## 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 ALTERNATIVES

## Recent Developments

(1) On February 4, the Federal Reserve moved to a less accommodative stance in reserve markets to reduce the likelihood that inflationary pressures would increase in the future, a decision announced by Chairman Greenspan. The availability of nonborrowed reserves was decreased slightly, with the allowance for adjustment and seasonal borrowing boosted from $\$ 50$ million to $\$ 75$ million and federal funds expected to trade around 3-1/4 percent. $1 / 4$ percentage point above the previous level. For the intermeeting period as a whole, the federal funds rate averaged close to its intended level.
(2) Over the intermeeting period, other market interest rates rose considerably more than the federal funds rate in frequently volatile markets. Although money market interest rates before February 4 had partly incorporated expectations of a tightening, the Committee's action came sooner than most market participants apparently had been expecting and was seen by some as suggesting that the Federal Reserve would move more quickly than had been anticipated to "policy neutrality" in order to head off potential inflationary pressures. Against this background, investors became especially sensitive to news that aggregate demand retained considerable forward momentum into the first quarter and that manufacturers were paying higher prices for inputs. Moreover, trade frictions with Japan and political developments at home appeared at times to increase uncertainty about future movements in the prices of dollar-denominated assets, putting downward pressure on the foreign exchange value of the dollar as well as upward pressure on interest rates. Anecdotal information suggests that a
number of institutional fund managers--some faced with appreciable trading losses in the United States and abroad and seeing interest rates now to be on an upward trend--slashed their long positions, possibly exacerbating the downswing in market prices.
(3) On balance, money market interest rates have risen 40 to 60 basis points since February 3 and now seem to incorporate expectations of a $1 / 4$ percentage point tightening in the very near term and strong odds on yet another firming not long thereafter. ${ }^{1}$ Inter-mediate- and long-term rates have jumped 60 to 75 basis points. Implied forward rates moved up especially sharply at intermediate maturities, reflecting the sense that cyclical pressures on credit demands and inflation would be greater than expected. Somewhat more surprising was the substantial increase in forward rates at longer horizons, perhaps indicating greater uncertainty premiums as well as the effects of heavy selling of bonds by some portfolio managers. In sometimes volatile trading, stock prices were unchanged to down 3 percent over the intermeeting period; this relatively small change suggests that the effects of higher interest rates were partly offset by a stronger outlook for output and earnings.
(4) Despite the rise in U.S. interest rates, the dollar's weighted-average exchange value declined 1-1/2 percent, on balance, since the February FOMC. The dollar depreciated $2-1 / 2$ percent against the mark and 2 percent against the yen, but appreciated 3 percent against the Canadian dollar. The mark and associated ERM currencies strengthened with the perception that the Bundesbank would be slower to ease than previously had been thought, a perception reflected in a sharp backup of Euro-mark deposit futures rates. Trade frictions

[^1]between the United States and Japan appeared to be the dominant influence on yen/dollar exchange rates. Bond yields abroad rose sharply through early March, with rates increasing 30 to 110 basis points on balance.
(5) The monetary aggregates were considerably weaker in February than projected. M2 and M3 contracted at 1 and 7-3/4 percent annual rates, respectively. These declines left M2 on a monthly average basis in February just a bit above the lower bound of its 1-to-5 percent range for 1994 and M3 below the lower end of its 0-to-4 percent range. ${ }^{3}$ Data for early March suggest some rebound in both aggregates, bringing growth of M2 since January back to its projected rate. The velocities of the broader aggregates are forecast to increase strongly in the current quarter, although not as rapidly as in the fourth quarter.
(6) The weakness in the monetary aggregates in February reflected several factors. With regard to M2, the System's tightening action may have played a small role, but the bulk of any influence should not occur for several months. A sharp decline in mortgage refinancings since late last year has depressed demand deposits and, to a lesser extent, savings deposits. ${ }^{4}$ Finally, distortions in

[^2]seasonal factors related to the timing of changes in monetary policy earlier in the 1990 s may have artificially held down money growth in February. ${ }^{5}$ While sales of long-term mutual funds apparently continued strong on average in February, there have been sizable net redemptions of bond funds in recent weeks, and inflows to stock funds seem to have been on the weak side. ${ }^{6}$ These developments may have contributed to a sharp boost in money funds and M2 in early March. At the M3 level, institution-only money funds dropped off precipitously in the wake of the System's tightening, as shareholders moved to take advantage of higher yields available in the open markets. Large time deposits also contracted, with the declines concentrated at foreign banks; credit at branches and agencies surged last month, but these institutions substituted borrowing from abroad for domestic CDs. After adjusting for a change in accounting that boosted reported securities holdings, the expansion of total bank credit was modest in February, with holdings of government securities flat on the month after several months of healthy increases. ${ }^{7}$
(7) So far in 1994, the growth of nonfederal sector debt is estimated to have about maintained the brisker pace of the fourth quarter of last year, but with the backup in yields borrowing has

[^3]shifted a little toward shorter-term sources. Business loans have expanded at a somewhat stronger pace than in 1993, abetted by the easing in terms and standards that has been underway over the past year. Nonfinancial corporations have trimmed offerings of bonds in public markets over the past few weeks and have reduced maturities of the bonds and commercial paper sold. Issuance of bonds in the taxexempt sector also has been running well below last year's pace. Borrowing by households appears to have moderated a little from its rapid fourth-quarter rate, though it still remains brisk. Consumer credit expanded at a 9 percent rate in January, and consumer loans at banks (adjusted for securitization) increased at a 12 percent rate last month. Although refinancing activity has declined, mortgage growth likely has remained strong, reflecting robust home sales late last year and some cashing out of equity. Applications for adjust-able-rate mortgage loans have picked up noticeably, as fixed-rate mortgage rates have moved well above their recent lows. The overall debt of domestic nonfinancial sectors is estimated to have expanded at a 5 percent rate in February, leaving this aggregate near the middle of its 4-to-8 percent annual range.

MONEY, CREDIT, AND RESERVE AGGREGATES (Seasonally adjusted annual rates of growth)

|  |  |  |
| :---: | :---: | :---: |
|  |  | 93:Q4 |
| Dec. Jan. Feb. | Feb. |  |

## Money and credit aggregates

| M1 | 6.5 | 5.4 | 5.4 | 6.2 |
| :--- | ---: | ---: | ---: | ---: |
| M2 | 2.4 | 2.3 | -1.0 | 1.4 |
| M3 | 3.5 | 1.1 | -7.8 | -1.0 |
| Domestic nonfinancial debt ${ }^{1}$ |  |  |  |  |
| Total | 7.5 | 5.0 | 5.1 | 5.8 |
| $\quad$ Federal | 13.3 | 2.8 | 5.1 | 6.6 |
| $\quad$ Nonfederal | 5.4 | 5.8 | 5.2 | 5.5 |
| Bank credit | 4.9 | 7.6 | 5.2 | 6.0 |

Reserve measures ${ }^{2}$
$\begin{array}{lllll}\text { Nonborrowed reserves }{ }^{3} & 1.7 & 0.5 & 3.7 & 3.6\end{array}$
Total reserves
1.5
0.4
3.6
3.1

Monetary base
5.5
11.4
13.3
10.5

Memo: (Millions of dollars)
Adjustment plus seasonal borrowing 82

Excess reserves
1063

73
70
1448
1138

1. Figures on domestic nonfinancial sector debt in February are preliminary estimates.
2. Monthly reserve measures, including excess reserves and borrowing, are calculated by prorating averages for two-week reserve maintenance periods that overlap months. Reserve data incorporate adjustments for discontinuities associated with changes in reserve requirements.
3. Includes "other extended credit" from the Federal Reserve.

## Eolicy Alternatives

(8) Two monetary policy alternatives are presented below for consideration by the Committee. Under alternative $B$, federal funds would continue to trade around 3-1/4 percent in association with adjustment plus seasonal borrowing of $\$ 75$ million. ${ }^{8}$ Under alternative $C$, the federal funds rate would increase 50 basis points, to 3-3/4 percent through an increase in the initial borrowing allowance to $\$ 100 \mathrm{million}$.
(9) With market participants expecting appreciable increases in the federal funds rate in coming months, including 25 basis points at the March FOMC meeting, interest rates could tend to drift lower under the unchanged reserve conditions of alternative $B$. Rate declines would be quite small initially if market participants still believed that the next tightening step was imminent but had merely been delayed, perhaps by the unsettled market conditions of late. As the intermeeting period unfolds, economic data in line with the Greenbook projection should suggest moderate economic growth and no intensification of inflation pressures, and interest rates could fall noticeably under this alternative as markets reassessed the trajectory of Federal Reserve tightening. The scope for any rate decreases, especially at the long end of the market, could be quite limited, however, if the hiatus in tightening were to call into question the Federal Reserve's anti-inflationary resolve.
(10) Alternative $B$ might be favored if most of the increase in intermediate and long-term real rates over recent months were thought likely to persist and be sufficient to restrain demand and

[^4]head off additional inflationary pressures. The staff economic forecast assumes that policy needs to tighten eventually to maintain high enough real rates to avoid an overheating of the economy. However, that forecast does not necessarily assume a move as soon as the March meeting. Even if long-term rates were expected to decline appreciably, alternative $B$ might be selected were the economy nevertheless seen as remaining below its long-term potential and inflation pressures contained. Such an assessment could be based on a sense that recent data suggested less momentum in the economy or on a judgment that the behavior of costs and broad price indexes has been indicating a greater degree of slack in the economy than embodied in the staff forecast.
(11) Alternative $C$ involves a larger immediate tightening than now built into the structure of market rates. As a consequence. money market interest rates would rise, though by much less than the 50 basis point increase in the funds rate, and the dollar would firm. Banks would probably take this opportunity to boost the prime rate. Long-term rates likely would also move up some. Another major bond market sell-off cannot be ruled out, but seems less likely now. Portfolios have been adjusted to an environment of rising short-term interest rates; moreover, if such a decisive action were seen as leaving the funds rate reasonably close to policy neutrality, uncertainty about the magnitude and timing of future tightening actions might be reduced.
(12) In addition to possibly contributing to more settled market conditions, alternative $C$ might be preferred if the Committee saw significant risks of greater inflation going forward. To forestall this possibility, the Committee may wish to take prompter action
than assumed in the staff forecast. The 50 basis point increase in the funds rate under this alternative would tend to sustain the backup in real intermediate- and long-term rates, which may be seen as needed to restrain inflation pressures, especially in the context of a considerably more accommodative lending posture of intermediaries.
(13) Instead of tightening to the degree contained in alternative $C$, the Committee could firm reserve conditions by enough to raise the federal funds rate 25 basis points. Such an action would validate market expectations for the outcome of the meeting, and the effect on most interest rates would be small. This alternative might be favored if the Committee were not certain that the strength of demands in the economy and credit markets required a $1 / 2$ percentage point hike in the funds rate at this time. However, such a smaller action could leave market participants with a sense that another tightening might be forthcoming fairly soon, perhaps contributing to continued market skittishness.
(14) Under the staff economic forecast, private credit demands should remain near the firmer pace of recent months. Business borrowing is projected to edge up in keeping with expansion of capital outlays, and these borrowing needs are expected to be focused largely on the bond market, especially if market conditions become more settled and some of the recent increase in bond rates is reversed. Nonetheless, bank loans to businesses will continue to expand in response to more favorable terms on such credits and growing financing needs of those without access to open markets. Household borrowing in both mortgage and consumer credit markets is expected to remain brisk, drifting downward as growth in outlays on housing and durables stays
below the pace of late last year. Expansion of federal debt is projected to be around that of nonfederal sectors, in sharp contrast to recent years, as fiscal restraint and solid economic growth shrink the deficit. The growth rate of total debt of domestic nonfinancial sectors is expected to average 5-1/4 percent over February to June. placing this aggregate $5-1 / 2$ percent at an annual rate above its fourthquarter base, broadly in line with nominal spending, and a little below the midpoint of its monitoring range for 1994.
(15) Projections for growth of the monetary aggregates are summarized in the table below (and more detail is provided on the table and charts that follow). Under both alternatives, the broader monetary aggregates are expected to be stronger in coming months than over January and February, though still quite subdued. Growth in M1 is projected to be close to or a bit faster than the reduced pace of January and February. ${ }^{9}$
Growth from February to June
M2
M3
M1
$\frac{\text { Implied }}{\text { M2 }}$ growth from 1993:Q4 to June
M3
M1

| Alt. B | Alt. C |
| :---: | :---: |
| 2-1/2 | 2-1/4 |
| 1-1/2 | 1-1/4 |
| 6 | 5-1/4 |
| 2 | 1-3/4 |
| 1/2 | 1/4 |
| 6 | 5-3/4 |

(16) Growth in M2 would average $2-1 / 2$ percent at an annal rate over the February-to-June period under alternative $B$, up from only $3 / 4$ percent over January and February, even as growth in nominal income continues to slow. A resumption of inflows to M2 money market mutual funds, owing in part to the lessened appeal of bond funds,

[^5]Alternative Levels and Growth Rates for Key Monetary Aggregates

|  |  | M2Alternatives |  | M3Alternatives |  | M1 <br> Alternatives |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | C | B | C | B | c |
| Levels in Billions |  |  |  |  |  |  |  |
| Dec-93 |  | 3566.0 | 3566.0 | 4228.5 | 4228.5 | 1128.5 | 1128.5 |
| Jan-94 |  | 3572.8 | 3572.8 | 4232.5 | 4232.5 | 1133.6 | 1133.6 |
| Feb-94 |  | 3569.7 | 3569.7 | 4205.0 | 4205.0 | 1138.7 | 1138.7 |
| Mar-94 |  | 3583.1 | 3583.1 | 4211.0 | 4211.0 | 1142.1 | 1142.1 |
| Apr-94 |  | 3590.3 | 3588.5 | 4218.0 | 4216.8 | 1148.7 | 1147.6 |
| May-94 |  | 3593.6 | 3590.9 | 4221.5 | 4219.4 | 1155.1 | 1153.2 |
| Jun-94 |  | 3598.7 | 3595.4 | 4226.5 | 4223,5 | 1161.1 | 1158.6 |
| Monthly Growth Rates |  |  |  |  |  |  |  |
| Dec-93 |  | 2.4 | 2:4 | 3.5 | 3.5 | 6.5 | 6.5 |
| Jan-94 |  | 2.3 | 2.3 | 1.1 | 1.1 | 5.4 | 5.4 |
| Feb-94 |  | -1.0 | -1.0 | -7.8 | -7.8 | 5.4 | 5.4 |
| Mar-94 |  | 4.5 | 4.5 | 1.7 | 1.7 | 3.6 | 3.6 |
| Apr-94 |  | 2.4 | 1.8 | 2.0 | 1.7 | 7.0 | 5.8 |
| May-94 |  | 1.1 | 0.8 | 1.0 | 0.8 | 6.7 | 5.9 |
| Jun-94 |  | 1.7 | 1.5 | 1.4 | 1.2 | 6.2 | 5.6 |
| Quarterly Averages |  |  |  |  |  |  |  |
| 93 Q4 |  | 2.1 | 2.1 | 2.4 | 2.4 | 9.4 | 9.4 |
| 94 Q1 |  | 2.0 | 2.0 | 0.0 | 0.0 | 6.0 | 6.0 |
| 94 Q2 |  | 2.1 | 1.8 | 0.6 | 0.4 | 5.9 | 5.3 |
| Growth Rate |  |  |  |  |  |  |  |
| From | To |  |  |  |  |  |  |
| Sep-93 | Dec-93 | 2.3 | 2.3 | 3.0 | 3.0 | 8.5 | 8.5 |
| Dec-93 | Mar-94 | 1.9 | 1.9 | -1.7 | -1.7 | 4.8 | 4.8 |
| Feb-94 | Jun-94 | 2.4 | 2.2 | 1.5 | 1.3 | 5.9 | 5.2 |
| 92.04 | Nov-93 | 1.4 | 1.4 | 0.6 | 0.6 | 10.6 | 10.6 |
| 92 Q4 | Dec-93 | 1.5 | 1.5 | 0.8 | 0.8 | 10.3 | 10.3 |
| 93 Q4 | Jan-94 | 2.6 | 2.6 | 2.4 | 2.4 | 6.5 | 6.5 |
| 93 Q4 | Feb-94 | 1.4 | 1.4 | -1.0 | -1.0 | 6.2 | 6.2 |
| 93 Q4 | Mar-94 | 2.2 | 2.2 | -0.3 | -0.3 | 5.5 | 5.5 |
| 93 Q4 | Jun-94 | 2.0 | 1.8 | 0.4 | 0.3 | 6.1 | 5.7 |
| 90 Q4 | 91 Q4 | 2.9 | 2.9 | 1.2 | 1.2 | 7.9 | 7.9 |
| 91 Q4 | 92 Q4 | 1.9 | 1.9 | 0.5 | 0.5 | 14.3 | 14.3 |
| 92 Q4 | 93 Q4 | 1.4 | 1.4 | 0.6 | 0.6 | 10.5 | 10.5 |

## ACTUAL AND TARGETED M2



## ACTUAL AND TARGETED M3




## DEBT


provides some of the lift to M2. Nonetheless. M2 velocity would continue to rise in the second quarter under alternative $B$, but its 2-3/4 percent annual pace of expansion would be well below that of the two previous quarters. Under alternative $C$, M2 would grow at a 2-1/4 percent rate over the February-to-June period, restrained by weaker inflows to liquid components as opportunity costs widen more. Still, by June, M2 would have grown at a $1-3 / 4$ percent rate from its fourth-quarter 1993 base under alternative $C$, above the lower end of its 1994 annual range.
(17) The pickup in M2 is projected to show through to M3. Under alternative $B$, this aggregate would expand at a $1-1 / 2$ percent pace over the February-to-June period. Bank credit is forecast to grow at the moderate pace of recent months, but less should be funded through non-M3 sources. Moreover, the drag on M3 from large outflows of institution-only money market mutual funds would end and small inflows resume as money market rates decline some. Under alternative C, M3 would pick up by less, expanding at a $1-1 / 4$ percent rate over February to June, restrained by some further outflows from M3-type money market funds. By June, M3 would stand $1 / 4$ percent at an annual rate above its fourth-quarter base under alternative $C$, only a little above the lower end of its annual growth cone.

## Directive Language

(18) Presented below is draft wording for the operational paragraph that includes the usual options for Committee consideration.

## OPERATIONAL PARAGRAPH


#### Abstract

In the implementation of policy for the immediate future, the Committee seeks to increase slightly (SOMEWHAT)/maintain/ DECREASE SLIGHTLY (SOMEWHAT) the existing degree of pressure on reserve positions. In the context of the Committee's long-run objectives for price stability and sustainable economic growth. and giving careful consideration to economic, financial, and monetary developments, slightly (SOMEWHAT) greater reserve restraint MIGHT/WOULD, or slightly (SOMEWHAT) lesser reserve restraint might (WOULD) be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with moderate growth in M2 and M3 over the first half of 1994.


SELECTED INTEREST RATES
(percent)

 following the end of the statement week. Column 13 is the Bond Buyer revenue index. Column 14 is the FNMA purchase yield, plus ban servicing lee, on 30 day inandatory deivery comminems Columit is is the averatp.
 rale mortgages (ARMs) at major institutional lenders oflering both FRMs and ARMs with the same number of discount points

[^6]

Adjusted for breaks caused by rectassifications.
Debt data are on a monthly average basis, derived by averaging end-of month levels of adjacent months, and have been adjusted to remove discontinuities.
preliminary
preliminary estimate


Net of money market mutual fund holdings of these items
Includes money market deposit accounts. IRA and Keogh accounts at commercial banks and thrift institutions are subtracted from small time depasits.
Excludes IRA and Keogh accounts.
Net of large denomination time deposits held by money market mutual funds, depository institutions, U.S. government, and foreign banks and official institutions.

Millions of dollars, not seasonally adjusted


1. Change from end-of-period to end-ol-period.
2. Reflects net change in redemptions $(-)$ of Treasury and agency securties.
3. Includes change in RPs $(t)$, matched sale-purchase transactions $(-)$, and matched purchase sale transactions ( + ).
4. Outright transactions in market and with foreign accounts.
5. The levels of agency issues were as follows:
in exchange for maturing bills. Exdudes maturity shifts and rollovers of maturing issues.

| within <br> 1 year | 1.5 | $5-10$ | over 10 | total |
| :---: | ---: | ---: | ---: | ---: |
| 1.7 | 2.0 | 0.5 | 0.0 | 4.2 |


[^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. Market quotations are as of noon on Friday, March 18.
[^2]:    2. The Desk did not intervene to affect exchange rates but did sell a little over $\$ 400$ million equivalent of Swiss and Belgian francs as part of a program to liquidate System balances of all currencies other than marks and yen.
    3. Both aggregates, however, remained well within the parallel lines associated with their annual ranges.
    4. M1 again expanded at a 5-1/2 percent rate in February but is expected to slow in March, as weakness in its deposit components outweighs continued rapid growth in currency. Growth in other checkable deposits and M1 in February was again depressed on a monthaverage basis

    - Total reserves expanded at a

    3-1/2 percent rate in February, while the monetary base increased at a 13-1/4 percent pace.

[^3]:    5. The monetary aggregates had expanded rapidly in early 1991 and 1992 as a result of policy easings late in the previous years. Seasonal adjustment procedures may have inappropriately attributed that pattern of growth partly to seasonal influences. The higher resulting seasonal factors for Eebruary would have artificially depressed growth.
    6. Owing partly to declines in capital market prices, M2 plus bond and stock mutual funds is estimated to have expanded at only a $1 / 2$ percent rate in February, bringing its increase from the fourth quarter of 1993 to 4 percent.
    7. Although the deceleration in government securities appears mainly to reflect sales or reduced purchases by banks in an environment of interest-rate increases, some may be due to the direct effect of higher interest rates on bond values, as more securities are marked to market under FASB 115.
[^4]:    8. Later in the intermeeting period the borrowing allowance may need to be raised to reflect normal increases in the demand for seasonal credit.
[^5]:    9. Although total reserves are projected to grow. at only a $3 / 4$ percent pace from February to June, continued rapid growth of currency is expected to lift the growth of the monetary base to a 9 percent rate over the period.
[^6]:    p. pretiminary dala

