## Prefatory Note

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## MONETARY POLICY ALTERNATIVES

## Prepared for the Federal Open Market Committee

## MONETARY POLICY ALTERNATIVES

## Recent Developments

(1) In accordance with the Committee's decision at its May 17 meeting, the allowance for adjustment plus seasonal borrowing was raised from $\$ 400$ million to $\$ 500 \mathrm{milli}$ a about a week following the meeting. Actual borrowing averaged $\$ 530$ million in the first two maintenance periods. In the current maintenance period, with the federal funds rate running a little above expectations even as long-term debt and equity markets were rallying, the borrowing assumption was raised $\$ 50$ million, rather than allowing the provision of reserves under the previous specification to push the federal funds rate lower. This action was taken against the backdrop of a directive indicating greater readiness to tighten than to ease and of economic indicators that suggested a continuing risk of inflation pressures. Over the first eight days of the current maintenance period, adjustment plus seasonal borrowing has averaged around $\$ 490$ million. Seasonal borrowing has increased a little more than usual in recent months, and is currently running around $\$ 320$ million; overall, the relationship between the sum of seasonal and adjustment borrowing and the federal funds rate does not appear to have changed appreciably from earlier this year.
(2) Responding to the further increases in reserve pressures, the federal funds rate moved up from around 7 percent at the time of the May FOMC meeting to the $7-1 / 2$ percent area most recently. Other money market interest rates increased by around $1 / 4$ to $3 / 8$ of a percentage point over
the intermeeting period. Despite the rise in short-term rates, substantial increases in commodity prices, and evidence of stronger economies and tighter monetary policies in some key foreign industrial countries, bond yields fell about $1 / 4$ of a percentage point over the intermeeting period, and stock prices rose, with broad stock price indezes up from 4 to 8 percent. Apparently, demands for longer-term instruments were buoyed by improved prospects for the dollar and by signs of some moderation in the economic expansion towards a more sustainable pace, together with perceptions that U.S. monetary policy was being tightened in a timely manner.
(3) The dollar rose about 5-1/4 percent on a weighted average basis over the intermeeting period, with $3-1 / 4$ percent of that occurring in the last few days. It moved higher in response to the better-than-expected U.S. trade figures both for March, released on the day of the last FOMC meeting, and for April, released in mid-June. These data apparently led market participants to revise their expectations about the pace of U.S. external adjustment. Indications of a tighter Federal Reserve stance also contributed to the dollar's firmness over the period, helping to offset the effects of monetary tightening in a number of foreign countries, including Germany, Canada, and the United Kingdom. The firming trend has gathered momentum in recent days, as convictions about a brighter outlook for the dollar seem to have become more firmly entrenched.

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

| April May | June peMarch <br> to pe <br> June | QIV '87 <br> to pe <br> June |
| :--- | :--- | :--- | :--- | :--- |

## Money and credit aggregates

| M1 | 11.2 | -.2 | 7.0 | 6.0 | 4.9 |
| :--- | ---: | :---: | :---: | :---: | :---: |
| M2 | 9.9 | 4.7 | 5.9 | 6.9 | 7.2 |
| M3 | 7.1 | 4.2 | 6.9 | 6.1 | 7.0 |
| Domestic nonfinancial <br> debt | 8.4 | 8.1 | -- | $8.2^{1}$ | $8.5^{2}$ |
| Bank credit | 11.4 | 13.0 | -- | $12.2^{1}$ | $8.1^{2}$ |

Reserve measures ${ }^{3}$
Nonborrowed reserves ${ }^{4}$
Total reserves

Monetary base
10.
12.3
$-.2$
. 3
4.2
3.8
11.4
5.1
5.8
7.4
7.7

Memo: (Millions of dollars)
Adjustment plus seasonal
borrowing
pe--preliminary estimate based on partial data through June 20.

1. March to May.
2. 1987:Q4 to May.
3. Reserve estimates incorporate assumptions of $\$ 550$ million of adjustment plus seasonal borrowing and $\$ 950$ million of excess reserves during the second half of June.
4. Includes "other extended credit" from the Federal Reserve.

NOTES: 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.
(4) Expansion of the monetary aggregates slowed substantially in May, mainly reflecting the runoff of tax-related balances. Based on partial data through June 20, growth of the aggregates appears to have rebounded in June. Still, expansion of M2 at 6 percent in June is slower than earlier in the year, as demands are evidently being restrained somewhat by the rise in opportunity costs that has resulted from the increase in short-term market interest rates. M2 is estimated to have increased at a 7 percent rate over the March-to-June period, in line with the Committee's specification of 6 to 7 percent for the broader aggregates. Growth of M3 over the March-to-June period is estimated at 6 percent. The moderate growth of this aggregate in the face of fairly rapid expansion of bank credit reflected heavier reliance on nondeposit sources--especially borrowings from foreign branches--to fund credit growth.
(5) Ml was about unchanged in May following its April bulge, but its growth appears to have snapped back to around a 7 percent rate in June. OCDs, along with other liquid deposits, have remained surprisingly strong given a steeper deposit yield curve, perhaps reflecting uncertainty about the future course of interest rates; in addition, demand deposits have rebounded following a decline in May. In June, M1 is estimated to be 5 percent at an annual rate above its fourth-quarter level. Growth in required reserves has generally tracked expansion of M1. Expansion in total reserves from March to June at about a 4-1/4 percent annual rate was held down to an extent by declining excess reserves. The monetary base
increased at a 7-1/2 percent rate over that period, about a percentage point slower than over the first three months of the year, as both currency and reserves grew less rapidly.
(6) M2 and M3 are estimated to have expanded at $7-1 / 4$ and 7 percent annual rates, respectively, from their fourth-quarter bases through June, leaving these aggregates in the upper halves of their annual ranges. Expansion of M2 has been supported this year by fairly strong growth of income. The pickup in this aggregate relative to its growth over 1987 stems in part from the turnaround in market interest rates and opportunity costs from October through February. In addition, special factors may have accounted for some of the relatively rapid M2 growth, at least judging by the overshoot of money growth relative to the money demand models. M2 holders apparently found equity investments less attractive in the aftermath of the stock market collapse--as evidenced by very weak sales of mutual funds--and also lower incentives to shift savings to IRAs before the April tax date depressed flows into these accounts. With respect to M3, while credit at banks and thrifts expanded over the first half of 1988 at about the same pace as last year, it was financed to a greater extent by liabilities included in the aggregates. In particular, inflows to banks from their foreign branches dropped off sharply compared with 1987.
(7) Overall, domestic nonfinancial sector debt expanded at an $8-1 / 2$ percent annual rate from the fourth quarter through May, leaving this measure just below the middle of its annual range. In recent months, business credit demands appear to have picked up appreciably, reflecting continuing strong equity retirements, as well as a large shortfall of
internal funds relative to capital spending. In addition to rapid business loan expansion, which appears to have extended into June, corporate bond issuance has strengthened since the drop in bond yields. Household borrowing is estimated to have been maintained at about the first quarter pace, a shade below that of 1987. Borrowing by the federal government was light over most of the second quarter, but the Treasury has increased the gross sizes of coupon issues in mid-June in order to begin funding a much higher third quarter deficit.

## Long-run Ranges

(8) For 1988, the aggregates are expected to grow well within their existing ranges. Under the staff greenbook forecast, M2 and M3 would be around the midpoint and in the upper portion of their 4 to 8 percent ranges, respectively, and debt in the middle of its 7 to 11 percent range. In that forecast, the growth of M2 is projected to slow substantially in the second half of the year from its pace of $7-1 / 4$ percent through June. This moderation primarily results from the effects of higher interest rates and opportunity costs on money demand. Opportunity costs have already risen in recent months and this increase is expected to be augmented under the staff forecast by a further upward movement in market interest rates. As a consequence, velocity is expected to increase at about a 1 percent annual rate over the second half of the year after falling at almost that rate in the first half. (Actual and projected velocities of the aggregates are illustrated in the charts on the following pages.) With nominal GNP projected to expand at a 6-1/2 percent annual rate in the second half of the year, M2 growth would be around 5 percent over this period, bringing growth for the year down close to 6 percent. Were this rate of expansion of the economy to be achieved without further increases in rates, growth in $M 2$ for the year would probably be only about 1/4 percentage point higher.
(9) With respect to $M 3$ and debt, the staff is projecting about the same growth in the second half of the year as in the first. For M3 this implies expansion of $7-1 / 4$ percent in 1988 , in the upper half of its range, and for debt $8-1 / 2$ percent, just below the midpoint of its monitoring range. Although equity retirements are projected to slow in the

## Actual and Projected Velocity of M2 and M3



## Actual and Projected Velocity of M1 and Debt



DOMESTIC NONFINANCIAL DEBT VELOCITY

second half of the year, debt growth is still expected to exceed the pace of GNP by 2 percentage points as a widening corporate financing gap boosts credit market borrowing. The share of bank and thrift credit in this total is not expected to change much in the second half of the year from the first. Rising long-term interest rates will continue to encourage borrowers to finance through short-term or floating-rate obligations-including ARM mortgages and business loans--which typically are held by depository institutions. Given the slowing of core deposits, banks and thrifts will have to rely more on managed liabilities, including those in M3. These expectations for M2 and M3 presume that the problems of individual distressed depository institutions do not spread in such a way as to disrupt the overall availability and terms of credit at depository institutions and their access to regular sources of funds.
(10) For 1989, the table below gives three possible alternatives for tentative long-run ranges for growth in M2, M3, and nonfinancial debt from the fourth quarter of 1988 to the fourth quarter of 1989. Alternative I would carry over the specifications of the current ranges. Alternative II would lower the ranges by $1 / 2$ percentage point, while alternative III would reduce the M2 range by another $1 / 2$ percentage point, given that any additional monetary restraint would have a greater impact on growth of this aggregate than on the other two. All the suggested alternatives would retain for 1989 the wider 4 point range adopted for 1988 at the February meeting. The aggregates are not likely to be any less interest sensitive next year or their demand properties known with any greater confidence than they were thought to be last February. An unusual degree
of uncertainty about the economic outlook in February also was an important element in the decision to widen the ranges; judgement as to whether the prospects for 1989 were clearer, thus permitting narrower ranges, might be easier to make next February.

## Alternative 1989 Ranges

## Alt. I

(Current Ranges)

| M2 | 4 to 8 | $3-1 / 2$ to $7-1 / 2$ | 3 to 7 |
| :--- | :--- | :--- | :--- |
| M3 | 4 to 8 | $3-1 / 2$ to $7-1 / 2$ | $3-1 / 2$ to $7-1 / 2$ |
| Debt | 7 to 11 | $6-1 / 2$ to $10-1 / 2$ | $6-1 / 2$ to $10-1 / 2$ |

(11) The monetary policy restraint embodied in the greenbook forecast is likely to involve a significant slowing of money growth next year. In this forecast, given the underlying strength in demands on the economy, a rise in interest rates of more than a percentage point from the middle of 1988 to the middle of 1989 may be required to contain nominal income growth to 6 percent next year. This combination of rising interest rates and resulting moderate income growth is expected to be consistent with M2 growth of 4 percent, or perhaps even a little lower. ${ }^{1}$ The implied increase in velocity would be 2 percent or so, as shown in the chart following page 7.
(12) M3 growth also is projected to slow in 1989 under the staff forecast, though, at $5-1 / 2$ percent, to remain well above that of $M 2$.

1. The staff's econometric models of money demand suggest that M2 growth on the order of 3 to 4 percent would be consistent with the combination of interest rates and income in the staff forecast.

Velocity of M3 would be about unchanged (see chart). The decline in M3 growth would accompany an overall slowing in the growth of nonfinancial debt to a little over 8 percent. The moderation in debt growth is prompted by slower expansion of demand by domestic borrowers, and a dropoff in equity retirement as interest rates rise. Of the debt growth projected, the proportion that is intermediated may decline a little, producing a greater deceleration in M3 than in debt. With long-term interest rates projected to level off next year, borrowers may find bonds and fixed-rate mortgages more attractive. In addition, banks and thrifts will continue under pressure from capital requirements, prompting further efforts to repackage and sell assets. However, our projections of M3 do not allow for a major shift of bank activities--such as government securities trading--and associated funding to nonbank subsidiaries of holding companies as a result of court, Congressional, or Federal Reserve regulatory actions.
(13) Of the long-run ranges, alternative III would be most appropriate if the risks were seen to be on the side of demands outpacing productive capacity, threatening progress toward price stability. This is the assessment implicit in the staff GNP forecast, and the degree of monetary restraint needed in that forecast to damp domestic demand and check inflationary pressures would seem to require some reduction in the lower bound of the M2 range. Even with the one-point decrease under this alternative, $M 2$ would be expected to be in the lower half of its range given the staff forecast. M3 and debt would be in the middle of their alternative III ranges. The upper bounds of the reduced ranges of this alternative allow some scope for less restraint and lower interest rates
if the economy turns out to be weaker than anticipated, but relative to the other ranges would provide for fairly prompt resistance to unexpected strength in the economy. On balance, the alternative III ranges would seem to imply an intention that nominal income decelerate in 1989, thus underscoring a commitment of policy to work toward gradually slowing inflation rates in 1989 and beyond.
(14) The larger reduction in the $M 2$ range than in the $M 3$ and debt ranges under alternative III recognizes the greater interest sensitivity of M2, and hence the need to have it decelerate more markedly should substantial restraint be appropriate. A higher range for M3 than M2 also is consistent with a tendency for more rapid growth of the broader aggregate over time--a tendency that frequently has been reflected in higher FOMC ranges for M3 than for M2. (A history of long-run ranges-and outcomes as they appeared at the time the results were reported to Congress-is given in first table following the directive.) Alternative II would reduce the $M 2$ range by only $1 / 2$ percentage point, thereby retaining the current equality of M2 and M3 ranges. Alternative II further reduces the ranges toward those more consistent with price stability, and it allows for restraint on demand should that be needed. But there is some greater risk than under alternative III that, should demands on the economy prove strong, the lower end of the $M 2$ range would not be consistent with the degree of restraint the Committee might want to consider.
(15) Alternative $I$ would be more appropriate if the risks to the economy and inflation were seen as more balanced than underlying the staff forecast. This might involve a judgment that there was a good chance that the policy tightening that has already occurred along with developing
cyclical forces, such as the unsustainable pace of inventory accumulation, were already pointing to growth in income at an acceptable pace next year, without further monetary restraint. In these circumstances, M2 would be expected to grow more in line with nominal GNP as the damping effects of recent rate increases subside. On balance, M2 growth of around 5-1/2 percent in 1989 might be associated with nominal GNP growth on the order of that in the staff forecast with no further change in interest rates. This alternative would allow for even faster M2 growth and an appreciable pickup from 1988 should an easier policy be needed to support the economy. Such an outcome might be associated, for example, with a tighter fiscal policy than markets now anticipate, resulting from credible actions this fall to meet Gramm-Rudman targets or a major new initiative on the budget deficit early in 1989. This alternative might also be preferred if the Committee saw a higher path for income as desirable. More rapid GNP expansion might be needed to keep unemployment from rising from current levels, and would be consistent with no uptick in underlying inflation rates if current labor market conditions were seen as consistent with an absence of feed-through into wages of price level adjustments associated with imports or farm commodities.

## Short-run Policy Alternatives

(16) The policy alternatives presented below include the current degree of pressure on reserve positions along with somewhat greater and slightly lesser restraint. Alternative $B$ would continue to specify adjustment plus seasonal borrowing at the discount window of $\$ 550$ million. Alternative $C$ would specify a borrowing level of $\$ 750$ million. Under alternative $A$, borrowing is assumed to decline only $\$ 100 \mathrm{million}$, to $\$ 450$ million, reversing the most recent increase and part of the tightening early in the period. Federal funds are expected to trade in a range around $7-1 / 2$ percent or a little below under alternative $B$ and would move up toward the 8 percent area under alternative $C$ and down to $7-1 / 4$ percent or a bit below under alternative $A$.
(17) The table below gives June-to-September growth of the monetary aggregates anticipated under the three alternatives. ${ }^{2}$ Under all the alternatives, M1 and M2 would slow somewhat from their pace over the first half of the year as the recent rise in opportunity costs takes hold. However, M2 and M3 would remain in the upper halves of their annual ranges through September. (More detailed data are shown on the table and charts on the following pages.)
2. Growth rates presented in the table are measured from a June base. Estimates of the monetary aggregates for June are a little less certain than is typical at the mid-year Committee meeting owing to the earlier time of the meeting this year.
Alt. A Alt, B Alt, C

Growth from June to September

| M2 | $6-1 / 4$ | $5-1 / 2$ | 4 |
| :--- | :--- | :--- | :--- |
| M3 | $7-1 / 4$ | 7 | $6-1 / 2$ |
| M1 | $4-1 / 2$ | $3-1 / 2$ | $1-1 / 2$ |
|  |  |  |  |
| sociated federal |  |  |  |
| funds rate range | 5 to 9 | 5 to 9 | 6 to 10 |

(18) Market rates appear to have incorporated the recent firming of policy, which would be retained under alternative $B$, and most rates should remain near current levels over the near term. However, the prime rate may be raised in response to recent increases in funding costs. And, the Treasury bill rate could move up toward $6-3 / 4$ percent, a more typical alignment with the funds rate, as the Treasury resumes net issuance of bills to cover larger financing needs. Over time, yields on long-term bonds and mortgages could retrace some of their recent declines should incoming data fail to show any significant easing of price pressures. A back-up in yields would be reinforced if the dollar came under some downward pressure, for example, because incoming data suggested a less rapid pace of reduction in external imbalances.
(19) Under alternative $B$, the widening of opportunity costs over the spring would continue to exert a restraining influence on $M 2$ and $M 1$ in the months ahead. Growth in $M 2$ would be expected to average 5-1/2 percent over the June-to-September period. Growth of the more liquid components should be most subdued, reflecting very sluggish adjustment of their offering rates, while small time deposits, whose rates adjust rather promptly, would

Alternative Levels and Growth Rates for Key Monetary Aggregates


## ACTUAL AND TARGETED M2



Chart 2

## ACTUAL AND TARGETED M3




Chart 4

## DEBT


strengthen a bit following their recent lull. In reflection of this pattern, M1 would slow to only a $3-1 / 2$ percent pace under this alternative.
(20) M3, under alternative $B$, is expected to pick up a little over June to September from the pace of recent months as outflows from money funds abate with the stable interest rates assumed under this alternative. Credit demands on banks and thrifts and their issuance of managed liabilities should remain strong. Corporate merger activity is projected to decline appreciably, but business credit demands are expected to slow only a bit, remaining focused on bank loans and short-term paper, as external financing needs rise further. Household borrowing should remain moderate, but Treasury financing will strengthen in the coming months along with the deficit, leading to a pickup in federal debt growth. Total nonfinancial debt is expected to expand at around an 8 percent annual rate over the June-to-September period, about in line with that of the second quarter, placing this aggregate $8-1 / 2$ percent above its fourth-quarter 1987 base.
(21) The market does not appear to be anticipating an immediate further monetary tightening as contemplated in alternative $C$. Thus, the half-point increase in the funds rate under this alternative would prompt other private short-term rates to move up by a similar amount. In view of still higher funding costs, a boost in the prime rate of at least 1/2 percentage point would seem much more likely. The Treasury bill rate would rise to 7 percent or above. Such a firming in policy, at a time of market concern about resource constraints and inflationary pressures, would tend to assuage some inflation worries and any rise in bond rates could be quite small. Recent
firmness of the dollar could be sustained for a time unless foreign authorities took this opportunity to tighten their policies substantially.
(22) The boost in opportunity costs under alternative $C$ would reduce monetary growth substantially below the pace of recent months. M2 would slow to 4 percent over the June-to-September period, with inflows to its liquid components being most affected. M1 would edge up at a $1-1 / 2$ percent annual rate as demand deposits declined and inflows to OCDs slowed to a trickle. By September, M2 would be only a little above the midpoint of its annual range and $M 1$ would be $3-3 / 4$ percent at an annual rate above its fourth-quarter level. Credit demands on banks and thrifts would be damped only a bit and these institutions would respond to smaller inflows to core deposits by stepping up their issuance of managed liabilities. M3 should grow at a 6-1/2 percent rate from June to September under this alternative and drift down only slightly within its annual range.
(23) The reversal of part of the recent tightening, as envisioned under alternative $A$, would result in some edging down of short-term rates, especially on private securities, perhaps heading off any increase in the prime rate. The dollar probably would reverse some of its recent strength. The extent and persistence of any downward movement in the dollar and the effect of an easing in policy on bond yields would depend partly on whether such an action raised questions about the Federal Reserve's policy intentions. M2 would slow relatively little under these conditions, leaving this aggregate on a trajectory that would tend to keep it noticeably above the midpoint of its annual range, while $M 3$ would move up in its range.

## Directive language

(24) Presented below for Committee consideration is draft directive language relating to the ranges for 1988 and for 1989, and to the operating paragraph for the intermeeting period.

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability over time, promote growth in output on a sustainable basis, and contribute to an improved pattern of international transactions. In furtherance of these objectives, the Committee REAFFIRMED at its THIS meeting THE RANGES IT HAD in February established IN FEBRUARY FOR growth ranges of 4 to 8 percent for both M2 and M3, measured from the fourth quarter of 1987 to the fourth quarter of 1988. [IN FURTHERANCE OF THESE OBJECTIVES, THE COMMITTEE AT THIS MEETING RAISED/LOWERED THE RANGES IT HAD ESTABLISHED IN FEBRUARY FOR GROWTH OF M2 AND M3 TO RATES OF __ PERCENT, MEASURED FROM THE FOURTH QUARTER OF 1987 TO THE FOURTH QUARTER OF 1988.] The monitoring range for growth in total domestic nonfinancial debt was ALSO MAINTAINED set at 7 to 11 percent (CHANGED TO _ TO _ PERCENT) for the year.

FOR 1989, THE COMMITTEE AGREED ON TENTATIVE RANGES
FOR MONETARY GROWTH, MEASURED FROM THE FOURTH QUARTER OF 1988 TO THE FOURTH QUARTER OF 1989, OF _ TO _ PERCENT

FOR M2 AND _ TO _ PERCENT FOR M3. THE COMMITTEE PROVISIONALLY SET THE ASSOCIATED MONITORING RANGE FOR GROWTH IN TOTAL DOMESTIC NONFINANCIAL DEBT AT _ TO PERCENT.

With respect to M1, the Committee REAFFIRMED ITS DECISION deeteded in February not to establish a specific target for 1988 AND ALSO DECIDED NOT TO SET A TENTATIVE RANGE FOR 1989. The behavior of this aggregate in relation to economic activity and prices has beeome very sensittive to changes in interest ratesp among other factorst as evideneed by sharp swings in its vetoeity in reeent years. -Eonsequentyy the appropriateness of ehanges in Ma this year will continue to be evaluated in the light of the behavior of its velocity, developments in the economy and financial markets, and the nature of emerging price pressures.

OPERATIONAL PARAGRAPH

In the initiat implementation of policy FOR THE IMMEDIATE FUTURE, the Committee seeks to DECREASE SLIGHTLY (Alt. A)/maintain (Alt. B)/INCREASE SOMEWHAT (SLIGHTLY) (Alt. C) the existing degree of pressure on reserve positions. Taking account of conditions in financial markets, the strength of the business expan-
sion, indications of inflationary pressures, develop-
ments in foreign exchange markets, and the behavior of
the monetary aggregates, the Eommittee expeets that a
stight-inerease in the degree of pressure on reserve
positions woutd be appropriate in the weeks ahead-
Bepending on further devełopments in these faetorst
somewhat (SLIGHTLY) greater reserve restraint would
(MIGHT) or (SOMEWHAT) slightly lesser reserve restraint
(WOULD) might ałso be acceptable $\ddagger$ ater in the intermeet-
ing period. The contemplated reserve conditions are
expected to be consistent with growth in M2 and M3 over
the period from Mareh through June THROUGH SEPTEMBER at
annual rates of about _ AND _ 6 te 7 percent, RESPEC-
TIVELY. The Chairman may call for Committee consul-
tation if it appears to the Manager for Domestic Opera-
tions 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

- 5 to 9 percent.

ADOPTED LONGER-RUN GRONTH RATE RANGES FOR THE MONETARY AND CREDIT AGGREGATES
(percent annual rates; numbers in parentheses are actual growth rates as reported at end of policy period in February Monetary Policy Report to Congress)

n.s--not specified.

1. Targets are for bank credit until 1983; from 1983 onward targets are for domestic nonfinancial sector debt.
2. At the February 1979 meeting the FOMC adopted a QIV' 78 to QIV' 79 range for M1 of 1$1 / 2$ to $4-1 / 2$ percent. This range anticipated that shifting to ATS and NOW accounts in New York State would slow M1 growth by 3 percentage points. At the October meeting it was noted that ATS/NOW shifts would reduce M1 by no more than 1-1/2 percentage points. Thus, the longer-run range for M1 was modified to $3-6$ percent.
3. Adopted on a preliminary basis at the July 1979 meeting. In February 1980, the monetary aggregates on which these targets were based were redefined and new target ranges adopted.
4. The figures shown reflect targeted and actual growth of M1-B in 1980 and shiftadjusted M1-B in 1981. M1-B was relabeled M1 in Janauary 1982. The targeted growth for M1-A was $3-1 / 2$ to 6 percent in 1980 (actual growth was 5.0 percent); in 1981 targeted growth for shift-adjusted M1-A was 3 to $5-1 / 2$ percent (actual growth was 1.3 percent).
5. When these ranges were set, shifts into other checkable deposits in 1980 were expected to have only a limited effect on growth of M1-A and M1-B. As the year progressed, however, banks offered other checkable deposits more actively, and more funds than expected were directed to these accounts. Such shifts are estimated to have decreased M1-A growth and increased M1-B growth each by at least $1 / 2$ percentage point more than had been anticipated.
6. Adjusted for the effects of shifts out of demand deposits and savings deposits into other checkable deposits. At the February FOMC meeting, the target ranges for observed M1-A and M1-B in 1981 on an unadjusted basis, expected to be consistent with the adjusted ranges, were $-4-1 / 2$ to -2 and 6 to $8-1 / 2$ percent, respectively. Actual M1-B growth (not shift adjusted) was 5.0 percent.
7. Adjusted for shifts of assets from domestic banking offices to International Banking Facilities.
8. Range for bank credit is annualized growth from the December 1981-January 1982 average level through the fourth quarter of 1982.
9. Base period, adopted at the July 1983 FOMC meeting, is QII'83. At the February 1983 meeting, the FOMC had adopted a QIV' 82 to QIV' 83 target range for M1 of 4 to 8 percent.
10. Base period is the February-March 1983 average.
11. Base period, adopted at the July 1985 FOMC meeting, is QII'85. At the February 1985 meeting the FOMC had adopted a QIV' 84 to QIV' 85 target range for M1 of 4 to 7 percent.
12. Actual reported rates in the February 1987 Monetary Policy Report to Congress. 13. No range for M1 was specified at the February FOMC meeting because of uncertainties about its underlying relationship to the behavior of the economy and its sensitivity to economic and financial circumstances.

SELECTED INTEREST RATES
(percent)

|  | $\qquad$ |  |  |  |  |  |  |  | -U.S. Gov't. constant $\qquad$ <br> maturity yields |  |  | corp. A <br> utility <br> rec off | muni. <br> Bond Buyer | $\qquad$ conventional home mortgages |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | federal funds | $\stackrel{3}{\text { month }}$ | $\stackrel{6}{\text { month }}$ | $\begin{gathered} 12 \\ \text { month } \end{gathered}$ | $\begin{gathered} \text { cds } \\ \text { sec mikt } \\ 3 \text {-mon'th } \end{gathered}$ | $\begin{aligned} & \text { comm. } \\ & \text { paper } \\ & \text { 1-month } \end{aligned}$ | market mutual fund | bank prime loan | 3-year | 10-year | 30-year |  |  | fixedrate | fixedrate | ARM |
| 87--High | 7.62 | 6.84 | 7.36 | 7.64 | 8.49 | 8.12 | 6.70 | 9.25 | 9.29 | 9.96 | 9.97 | 11.50 | 9.59 | 11.98 | 11.58 | 8.45 |
| Low | 5.95 | 5.24 | 5.36 | 5.40 | 5.83 | 5.88 | 5.28 | 7.50 | 6.37 | 7.03 | 7.34 | 8.79 | 6.92 | 8.97 | 9.03 | 7.47 |
| 88--High | 7.54 | 6.44 | 6.82 | 7.11 | 7.53 | 7.41 | 6.79 | 9.00 | 8.41 | 9.21 | 9.33 | 10.73 | 8.34 | 10.86 | 10.58 | 7.90 |
| Low | 6.38 | 5.61 | 5.81 | 6.15 | 6.58 | 6.50 | 6.03 | 8.50 | 7.33 | 8.16 | 8.40 | 9.63 | 7.76 | 9.98 | 9.84 | 7.49 |
| Monthly |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| JUN 87 | 6.73 | 5.67 | 5.99 | 6.35 | 6.94 | 6.86 | 6.01 | 8.25 | 7.82 | 8.40 | 8.57 | 10.05 | 8.13 | 10.38 | 10.54 | 7.93 |
| JUL 87 | 6.58 | 5.69 | 5.76 | 6.24 | 6.70 | 6.57 | 6.02 | 8.25 | 7.74 | 8.45 | 8.64 | 10.17 | 8.09 | 10.20 | 10.28 | 7.81 |
| AUG 87 | 6.73 | 6.04 | 6.15 | 6.54 | 6.75 | 6.62 | 6.00 | 8.25 | 8.03 | 8.76 | 8.97 | 10.37 | 8.11 | 10.39 | 10.33 | 7.76 |
| SEP 87 | 7.22 | 6.40 | 6.64 | 7.11 | 7.37 | 7.26 | 6.22 | 8.70 | 8.67 | 9.42 | 9.59 | 10.84 | 8.61 | 11.01 | 10.89 | 7.95 |
| OCT 87 | 7.29 | 6.13 | 6.69 | 7.05 | 8.02 | 7.38 | 6.57 | 9.07 | 8.75 | 9.52 | 9.61 | 11.07 | 9.06 | 11.42 | 11.26 | 8.25 |
| NOV 87 | 6.69 | 5.69 | 6.19 | 6.50 | 7.24 | 6.77 | 6.45 | 8.78 | 7.99 | 8.86 | 8.95 | 10.39 | 8.39 | 10.73 | 10.65 | 8.00 |
| DEC 87 | 6.77 | 5.77 | 6.36 | 6.69 | 7.66 | 7.76 | 6.57 | 8.75 | 8.13 | 8.99 | 9.12 | 10.42 | 8.43 | 10.82 | 10.65 | 7.96 |
| JAN 88 | 6.83 | 5.81 | 6.25 | 6.52 | 6.92 | 6.76 | 6.57 | 8.75 | 7.87 | 8.67 | 8.83 | 10.05 | 8.11 | 10.43 | 10.43 | 7.85 |
| FEB 88 | 6.58 | 5.66 | 5.93 | 6.21 | 6.60 | 6.55 | 6.22 | 8.51 | 7.38 | 8.21 | 8.43 | 9.75 | 7.83 | 10.02 | 9.89 | 7.61 |
| MAR 88 | 6.58 | 5.70 | 5.91 | 6.28 | 6.63 | 6.57 | 6.04 | 8.50 | 7.50 | 8.37 | 8.63 | 9.91 | 8.08 | 10.12 | 9.93 | 7.52 |
| APR 88 | 6.87 | 5.91 | 6.21 | 6.56 | 6.92 | 6.80 | 6.09 | 8.50 | 7.83 | 8.72 | 8.95 | 10.23 | 8.22 | 10.44 | 10.20 | 7.58 |
| MAY 88 | 7.09 | 6.26 | 6.56 | 6.90 | 7.24 | 7.07 | 6.20 | 8.84 | 8.24 | 9.09 | 9.23 | 10.61 | 8.30 | 10.73 | 10.46 | 7.71 |
| Weakly |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MAR 288 | 6.60 | 5.61 | 5.81 | 6.19 | 6.58 | 6.54 | 6.10 | 8.50 | 7.33 | 8.17 | 8.41 | 9.78 | 7.80 | 10.08 | 9.85 | 7.53 |
| MAR 988 | 6.51 | 5.70 | 5.90 | 6.26 | 6.61 | 6.53 | 6.04 | 8.50 | 7.42 | 8.27 | 8.52 | 9.83 | 8.02 | 10.11 | 9.96 | 7.53 |
| MAR 1688 | 6.61 | 5.68 | 5.82 | 6.25 | 6.62 | 6.56 | 6.05 | 8.50 | 7.44 | 8.32 | 8.58 | 9.98 | 8.09 | 10.06 | 9.92 | 7.49 |
| MAR 2388 | 6.51 | 5.72 | 5.88 | 6.28 | 6.62 | 6.56 | 6.03 | 8.50 | 7.52 | 8.42 | 8.70 | 10.01 | 8.27 | 10.22 | 9.99 | 7.52 |
| MAR 3088 | 6.62 | 5.74 | 6.03 | 6.36 | 6.66 | 6.61 | 6.03 | 8.50 | 7.65 | 8.54 | 8.79 | 10.09 | 8.23 | 10.36 | 10.05 | 7.53 |
| APR 688 | 6.82 | 5.90 | 6.16 | 6.51 | 6.78 | 6.69 | 6.04 | 8.50 | 7.78 | 8.63 | 8.87 | 10.02 | 8.15 | 10.36 | 20.19 | 7.56 |
| APR 1388 | 6.81 | 5.98 | 6.16 | 6.50 | 6.85 | 6.76 | 6.09 | 8.50 | 7.71 | 8.57 | 8.79 | 10.26 | 8.21 | 10.45 | 10.19 | 7.59 |
| APR 2088 | 6.93 | 5.82 | 6.18 | 6.56 | 6.97 | 6.82 | 6.09 | 8.50 | 7.86 | 8.77 | 9.01 | 10.37 | 8.27 | 10.49 | 10.30 | 7.61 |
| APR 2788 | 6.85 | 5.86 | 6.24 | 6.57 | 6.99 | 6.84 | 6.14 | 8.50 | 7.88 | 8.80 | 9.04 | 10.46 | 8.25 | 10.55 | 10.28 | 7.60 |
| MAY 488 | 6.82 | 6.06 | 6.39 | 6.70 | 7.05 | 6.89 | 6.13 | 8.50 | 8.00 | 8.89 | 9.13 | 10.56 | 8.27 | 10.68 | 10.32 | 7.63 |
| MAY 1188 | 7.02 | 6.28 | 6.48 | 6.83 | 7.17 | 6.98 | 6.14 | 8.57 | 8.17 | 9.02 | 9.18 | 10.51 | 8.26 | 10.58 | 10.40 | 7.66 |
| MAY 1888 | 7.04 | 6.22 | 6.48 | 6.85 | 7.24 | 7.08 | 6.27 | 9.00 | 8.20 | 9.07 | 9.19 | 10.73 | 8.34 | 10.79 | 10.52 | 7.79 |
| MAY 2588 | 7.14 | 6.26 | 6.65 | 7.00 | 7.28 | 7.08 | 6.28 | 9.00 | 8.34 | 9.21 | 9.33 | 10.70 | 8.32 | 10.86 | 10.58 | 7.77 |
| JUN 188 | 7.41 | 6.44 | 6.82 | 7.11 | 7.47 | 7.34 | 6.37 | 9.00 | 8.41 | 9.17 | 9.27 | 10.43 | 8.21 | 10.73 | 10.58 | 7.90 |
| JUN 888 | 7.37 | 6.44 | 6.71 | 7.01 | 7.46 | 7.36 | 6.41 | 9.00 | 8.25 | 8.99 | 9.09 | 10.46 | 8.15 | 10.57 | 10.51 | 7.88 |
| JUN 1588 | 7.43 | 6.40 | 6.61 | 6.89 | 7.43 | 7.34 | 6.50 | 9.00 | 8.11 | 8.84 | 8.95 | 10.47 | 8.10 | 10.65 | 10.35 | 7.79 |
| JUN 2288 | 7.54 | 6.42 | 6.74 | 7.02 | 7.53 | 7.41 | 6.56 | 9.00 | 8.27 | 8.97 | 9.05 | 10.36 | 8.10 | 10.53 | 10.40 | 7.83 |
| Daily |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| JUN 1788 | 7.54 | 6.37 | 6.70 | 7.03 | 7.50 | 7.38 | . | 9.00 | 8.30 | 9.02 | 9.12 | . | $\ldots$ |  | . | . |
| JUN 2388 | 7.55 | 6.52 | 6.76 | 6.99 | 7.53 | 7.41 | . | 9.00 | 8.22 | 8.88 | 8.90 | $\cdots$ | . | . | . | . |
| JUN 2488 | 7.58p | 6.51 | 6.75 | 6.98 | 7.53 | 7.44 | . | 9.00 | 8.21p | 8.84p | 8.87p | . | - |  |  |  |




 commitments for 1 -year, adjustable-rate mortgages (ARMs) at S\&Ls offering both FRMs and ARMs with the same number of discount points.

JUAE 27. 1988

| Period | Money stock measures and liquid assets |  |  |  |  |  | Bank credit | Domestic nonfinancial debt ${ }^{2}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M1 | M2 | nontransactions components |  | M3 | L | $\begin{aligned} & \text { Iotal loans } \\ & \text { and } \\ & \text { investments' }^{\prime} \end{aligned}$ | $\begin{gathered} \text { U.S. } \\ \text { government }{ }^{2} \end{gathered}$ | other ${ }^{2}$ | total ${ }^{2}$ |
|  |  |  | in M2 | in M3 only |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| PBRCEMT ANMOAL GRORTE: <br> Allionlly (UIY TO UIV) |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1985 | 12.0 | 8. 9 | 7.9 | 3.4 | 7.7 | 8.5 8.3 | 10.2 9.9 | 15.2 | 12.7 12.8 | 13.3 |
| 1986 | 15.6 | 9.4 | 7.4 | 8.1 | 9.1 | 8. 3 | 9.9 | 14.7 | 12.8 | 13.3 |
| 1987 | 6.2 | 4.0 | 3.3 | 10.8 | 5.4 | 5.2 | 7.8 | 9.0 | 9.8 | 9.6 |
| quarterli average |  |  |  |  |  |  |  |  |  |  |
| 2HD UTH. 1987 | 6.6 | 2.7 | 1.3 | 12.7 | 4.6 | 4.1 | 8.2 | 8.9 | 8.5 | 8.6 |
| 3RD QTA. 1987 | 0.8 | 2.8 | 3.6 | 11.0 | 4.5 | 4.3 | 6.2 | 5.8 | 8.5 | 7.9 |
| 4 TH QTA. 1987 | 3.9 | 3.9 | 3.9 | 11.3 | 5.4 | 5.8 | 5.5 | 7.6 | 10.8 | 10.1 |
| IST QTA. 1988 | 3.9 | b. 7 | 7.7 | 7.9 | 7.0 | 6.9 | 5.1 | 9.3 | 8.2 | 8.4 |
| H0NT ${ }^{\text {che }}$ |  |  |  |  |  |  |  |  |  |  |
| 1987--Mat | 2.9 | 0.7 | 0.0 | 21.7 | 4.9 | 8.0 | 7.8 | 8.2 | 10.5 | 10.0 |
| JUME | -7.1 | 1.1 | 3.9 | 22.1 | 5.3 | 4.2 | 6.3 | 7.4 | 9.2 | 8.8 |
| JULY | 2.4 | 2.7 | 2.8 | 1.8 | 2.5 | 0.8 | 2.5 | 1.8 | 7.7 | 6.3 |
| 10G. | 4.7 | 4.7 | 4.9 | 10.7 | 6.0 | 6.4 | 9.7 | 8.7 | 7.2 | 7.6 |
| SEPT. | 1.6 | 4.8 | 5.8 | 5.9 | 5.0 | 7.2 | 8.6 | 6.5 | 10.1 | 9.2 |
| OCT. | 14.0 | 5.7 | 2.8 | 12.5 | 7. 1 | 8.1 | 6.0 | 4.1 | 12.3 | 10.3 |
| NOV. | -5.6 | 0.8 | 3.1 | 20.6 | 4.8 | 3.2 | 2.6 | 13.0 | 11.8 | 12.1 |
| DRC. | -3.0 | 1.9 | 3.6 | -0.2 | 1.4 | 0.4 | -1.0 | 8.3 | 9.0 | 8.8 |
| 1988--3AN. | 12.9 | 9.9 | 8.8 | 2.7 | 8.4 | 10.5 | 6.1 | 5.3 | 7.6 | 7.0 |
| FEB | 1.1 | 8.6 | 11.2 | 18.6 | 10.7 | 9.0 | 9.3 | 11.1 | 7.1 | 8.0 |
| Mar. | 5.5 | 8.8 | 9.9 | 5.4 | 8.1 | 7.8 | 7.9 | 15.2 | 6.5 | 8.5 |
| 198 | 11.2 | 9.9 | 9.4 | -3. 4 | 7.1 | 11.6 | 11.4 | 7.1 | 8.8 | 8.4 |
| Mat $P$ | -0.2 | 4.7 | 6:4 | 2.5 | 4.2 |  | 13.0 | 2.7 | 9.7 | 8.1 |
| MOXTHLY LRTELS (\$BILLIOMS) |  |  |  | 760.0 | 3661.1 | 4325.4 | 2230.6 | 1954.7 | 6350.4 | 8305.1 |
| 1987--DEC. | 750.8 758.9 | 2901.1 | 2150.3 2166.1 | 760.0 761.7 | 3667.1 3686.7 | 4363.2 | 2242.4 | 1963.3 | 6390.6 | 8353.8 |
| PEB | 759.6 | 2946.0 | 2186.4 | 773.5 | 3719.5 | 4396.1 | 2259.8 | 1981.5 | 6428. 2 | 8409.8 |
| HAB. | 763.1 | 2967.5 | 2204.4 | 777.0 | 3744.5 | 4424.5 | 2274.8 | 2006.6 | 6462.9 | 8469.5 |
| APR | 770.2 | 2991.9 | 2221.7 | 774.8 | 3766.7 | 4467.3 | 2297.7 | 2018.5 | 6510.2 | 8528.7 |
| HAI $P$ | 770.1 | 3003.7 | 2233.6 | 776.4 | 3780.0 |  | 2322.5 | 2023.1 | 6563.0 | 8586.1 |
| MEBKLY LEVELS (\$BILLIOMS) |  |  |  |  |  |  |  |  |  |  |
| 1988-may 2 | 776.3 | 2945.6 | 2219.3 | 776.4 | 3772.0 |  |  |  |  |  |
| 9 | 769.7 | 2998.1 | 2228.5 | 778.6 | 3776.7 |  |  |  |  |  |
| 16 | 768.1 | 3000.4 | 2232.3 | 775.3 | 3775.8 |  |  |  |  |  |
| 23 | 769.2 | 3006.5 | 2237.3 | 775.9 | 3782.4 |  |  |  |  |  |
| 30 | 771.1 | 3009.8 | 2238.7 | 775.5 | 3785.3 |  |  |  |  |  |
| $\text { JUIE } \begin{array}{r} 6 \\ \\ 13 \end{array}$ | $\begin{aligned} & 773.9 \\ & 771.8 \end{aligned}$ | 3017.7 3012.9 | 2243.8 2241.1 | 778.0 781.0 | $\begin{aligned} & 3795.7 \\ & 3793.9 \end{aligned}$ |  |  |  |  |  |

 BEGIIMIMG SEPTEHBER 26. 1984.
2/ DEBT DATA ARE DN ; HONTHLT AVEAGB BESIS, DERIVED EY AVERAGING END-UF-MONTH LEEELS OF ADJACEMT MONTHS AHD HAYE BERA ADJUSTED to genove discontimonties
P-PRELIMINARY

 FROB SAALL TIBE DEPOSITS.

2/ FROB SAALL TIBE DEPOSITS.
EXCLUDES IBA AND EEOGH AOCODNTS
EXCLUDES IRA ARD EEOGH ACCOONTS. BET OR LARGR
P-PRELIBINARY

# Net Changes in System Holdings of Securities' 

Millions of dollars, not seasonaliy adjusted

| Period | Treasury bills |  |  | Treasury coupons |  |  |  |  |  | Federal agencies redemptions (-) | Net change outright holdings total ${ }^{4}$ | Net RPs ${ }^{5}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net purchases ${ }^{2}$ | Redemptions (-) | Net change | Net purchases ${ }^{3}$ |  |  |  | Redemptions ( - ) | Net change |  |  |  |
|  |  |  |  | within <br> 1-year | 1-5 | 5-10 | over 10 |  |  |  |  |  |
| 1982 | 8,698 | 3,000 | 5,698 | 312 | 1,797 | 388 | 307 | -- | 2,803 | 189 | 8,312 | 1,461 |
| 1983 | 15,468 | 2,400 | 13,068 | 484 | 1,896 | 890 | 383 | 87 | 3,566 | 292 | 16,342 | -5,445 |
| 1984 | 11,479 | 7,700 | 3,779 | 826 | 1,938 | 236 | 441 | -- | 3,440 | 256 | 6,964 | 1,450 |
| 1985 | 18,096 | 3,500 | 14,596 | 1,349 | 2,185 | 358 | 293 | -- | 4,185 | 162 | 18,619 | 3,001 |
| 1986 | 20,099 | 1,000 | 19,099 | 190 | 893 | 236 | 158 | -- | 1,476 | 398 | 20,178 | 10,033 |
| 1987 | 12,933 | 9,029 | 3,905 | 3,358 | 9,779 | 2,441 | 1,858 | 70 | 17,366 | 276 | 20,994 | -11,033 |
| 1987--01 | -1,914 | 800 | -2,714 | - 76 | -252 | 1, -- | -- | -- | -252 | 110 | -3,076 | -14,254 |
| Q2 | 5,823 | -- | 5,823 | 1,767 | 5,036 | 1,226 | 920 | -- | 8,948 | 37 | 14,735 | 2,121 |
| Q3 | 4,690 | 8,229 | -3,539 | 143 | 2,356 | 619 | 493 | -- | 3,610 | 59 | 12 | -1,433 |
| Q4 | 4,334 | -- | 4,334 | 1,449 | 2,639 | 596 | 445 | 70 | 5,059 | 70 | 9,323 | 2,533 |
| 1988--Q1 | 319 | 2,200 | -1,881 | -- | -800 | $-175$ | -- | -- | -975 | 155 | -3,011 | -3,514 |
| 1987--oct. | 795 | -- | 795 | 300 | -- | -- | -- | -- | 300 | 56 | 1,039 | 7,493 |
| Nov. | 3,388 | -- | 3,388 | 670 | 50 | -- | -- | 70 | 650 | 1 | 4,038 | -3,331 |
| Dec. | 150 | -- | 150 | 479 | 2,589 | 596 | 445 | -- | 4,109 | 13 | 4,246 | -1,629 |
| 1988--Jan. | -49 | 600 | -649 | -- | -- | -- | -- | -- | -- | 131 | -780 | -4,807 |
| Feb. | -192 | 1,600 | -1,792 | -- | -800 | -175 | -- | -- | -975 | 21 | -2,788 | 1,247 |
| Mar. | 560 |  | 560 | -- | -- | -- | -- | -- | -- | 3 | 557 | 45 |
| Apr. | 423 | -- | 423 | 1,092 | 3,661 | 1,017 | 966 | -- | 6,737 | -120 | 7,040 | 9,111 |
| May | -- | -- | -- | -- | -- | -- | -- | -- | - | 11 | -11 | -10,575 |
| Apr. 6 | 515 | -- | 515 | -- | , | -- | -- | -- | -- | -- | 515 | 5,776 |
| 13 | 248 | -- | 248 | 622 | 1,944 | 596 | 518 | -- | 3,680 | 20 | 3,909 | -4,972 |
| 20 | 41 | -- | 41 | -- | -- | -- | -- | -- | --- | 100 | -59 | 5,917 |
| 27 | 120 | -- | 120 | 470 | 1,717 | 421 | 449 | -- | 3,057 | -- | 3,177 | -4,191 |
| May 4 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | $-3,522$ 7 |
| 11 | -- | - | -- | -- | -- | -- | -- | -- | -- | -- | -- | 7,529 |
| 18 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 11 | -11 | -10,380 |
| 25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -3,761 |
| June 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 7,614 |
| 8 | -- | -- | -- | -- | - | -- | -- | -- | -- | -- | -- | 2,462 |
| 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1,403 |
| 22 | - | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -3,034 |
| $\begin{array}{ll} \text { Memo: LEVEL (bil. } \${ }^{\text {c }} \\ \\ \text { June } 22 \end{array}$ | - | -- | 111.0 | 21.5 | 53.5 | 15.4 | 26.5 | -- | 117.0 | -- | 235.3 | -4.3 |

1. Change from end-of-period to end-of-period.
2. Outright transactions in market and with foreign accounts.
3. Outright transactions in market and with foreign accounts, and short-term notes acquired in exhange for maturing bills. Excludes maturity shifts and rollovers of maturing coupon issues.
4. Refiects net change and redemptions $(-)$ of Treasury and agency securities
5. Includes changes in RPs $(+)$, matched sale-purchase transactions $(-)$, and matched purchase sale transactions ( + ).
6. The levels of agency issues were as follows:

| within <br> $1-$ year | $1-5$ | $5-10$ | over 10 | total |
| :---: | :---: | :---: | :---: | :---: |
| 2.7 | 3.2 | 1.1 | .2 | 7.3 |


[^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.

