achieving the nonborrowed reserves objective rose sharply to about $1.5 billion in the final two weeks of the period. Open market operations accordingly absorbed reserves somewhat more than seasonally over the month. According to latest available information, total reserves finished $670 million above path; nonborrowed reserves finished the period approximately $40 million above the downward revised path.[3] The weekly average Federal funds rate increased to about 14¾ percent in the final week, compared with a range of about 12½ to 13 percent in the first half of the intermeeting period (Chart 7, top panel).

At its February 1-2 meeting, the Committee selected short-run objectives envisaging no further growth of M-1 over the February-March interval and an 8 percent growth rate for M-2 for the period. The Committee also indicated that some decline in M-1 would be acceptable in the context of reduced pressure in the money market. The initial borrowing level was continued at $1.5 billion.

During the first subperiod after the February meeting, the four weeks ended March 3, incoming data indicated a decline in M-1 for February at a modest rate and below-path growth for M-2. The demand for total reserves fell below the total reserve path, but discount window borrowing in the middle weeks of the subperiod nonetheless bulged to $1.7 billion (Chart 7, bottom panel). In the third week this was $400 million above the level consistent with achieving the nonborrowed reserve path. To allow for the unintentional overshoot in borrowing, the nonborrowed reserve path was lowered by $100 million in the final week, leaving average borrowing for the subperiod implied by the path at about $1.5 billion. For the period, total reserves averaged $80 million below path while nonborrowed reserves were virtually on path. The Federal funds rate averaged around 14 percent in the final two weeks of the subperiod, after climbing to over 15½ percent earlier.

In the second subperiod, the four weeks ended on March 31, both M-1 and M-2 were below path for the two-month period ended in March despite upward revisions over the interval. Open market operations had to adjust to a decline in borrowing which, in the first two weeks, ran below path levels. To allow for this, the nonborrowed reserve path was raised by a total of $80 million and, late in the subperiod, the path was raised a bit further because of the slow growth of M-2 by not taking all of the potential technical path adjustments indicated. During the interval the nonborrowed reserves objectives were generally consistent with average borrowing for the subperiod of about $1.2 billion to $1.3 billion. Even so, the Federal funds rate rose during March, reaching about 15 percent on average in the final week, partly because market participants were anticipating a money supply bulge in April which might exert pressure on short-term rates. Total reserves ended $120 million below path on average, while nonborrowed reserves ended $60 million above path.

Over the quarter, interest rate movements were influenced by monetary developments and concerns

[3] This report uses latest available data on reserves throughout; revisions from originally available estimates are generally small.

about the Federal deficit Yields on long-term fixed-income securities moved higher in the first half of January in the wake of the rapid rise in money and short-term rates. Although rates on long-term taxable issues remained below the record levels registered in the fall of 1981, municipal bond yields set new record highs early in the month In view of large prospective Treasury cash needs, investors saw no need to rush to buy securities and the Treasury's financings encountered mixed receptions. The prospect of continued heavy Treasury borrowing halted a brief market rally in early February.

Financial markets did take brief encouragement from Chairman Volcker's February 10 Congressional testimony, indicating that money growth high in its range—or temporarily above—would be acceptable. Then in late February in the midst of further evidence of economic weakness, decelerating inflation, and a decline in money from its high January level, interest rates once more began to decline. This rally halted in early March when investor support faltered and attention focused again on the large Federal deficits.

Corporate borrowers took advantage of temporary dips in rates to rush a large volume of issues to market in late February and early March, ending the lull in issuance that had existed since December. The municipal sector outperformed the taxable sectors in this period but shared in the mid- and late-March weakness. There were some downgradings of commercial paper issuers during the quarter (most notably of Ford Motor Credit Company) and yield spreads between top-rated instruments and lesser regarded instruments increased, but there was no sense of widespread problems.

April through June

A bulge in M-1 in early April receded as the quarter went along, but signs of strength reemerged as the quarter drew to a close In late April, Desk operations had to pump in reserves to offset a sharp run-up of Treasury balances at the Federal Reserve After mid-May, the Desk also had to bear in mind the disturbed conditions in the securities markets following the collapse of Drysdale. Desk operations were conducted flexibly in view of the sensitive state of financial markets, but without setting aside the System's basic reserves objectives.

As part of its continuing effort to achieve its annual monetary objectives, the Committee at its March 29-30 meeting called for M-1 growth at a 3 percent rate and M-2 growth at an 8 percent rate over the second quarter The Committee noted that M-2 would probably be less affected over the period than M-1 by deposit shifts related to the April tax date and by changes in the relative importance of NOW accounts as a savings vehicle. It was also recognized that M-1's growth since the fall could be traced almost entirely to extraordinarily rapid growth in NOW accounts, which have a slower transactions turnover and might also reflect increased precautionary demands by the public The Committee was willing to accept a shortfall in M-1 growth, in the context of appreciably reduced pressures in the money market and relative strength of other aggregates. The reserve paths subsequently incorporated the Committee's initial borrowing assumption of $1,150 million

Policy was implemented in this period against a background of a sluggish economy and evidence of receding inflation. Mindful of the possibility that M-1 growth might be spurred by precautionary and liquidity concerns, as well as seasonal adjustment uncertainties related to the April tax date, the Committee was willing to tolerate temporary spurts in money growth In line with this decision, the reserve paths were constructed to allow a bulge in M-1 in April, followed by no additional growth in May and June Implemented in this fashion, the reserve-targeting procedure prevented a transitory spurt in money growth from transmitting undesired pressures to the money markets At the same time, persistent money strength would still generate appropriate market pressures through increased borrowing.

Estimates of the aggregates as they emerged during the first subperiod—the four weeks ended April 28—revealed M-1 growth in April somewhat above path and M-2 growth just slightly above path. Reflecting the strength of the aggregates in early April, the demand for total reserves in the first subperiod was above path and the weekly implied borrowing levels consistent with achieving the nonborrowed reserve path average rose to about $1.4 billion in the final two weeks In the final week, the Desk was unable to offset fully severe reserve drains due to high Treasury balances because of a temporary collateral shortage in the market.

In late April the Desk encountered heavy reserve drains, stemming from a sharp rise in Treasury balances at the Federal Reserve. The Treasury's balance at the Federal Reserve rose as high as $12 4 billion on April 29, compared with a normal targeted balance of about $3 billion. To counter the reserve drain, the Desk bought outright about $5 billion of Treasury securities. In addition, on April 29 it arranged a record $8 7 billion of RPs in the market, consisting of one- and four-day fixed-term agreements to offset short-lived reserve drains. These efforts fell short of the indicated reserve need, so that borrowing at the discount window rose.

Specifications from Directives of the Federal Open Market Committee and Related Information

Date of meeting*	Specified short-term annualized rates of growth for period indicated (percent) M-1	M-2	M-3	Consultation range for Federal funds rate (percent)	Initial assumption for borrowings in deriving nonborrowed reserve path (millions of dollars)	Discount rate on day of meeting and subsequent changes (percent)	Notes
12/21/81	November to March						
	4-5	9-10	—	10-14	300	12	In setting the M-1 targets, the Committee took account of the rapid M-1 growth which had already taken place in early December and noted that interpretation of actual money growth might require taking account of the significance of fluctuations in NOW accounts.
2/1/82	January to March						
	0	8	—	12-16	1,500	12	The Committee indicated that some decline in M-1 would be acceptable in the context of reduced pressure in the money market.
3/29/82	March to June						
	3	8	—	12-16	1,150	12	Some shortfall in M-1 from the 3 percent growth rate objective was deemed acceptable by the Committee in the context of appreciably reduced pressures in the money market and relative strength of other aggregates. Moreover, the Committee noted that deviations from the short-run growth objectives should be evaluated in the light of the probability that M-2 would be less affected over the period than M-1 by deposit shifts related to the April tax date and by changes in the relative importance of NOW accounts as a savings vehicle.
5/18/82	March to June						
	3	8	—	10-15	800	12	
6/30/82	June to September						
	5	9	—	10-15	800	12 11½ on 7/19/82 11 on 7/30/82 10½ on 8/13/82	The Committee noted that somewhat more rapid growth than indicated in the short-term objectives would be acceptable depending on evidence that economic and financial uncertainties were leading to exceptional liquidity demands and changes in financial asset holdings.

Specifications from Directives of the Federal Open Market Committee and Related Information *(continued)*

Date of meeting*	Specified short-term annualized rates of growth for period indicated (percent) M-1 M-2 M-3	Consultation range for Federal funds rate (percent)	Initial assumption for borrowings in deriving nonborrowed reserve path (millions of dollars)	Discount rate on day of meeting and subsequent changes (percent)	Notes
8/24/82.......	June to September 5 9 —	7-11	350	10½ 10 on 8/26/82	Money growth somewhat greater than the short-run objectives was again viewed as acceptable, depending on evidence that economic and financial uncertainties were leading to exceptional liquidity demands and changes in financial asset holdings
10/5/82.......	September to December — 8½-9½ 8½-9½	7-10½	300	10 9½ on 10/8/82	The Committee agreed that it would tolerate growth somewhat above the target range in the event of unusual precautionary demands for money and liquidity and that there was a need for flexibility in responding to M-1 developments because of probable distortions in that measure stemming from institutional developments.
11/16/82......	September to December — 9½ 9½	6-10	250	9½ 9 on 11/19/82 8½ on 12/13/82	The Committee decided that much less than usual weight be placed on movements in M-1 during the fourth quarter because of continued difficulties in interpreting that aggregate
12/20/82.. . .	December to March — 9½ 8	6-10	200	8½	The Committee's short-term objective for M-2 growth allowed for modest shifting into the new MMDAs from non-M-2 instruments, greater growth was acceptable if analysis of incoming data indicated that the MMDAs were generating more substantial shifts of funds into broader aggregates from market instruments.

* When meetings cover two days, first day is given

For the subperiod, total reserves exceeded path by about $150 million on average: nonborrowed reserves averaged approximately $60 million under path and borrowing about $210 million over path. The Federal funds rate generally averaged between about 14½ percent and 15¼ percent during the subperiod.

In the three weeks ended May 19, the monetary aggregates weakened relative to the associated path levels. Consequently, the implied average borrowing level for the subperiod fell to about $1.1 billion by the final week. However, the Committee at its May 18 meeting decided to aim for a nonborrowed reserve level consistent with $800 million of borrowing for the week, in line with the average of the first six days. (Retention of the original nonborrowed reserves objective would have implied a sharp increase in borrowing on the final day.) Largely as a result of the change, nonborrowed reserves over the three-week period averaged about $110 million above the path set earlier in the week; total reserves were a shade below path.

Desk activity during the latter part of the May 19 statement week sought to cushion the immediate market impact of the failure on Monday, May 17, of Drysdale to make sizable accrued interest payments on borrowed Treasury securities. As described earlier in this article, this collapse threatened to disrupt securities trading and the ability of dealers to continue to finance their positions. On Tuesday and Wednesday of the May 19 statement week, the Desk acted a bit more promptly than usual to fill projected reserve needs. To forestall undesired financing pressures, it also resolved doubts regarding the size of reserve needs on the side of meeting indicated needs fully.

At its May 18 meeting, the Committee retained the 3 percent M-1 and 8 percent M-2 growth rate objectives set in March for the second quarter. Given April developments and the likely indications for May, reserve paths were drawn up based upon a decline in M-1 in May and modest growth in June.

Early in the six-week period ended June 30, estimates of the aggregates were generally on, or slightly above, path. However, in early June greater strength in the aggregates pushed the May-June growth rates for M-1 and M-2 moderately above path. In line with these developments, the demand for total reserves generally ran slightly above path during the period, producing some upward pressure on rates at a time when market participants were expecting rates to fall. In the last two weeks of June, however, the estimates of M-1 were revised downward closer to path, although the stronger performance of earlier weeks continued to affect reserve needs in the period because of lagged reserves accounting. In view of this and the proximity of the July Committee meeting, not all technical adjustments to the reserve paths were taken. Implied borrowing in the final two weeks rose only to a level of about $1 billion, compared with the $800 million initial assumption adopted at the May meeting.

The complications that arose around the quarter end serve to illustrate some of the operational issues involved in implementing policy. As is typically the case in the June 30 statement week, window-dressing pressures developed, with the end-of-quarter publishing date in this case coinciding with the week's settlement date. Banks typically build up excess reserves on an end-of-quarter statement publishing date and the path allowed for this likelihood. In these circumstances, the Desk responded to a moderate estimated reserve need by adding reserves in size on each day before the weekend. Even so, the money markets remained firm and borrowing bulged to $2 billion on Friday, June 25. After the weekend, with borrowing averaging well above the implied path level, the Desk had to allow for the reserves already provided through the window, being willing to permit nonborrowed reserves to come out below the objective. Otherwise, reserves would have been much more plentiful than was consistent with the degree of restraint being sought at that time. When projections of a reserve surplus were confirmed by an easier money market early on the final day, the Desk absorbed reserves. However, the funds rate firmed again late on the final day, reflecting as it turned out a reserve shortfall and even higher excess reserve holdings by banks than had been allowed for.

In the following statement week, encompassing the Independence Day holiday weekend, the Desk again allowed for excess reserve holdings above normal. Moreover, to forestall unwanted firming in the money market, the Desk responded to estimated reserve needs by supplying reserves abundantly on each day. Nevertheless, borrowing ran high as the banking system sought even larger excess reserves than expected to accommodate the financial flows and uncertainties of the week. The funds rate eased only grudgingly during the week until late on the settlement day when it dropped to as low as 2 percent. For the period, total reserves were above path by $110 million while nonborrowed reserves fell $80 million short of path.

In the money markets over the period, the Federal funds rate dipped to around 13½ percent in early June from the 14½ to 15 percent area prior to the May meeting. As money strengthened, the funds rate firmed to somewhat over 14 percent later in the month and still higher in the June 30 statement day week.

Interest rates worked irregularly lower during the early part of the quarter but then turned around sharply in June. In April and early May, the markets were buoyed by continued indications of economic weakness and very encouraging inflation statistics, which buttressed the view that interest rates were significantly higher than seemed consistent with the economic fundamentals. The Treasury's quarterly refunding auction in early May of $9.25 billion of notes met good demand even though the size of the operation was somewhat more than had been anticipated. Despite the decline in rates, corporate and municipal new issue volume was only moderate as many treasurers hoped for better opportunities down the road.

Despite the nervousness in financial markets resulting from the Drysdale incident, price changes in the immediate aftermath of the incident were modest. In fact, Treasury bill rates benefited as investors exhibited greater concern than usual over safety and liquidity. However, as heavy prospective third-quarter Treasury financing needs drew nearer, without the expected decline in short-term rates, market sentiment deteriorated and yields moved sharply higher in June. Debt ceiling constraints forced the Treasury to reduce the size of two bill auctions and to postpone the four-year note auction scheduled for late in the quarter. Legislation to enlarge the debt ceiling was passed on June 23, the same day that saw final passage of a budget resolution, but these events provided only modest support to the markets amid lingering doubts that the Congress would achieve its goals for reducing the deficit.

July through September

Open market operations were conducted against a troubled financial background, while money growth was restrained in July but strengthened in August and September. Financial markets had to cope with several well-publicized bankruptcies and growing concerns regarding the banking sector's loan exposure to hard-pressed domestic and international borrowers. Large loan losses suffered by several major banks highlighted the potential for difficulties in this area, and some major banks encountered investor reluctance to purchase their CDs. Nevertheless, the markets for fixed-income securities were able to sustain a strong rally in the face of a substantial volume of Treasury, corporate, and municipal debt offerings.

At its meeting of June 30-July 1, the Committee specified third-quarter growth for M-1 and M-2 at annual rates of about 5 percent and 9 percent, respectively. Somewhat more rapid growth was acceptable, depending on evidence that economic and financial uncertainties were leading to exceptional liquidity demands and changes in financial asset holdings. It was noted that seasonal uncertainties, together with increased social security payments and the initial impact of the tax cut on cash balances, might lead to a temporary bulge in M-1 in July. Using likely indications of July growth, the reserve paths for July and August allowed for a temporary bulge in M-1 in July and reflected the Committee's $800 million initial borrowing assumption.

There was a large increase in M-1 in the first week of July, but the bulge was less than had been anticipated at the time of the meeting and incoming data suggested no further strength as July progressed. By the end of the first subperiod—the four weeks ended July 28—M-1's July growth was modest. M-1 was well below path, and M-2 was expected to be close to path in July. In these circumstances and in view of the sensitive conditions in financial markets, the nonborrowed reserve path was raised by $85 million during the interval to accommodate the resumption of money growth. With the weakening in money growth, total reserves ran $120 million below path for the subperiod. The average level of borrowing implied by the nonborrowed reserve path declined to about $630 million in the final week, down from $800 million initially. Reflecting this and a cut in the discount rate on July 19 from 12 to 11½ percent, the money market eased markedly. The average Federal funds rate fell steadily from 14.47 percent in the first week to 11.02 percent in the last week of the subperiod.

Early in the second subperiod, the four weeks ended August 25, data indicated additional weakness in M-1. Therefore, an additional upward adjustment of $100 million was made to the nonborrowed reserve path. Moreover, against the background of continuing economic weakness, the discount rate was trimmed by 1½ percentage points to 10 percent in three ½ percentage point moves by the end of August. Despite some strengthening of M-1 and M-2 in the first half of August, these aggregates remained below path. Consequently, the demand for total reserves in the subperiod ran $240 million below path. Reflecting this and upward adjustments to the nonborrowed reserve path, the average borrowing level for the subperiod implied by the reserve paths declined to $410 million in the final week.[4] In line with these events and the discount rate cuts, the Federal funds rate declined to around 10 percent or a bit lower as the period progressed, compared with just over 11 percent in the first week of the subperiod.

[4] Part of the decline in implied borrowing reflected a $61 million upward adjustment made to the nonborrowed reserve path to account for the reclassification of borrowing by a merged bank to the extended credit category, which occurred on August 9. For reserve path construction purposes, extended credit is treated as a source of nonborrowed reserves since such borrowing does not result in normal reserves adjustment pressure on the banks involved.

At its August 24 meeting the Committee retained its third-quarter monetary growth rate objectives of 5 percent for M-1 and 9 percent for M-2. The reserve paths allowed for more rapid growth than projected for August. While the September M-2 path growth rate appeared lower than was likely to occur, the directive allowed for acceptance of some above-path growth of this aggregate. The nonborrowed reserve path reflected a $350 million initial borrowing level.

In the six-week intermeeting period ended on October 6, M-1 strengthened in August and came in above path in September. Meanwhile, M-2 came in slightly below the August path level but was estimated to be moderately above path in September. Actual borrowing was frequently bolstered by special-situation borrowing, which was not considered to be reflective of normal reserves availability pressures. In practice, some allowance was made for this in adjusting the paths; however, it was usually difficult to ascertain the exact magnitude of the special-situation borrowing, complicating the determination of appropriate Desk action.

In the three weeks ended September 15, the demand for total reserves ran $120 million above path, reflecting M-1 strength in August. Nonborrowed reserves averaged $60 million below path. Further appreciable strengthening appeared for September in the three weeks ended October 6. By the middle week of the second subperiod, it was clear that mechanical adherence to reserve path procedures would result in a borrowing gap in the final two weeks of around $900 million (even before any allowance for special-situation borrowing), implying considerable upward interest rate pressure. The Committee reviewed recent developments at a conference call on September 24. It was the Committee consensus that some accommodation of the more rapid growth of money was consistent with the directive adopted at the August meeting in view of the strength in NOW accounts, the overall background of weakness in the economy, and the fragility of worldwide financial conditions. Hence, the nonborrowed reserve path was adjusted to limit implied borrowing to the $500 million to $550 million area. Average nonborrowed reserves were just slightly above the adjusted path; total reserves finished about $570 million above path.

The strengthening of money growth in August and September arrested the substantial easing trend in the money markets which had characterized July and August. In the six weeks following the August 24 meeting, the weekly Federal funds rate fluctuated in a range of about 10⅛ to 10⅜ percent until the week of October 6, when the funds rate jumped to about 10¾ percent.

Despite strong crosscurrents—and indeed partly because of them—the fixed-income securities markets rallied sharply during the quarter, with many rates dropping to their lowest levels in about two years. Many short-term rates, notably on Treasury issues, reached their lowest levels in mid-August when widespread concerns over creditworthiness and liquidity were greatest. Longer term rates continued to decline through the quarter's end, however, despite some occasional backups. Price gains were supported early in the period by slow M-1 growth, a sluggish economy, and cuts in the discount rate. Although money growth strengthened in August and September, most market participants felt that the weak performance of the economy would moderate private credit demands and keep System policy from a tighter course.

In the quarter, financial markets witnessed a heightening of concern about the quality of U.S. bank loan portfolios. The failure of Penn Square Bank in Oklahoma in July had cast a shadow on a number of major commercial banks that had participated in loans initiated by Penn Square. In September, anxiety mounted as Mexico's deteriorating financial situation underscored the sizable exposure of banks through foreign loans in a deteriorating world economic situation. Rates on three-month CDs rose to a spread of about 3 percentage points over Treasury bills in September, compared with about 1 percentage point earlier in the year.

The Treasury sold to the public $230 billion of debt in the quarter, while raising about $55 billion of new cash (exclusive of foreign gross purchases of about $3 billion). Nevertheless, yields on three-year Treasury issues declined about 3¼ percentage points over the quarter to about 11½ percent, while thirty-year bond yields declined about 2⅛ percentage points to 11¾ percent. Corporate debt issuance picked up significantly in August and September, while municipal borrowing was substantial throughout the quarter. The substantial volume of new issues generally met good receptions.

October through the year end

In formulating monetary policy in the fourth quarter, the Committee concluded that M-1 would be subject to unusually large uncertainties over the remainder of the year (and for at least some time in 1983) because of the substantial effects of maturing ASCs and the introduction of new money-market-type accounts. Accordingly, the FOMC decided to accommodate M-1 changes during the balance of the year, looking instead to M-2 which was expected to be affected to a much smaller extent by these developments. The resultant reliance upon M-2 for drawing reserve paths implied that equivalent money deviations from path would generate smaller changes in borrowing pressure, since the average M-2 reserve requirement was about 2 percent compared with 9 percent for M-1.

At its October 5 meeting, the Committee set monetary objectives over the September-to-December period for M-2 and M-3 growth rates in a range of 8½ to 9½ percent. The paths were constructed on the basis of quarterly growth rates of 5 percent, 9½ percent, and 8½ percent, respectively, for M-1, M-2, and M-3. However, deviations in the M-1 growth rate would be accommodated. The reserve paths were drawn up with a monthly growth pattern which reflected projected slow growth for the broader aggregates in October but large increases in M-1 as a result of the maturing ASCs. The nonborrowed reserves objective incorporated an initial borrowing assumption of $300 million.

Early in the October-November intermeeting period, available data on the monetary aggregates indicated that M-1 in early October was stronger than had been anticipated at the time of the October meeting. Non-M-1 components of M-2 appeared sufficiently weak, however, to compensate for the M-1 strength, so that estimates of M-2 indicated a close-to-path performance for that aggregate. In these circumstances, and in line with the Committee's desire to accommodate variations in M-1, adjustments were made to the paths to leave seasonal and adjustment borrowing around $300 million. Total and nonborrowed reserves averaged about $30 million and $40 million below path, respectively. By the second subperiod, the three weeks ended November 17, M-1 in October appeared to be considerably stronger and estimates of M-2 in October also were revised upward to levels above those built into the path. The directive, however, called for toleration of somewhat more rapid growth of the broader aggregates if economic and financial uncertainties led to exceptional liquidity demands. Thus, in addition to accommodating M-1 developments, path adjustments were taken so as to result in only a modest widening of the implied borrowing gap to about $340 million for the second subperiod. As the subperiod progressed, actual borrowing ran high, largely reflecting a $3 billion bulge in borrowing on November 10 which automatically carried into the November 11 Veterans Day holiday. In the final week (November 17), the nonborrowed reserves objective for the week was set consistent with borrowing in that week of $550 million. For the subperiod, nonborrowed reserves were essentially equal to the revised path while total reserves were $150 million above path.

Conditions in the money market during the intermeeting period generally moved in line with developments in money growth. Federal funds traded around the discount rate, which was cut from 10 to 9½ percent on October 8. With M-2 close to path during the first subperiod, the Federal funds rate eased from slightly above 9½ percent at the period's outset to slightly below 9½ percent in the middle weeks of the period. Consistent with the strengthening in M-2 and higher borrowing levels in the second subperiod, the funds rate backed up to slightly over 9½ percent in the November 17 week.

At its November meeting, with institutional developments continuing to cloud the interpretation of M-1, the Committee reaffirmed its earlier decision to respond flexibly to M-1 developments, continuing to focus primarily on M-2 and to some extent on M-3. The Committee established monetary objectives of 9½ percent growth rates for both M-2 and M-3 over the September-to-December period and opted for an initial borrowing assumption of $250 million.

The five weeks ended December 22 were characterized by M-2 and M-3 growth which was relatively close to path, while M-1 continued to show considerable strength. By the period's close, M-2 was estimated to be slightly above path for the month of November but a shade below path in the five weeks underpinning reserve needs for the period. M-3 was estimated to be a bit below path in November. During the period, less than the full amount of potential M-2-based technical adjustments were taken, which had the effect of less than fully accommodating the strength in M-1. In addition, stronger than anticipated demands for excess reserves during a period of seasonal churning led to higher than intended levels of borrowing at the discount window and an increase in money market pressures. The nonborrowed reserve path was lowered by $105 million to allow for this rise in actual borrowing. After these adjustments, average borrowing implied by the reserve paths was about $340 million for the period. Implied borrowing levels in the final two weeks of $230 million were about equal to the level consistent with the below-path performance of M-2 in the five weeks determining reserve needs in the period. Total reserves fell about $40 million short of path, and nonborrowed reserves about $50 million below path.

The Federal funds rate edged downward irregularly over the interval, but by less than the discount rate which was cut from 9½ to 9 percent in the first week of the period and then to 8½ percent in the week of December 15. The weekly average funds rate fell from 8.91 percent in the first week to 8.69 percent in the final week, a bit above the new discount rate.

Over the remainder of the year, interpretation of the monetary aggregates data was complicated further by very rapid growth of the new MMDAs which were introduced at banks and thrift institutions on December 14. By late December, it was estimated about $90 billion of these deposits—included in M-2—was outstanding. In early 1983 the MMDAs continued to expand rapidly, while additional uncertainty over interpretation of the alternative money measures resulted from the introduction on January 5 of the new super NOW accounts (included in M-1). At its December meeting the Committee set growth rates of 9½ percent and 8 percent for M-2 and M-3, respectively, from December to March. The M-2 growth rate allowed for modest shifting of funds into the new MMDAs from large-denomination CDs or market instruments (that is, from non-M-2 sources). But the Committee indicated that greater growth was acceptable if incoming data indicated that the MMDAs were attracting more substantial shifts of funds into the broader aggregates from market instruments. As the period proceeded, it became clear that a significant portion of the funds pouring into the new MMDAs was coming from sources outside M-2. Consequently, in line with Committee desires, adjustments were made to the reserve paths to accommodate the emerging growth.

Desk operations in the first subperiod, the four weeks ended January 19, were complicated by year-end pressures and implementation of two mandated reductions of required reserves. (Reserve requirements were ended for the first $2.1 million of each institution's reservable deposits and for personal MMDAs at member banks.) In these circumstances, holdings of excess reserves tended to run well above expected levels (even though higher than normal levels were allowed for in the paths) and required reserve levels were frequently revised, complicating efforts to achieve weekly nonborrowed reserves objectives. Around the year-end, while the Desk frequently more than met the expected reserve needs, the extraordinarily high demand for excess reserves persistently forced discount window borrowing above the levels allowed for in the paths. In the face of these uncertainties, it seemed appropriate to adjust for that borrowing and aim for nonborrowed reserves in subsequent weeks consistent with the initial $200 million borrowing level assumed by the Committee. As underestimates of excess reserves and end-of-week reserve projection errors persisted, borrowing turned out higher than $200 million each week, especially in the week that included the year-end. Despite the Desk's actions to counter the year-end pressures, the Federal funds rate began to firm late in the December 29 statement week with a significant volume of trading in a 10 to 14 percent range in the January 5 statement week. Year-end pressures finally unwound in the final two weeks of the subperiod, and funds eased back to the vicinity of the 8½ percent discount rate. Total reserves averaged about $20 million under path and nonborrowed reserves about $60 million under path.

Yields on most fixed-income securities fell sharply during the first half of October. Markets began to rally in reaction to newspaper articles that strongly suggested the FOMC had decided at its October meeting to ease credit conditions and set aside its M-1 targets at least temporarily. Market sentiment was bolstered further by the ½ percentage point cut in the discount rate on October 8, and a statement by the Chairman indicating that the FOMC would pay less attention to M-1 because of technical difficulties in interpreting its movements. Over the remainder of the quarter, most rates exhibited little overall trend but fluctuated largely in response to speculation regarding possible further cuts in the discount rate. With additional cuts in the discount rate already largely built into the price structure, the two additional reductions that occurred in November and December elicited only subdued market reaction. Very heavy Treasury borrowing, amounting to about $57 billion net in marketable debt over the quarter, contributed to the bottoming-out of intermediate and longer term yields. A very large volume of municipal debt was offered as the year-end approached, and corporate bond issuance was also fairly heavy. Private-sector demand for short-term credit was restrained by the recession. This, combined with a revival of confidence that collective action by banks, national authorities, and the International Monetary Fund would contain the downside risks of country lending, contributed to a considerable narrowing in quality spreads. CDs, for example, were trading by late December at yields only about 50 basis points or so above Treasury bills, compared with about 300 basis points in September.