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The FOMC in 1988: Uncertainty's Effects on Monetary Policy

DURING 1988, as the economy continued in an historically long expansion, the Federal Open Market Committee — henceforth, the "Committee" — faced the task of pursuing its long-term objective of reasonable price stability, while promoting growth in output on a sustainable basis and improvements in the nation's external accounts.[1] As the year began, the Committee believed that accomplishing this task was complicated by uncertainties associated with the long-term effects of the stock market crash of October 1987 and the continuing movements in the dollar, as well as the changing relation between the monetary aggregates and nominal output. In the Committee's view, these uncertainties, among others, warranted a greater degree of flexibility in the implementation of monetary policy. Otherwise, unexpected economic developments easily could drive a wedge between desired and actual outcomes.

To explain the challenge faced by the Committee and the role of flexibility in meeting that challenge, this article examines the formulation of monetary policy by the Federal Open Market Committee in 1988. The discussion focuses on how changing economic conditions and the desire for greater operational flexibility influenced Committee's decisions during the year.

LONG-RUN OBJECTIVES

As mandated by the Full Employment and Balanced Growth Act of 1978—or equivalently, the Humphrey-Hawkins Act—the Board of Governors of the Federal Reserve System reports semiannually to Congress on the Committee's annual growth rate targets for monetary and debt aggregates. In February, the Committee establishes and reports on its objectives for the current year; in July, the Committee reports its progress toward achieving those objectives, its decision to reaffirm or alter its targets for the current year and the tentative targets for the following year. The relevant one-year period for the growth rate targets is from the fourth quarter of the previous year to the fourth quarter of the current year.[2] Table 1 summarizes the Committee's reports to Congress on its long-run objectives for 1988.

NOTE: Citations referred to as the "Record" are to the "Record of Policy Actions of the Federal Open Market Committee" found in various issues of the *Federal Reserve Bulletin.* Citations referred to as the "Report" are to the "Monetary Policy Report to the Congress," also found in various issues of the *Bulletin.*

[1]For a description of the Committee's membership during 1988, see the shaded insert on pages 18 and 19.

[2]As discussed by Hafer and Haslag (1988), among others, such a procedure eliminates the problem of intra-year base drift; however, it does not circumvent the inter-year base drift problem.

Table 1
The FOMC's Long-Run Operating Ranges

Date of meeting	Target period	Ranges M2	Ranges M3
July 7, 1987[1]	IV/1987-IV/1988	5-8%	5-8%
February 9-10, 1988	IV/1987-IV/1988	4-8	4-8
June 29-30, 1988	IV/1987-IV/1988	reaffirmed	reaffirmed
June 29-30, 1988[2]	IV/1988-IV/1989	3-7	3.5-7.5

[1]Ms. Seger dissented. She wanted the 1988 target ranges to be the same as those for the previous year. She stated, however, that she would be willing to reduce these target ranges if economic developments between July 1987 and February 1988 called for such a move.

[2]Ms. Seger dissented. Given the prevailing uncertainty about the economic outlook, she preferred to retain the 4-8 percent range for M2 and M3 at that time.

The Committee decided, as it had in the previous year, not to establish a target range for M1 in 1988:

> The behavior of this aggregate in relation to economic activity and prices has become very sensitive to changes in interest rates, among other factors, as evidenced by sharp swings in its velocity in recent years. Consequently, the appropriateness of changes in M1 this year will continue to be evaluated in light of its velocity, developments in the economy and financial markets, and the nature of emerging price pressures.[3]

In setting its 1988 target growth ranges for the broader monetary aggregates, M2 and M3, at 4 to 8 percent, the Committee decided to reduce the lower bound of the range by 1½ percentage points below that established for 1987. The midpoints for the target growth ranges of these two monetary aggregates also were reduced ½ percentage point below the tentative ranges set for 1988.[4] The Committee felt that

> such a reduction would help to focus attention on the need for relatively restrained expansion in domestic demand to accommodate the adjustment in the nation's external accounts and would underscore the Committee's commitment to achieving reasonable price stability over time.[5]

Because of continuing uncertainty regarding the velocities of M2 and to a lesser extent M3, the members agreed that widening the target ranges for these aggregates would be appropriate:

> In light of the experience of recent years, which have been marked by large swings in velocity, the ranges were widened somewhat. Institutional change is a source of continuing "noise" in the relationship of money growth to economic activity; in addition, there clearly is a strong, systematic sensitivity of velocity to changes in market rates of interest.[6]

Moreover, the wider ranges seemed appropriate given the increased uncertainty about the economic outlook due to the decline in the stock market in October 1987. The Committee noted that "the eventual effects on domestic demand of the October stock market plunge and the subsequent drop in interest rates remained unclear."[7]

At the time the targets were established, the members believed that the growth in the broader monetary aggregates would be around the middle of the targeted ranges. Because of the sensitivity of the M2 and M3 velocities to movements in market interest rates and the increased uncertainty about the economic out-

[3]Record (May 1988), p. 323. See Hafer and Haslag (1988) for a discussion of the Committee's omission of the M1 target. Stone and Thornton (1987) provide a critical analysis of the existing explanations for the recent, puzzling decline in the velocity for M1. Also, Hafer (1986) discusses the impact that the decline in M1 velocity had on the decisions of the FOMC in 1985.

[4]Report (March 1988), p. 152.

[5]Record (May 1988), p. 322.

[6]Report (March 1988), p. 152. Also, see Record (May 1988), p. 322.

[7]Report (August 1988), p. 525. Also, see Record (May 1988), pp. 320-21.

Organization of the Committee

The Federal Open Market Committee (FOMC) consists of 12 members, including seven members of the Federal Reserve Board of Governors and five of the 12 Federal Reserve Bank presidents. The chairman of the Board of Governors is traditionally elected chairman of the Committee. The president of the New York Federal Reserve Bank, also by tradition, is elected the Committee's vice chairman. All Federal Reserve Bank presidents attend Committee meetings and present their views, but only those who are current members of the Committee are permitted to vote. Four memberships rotate among the Bank presidents and are held for one-year terms commencing March 1 of each year.[1] The president of the New York Federal Reserve Bank is a permanent voting member of the Committee.

Members of the Board of Governors at the beginning of 1988 included Chairman Alan Greenspan, Vice Chairman Manuel H. Johnson, Wayne D. Angell, H. Robert Heller, Edward W. Kelley, Jr. and Martha R. Seger.[2] John P. LaWare joined the Board in August 1988.

The following Bank presidents voted at the meeting on February 9-10, 1988: E. Gerald Corrigan (New York), Edward G. Boehne (Philadelphia), Robert H. Boykin (Dallas), Silas Keehn (Chicago), and Gary H. Stern (Minneapolis). In March, the Committee membership changed and the presidents' voting positions were filled by E. Gerald Corrigan (New York), Robert P. Black (Richmond), Robert P. Forrestal (Atlanta), W. Lee Hoskins (Cleveland) and Robert T. Parry (San Francisco).

The Committee met eight times at regularly scheduled meetings during 1988 to discuss economic trends and decide the future course of open market operations.[3] As in previous years, telephone consultations were held occasionally between scheduled meetings. During each scheduled meeting, a directive was issued to the Federal Reserve Bank of New York. Each directive contained a short review of economic developments, the general economic goals sought by the Committee, its long-run monetary growth objectives and instructions to the Manager for Domestic Operations at the New York Bank for the conduct of open market operations. These instructions were stated in terms of the degree of pressure on reserve positions to be sought or maintained. Directives issued earlier in the year qualified the degree of pressure sought with a special reference to the sensitive conditions in the financial markets. The reserve conditions stated in the directive were deemed consistent with specific short-term growth rates for M2 and M3 which, in turn, were considered consistent with desired longer-run growth rates for these monetary aggregates. The Committee also specified intermeeting ranges in the federal funds rate. These ranges provided a mechanism for initiating consultations between meetings whenever it appeared that the constraint of the federal funds rate was inconsistent with the objectives for the behavior of the monetary aggregates.

The account manager has the primary responsibility for formulating plans regarding the timing, types and amount of daily buying and selling of securities in fulfilling the Committee's directive. Each morning the manager and his staff plan the open market operations for that day. This plan is developed on the basis of the Committee's directive and the latest developments affecting money and credit market conditions, the growth of monetary aggregates and bank reserve conditions. The manager also consults with the Board's staff. Present market conditions and open market operations that the manager proposes to execute are discussed each morning in a telephone conference call involving the staff at the New York Bank, one voting president at another Reserve Bank, and the staff at the Board. Other members of the Committee may participate and are informed of the daily plan by internal memo or wire.

[1] Starting in 1990 the one-year terms for membership will be on a calendar-year basis.

[2] Mr. Kelley was absent and so did not vote at the August meeting.

[3] No meetings were held in January, April, July or October.

The directives issued by the Committee and a summary of the discussion and reasons for Committee actions are published in the "Record of Policy Actions of the Federal Open Market Committee." The "Record" for each meeting is released a few days after the next Committee meeting. Soon after its release, it appears in the *Federal Reserve Bulletin*. In addition, "Records" for the entire year are published in the annual report of the Board of Governors. The record for each meeting in 1988 included:

(1) a staff summary of recent economic developments—such as changes in prices, employment, industrial production and components of the national income accounts—and projections of general price, output and employment developments for the year ahead;

(2) a summary of recent international financial developments and the U.S. foreign trade balance;

(3) a summary of open market operations, growth of monetary aggregates and bank reserves and money market conditions since the previous meetings;

(4) a summary of the Committee's discussion of the current and prospective economic and financial conditions;

(5) a summary of the monetary policy discussion of the Committee;

(6) a policy directive issued by the Committee to the Federal Reserve Bank of New York;

(7) a list of the members' votes and any dissenting comments; and

(8) a description of any actions regarding the Committee's other authorizations and directives, and reports on any actions that might have occurred between the regularly scheduled meetings.

look, however, the Committee recognized that outcomes consistent with the Committee's goals could differ. Accordingly, the Committee sought greater leeway in targeting money growth. The greater leeway or flexibility was afforded by the 1 percentage-point increase in the width of the targeted ranges for M2 and M3.[8] Furthermore, to assure the consistency of its actions with its long-term objectives, the Committee felt, as in previous years, that it would be necessary to monitor the behavior of the broader monetary aggregates in light of indicators of the strength of expansion of economic activity, price pressures and conditions in financial markets, including the market for foreign exchange.[9]

When the Board presented the July Report to the Congress, the broad monetary aggregates were growing at annual rates of approximately 7 percent, close to the upper bounds of their targeted ranges. Nevertheless, the Committee expected that M2 growth would moderate sufficiently in the second half of 1988 so that its growth rate over the full year would fall around the middle of its targeted range. The lower growth rate in M2 for the second half of the year was thought to be consistent with the expected and desired lower growth in output needed to achieve price stability goals. While some members expected that M3 growth over the full year would exceed that of M2, they did not expect it to exceed the upper bound of its range. Thus, the 1988 growth rate ranges for M2 and M3 established in February were reaffirmed in July 1988.[10]

In its July Report, the Committee provisionally set the 1989 target ranges for M2 and M3 at 3 to 7 percent and 3.5 to 7.5 percent, respectively. Given the high levels of resource utilization and the resurging fears of future inflation at that time, a majority of the Committee agreed that reducing the ranges for 1989 would be consistent with the Federal Reserve System's goal of price stability and would communicate the System's intention to pursue that goal.[11]

[8]Report (August 1988), p. 525 and Record (May 1988) p. 322. Some members were wary of such widening, as it might signal "a further retreat from effective monetary targeting" and partially remove a "desirable discipline" requiring re-evaluation of policy if the monetary aggregates deviated from otherwise narrower targeted ranges. See Record (May 1988), pp. 322-23.

[9]Report (March 1988), pp. 152-53. Also, see Greenspan (1988), pp. 612-13. Nuetzel (1987) discusses the Committee's move to place greater weight on indicators of economic activity and price pressures relative to the behavior of the monetary aggregates to guide the implementation of monetary policy. Also, see Heller (1988).

[10]Record (October 1988), p. 658.

[11]Report (August 1988), pp. 518-19, and Record (October 1988), p. 658.

Table 2
Actual and Expected Money Growth in 1988

Aggregate	Target range[1]	Actual[2]
M2	4-8%	5.2%
M3	4-8	6.3

[1]The target period for M2 and M3 is from IV/1987 to IV/1988.
[2]Data are taken from the Board of Governors' H.6 release (February 23, 1989).

The Committee also reaffirmed the need to maintain some flexibility in the general strategy for monetary policy:

> Recognizing the variability of the relationship of these measures [M1, M2, M3 growth rates] to the performance of the economy, the Committee agreed that operating decisions would continue to be made not only in light of the behavior of the monetary aggregates, but also with due regard to developments in the economy and financial markets, including attention to the sources and extent of price pressures and to the performance of the dollar in foreign exchange markets.[12]

Continued uncertainties about the economic outlook and the relation between the growth in the monetary aggregates and other key economic variables also prompted the Committee to maintain the wider target ranges for M2 and M3 growth and, once again, to forego establishing a target for M1 growth.

Table 2 shows that the actual 1988 growth rates in M2 and M3 — 5.2 percent and 6.3 percent, respectively — were within their target ranges; however, M2 and M3 growth rates fluctuated considerably during the year. These fluctuations influenced the Committee's short-run policy decisions during 1988.

SHORT-RUN POLICY OBJECTIVES

The Committee holds eight meetings during the year to determine, in light of the economic environment, the changes in short-run monetary policy necessary to achieve its long-term goals. The Committee formulates a domestic policy directive to serve as a basis for the day-to-day policy implementation between meetings. The directive is issued to the Federal Reserve Bank of New York where the Manager for Domestic Operations of the System Open Market Account is held responsible for implementing the instructions stipulated in the directive.

Maintaining the approach used in previous years, the directives issued during 1988 placed primary emphasis on the degree of restraint on reserve positions expected to be consistent with the Committee's money growth targets and goals for the economy. Under the current borrowed-reserves operating procedure, the desired degree of reserve restraint translates into a target for borrowed reserves (reserves borrowed from the Federal Reserve Banks). The target level of borrowed reserves (the borrowings assumption) includes adjustment plus seasonal borrowings. A statement in the directive to increase (decrease) the degree of pressure on reserve positions would indicate a higher (lower) target level of borrowed reserves. Inducing the higher (lower) level of borrowed reserves, for a given discount rate, would imply an increase (decrease) in the federal funds rate.[13]

In the first two directives in 1988, however, emphasis was also placed on financial market conditions:

> In the aftermath of the stock market crash last October, the Committee modified the System's procedures by placing greater emphasis on money market conditions and less on bank reserve positions in carrying out day-to-day open market operations. . . . During this period, it was considered important to assure the markets of the System's intention to provide adequate liquidity, and it was feared that significant variation in money market conditions could add to the unusual uncertainties already in the markets.[14]

At the beginning of 1988, the Committee believed that, given the fragility of financial markets evidenced by wide fluctuations in bond and

[12]Report (August 1988), p. 518.

[13]Specifically, the amount of borrowed reserves is assumed to be a negative function of its opportunity cost — that is, the difference between the discount rate (the interest rate charged for reserves borrowed from the Federal Reserve System) and the federal funds rate (the interest rate paid on reserves borrowed from the other depository institutions). For a discussion of the implementation of monetary policy under the borrowed-reserves operating procedures, see Gilbert (1985), Heller (1988) and Thornton (1988).

[14]Report (August 1988), p. 528. See also, for example, Record (February 1988), pp. 116-17, Record (April 1988), p. 239, Record (May 1988), p. 324, and Record (July 1988), p. 472.

equity prices, a policy focused primarily on meeting reserve objectives could create excessive volatility in those markets. To avoid or to dampen temporary fluctuations in the money markets, a policy that was flexible with respect to meeting reserve objectives seemed appropriate to the Committee.[15] Toward the middle of 1988, when it appeared that financial markets had stabilized, no reference to sensitive conditions in financial markets was made in the directive.[16]

In addition to stating the desired degree of reserve pressure (maintained, increased or decreased) and possible modifications in the intermeeting period, the directives indicated the expected growth rates in M2 and M3, conditional on the desired degree of reserve pressure, and established a range for the federal funds rate. If the federal funds rate were to diverge from the specified range, the chairman could initiate a Committee consultation in the intermeeting period.

The following discussion highlights key economic developments during 1988 and shows how they influenced the Committee's formulation of short-run policy objectives. Tables 3 and 4 summarize the directives issued in 1988. Table 3 shows the desired degree of reserve pressure, the expected growth rates of M2 and M3, and the monitoring range for the federal funds rate specified in the domestic policy directives. It also reports the borrowings assumption in effect at each meeting.[17] Table 4 lists the policy guides used to determine whether modifications in the degree of reserve pressure would be desirable in the intermeeting period. The ordering of policy guides is as listed in the directives. Finally, table 5 shows the actual (revised) intra-year growth rates in M2 and M3 and the rates expected by the Committee.

February 9-10 Meeting

The data available for review at the first meeting of 1988 suggested that, although the economy had continued to expand through the fourth quarter of 1987, growth in output was slowing toward the end of the year. Moreover, because consumer spending had slowed substantially in the late months of 1987, the observed growth in production was associated chiefly with an increase in inventories. While Committee members generally thought that increased inventories could exert downward pressure on business activity in the first half of 1988, some members believed such pressure would be limited.[18]

The Board's staff projected that the growth in output over 1988 would be fueled primarily by growth in export demand. Their projections indicated that output growth would be sluggish in the first half of the year, but would build momentum in the second half. The projected transition from an expansion driven by growth in consumer demand to one driven by growth in export demand generated some uncertainty among the members about the economic outlook. In addition, some members expressed concern about the possibility of lagging effects of the October 1987 stock market crash on consumer and business spending and about the sensitivity of financial markets.[19]

The Committee's long-run concerns centered on the possibility of higher future inflation because of the strong growth in demand and the high levels of capacity utilization. Although available economic data reflected only modest wage increases, the Committee thought that continued expansion with lower rates of unemployment and rising prices inevitably would result in higher wage demands and wage increases.[20] Furthermore, there was some evidence that higher production costs were resulting in higher retail prices. The members believed that "the key to avoiding both more inflation or a recession in a period of major adjustments in the trade balance would be the dif-

[15]Record (May 1988), p. 324. See also footnote 14. At the March meeting, however, some members indicated that such fluctuations in money market interest rates were not "detracting from the functioning of the market or the implementation of policy." Provided that market participants understood the System's procedures, fluctuations in money market interest rates would reveal movements in expectations of market participants and changes in the market for reserves and credit. See Record (July 1988), p. 472.

[16]Report (August 1988), p. 528, and Record (August 1988), p. 542.

[17]The borrowing assumptions were not explicitly stated in the directives.

[18]Record (May 1988), p. 320.

[19]Ibid., p. 320-21.

[20]Ibid., p. 322. Also, in January, growth in M2 and M3 had recovered from the sluggish pace at the end of 1987. In January, M2 grew at an annual rate of 8.8 percent, up from 2.2 percent in December. Similarly, M3 grew at an annual rate of 8.1 percent in January, up from 2.4 percent in December.

Table 3
The FOMC's Short-Run Operating Ranges

Date of meeting	Target period	Expected growth rates M2	Expected growth rates M3	Degree of reserve pressure	Intermeeting federal funds range	Borrowings[1] assumption
February 9-10, 1988	November-March	6-7%		Maintain, with flexibility	4-8%	$200 million
March 29, 1988[2]	March-June	6-7		Increase somewhat with flexibility	4-8	300
May 17, 1988[3]	March-June	6-7		Maintain pressure initially, with probable increase later	5-9	400
June 29-30, 1988[4]	June-September	5.5%	7%	Increase slightly	5-9	600
August 16, 1988[5]	June-September	3.5	5.5	Maintain	6-10	600
September 20, 1988	August-December	3	5	Maintain	6-10	600
November 1, 1988[6]	September-December	2.5	6	Maintain	6-10	600
December 13-14, 1988[7]	November-March	3	6.5	Increase slightly	7-11	500

[1]The borrowings assumption in effect immediately after the December 15-16, 1987, meeting was $300 million. Changes in the borrowings assumption were made in some of the intermeeting periods. These changes were made in light of incoming information indicating that increased or decreased pressure on reserve positions was desirable or when a shift in the borrowings function was identified. (See, for example, the discussion of the December meeting.)

[2]Ms. Seger dissented. She thought that the risk of additional inflation was less than the downside risks; in particular, she argued that tightening of reserve conditions could be especially harmful, given the sensitivity of financial markets and the weakened condition of many depository institutions.

[3]Messrs. Hoskins and Parry dissented. Past efforts to tighten reserves were insufficient, in their view, to counter the additional inflationary pressures that were inevitable given the current trend of expansion and prospects for future expansion with already tight labor markets. Thus, failure to tighten reserve conditions now would require much greater tightening in the future. Mr. Hoskins also noted that growth of the monetary aggregates was already near the upper limit of the target ranges and that failure to increase the degree of pressure on reserves under current circumstances would detract from the credibility and consequently effectiveness of monetary policy.

[4]Messrs. Angell and Kelley and Ms. Seger dissented. They preferred to maintain the current degree of reserve restraint, at least for the initial period following the meeting. Mr. Angell emphasized that the effects of previous restraining actions had not yet fully emerged, and expressed concern about the potentially counterproductive effect of further restraint on the dollar and thus on improvements in the external balances. Mr. Kelley recognized that inflation had the potential to accelerate, but he felt that there was insufficient evidence to justify further tightening at this time and thereby incur the risk of undue slowing in economic growth. Ms. Seger stressed that slower economic growth was already suggested by current business indicators, and in the context of earlier tightening actions whose impact had not yet fully materialized, she concluded that further tightening would create an unnecessary risk to the economic expansion.

[5]Mr. Hoskins dissented. Pointing to the current indications of increasing price pressures, he felt that increased pressure on reserve conditions would be more consistent with the Committee's long-run price stability objectives. He thought that such an action would enhance the credibility of the Fed's stated anti-inflationary intentions.

[6]Ms. Seger dissented. She believed that the bias in the directive toward further restraint was not appropriate in light of the recent indications of the slower economic expansion and her outlook for reduced price pressures in the next year.

[7]Ms. Seger dissented. She thought that the future pace of economic expansion would be compatible with progress in reducing inflation. In her view, given the restrained growth of the monetary aggregates, additional restrictive actions could add significantly and unnecessarily to pressures on interest-sensitive sectors of the economy and increase the downside risks in the economy.

Table 4
Ordering of Guides to Monetary Policy

Date of meeting	
February 9-10, 1988 March 29, 1988 May 17, 1988	Financial markets, business expansion, inflation, foreign exchange, monetary aggregates.
June 29-30, 1988	Inflation, business expansion, foreign exchange, financial markets, monetary aggregates.
August 16, 1988 September 20, 1988 November 1, 1988 December 13-14, 1988	Inflation, business expansion, monetary aggregates, foreign exchange, financial markets.

NOTE: This ordering is as listed in the domestic policy directives.

Table 5
Actual and Expected Rates of Money Growth

	M2		M3	
Period	Expected	Actual[1]	Expected	Actual[1]
November 1987-March 1988	about 6-7%	6.8%	about 6-7%	7.2%
March-June 1988	about 6-7	6.0	about 6-7	6.5
June-September 1988[2]	about 3.5-5.5	2.9	about 5.5-7	5.2
August-December 1988	about 3	4.0	about 5	5.3
September-December 1988	about 2.5	4.6	about 6	5.8

[1]Actual growth rates are taken from the Board's release.

[2]The June-to-September growth rates for M2 and M3 were revised to 3.5 percent and 5.5 percent, respectively, from 5.5 percent and 7.0 percent at the August 16 meeting of the FOMC.

ficult task of maintaining restrained growth in domestic demands over an extended period."[21]

In an effort to strike a balance between the risks associated with a possible weaker expansion in the short run and those of future inflation, the Committee's directive called for maintaining the degree of pressure on reserve positions.[22] Because of the uncertainties revolving around financial market conditions and the economic outlook, the directive indicated that some flexibility in the implementation of monetary policy might be appropriate. In particular,

> . . . financial market conditions still exhibited some degree of fragility and, against the background of substantial uncertainty in the economic outlook, unanticipated developments might well continue to warrant occasional departures from the focus on reserve objectives for the purpose of moderating temporary fluctuations in money market conditions.[23]

In addition, depending on financial market conditions as well as forthcoming indications of economic activity and price pressures, greater or lesser reserve restraint would be appropriate in the intermeeting period.[24]

The Committee anticipated that the reserve conditions would be consistent with an annual rate of growth for M2 and M3 of about 6 to 7 percent from November to March. The monitoring range for the federal funds rate was set at 4 to 8 percent.[25]

March 29 Meeting

In the intermeeting period, strong growth in M2 and M3 continued.[26] The level of adjustment plus seasonal borrowings averaged $238 million, just above the borrowings assumption, and the federal funds rate averaged 6.59 percent during the six-week period ending March 23.[27]

Economic data indicated that the economy had continued to expand during the first quarter of 1988; however, growth in output was slower than that in the last few months in 1987. A large part of the moderation in output growth was attributed to the deceleration in inventory investment, as businesses corrected their previously high inventories. The ongoing expansion was driven largely by the unexpected, marked increase in domestic final demand in the first quarter.[28]

Although inflation and wage trends essentially were unchanged, the Committee's concerns about future inflationary pressures were not eased substantially. The February rate of unemployment was 5.7 percent, its lowest level since the middle of 1979. Capacity utilization rates were relatively high in many industries. In addition, during the intermeeting period, the dollar had declined 2.25 percent on a trade-weighted basis relative to the other G-10 currencies. Many argued that this decline, perhaps reflecting a skepticism in the world market about the speed with which the U.S. trade deficit was adjusting, could provide an additional potential source of upward movement in prices.[29] Moreover, the staff revised upward their forecasts of future economic expansion. Committee members generally felt that, with high rates of capacity utilization in many industries, additional price pressures would be created by increased domestic and export demand growth.[30]

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[21] Ibid.

[22] Ibid., p. 324. There was also concern that further easing of the degree of reserve pressure could have an adverse effect on the dollar in foreign exchange markets and on financial markets, unless market participants believed that the economy was weakening (Ibid.). It should be noted that the decline in the borrowings assumption from the December 1987 to the February 1988 meetings (as shown in table 3) reflects reduced reserve pressure that had been implemented in the intermeeting period.

[23] Ibid., p. 324.

[24] Ibid., p. 326.

[25] Ibid.

[26] In February, M2 and M3 grew at annual rates of 8.6 and 10.1 percent, respectively, and in March, M2 and M3 grew at annual rates of 7.8 and 8.2 percent, respectively.

[27] Record (July 1988), p. 469. Around the time of the February meeting, the federal funds rate was about 6½ percent. See Record (May 1988), p. 320.

[28] Ibid., p. 468-69.

[29] Ibid. Currencies of Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland and the United Kingdom are included in the trade-weighted G-10 index, used by the Federal Reserve Board as a measure of the relative strength of the dollar in foreign exchange markets. When the value of the dollar falls, holding all else constant, goods produced in the United States become more attractive to foreign importers and individuals in the United States than goods produced elsewhere. The resulting shift in demand can create domestic price pressures. Furthermore, a dollar depreciation can increase the cost of production for firms relying heavily on imported intermediate goods, thereby creating additional price pressures.

[30] Ibid., p. 470-71.

In the discussion, some Committee members suggested that the effects of high capacity utilization had not yet fully shown up in price and wage growth because of individuals' expectations of a policy response to increased inflation.[31] Moreover, consumer prices and wages had not yet exhibited signs of acceleration because of the recently declining energy prices and the relatively small increases in food prices.[32] Nevertheless, the members believed that any added pressure on wages "would make achievement of the ultimate objective of price stability considerably more difficult."[33]

As table 3 shows, the policy directive issued at the close of the meeting called for a marginal increase in pressure on reserve positions to slow the growth of the broader monetary aggregates. Such an action, reflected in the increased borrowings assumption, was thought to be consistent with annual growth rates in M2 and M3 of 6 to 7 percent for the period from March to June, a slowdown from their rapid growth rates in the first quarter.

Given the uncertainties about the economic outlook and concerns about the fragility of financial markets, the Committee again voted to permit the focus of day-to-day implementation of monetary policy to shift away from reserve objectives if necessary. Furthermore, depending on forthcoming information as indicated in table 4, greater or lesser reserve restraint would be acceptable in the intermeeting period. The monitoring range for the federal funds rate was maintained at 4 to 8 percent.[34]

May 17 Meeting

Immediately following the March meeting, some actions were taken to firm reserve positions slightly. Adjustment plus seasonal borrowings averaged about $330 million during the four-week period ending April 20 and averaged $440 million between April 21 and May 4. Additional restraint on reserve positions was implemented just before the May meeting "in light of information that indicated considerable strength in the economy and a related increase in concerns about the potential for greater inflation."[35] By the May meeting, the federal funds rate had risen to 7 percent.

As had been expected, strong growth in domestic and export sectors continued to boost economic growth. Preliminary statistics suggested that unemployment in April declined to 5.4 percent, its lowest rate since 1974, and capacity utilization rates had increased substantially. From March to April, the industrial production index had risen at an annual rate of 6.4 percent; moreover, the U.S. merchandise trade deficit had improved in March. The continued strength in economic expansion was accompanied by a slight weakening of the dollar and signs of increased inflationary pressure and higher labor costs.[36]

The staff's forecasts for the economic outlook depended partly on how the added risks of greater inflation and wage growth would affect financial markets. If the added risks placed pressures on financial markets so as to restrain final domestic demand, "the extent and duration of any pickup of inflation might be limited."[37] The forecasts indicated that, in this case, reduced growth in domestic demand combined with the current large inventories eventually could reduce the rate of inventory investment. Furthermore, the staff predicted that growth in business fixed investment would fall and real federal purchases would decline. Nevertheless, in light of the weakening dollar and the high capacity utilization rate, growth rates of prices and wages were expected to increase in the coming quarters.[38]

The majority of the members generally agreed that additional restraint was needed. In their discussion, the risks of excessive expansion and augmented inflationary pressures seemed to dominate the economy's downside risks due to increased inventories, fragile conditions in financial markets and a relatively weak outlook for

[31] Ibid., p. 470.

[32] Ibid., p. 469.

[33] Ibid., p. 471.

[34] Ibid., pp. 473-74.

[35] Record (August 1988), p. 539.

[36] Record (August 1988), pp. 538-39. For example, the seasonally adjusted consumer price index for all urban consumers had risen at annual rates of 5.3 percent in April and 4.2 percent in March, up from 2.1 percent in February. Further, the seasonally adjusted producer price index for finished goods rose 4.6 percent and 3.4 percent, respectively, in March and April, after not changing in February. Note that the civilian unemployment rate in April has been revised to 5.5 percent.

[37] Ibid., p. 540.

[38] Ibid.

construction. In addition, the importance of maintaining credibility was noted:

> ...the members generally agreed that some further tightening of reserve conditions was needed to counter the risks of rising inflationary pressures in the economy. A failure to act in timely fashion not only would be inconsistent with the Committee's commitment to achieving price stability over time but would in fact compound the difficulties of accomplishing that objective.[39]

The Committee members disagreed, however, about the extent and timing of additional tightening of reserves. Immediate action was considered by some to be potentially damaging to financial markets unless market participants anticipated such an action. Further, the impact of the previous move to increase pressure had not yet been fully realized in terms of growth of domestic demand. Finally, growth in the monetary aggregates was expected to slow, primarily because of a reversal of the temporary rise in transaction accounts related to taxes during April. Yet, others thought that immediate action could have a favorable effect on inflation expectations and reduce the need for increased restraint in the future.[40]

The Committee's directive called for maintaining the existing pressure on reserve positions in the initial period following the meeting with possibly higher pressure after some weeks depending on forthcoming information.[41]

In contrast to prior directives since the stock market crash in October 1987, this directive did not explicitly include a special reference to the sensitive conditions in the financial markets that required some flexibility in the conduct of open market operations. The members felt that the "normal" approach to the implementation of monetary policy—that is, with primary emphasis on the degree of pressure on reserve positions and less emphasis on money market conditions — would be appropriate; the special reference "no longer served a clarifying purpose in communicating the Committee's intentions."[42]

The directive issued at the close of this meeting, however, did not fully abandon the spirit of flexibility; financial markets would continue to be closely monitored. Although the primary focus of the directive was placed on meeting reserve objectives, changes in those objectives could be made in light of incoming information in the intermeeting period. The directive stated that, depending on further developments in the economy, "somewhat greater reserve restraint would, or slightly lesser reserve restraint might, also be acceptable later in the intermeeting period."[43]

The reserve conditions contemplated by the Committee were expected to be consistent with a 6 to 7 percent annual growth rate in M2 and M3 from March to June. The monitoring range for the federal funds rate was increased by 1 percentage point to 5 to 9 percent, because of past actions to increase the pressure on reserve positions and possible further restraint.[44]

June 29-30 Meeting

Actions were taken to increase the degree of pressure on reserve positions as suggested by the May directive. Adjustment plus seasonal borrowings averaged $530 million in the four weeks ending June 15. The federal funds rate rose from 7 percent around the time of the prior meeting to approximately 7 3/8 to 7½ percent by the middle of June. Despite the additional restraint imposed on reserve positions in the latter part of June, however, adjustment plus seasonal borrowing averaged only about $520 million over the two weeks ending June 29. Nonetheless, the federal funds rate rose further to about 8 percent and, as expected by Committee members, growth in M2 and M3 fell from their robust pace earlier in the year.[45]

From the May to the June meetings, the strong expansion in economic activity continued.

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[39]Ibid.

[40]Ibid., pp. 540-41.

[41]The increase in the borrowings assumption from the previous meeting, as indicated in table 3, reflects actions in the intermeeting period to increase reserve pressure and, hence, is consistent with the stated desired degree of reserve pressure. It should be noted that the increase in the borrowings assumption does not reflect the expectation of additional restraint in the beginning of the intermeeting period.

[42]Ibid., p. 542.

[43]Ibid., p. 543. As indicated in table 4, although the special reference to "sensitive" conditions in financial markets was absent from the directive, conditions in financial markets were first on the list of policy guides in the directive issued at the May meeting.

[44]Ibid.

[45]Record (October 1988), p. 655. Annualized growth in M2 fell from 8.8 percent in April to 3.9 percent in May, and annualized growth in M3 fell from 7.8 percent in April to 4.9 percent in May.

While unemployment rose to 5.6 percent in May, it was still below its average in the first quarter. Moreover, the industrial production index grew at a relatively fast pace of 6.4 percent from April to May. The information reviewed by the Committee indicated that the impetus to the current expansion was continued growth in both domestic and export demands. Improvements in the external accounts, due mostly to a decline in imports, was accompanied by a sharp appreciation of the dollar.[46] Furthermore, signs of increased price pressures were clear. The consumer price index was moving at a pace close to the average in the first quarter, but producer prices and average hourly earnings were gaining momentum in May.[47]

Staff forecasts suggested that the growth in economic activity would be moderated by several factors, including the impact of the drought on agricultural output and a more pronounced slowdown in inventory investment than was originally expected. In addition, recent pressures on financial markets — particularly, the rise in interest rates — could restrain future growth in domestic spending. Because of further improvements in the U.S. trade balance, however, the expansion was expected to continue, though at a reduced pace.[48]

Concerned about the credibility of its goal to achieve reasonable price stability, some members suggested that maintaining the current degree of restraint might create a signal of easier monetary policy. Others felt that increased restraint might be excessive. In particular, the effects of earlier actions to place greater pressure on reserve positions had not yet fully materialized in terms of the strength of business expansion. Moreover, further restraint would impose added pressure on an already stronger dollar, supported by recent improvements in the trade balance and expectations of tight monetary policy, with adverse implications for the needed improvement in external balances.[49]

A majority of the members voted for a slightly increased degree of pressure on reserve positions, as indicated in table 3. Additional restraint or ease would depend on the forthcoming indications of inflationary pressures, business expansion, future developments in the foreign exchange and domestic financial markets and the behavior of monetary aggregates. The reserve conditions contemplated were expected to be consistent with annual growth rates in M2 and M3 of 5.5 percent and 7 percent, respectively, from June to September. The monitoring range for the federal funds rate was maintained at 5 to 9 percent.[50]

August 16 Meeting

Following the June meeting, as specified in the June directive, more restrictive actions were taken. In the first two weeks of July, average adjustment plus seasonal borrowings surged to $1.3 billion, reflecting a large increase in borrowings over the long July 4 weekend and other special circumstances. In the subsequent four weeks, adjustment plus seasonal borrowings fell back to around the targeted level of $600 million, and preliminary evidence indicated that the growth of the broader monetary aggregates, especially M2, fell in July.[51]

During the intermeeting period, incoming data indicated a further expansion of economic activity and additional inflationary pressures. Preliminary evidence suggested that the industrial production index rose at an annual rate of 13 percent from June to July. Moreover, the capacity utilization rate for all industries in June was estimated to be 85.1 percent, up from the second quarter average of 82.9 percent.[52] The seasonally adjusted producer price index for finished goods had increased at an annual rate of 6.9 percent from June to July. The federal funds rate had risen recently from its average rate in June — from around 7¾ percent to 7 7/8 percent — and on August 9, the

[46]Ibid., pp. 654-55. Since the last meeting, the dollar had appreciated 6 percent on a weighted average basis in relation to the other G-10 currencies.

[47]Ibid.

[48]Ibid., pp. 655-57.

[49]Ibid., p. 660.

[50]Ibid., pp. 660-61.

[51]Record (November 1988), p. 755. Revised annual growth rates in M2 were 5.5 and 4.4 percent, respectively, for June and July, and M3 grew at annual rates of 6.8 and 7.3 percent respectively for June and July.

[52]The estimate for the annual growth rate in the industrial production index from June to July has been revised to 14 percent. Also, the estimated capacity utilization rate for total industry during June has been revised to 83 percent.

Board increased the discount rate from 6 percent to 6.5 percent.[53]

By the August meeting, the expansion in economic activity appeared to have strengthened, with indications of accelerating prices and labor costs. Total nonfarm payroll employment rose sharply in June and July, and the unemployment rate in July was below the second-quarter average. While the consumer price index had not risen substantially, chiefly because of declining oil prices, recent movements in the producer price index were indicative of accelerating prices. The dollar had risen 2.5 percent compared with the other G-10 currencies since the June meeting, reflecting further improvement in the trade balance and the recent tightening of reserve conditions.[54]

Other effects of the previous tightening were starting to emerge. In particular, the expansion of the monetary aggregates had exhibited a marked deceleration in recent months, and interest rates had risen 50 to 75 basis points since the June meeting. The staff continued to expect pressures in financial markets to restrain domestic spending. Despite the appreciation of the dollar, the staff expected continued improvements in the nation's trade balance to be the driving force to further economic expansion. The relatively high rates of capacity utilization were perceived to point to increased inflationary pressures.[55]

The members agreed that, given the recent rise in the discount rate, it would be appropriate to maintain the current degree of pressure on reserve conditions. While many members felt that further tightening of reserve conditions might well be needed, others thought that previous moves to tighten might prove to be sufficient. Some members argued that increased pressure could induce an excessive, upward movement in the dollar and thereby inhibit further improvement in the external balance. Some also expressed concerns that an increase in interest rates could have adverse effects on debtors and troubled financial intermediaries. Others pointed out that increased inflationary pressures would have a similar effect by fostering even higher nominal interest rates.[56]

As reported in table 3, the directive adopted by the Committee called for maintaining the current reserve conditions, although greater or lesser restraint might be appropriate in the intermeeting period, depending on the behavior of prices and economic indicators. The reserve conditions contemplated by the Committee were expected to be consistent with annual growth rates of approximately 3.5 and 5.5 percent, respectively, for M2 and M3 from June to September. In light of the recent increase in the discount rate, the directive increased the federal funds monitoring range to 6 to 10 percent.[57]

September 20 Meeting

Reserve conditions hardly changed in the intermeeting period. The federal funds rate averaged about 8 1/8 percent over the period, close to the level prevailing at the time of the August meeting, and the growth of the monetary aggregates continued to decline.[58]

Information available for review at the September meeting suggested a slight moderation in expansion of economic activity from the intense pace earlier in the year. The moderation was especially evident in labor markets; although there were substantial gains in nonfarm payroll employment in July and August, the pace of growth had slowed, and the unemployment rate rose to 5.6 percent in August. Similarly, capacity utilization rates remained generally high, but rates in manufacturing edged lower. Further, gains in industrial production in August were much smaller than they had been in previous months.[59]

Recent developments in domestic spending also suggested that the pace of economic expan-

[53]By the August meeting, the federal funds rate was approximately 8 1/8 percent. See Record (November 1988), p. 755.

[54]Ibid., pp. 754-55.

[55]Ibid., pp. 755-56.

[56]Ibid., p. 757.

[57]Ibid., pp. 758-59. An increase in the discount rate without a change in the borrowings assumption is a restrictive policy. To maintain the borrowings assumption with a given increase in the discount rate that initially reduces the level of borrowed reserves, the Federal Reserve must remove nonborrowed reserves from the economy until the federal funds rate increases enough to restore the level of borrowed reserves back to its assumed level.

[58]Record (January 1989), p. 21. M2 grew at an annual rate of 2.3 percent in August, while M3 grew at an annual rate of 4.6 percent over the same period.

[59]Ibid., p. 20.

sion was slowing. Growth in sales of nondurable goods was sluggish and the level of sales of durables had fallen in July and August. In addition, the U.S. merchandise trade deficit had dropped substantially in July, primarily because of a reduction in imports. The weakening of the dollar earlier in the intermeeting period, attributed to reports of soft employment conditions, was virtually offset by the strengthening of the dollar due to the trade reports.[60]

Despite evidence that economic growth was slowing from its pace in the summer, price pressures persisted. While the seasonally adjusted producer price index of finished goods increased at an annual rate of 3.4 percent in August, down from a 6.9 percent increase in July, the seasonally adjusted consumer price index for all urban consumers increased at an annual rate of 5.2 percent in July, up from 4.1 percent in August and 4.2 percent in June. Increased price pressures were perceived to be driven by the substantial increases in food prices resulting from the summer drought and increasing gasoline prices.[61]

In their discussion of objectives for short-run policy, the members took into account the recent moderation in monetary growth. (Table 5 shows the deceleration in the expansion of M2 and M3 from June to September.) In the view of at least some members, this moderation would tend to restrain future domestic spending, thereby reinforcing the recent slowdown of the economic expansion. Although some members felt that previous actions to tighten might prove to be sufficient to achieve expansion in economic activity consist with reasonable price stability, many remained concerned that the risks of inflation might intensify:

> Some favorable developments that had tended to dampen inflation, such as declining oil prices and a rising dollar, might well be reversed. More fundamentally, given current utilization rates of labor and other production resources, the economy was probably near the point where expansion at a rate somewhat above the economy's trend growth potential could result in greater pressures on wages and prices.[62]

Some members, pointing to recent movements in expectations of inflation as revealed in financial markets, especially for long-term debt, saw a greater possibility that the economy might be on a less-inflationary course.[63]

The Committee's directive called for an unchanged degree of pressure on reserve conditions until more information, suggesting the desirability of an alternative policy action, became available. (See tables 3 and 4.) Those believing that inflation could intensify were willing to wait for additional evidence. The previous restrictive policy actions might have been sufficient to avoid additional inflation. Further tightening could have a disruptive impact on financial markets and an unwanted effect on the dollar that could hamper or even reverse improvements in the U.S. external balances.

The Committee was prepared to take the measures needed to carry out its anti-inflationary commitment. In particular, all members agreed to adopt a

> . . . directive that would more readily accommodate a move toward firming than an adjustment toward easing in the weeks ahead. Some commented that near-term developments were not likely to call for a policy change in this period, while others saw a greater likelihood that intermeeting developments would point to the desirability of some firming. The potential need for some easing was viewed as remote.[64]

The members expected that the contemplated reserve conditions would be consistent with annual growth rates of 3 percent and 5 percent, respectively, for M2 and M3 over the period from August to December. The monitoring range for the federal funds rate was maintained at 6 to 10 percent.[65]

November 1 Meeting

Between the September and November meetings, adjustments plus seasonal borrowings averaged about $630 million, just above the borrowings assumption, and the average federal funds rate rose to about 8¼ percent. Growth in the monetary aggregates continued to fall in September; preliminary data indicated that M2 growth had been particularly weak in October.[66]

[60] Ibid., pp. 20-21.

[61] Ibid.

[62] Ibid., p. 22.

[63] Ibid., p. 21.

[64] Ibid., p. 23.

[65] Ibid.

[66] Record (February 1989), p. 67. Revised statistics indicate that M2 grew at annual rates of 2.1 and 2.9 percent, respectively, in September and October. The annualized growth rate for M3 increased from 3.6 percent in September to 5.4 percent in October.

Reinforcing the evidence from the previous meeting, the data available at the November meeting revealed a moderation in the expansion of economic activity. Although the civilian unemployment rate fell to 5.4 percent in September, third-quarter growth in total non-farm payroll employment fell from its pace in the first half of the year. Preliminary evidence showed that industrial capacity utilization fell slightly in September, but the rate was still relatively high, and the pace of growth in industrial production slowed from its fast pace in the summer months. Moreover, private domestic final demand exhibited substantially slower growth in the third quarter than it had in the first half of the year.[67]

The Committee welcomed evidence of a slowdown in economic growth; however, the evidence did not mitigate its concern about the risks of greater inflationary pressures in the future. At the producer and consumer levels, inflation had declined slightly in September relative to August, because of falling energy prices, and wage increases were modest. But, the third-quarter average rates of growth in the consumer and producer price indexes exceeded their respective average growth rates for the first half of 1988.[68] Furthermore, the dollar had depreciated significantly relative to the other G-10 currencies since the August meeting.[69]

Forecasts by the staff suggested that "any decline in inflation would be limited, largely because of continuing pressures stemming from still strong demands pressing against reduced margins of unutilized labor and other production resources."[70] The majority of the members expected that the economic expansion would continue at a more moderate pace in the coming months "partly in light of the monetary policy tightening that already had been implemented this year."[71] Additional improvements in the trade balance and increases in inventory investments were expected to contribute to continuing economic growth.

Despite the Committee's concern about future inflationary pressures, a majority of the members believed that the "current relatively balanced performance of the economy and the uncertainties surrounding the outlook argued for an unchanged policy at this point."[72] As table 3 indicates, the directive called for maintaining the current degree of pressure in reserve positions. However, most of the members believed that policy implementation should continue to be especially alert to possible economic developments that could warrant some firming in the intermeeting period. Placing additional or less pressure on reserve positions might be acceptable depending on developments in the intermeeting period. (See table 4.) Most of the members anticipated that additional restraint would be warranted in the intermeeting period.[73] The reserve conditions contemplated were expected to be consistent with annual growth rates of 2½ percent and 6 percent, respectively for M2 and M3 from September to December.[74]

December 13-14 Meeting

In the several weeks after the November meeting, it became apparent that the relation between borrowed reserves and the federal funds rate had changed. The demand for borrowed reserves seemed to shift back so that a given level of borrowed reserves was associated with a higher federal funds rate. To accommodate the shift, the borrowings assumption was reduced, thereby putting downward pressure on the federal funds rate. Because incoming information indicated that the strength of economic expansion was greater than expected and contained greater potential for inflation than desired by the Committee, the accommodation was only partial; therefore, the adjusted

[67]Ibid., p. 66.

[68]Ibid., pp. 66-67. For example, in the third quarter, annual growth in the seasonally adjusted consumer price index rose to 4.7 percent, up from 3.7 percent in the first quarter and 4.5 percent in the second quarter.

[69]Ibid., p. 67. Between August and October, the dollar had depreciated 3.25 percent on a trade-weighted basis in relation to the other G-10 currencies.

[70]Ibid., p. 68.

[71]Ibid.

[72]Ibid., p. 69.

[73]Ibid., p. 69-70. Such a "bias" toward potential restraint appears to have been partly driven by what the Committee perceived as a "continuing need to sustain the System's commitment to its long-run objective of controlling inflation, including the desirability of making clear that the current rate of inflation was unacceptable." See Record (February 1989), p. 69.

[74]Ibid., p. 70.

borrowings assumption was expected to be consistent with a slightly higher federal funds rate. The average rate at which federal funds traded over the intermeeting period rose from around 8¼ percent to 8½ percent. In general, rates in short-term credit markets and, to a lesser extent, those in long-term credit markets, rose over the intermeeting period. Growth in the broader monetary aggregates exceeded the Committee's expectations.[75]

The information reviewed at the December meeting pointed to a rapid economic expansion, once the effects of the drought were removed. The strength of the expansion appeared greater than what the Committee had perceived it to be at the previous meeting. Although the unemployment rate rose from 5.3 percent in October to 5.4 percent in November, total nonfarm payroll employment made large gains in those two months. Preliminary evidence indicated that the industrial production index rose sharply over the intermeeting period and capacity utilization rates for November were relatively high by recent standards.[76] Further, while growth in overall consumer spending appeared to moderate, total retail sales increased markedly over the intermeeting period.[77]

There was no clear evidence that the general price level was accelerating. But the greater-than-expected economic expansion, accompanied by signs of accelerating labor costs as well as a weakening of the dollar in foreign exchange markets, increased the Committee's concerns about future inflation.[78] Most members believed that, without additional restrictive policy actions, potential growth in economic activity in 1989 would not be consistent with avoiding higher inflation in the future because of the already high rates of resource utilization:

> . . . in the absence of a timely move to restraint, greater inflation would become embedded in the economy, especially in the labor-cost structure. A new wage-price spiral would then be very difficult to avoid and the critical task of bringing inflation under control would be prolonged and much more disruptive.[79]

The risks of greater inflation would be augmented if the dollar fell substantially from its current level.

Many members believed that, if the inflation condition were allowed to worsen, rising interest rates due to greater inflationary expectations eventually could lead to a downturn in the economy. Other members were more concerned about the downside risks associated with additional restrictive actions:

> In addition to job and output losses, a recession could impede progress in bringing the federal budget into balance and could have severe repercussions on the viability of highly leveraged borrowers and many depository institutions.[80]

In general, the members perceived that risks of greater inflation in the future would pose a greater threat to future growth in economic activity than would a slightly more restrictive policy.[81]

The uncertainties about the impact of further monetary restraint generated some disagreement among the members about the exact timing and degree of additional restraint. On the one hand, a gradual restraining policy would

[75]Ibid., p. 71, and Record (Federal Reserve Press Release, February 10, 1989), p. 4. M2 grew at an annual rate of 6.9 percent and M3 grew at an annual rate of 6.6 percent in November. At the December meeting, the Committee reviewed the procedures for the implementation of monetary policy, in light of the recent unusual behavior of the relation between borrowings and the federal funds rate. In the several weeks prior to the meeting, once the fundamental change in that relationship had been identified, day-to-day policy actions were carried out with some flexibility. Some members suggested that a move to place more emphasis on the federal funds rate relative to the degree of pressure on reserve positions might be appropriate since the unusual behavior of the relationship between the federal funds rate and borrowing could continue. Because of the perceived advantages of the currently used operating procedure, however, it was decided that no changes in the procedures for policy implementation would be made, although "flexibility would remain important in accomplishing Committee objectives under changing circumstances." [Record (Federal Reserve Press Release, February 10, 1989), pp. 15-16.]

[76]Record (Federal Reserve Press Release February 10, 1989), pp. 1-2. The capacity utilization rates for the total industry rose from 83.7 percent in September to 84.0 percent and 84.1 percent, respectively, in October and November. The industrial production index rose at an annual rate of 7.2 percent in October and 4.4 percent in November, up from 0.9 percent annual rate of growth in September.

[77]Ibid., pp. 2-3. Total retail sales rose at annual rates of 20.1 percent and 15.7 percent, respectively, in October and November, after having declined at an annual rate of 2.6 percent in September.

[78]Ibid., pp. 6-8. Over the intermeeting period, the dollar's trade-weighted exchange index fell approximately 2.3 percent.

[79]Ibid., p. 8.

[80]Ibid., p. 7.

[81]Ibid., p. 10.

minimize the possible disruptive effects in domestic and international financial markets; immediate action could lead to an escalation of interest rates in world markets, with especially damaging consequences for less-developed debtor nations. Moreover, sharp tightening could impose excessive restraint on the growth of the monetary aggregates and, ultimately, on the growth of economic activity. On the other hand, it was thought that immediate tightening could contain perceived increased price pressures and inflationary expectations more effectively. Without some tightening, growth in M2 and M3 could accelerate.[82]

The directive called for an immediate slight increase in the degree of pressure on reserve conditions, as shown in table 3. Further tightening actions would be implemented at the beginning of 1989 unless economic and financial conditions were to deviate substantially from the Committee's expectations (see table 4). Given the reserve conditions contemplated by the Committee, growth in M2 and M3 were expected to be 3 percent and 6½ percent, respectively, from November 1988 to March 1989. Because of the restrictive policy actions specified in the directive and those expected to be implemented in the intermeeting period, the monitoring range for the federal funds rate was raised to 7 to 11 percent.[83]

CONCLUSION

The Committee's uncertainty about the economic outlook motivated it to adopt a more flexible strategy for the implementation of monetary policy in 1988. This additional flexibility manifested itself in long-run goals for money growth and in short-run policy implementation. The changing economic environment played an important role in the evolution of policy in 1988 in terms of the changing emphasis toward monetary restraint.

At the beginning of the year, the Committee believed that sharp fluctuations in money market interest rates should be resisted. In addition, it was concerned that economic growth could slow substantially. Consequently, the Committee placed greater weight early in the year on conditions in financial markets in the implementation of policy, though the latter also would continue to be guided by the behavior of the monetary aggregates, price pressures and other indications of economic activity. The additional flexibility permitted temporary departures from reserve objectives to avoid unusual fluctuations in money market interest rates.

As the year progressed, it became increasingly apparent to the Committee that financial markets were sufficiently stabilized and that the stock market collapse in the previous year would not have a devastating effect on aggregate economic activity. Accordingly, the Committee abandoned some of the additional flexibility it had sought since October 1987, and returned to its earlier practice of placing primary emphasis on reserve positions. At the same time, incoming information heightened the Committee's concerns about future inflation. Specifically, the strength of the economic expansion was perceived to be incompatible with the Committee's long-term goal of reasonable price stability. In response to the increased risks of future price pressures, the Committee moved toward a more restrictive monetary policy starting in late March.

In the second half of the year, when the increased risks of future price pressures came to the forefront of the Committee's concerns, the uncertainty stemming from the dollar's movements and the impact of previously implemented restrictive monetary policy on the economy were given increased emphasis in the Committee's deliberations. As the dollar gained notable strength against other major currencies in the summer and there were some indications of a moderating economic expansion, no changes in the degree of pressure on reserve positions were made. When the dollar started to decline in foreign exchange markets, there was also increasing evidence that the economic expansion was more in line with the Committee's goal of price stability and again, no policy changes

[82]Ibid., pp. 10-11. The members also discussed the implications for the tightening of reserve positions combined with an increase in the discount rate. Despite the fact that a rise in the discount rate could communicate the Committee's commitment to fight inflation, an increase in the discount rate was not seen as an appropriate policy action at that time by most members. Like a sharp, immediate increase in the degree of pressure on reserve positions, an increase in the discount rate could disrupt domestic and international financial markets. Nevertheless, the Committee did not rule out the possibility during the intermeeting period and agreed to call a special consultation in the event that the Board of Governors agreed to increase the discount rate (Ibid., p. 11.).

[83]Ibid., pp. 13-15.

were made. By the end of the year, when signs of a rapid economic expansion re-emerged and the dollar's value started to fall in foreign exchange markets, the Committee responded quickly by tightening monetary policy further.

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