## Prefatory Note

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## MONETARY POLICY ALTERNATIVES

Prepared for the Federal Open Market Committee
By the staff Board of Governors of the Federal Reserve System

## MONETARY POLICY AUTERNATIVES

## Recent developments

(1) Monetary policy was tightened in two steps over the intermeeting period. On February 14, in view of mounting evidence of inflationary pressures, the borrowing assumption was raised to $\$ 700$ million from the $\$ 600$ million level that had been continued after the February FOMC meeting. Federal funds were expected to trade around 9-1/4 to 9-3/8 percent, up from 9 to $9-1 / 8$ percent at the time of the meeting. Although federal funds did trade mostly in this higher range, borrowing averaged only $\$ 366$ million in the maintenance period ending February 22. In association with the increase in the discount rate to 7 percent on February 24, federal funds moved up to average a little above $9-3 / 4$ percent. Borrowing continued to fall short of the $\$ 700$ million allowance, coming in at just $\$ 550$ million for the maintenance period ending March 8. In light of these indications of additional weakening in borrowing demands, the borrowing assumption was reduced to $\$ 500$ million in the maintenance period beginning March 9 as a technical adjustment to make it more consistent with expected conditions in reserve markets. In that maintenance period, which ended March 22, adjustment plus seasonal borrowing was $\$ 422$ million and the federal funds rate averaged 9.85 percent.
(2) The tightening of policy, together with renewed concerns about inflation and associated future policy moves, propelled other interest rates higher across the maturity spectrum over the intermeeting period. Increases in private short-term rates have totaled nearly 1 percentage
point, including two half-point increases in the prime rate, somewhat more than the almost $3 / 4$ percentage point rise in the funds rate. The additional increase in these rates followed release of the second large jump in producer prices, which was seen as raising the odds of a further nearterm firming of policy. It may also have reflected greater supplies of short-term paper, especially bank $C D s$ to fund stronger bank credit and sponsored agency obligations to meet demands for FHLB advances as thrift deposits ran off. By contrast, Treasury bill supplies have been flat, and with substantial retail demand for these instruments through noncompetitive tenders, bill rates rose only about half a percentage point.
(3) Long-term rates rose immediately following the FOMC meeting, when an unchanged Federal Reserve policy stance in the face of strong economic data apparently led to renewed concerns about the possible intensification of inflation, especially since the dollar weakened as well. Further increases in long-term rates were registered as incoming price data--both broad indexes and prices of oil and other commodities-were interpreted as signalling an actual pickup in inflation and a need for further policy firming. On balance, yields on Treasury bonds are 40 to 50 basis points higher over the intermeeting period. Actual and anticipated sales of mortgages and mortgage-backed securities by thrifts may have contributed to larger increases in yields on these instruments in both primary and secondary markets. In the primary market, rates on fixed-rate mortgages rose nearly 70 basis points to 11.22 percent over the intermeeting period, while the spread between secondary market mortgage securities and Treasuries widened around 15 to 35 basis points.

The dollar's weighted-average foreign exchange value rose marginally on balance over the intermeeting period. The dollar weakened early in the period, given the restrained response of the Federal Reserve to incoming economic and price data and in view of expected further monetary tightening by foreign central banks, especially the Bundesbank. Market perceptions reversed and the dollar strengthened substantially, however, shortly after the Federal Reserve's discount rate increase and amid clear signals from the Bundesbank and other central banks that they would not raise rates in the near term. As the dollar moved back toward its earlier peak against the Deutschmark, the Desk sold $\$ 650$ million for marks.
(5) After considerable weakness in January, growth of M2 and M3 strengthened in February and is estimated to have picked up further in March. Still, expansion of the aggregates so far this year has remained subdued, reflecting high opportunity costs and probably also the problems of the thrift industry. M2 growth of $1-1 / 2$ percent since December is slightly slower than the 2 percent specification of the Comittee, which, however, did not embody the policy tightening that occurred. Growth of M3 for the December-to-March period at a $3-3 / 4$ percent rate is in line with the Committee's expectations for this interval. The levels of M2 and M3
in March are estimated to be a little below and a little above the lower bounds of their respective annual growth cones.
(6) Within M2, liquid deposits have remained quite weak--M1 was about unchanged over February and March--and small time deposits relatively strong. Offering rates on retail time deposits have moved up substantially, but remain unusually low relative to Treasury yields, especially at thrifts. Deposits at thrift institutions with FSLIC insurance have continued to decline, though outflows in late february and early March may have abated from earlier in the quarter. While most of these funds seem to have remained within M2, the thrift situation still appears to have depressed growth of this aggregate in the first quarter. Some apprehensive depositors seem to have opted for market instruments, and regulatory pressures on deposit rates at thrifts have held down offering rates more generally and widened the opportunity cost of holding M2 assets. Thrift behavior may also have affected M3. S\&Ls have substituted non-M3 sources--FHLB advances--for deposits and probably have restrained credit expansion; $S \& L$ assets declined in January, the latest month for which data are available. On the other hand, the expansion of M3 over the past two months has been supported by the strong reliance of commercial banks on managed liabilities, particularly large time deposits, to fund increased lending. Bank credit growth was spurred in February by borrowing used to retire shares in RJR Nabisco.
(7) Even abstracting from the RJR Nabisco deal, business borrowing has shown renewed vigor in February and March. Concerns about event risk and the higher level of interest rates have pushed these demands into

## MONEI, CREDIT, AND RESERVE AGGREGATES

(Seasonally adjusted annual rates of growth)

|  | Jan. | Feb. | Mar. ${ }^{\text {pe }}$ | Jan. to Mar. ${ }^{\text {pe }}$ $\qquad$ | $\begin{gathered} \text { QIV' } 88 \\ \text { to pe } \\ \text { Mar. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Money and credit aggregates |  |  |  |  |  |
| M1 | -6.1 | 1.8 | -1 | 1/2 | $-1 / 4$ |
| M2 | -1.3 | 1.7 | 4-1/4 | 3 | 2-1/2 |
| M3 | 1.6 | 3.2 | 6-1/4 | 4-3/4 | 4-1/4 |
| Domestic nonfinancial debt | 6.9 | 10.1 | n.a. | n.a. | $8.5^{1}$ |
| Bank credit | 2.4 | 14.4 | n.a. | n.a. | $7.0^{1}$ |
| Reserve measures |  |  |  |  |  |
| Nonborrowed reserves ${ }^{2}$ | -11.5 | 2.4 | -9 | $-3-1 / 4$ | $-4-1 / 2$ |
| Total reserves | -8.5 | -1.1 | $-8-1 / 4$ | $-4-3 / 4$ | -4-1/2 |
| Monetary base | 4.0 | 4.4 | 5-3/4 | 5 | 4-3/4 |
| Memo: (Millions of dollars) |  |  |  |  |  |
| Adjustment plus seasonal borrowing | 616 | 437 | 478 | -- | -- |
| Excess reserves | 1145 | 1153 | 885 | -- | -- |

pe - preliminary estimate.

1. Fourth quarter to February.
2. Includes "other extended credit" from the Federal Reserve.

NOTE: Monthly reserve measures, including excess reserves and borrowing, are calculated by prorating-averages for two-week reserve maintenance periods that overlap months. The March figures assume an average level of adjustment plus seasonal borrowing of $\$ 500 \mathrm{milli}$ ion and excess reserves of $\$ 950 \mathrm{million}$ for the maintenance period ending April 6. Reserve data incorporate adjustments for discontinuities associated with changes in reserve requirements.
shorter-term areas: both bank lending and commercial paper issuance net of merger effects picked up in February, and at least for commercial paper, this strength has continued into March. In addition, recent weeks have seen a flurry of new investment-grade industrial bonds concentrated in short maturities, often of one year. Mortgage lending has strengthened somewhat from late 1988, and consumer borrowing has held steady. With government borrowing also picking up in February, overall domestic nonfinancial debt accelerated that month, lifting this aggregate to the midpoint of its range.

## Policy alternatives

(8) Three alternatives are presented below for Committee consider-
ation. Alternative $B$ maintains the current degree of reserve market pressure, with federal funds trading around $9-3 / 4$ percent or slightly higher in association with adjustment plus seasonal borrowing of $\$ 500$ million. Alternative A entails federal funds around 9-1/4 percent and borrowing of $\$ 300$ million, and alternative $C$ involves funds around $10-1 / 4$ percent and borrowing of $\$ 700$ million. These relationships assume that the heightened reluctance of banks to tap the discount window of recent weeks will persist over the intermeeting period. Uncertainties about the relationship between borrowing and the spread of the funds rate over the discount rate suggest a continued flexible approach to the borrowing objective in open market operations. Even with this approach, funds could temporarily trade above expected levels in coming days should significant quarter-end pressures emerge and again in the latter half of April should individual income tax payments prove to be larger than anticipated, leading to a sharper advance in required reserves and a larger drain in bank reserves. (9) Projections of growth in the monetary aggregates for March to June are presented below for the three alternatives, together with implied growth from the fourth-quarter base to June. ${ }^{1}$ (Detailed data are presented on the table and charts on the following pages.) Under all three alternatives, monetary growth would remain subdued, largely reflecting

[^1]recent increases in market interest rates and slow adjustment of offering rates on liquid accounts. In addition, the thrift situation is expected to depress growth of the broader aggregates in the second quarter, though to a lesser extent than in the first quarter. The reduced impact should result from a tendency for the most concerned depositors to flee first, and assumes no new information that would exacerbate depositors' fears, such as a Congressional stalemate on the proposed legislation. It also assumes no greater regulatory pressure on thrift deposit offering rates; changes in the average own rate on M2 components are likely to respond in more typical ways to changes in market rates, although the level of opportunity costs should remain unusually wide. M2 growth rates under the alternatives are a bit lower than would be suggested by various models of money demand given the staff GNP forecast. At the M3 level, further substitutions of FHLB advances for deposits and restraint on asset growth at thrifts are expected to have a continuing but diminishing effect on growth. ${ }^{2}$
2. Tax payments are not expected to have much impact on the pattern of monetary growth over the March-to-June period, in contrast to the last two years. There are no extraordinary influences on tax payments this year and current seasonal adjustment factors capture expected tax- and refund-related deposit swings.

However, M2 and M3 growth is expected to be depressed slightly in May by a transfer of the government securities trading operation of a major bank dealer, with associated $R P$ financing, to a nonbank affiliate. RP liabilities of nonbank dealers are not included in the definition of the money aggregates.

Alt. A Alt. B Alt. C
Growth from March to June

| M2 | 4 | 3 | 2 |
| :--- | :--- | :---: | :---: |
| M3 | $5-1 / 2$ | 5 | $4-1 / 2$ |
| M1 | 1 | $-1 / 2$ | -2 |

Growth from QIV' 88 to June
M2

M3
M1
$3-1 / 4$
$4-3 / 4$

2-3/4
2-1/4
4-3/4 $4-1 / 2$
$1 / 2$
$-1 / 4$
4-1/4
-1

Associated federal funds rate ranges

7 to 11
8 to 12
8 to 12
(10) The existing structure of interest rates appears to incorporate some expectation that monetary policy may be a little firmer in the near term than is assumed under alternative $B$. As a consequence, with federal funds continuing around $9-3 / 4$ percent or even a little above under alternative $B$, money market rates might tend to decline a bit. Threemonth Treasury bills at the current level of 9 percent would seem appropriately priced in relation to the prevailing federal funds rate under usual supply and demand conditions; but if strong retail demands continue, these rates also might edge lower, especially once the early-April cash management bill is absorbed. The dollar might come under some downward pressure as short-term rates softened and the prospects for further nearterm monetary tightening in the United States were reassessed. Given recent mixed signals about the strength of the expansion, bond markets are

## Alternative Levels and Growth Rates for Key Monetary Aggregates

|  | M2 |  |  | M3 |  |  | M1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Alt. A | Alt. B | Alt. C | Alt. A | Alt. B | Alt. C | Alt. A | Alt. B | Alt. C |
| Levels in billions |  |  |  |  |  |  |  |  |  |
| 1989 January | 3066.0 | 3066.0 | 3066.0 | 3923.2 | 3923.2 | 3923.2 | 786.2 | 786.2 | 786.2 |
| February | 3070.3 | 3070.3 | 3070.3 | 3933.5 | 3933.5 | 3933.5 | 787.4 | 787.4 | 787.4 |
| March | 3081.4 | 3081.4 | 3081.4 | 3953.8 | 3953.8 | 3953.8 | 786.9 | 786.9 | 786.9 |
| April | 3090.4 | 3089.1 | 3087.8 | 3971.0 | 3970.3 | 3969.6 | 787.0 | 786.5 | 786.0 |
| May | 3099.7 | 3096.3 | 3092.9 | 3987.8 | 3985.8 | 3983.8 | 787.5 | 786.2 | 784.9 |
| June | 3113.1 | 3104.5 | 3095.9 | 4008.2 | 4003.2 | 3998.2 | 789.1 | 786.1 | 783.1 |
| Monthly Growth Rates |  |  |  |  |  |  |  |  |  |
| 1989 January | -1.3 | -1.3 | -1.3 | 1.6 | 1.6 | 1.6 | -6.1 | -6.1 | -6.1 |
| February | 1.7 | 1.7 | 1.7 | 3.2 | 3.2 | 3.2 | 1.8 | 1.8 | 1.8 |
| March | 4.3 | 4.3 | 4.3 | 6.2 | 6.2 | 6.2 | -0.8 | -0.8 | -0.8 |
| April | 3.5 | 3.0 | 2.5 | 5.2 | 5.0 | 4.8 | 0.2 | -0.6 | -1.4 |
| May | 3.6 | 2.8 | 2.0 | 5.1 | 4.7 | 4.3 | 0.7 | -0.5 | -1.7 |
| June | 5.2 | 3.2 | 1.2 | 6.1 | 5.2 | 4.3 | 2.4 | -0.2 | -2.8 |
| Quarterly Ave. Growth Rates |  |  |  |  |  |  |  |  |  |
| 1988 Q2 | 6.9 | 6.9 | 6.9 | 7.2 | 7.2 | 7.2 | 6.4 | 6.4 | 6.4 |
| Q3 | 3.8 | 3.8 | 3.8 | 5.7 | 5.7 | 5.7 | 5.2 | 5.2 | 5.2 |
| Q4 | 3.6 | 3.6 | 3.6 | 5.0 | 5.0 | 5.0 | 2.3 | 2.3 | 2.3 |
| 1989 Q1 | 2.1 | 2.1 | 2.1 | 3.8 | 3.8 | 3.8 | -0.3 | -0.3 | -0.3 |
| Q2 | 3.7 | 3.1 | 2.6 | 5.3 | 5.0 | 4.8 | 0.5 | -0.3 | -1.1 |
| Dec. 88 to Mar. 89 | 1.6 | 1.6 | 1.6 | 3.7 | 3.7 | 3.7 | -1.7 | -1.7 | -1.7 |
| Mar. 89 to June 89 | 4.1 | 3.0 | 1.9 | 5.5 | 5.0 | 4.5 | 1.1 | -0.4 | -1.9 |
| Q4 87 to Q4 88 | 5.2 | 5.2 | 5.2 | 6.3 | 6.3 | 6.3 | 4.3 | 4.3 | 4.3 |
| Q4 88 to Q2 89 | 2.9 | 2.6 | 2.3 | 4.6 | 4.5 | 4.3 | 0.1 | -0.3 | -0.7 |
| Q4 88 to Mar. 89 | 2.4 | 2.4 | 2.4 | 4.2 | 4.2 | 4.2 | -0.2 | -0.2 | -0.2 |
| Q4 88 to June 89 | 3.2 | 2.7 | 2.2 | 4.8 | 4.6 | 4.3 | 0.4 | -0.3 | -0.9 |
| 1989 Target Ranges: |  | . 0 to 7. |  |  | 5 to 7. |  |  |  |  |

## ACTUAL AND TARGETED M2



## ACTUAL AND TARGETED M3




## DEBT


likely to be especially sensitive to incoming information about developments in the economy. Should the incoming data point more clearly to continued strength in the economy and prices, consistent with the greenbook forecast, bond yields would be unlikely to fall with an unchanged System policy stance and could even move higher.
(11) Growth in M2 under alternative $B$, at 3 percent from March to June, would be stronger on average than over the first three months of this year. As discussed above, deposit weakness at thrifts is expected to continue, but to abate. In addition, with short-term market rates moving a bit below current levels and rates on deposits edging higher in response to previous increases in market rates, opportunity costs would be narrowing, rather than rising as in recent months. Even so, the lagged effects of earlier substantial increases in opportunity costs would continue to restrain M2 growth and result in a $4-1 / 2$ percent increase in its velocity in the second quarter, somewhat faster than in the second half of 1988. M1 would continue about flat over the March-to-June period as outflows of transactions deposits about match growth in currency; consequently, its velocity would increase at around the projected $7-3 / 4$ percent increase in nominal GNP.
(12) ${ }^{-}$M3 is projected to grow at a 5 percent annual rate over the March-to-June period under alternative $B$, somewhat faster than from December to March. Commercial banks are expected to continue issuing substantial amounts of large CDs to fund still strong merger-related loan demands. At thrifts, even if asset growth doesn't pick up, M3 could still be boosted relative to earlier this year as less weakness in retail
deposits is reflected in reduced reliance on FHLB advances. Contributing to the pickup in M3 growth would be a resumption of inflows to institu-tion-only money funds as their returns catch up to market rates. On a quarterly average basis, M3 would grow at a 5 percent rate, implying an increase of $2-1 / 2$ percent in its velocity.
(13) In credit markets, the smaller role of thrifts in acquiring and perhaps even originating mortgage loans is not expected to have a material impact on overall mortgage debt growth, which is projected to taper off only a little in the second quarter in response to the recent climb in mortgage rates. Business borrowing should diminish as corporate restructuring activity and associated borrowing to finance share retirements fall off somewhat from the record first-quarter pace. Reflecting elevated bond rates and investor concern about event risk, firms are likely to continue to focus their credit demands on bank loans and shorter-term paper. Aggregate growth in the debt of nonfinancial sectors is projected at an 8 percent annual rate over the second quarter, bringing expansion through June to around the middle of its 6-1/2 to 10-1/2 percent annual monitoring range.
(14) The extent of immediate policy tightening embodied in alternative $C$ is more than currently seems to be built into market interest rates. In response to the federal funds rate moving into the $10-1 / 4$ percent area, other short-term market rates would be expected to rise somewhat less; the prime rate would be hiked again, probably by $1 / 2$ percentage point. The dollar would be expected to firm. Bond rates are likely to increase under this alternative, but the extent of any rise might be
limited, and over time yields could drop back, if market participants saw the tightening action as reducing the risks of greater inflation and raising the odds on an appreciable moderation in economic growth. With the further rise in market rates, M2 would expand at a 2 percent annual rate over the March-to-June period under alternative $C$, only a bit faster than the December-to-March pace. Growth at this rate would place this aggregate noticeably below its 3 to 7 percent growth cone by June. Higher market rates along with the lagged adjustment of offering rates on M3 type-money market mutual funds would weaken inflows to such funds. M3 expansion, at $4-1 / 2$ percent over the March-to-June period, while picking up some from the sluggish rate of recent months, would remain in the lower portion of its long-run range.
(15) With the lower money market rates of alternative $A$, M2 growth would strengthen to a 4 percent pace, lifting it above the lower bound of its growth cone by June. M3 would move more into the middle portion of its range. The decline in other short-term market rates might be less than the one-half point drop in the federal funds rate, depending on perceptions of the sustainability of the policy easing. The dollar could fall substantially. Investors are likely to be confounded by this policy action, which would be seen as reversing the thrust of policy over the past year. Unless subsequent data suggested substantial weakness in the economy and price pressures, inflation expectations and bond yields ultimately could rise under this alternative.

## Directive lanquage

(16) Draft language for the operational paragraph, including the usual options and updating, is shown below.

## OPERATIONAL PARAGRAPH

In the implementation of policy for the immediate future, the Committee seeks to DECREASE SOMEWHAT/maintain/INCREASE SOMEWHAT the existing degree of pressure on reserve positions. Taking account of indications of inflationary pressures, the strength of the business expansion, the behavior of the monetary aggregates, and developments in foreign exchange and domestic financial markets, somewhat (SLIGHTLY) greater reserve restraint would (MIGHT), or (SOMEWHAT) slightly lesser reserve restraint (WOULD) might, be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with growth of M2 and M3 over the period from Beeember through March THROUGH JUNE at annual rates of about _ $z$ and _ 3-¥fz percent, respectively. The Chairman may call for Committee consultation if it appears to the Manager for Domestic Operations that reserve conditions during the period before the next meeting are likely to be associated with a federal funds rate persistently outside a range of _ TO _ 7 to $\nexists z$ percent.




 comitmante for 1 -year, adjusteble-rete mortgoges(ARMs) at siL offering both FRMs end ARMs with the same mumber of discount points.


Components of Money Stock and Related Measures


4. Excludes IRA and Keogh accounts deposits held by money market mutual furds and thrift institutions
p-preliminary



[^0]:    ${ }^{1}$ In some cases, original copies needed to be photocopied before being scanned into electronic format. All scanned images were deskewed (to remove the effects of printer- and scanner-introduced tilting) and lightly cleaned (to remove dark spots caused by staple holes, hole punches, and other blemishes caused after initial printing).
    ${ }^{2}$ A two-step process was used. An advanced optimal character recognition computer program (OCR) first created electronic text from the document image. Where the OCR results were inconclusive, staff checked and corrected the text as necessary. Please note that the numbers and text in charts and tables were not reliably recognized by the OCR process and were not checked or corrected by staff.

[^1]:    1. The funds rate range suggested for alternatives $B$ and $C$ is a percentage point above the 7 to 11 percent range now in the directive, better centering the range on current (alternative B) or somewhat higher (alternative $C$ ) expected funds rates.
