## 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) Since the February FOMC meeting, reserve paths have been constructed assuming adjustment plus seasonal borrowing of $\$ 200$ million, in accordance with the Committee's decision to maintain the slightly reduced degree of reserve pressure sought in the days preceding the meeting. This level of borrowing was expected to be associated with federal funds trading around 6-1/2 percent, once the market had perceived the degree of Federal Reserve easing. Over the three complete maintenance periods since the FOMC meeting, adjustment plus seasonal borrowing has averaged $\$ 238$ million, and the federal funds rate has averaged 6.59 percent. The difficulties of some Texas banks and the associated surge of extended credit have had little apparent impact on reserve markets. The Desk readily offset the increased supply of reserves, and bank reserve management does not seem to have been affected. Excess reserves have fallen on balance over the intermeeting period in typical seasonal fashion, and willingness to tap discount credit does not appear to have diminished further.
(2) Most other interest rates have risen somewhat over the intermeeting period, especially in bond markets where yields increased around $3 / 8$ of a percentage point. Data and reports on the economy suggested more strength than had been anticipated, prompting a shift in market sentiment about prospects for future inflation and Federal Reserve policy. Despite the Texas bank situation, spreads between private and

KEY MONETARY AGGREGATES
(Seasonally adjusted annual rates of growth)

|  | Jan. | Feb. | Mar. ${ }^{\text {pe }}$ | Nov. to Mar. pe | $\begin{aligned} & \text { QIV ' } 87 \\ & \text { to } \\ & \text { Mar. pe } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Money and credit aggregates |  |  |  |  |  |
| M1 | 12.8 | 1.1 | $6-1 / 2$ | 4-1/2 | 4 |
| M2 | 9.7 | 8.7 | 9-1/4 | $7-1 / 2$ | 7-1/2 |
| M3 | 8.2 | 10.2 | 7-1/2 | 6-3/4 | 7 |
| Domestic nonfinancial debt | 8.0 | 10.6 | n.a. | n.a. | $9-1 / 2^{3}$ |
| Bank credit | 5.9 | 8.4 | n.a. | n.a. | $5^{3}$ |
| Reserve measures $^{1}$ |  |  |  |  |  |
| Nonborrowed reserves ${ }^{2}$ | 9.7 | 13.4 | 2-1/2 | 3-1/4 | $3-3 / 4$ |
| Total reserves | 18.4 | 2.6 | 3-1/2 | 3-1/4 | $3-1 / 4$ |
| Monetary base | 16.6 | 4.7 | 5 | 7-1/2 | 7-3/4 |
| Memo: (Millions of dollars) |  |  |  |  |  |
| Adjustment plus seasonal borrowing | 710 | 191 | 242 | -- | -- |
| Excess reserves | 1295 | 1135 | 948 | -- | -- |

pe - preliminary estimate.

1. The March figures assume adjustment plus seasonal borrowing of $\$ 200$ million and excess reserves of $\$ 850$ million over the reserve period ending April 9.
2. Includes "other extended credit" from the Federal Reserve.
3. Fourth quarter to February.

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.

Treasury rates have continued to fluctuate in a narrow range, well below the relatively high levels reached after the stock market collapse, though prices of bank stocks fell following reports of those problems. Broad stock price indexes posted sizable gains through most of the period, reaching their highest levels since last October. They have retreated in the last week, perhaps prompted by renewed concerns about the prospects for interest rates and the dollar; however, substantial stock price declines in the last two days were accompanied by decreases in Treasury bill and bond rates, in a pattern similar to last October.
(3) The dollar's weighted average exchange value against 10 major currencies declined by about $1-1 / 2$ percent since the last Committee meeting. Although January trade figures were generally better than expected, incoming economic data were interpreted as suggesting stronger domestic demand, calling into question the prospects for reducing external imbalances. Sterling was particularly strong, pushing through Britain's de facto target ceiling rate of 3.00 marks per pound, later prompting a 1/2 percentage point reduction in the Bank of England's official lending rates. Elsewhere, interest rate movements were fairly narrow. As the dollar weakened at the end of the intermeeting period the Desk bought dollars against yen, with Desk purchases amounting to $\$ 148$ million.
(4) The broader monetary aggregates expanded rapidly again in February and March. Over the two months combined, M2 and M3 increased at 9 and 8-3/4 percent rates, respectively, leaving M2 a little above and M3 at
the upper bound of the Committee's 6 to 7 percent November-to-March growth ranges. On a quarterly average basis, both broad aggregates increased at a 6-3/4 percent rate in the first quarter, implying a small decline in velocity (based on the Greenbook GNP projection)--the first since the last quarter of 1986 . The strength in $M 2$ and drop in its velocity reflected the decrease in the opportunity costs of holding deposits in this aggregate that has resulted from the fall in market interest rates on balance since October. Within M2, liquid retail components as a whole increased in the first quarter following several months of declines, as rates on these instruments fell more slowly than those on time deposits or market instruments; even so, flows into small time deposits remained quite rapid, owing to their still large rate advantage. Flows into money funds, both at the M2 and M3 levels, continued strong in February, but in March shares of institution-only money funds leveled out as their rates fell into closer alignment with market rates. Issuance of large time deposits was brisk in February. Bank credit growth picked up last month, while reliance on funding from foreign offices was reduced; the supply of funds in Eurodollar markets may have contracted as foreign official institutions shifted dollar investments to U.S. government securities. In March, however, issuance of large time deposits decelerated sharply, perhaps associated with the weakness in credit at large banks that is suggested by data for the first part of the month.
(5) M1 slowed sharply in February, but growth is estimated to have rebounded in March. On balance over the two months, NOW accounts have increased at a relatively robust pace, but demand deposits have declined
further. Owing to the weakness in demand deposits, the velocity of M1 continued to increase in the first quarter, though at a slower pace than over the second half of 1987. With transactions accounts relatively sluggish on balance and excess reserves declining, total reserves advanced at only a 3 percent rate over February and March. Relatively flat reserve growth along with slowing expansion in currency led to a deceleration in the monetary base over February and March, holding the rise from November to March to 7-1/2 percent.
(6) Expansion of nonfinancial debt picked up to a double-digit pace in February and early indications are that growth has continued strong in March. Overall business borrowing has been sizable, in part reflecting heightened merger and acquisition activity, and has been focused increasingly on longer-term markets in response to the decline in bond rates since last fall. Tax-exempt bond issuance also increased in the last two months, spurred by a resumption of refinancings. Bank data suggest that consumer installment borrowing remained substantial in February and early March. Treasury borrowing has strengthened in February and March, but sales to foreign official institutions and state and local governments have enabled it to hold down offerings to the general public.

## Policy alternatives

(7) Three short-run policy options are presented below. Alternative $B$ would retain the $\$ 200$ million assumption for adjustment plus seasonal borrowing now used in constructing paths for nonborrowed reserves, with federal funds rates remaining generally in the 6-1/2 percent area, once any quarter-end pressures were past. Under alternative $C$, the borrowing objective would be raised to $\$ 400 \mathrm{million}$ and the funds rate would move up to the vicinity of 7 percent. Under alternative A, federal funds would be expected to trade around the current 6 percent discount rate; this could be accomplished by reducing the discount rate by $1 / 2$ point while keeping the $\$ 200$ million borrowing objective, or by decreasing this objective. The staff estimates that borrowing on the order of $\$ 100$ million might represent the level associated with this alternative. However, this estimate is subject to considerable uncertainty as we have very limited experience with operating at borrowing around frictional levels. ${ }^{1}$ Moreover, at very low levels of borrowing, the funds rate might become quite sensitive to relatively minor changes in borrowing behavior. Such changes could include the normal pattern of seasonal credit as well as other influences.
(8) The relationship between the funds rate-discount rate spread and borrowing specified in alternatives $B$ and $C$ (and $A$ with a discount rate cut) corresponds to average experience over the period since December. Although depository institutions may be somewhat less reluctant

[^1]to be seen at the window than they were immediately after the stock market crash, some concern seems to remain, and achieving a given spread appears to require targeting about $\$ 100$ million less borrowing than suggested by the relationship from early 1986 through mid-October 1987. The specifications of the policy alternatives also assume that the Texas bank situation and indications of other difficulties of depository institutions will not alter overall borrowing behavior in the period ahead. And they abstract from any effects at low total borrowing levels of rising seasonal borrowing expected over coming months. The Committee may wish the Manager to remain alert to any need for revisions to intended borrowing should the relationship to money market conditions be affected by these potential influences on discount window use.
(9) The anticipated growth in the monetary aggregates from March to June implied by these policy alternatives is shown in the table below, together with the associated federal funds rate ranges. (More detailed data are shown on the table and charts on the next few pages.)

Growth from March to June

| M2 | 8 | 7 | 6 |
| :--- | :--- | :--- | :--- |
| M3 | 7 | $6-1 / 2$ | 6 |
| M1 | 6 | $4-1 / 2$ | 3 |
|  |  |  |  |
| sociated federal |  |  |  |
| funds rate range | 4 to 8 | 4 to 8 | 5 to 9 |

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 |  |  |  |  |  |  |  |  |  |
| 1988 January | 2925.5 | 2925.5 | 2925.5 | 3687.3 | 3687.3 | 3687.3 | 758.9 | 758.9 | 758.9 |
| February | 2946.8 | 2946.8 | 2946.8 | 3718.7 | 3718.7 | 3718.7 | 759.6 | 759.6 | 759.6 |
| March | 2969.6 | 2969.6 | 2969.6 | 3741.6 | 3741.6 | 3741.6 | 763.7 | 763.7 | 763.7 |
| April | 2989.7 | 2988.7 | 2987.7 | 3761.8 | 3761.2 | 3760.6 | 767.9 | 767.5 | 767.1 |
| May | 3010.1 | 3007.1 | 3004.1 | 3783.8 | 3781.9 | 3780.0 | 770.8 | 769.6 | 768.4 |
| June | 3029.7 | 3022.3 | 3014.9 | 3806.5 | 3801.8 | 3797.1 | 775.4 | 772.5 | 769.6 |
| Monthly Growth Rates |  |  |  |  |  |  |  |  |  |
| 1988 January | 9.7 | 9.7 | 9.7 | 8.2 | 8.2 | 8.2 | 12.8 | 12.8 | 12.8 |
| February | 8.7 | 8.7 | 8.7 | 10.2 | 10.2 | 10.2 | 1.1 | 1.1 | 1.1 |
| March | 9.3 | 9.3 | 9.3 | 7.4 | 7.4 | 7.4 | 6.5 | 6.5 | 6.5 |
| April | 8.1 | 7.7 | 7.3 | 6.5 | 6.3 | 6.1 | 6.6 | 6.0 | 5.3 |
| May | 8.2 | 7.4 | 6.6 | 7.0 | 6.6 | 6.2 | 4.5 | 3.3 | 2.0 |
| June | 7.8 | 6.1 | 4.3 | 7.2 | 6.3 | 5.4 | 7.2 | 4.5 | 1.9 |
| Quarterly Ave. Growth Rates |  |  |  |  |  |  |  |  |  |
| 1987 Q2 | 2.7 | 2.7 | 2.7 | 4.6 | 4.6 | 4.6 | 6.6 | 6.6 | 6.6 |
| Q3 | 2.8 | 2.8 | 2.8 | 4.5 | 4.5 | 4.5 | 0.8 | 0.8 | 0.8 |
| Q4 | 4.0 | 4.0 | 4.0 | 5.5 | 5.5 | 5.5 | 4.0 | 4.0 | 4.0 |
| 1988 Q1 | 6.8 | 6.8 | 6.8 | 6.7 | 6.7 | 6.7 | 3.9 | 3.9 | 3.9 |
| Q2 | 8.5 | 8.0 | 7.5 | 7.3 | 7.1 | 6.8 | 5.6 | 4.8 | 4.0 |
| Nov. 87 to Mar. 88 | 7.4 | 7.4 | 7.4 | 6.8 | 6.8 | 6.8 | 4.4 | 4.4 | 4.4 |
| Feb. 88 to June 88 | 8.4 | 7.7 | 6.9 | 7.1 | 6.7 | 6.3 | 6.2 | 5.1 | 4.0 |
| Mar. 88 to June 88 | 8.1 | 7.1 | 6.1 | 6.9 | 6.4 | 5.9 | 6.1 | 4.6 | 3.1 |
| Q4 86 to Q4 87 | 4.0 | 4.0 | 4.0 | 5.4 | 5.4 | 5.4 | 6.3 | 6.3 | 6.3 |
| Q4 87 to Q1 88 | 6.8 | 6.8 | 6.8 | 6.7 | 6.7 | 6.7 | 3.9 | 3.9 | 3.9 |
| Q4 87 to Q2 88 | 7.7 | 7.4 | 7.2 | 7.1 | 7.0 | 6.8 | 4.8 | 4.4 | 4.0 |
| Q4 87 to Mar. 88 | 7.4 | 7.4 | 7.4 | 7.1 | 7.1 | 7.1 | 4.1 | 4.1 | 4.1 |
| Q4 87 to June 88 | 7.8 | 7.3 | 6.9 | 7.1 | 6.9 | 6.7 | 5.0 | 4.4 | 3.7 |

## ACTUAL AND TARGETED M2



Chart 2
ACTUAL AND TARGETED M3



(10) With recent conditions in the reserves market maintained
under alternative $B$, interest rates would tend to remain around current levels, at least for a time. But given the staff economic forecast, which implies a flow of data that would not allay market concerns about potentially inflationary pressures on resources, the market might well remain edgy. In addition, if signs of further expansion in domestic demand were combined with trade data suggesting sluggish adjustment of U.S. external imbalances, the dollar could come under further downward pressure which, in this context, would be likely to contribute to some increases in U.S. interest rates.
(11) Given the financial conditions associated with alternative B, M2 and M3 are expected to grow at 7 and 6-1/2 percent annual rates, respectively, from March to June, leaving them well into the upper halves of their 4 to 8 percent annual ranges. Although the broader aggregates would be expected to slow somewhat from the pace of the last three months, growth would still exceed the projected expansion of nominal income. ${ }^{2}$ An important impetus to growth of $M 2$ will continue to be the reduced opportunity cost of holding retail interest-bearing accounts. To be sure, opportunity costs are likely to widen a little once again in coming months as returns on retail balances edge off further in lagged response to the

[^2]previous decline in market rates. Nevertheless, the expected second-quarter spread between market rates and the average return on retail balances in M2 still would represent a very substantial reduction from its peak in the third quarter of last year. Inflows to these accounts might be supported by other influences as well: the personal saving rate is projected to remain high relative to last year, and additions to IRAs should be considerably smaller than in recent years in response to tightened taxreform restrictions.
(12) M3 growth in the spring and early summer will be damped by weaker inflows to money market mutual funds as their rate advantage over short-term market instruments narrows further. Depositories are expected to maintain the recent pace of issuance of managed liabilities to fund credit expansion in the face of a moderation in core deposit growth. Bank credit growth is projected to be supported by some strengthening in business loans, reflecting a projected widening financing gap and continued rapid share retirements. However, consumer lending at banks is likely to weaken a little, as the rise in consumer spending moderates. Mortgage borrowing should remain at around the first-quarter pace. For thrifts, asset growth at around the moderate pace of recent months would continue to be bolstered by demand for ARMS, which are retained in their own portfolios to a greater extent than are fixed-rate mortgages. Overall, however, the debt of domestic nonfinancial sectors is projected to slow to around an 8 percent rate over the second quarter, leaving this aggregate just above the midpoint of its 7 to 11 percent annual range. The deceleration results entirely from a marked slowdown in federal borrowing, as the Treasury trims
its auctions to moderate the surge in its cash balance associated with higher-than-usual spring tax payments.
(13) M1 growth in April might be boosted by a buildup in transaction balances associated with tax payments, which are projected to exceed the typical volume reflected in the transactions account seasonals, though not matching last year's exceptional surge. ${ }^{3}$ Any such effect will have abated by early May. On a March-to-June basis, M1 is expected to increase at a rate of about $4-1 / 2$ percent under alternative $B$. Demand deposits are anticipated to strengthen only a little on balance over the next three months, after the somewhat inexplicable weakness through the first quarter. NOW account growth, while moderating from recent rapid rates, would remain above the pace of the second half of 1987 . M1 velocity would continue to increase, but at a slower rate than in the first quarter.
(14) The more restrictive monetary posture of alternative $C$, at least at this time, would come as some surprise to financial markets. With the funds rate averaging around 7 percent, the 3 -month Treasury bill rate could move into an area around 6-1/4 percent. Rate spreads between bank and thrift paper and Treasury bills could widen, if concerns about their asset quality and earnings prospects intensify, which might be more likely, given the already troubled status of many depository institutions. A good portion of the increases in short-term rates might show through in longerterm rates. But, an upward movement in U.S. interest rates, especially if viewed as reflecting Federal Reserve resolve to avoid inflation and faster external adjustment by containing domestic demand, would help to support

[^3]the dollar in the near term, and over time the net increase in bond yields could be limited.
(15) The broader monetary aggregates under alternative $C$ would post a more marked slowing over the course of the quarter than under the other alternatives, as the effects of the rebound in market interest rates increasingly took hold. Both aggregates would end the quarter a bit closer to, though still above, the midpoints of their longer-run ranges. The attractiveness of transactions and other liquid accounts would be lessened further, as their rates lag in typical fashion behind market yields. M1 probably would be growing very sluggishly by June, leaving its growth from the fourth quarter to June a bit below its current 4 percent rate through March.
(16) Under alternative $A$, the easing of reserve market conditions would ripple through other financial markets. The 3-month Treasury bill would drop to below $5-1 / 2$ percent, but declines in longer-term rates might be small. Absent a weaker economic picture than contemplated under the staff forecast, market participants may not expect such a policy easing to be sustained for long. The dollar could come under substantial downward pressures, particularly if concerns about inflation and external adjustment increased.
(17) With the lower short-term market interest rates of alternative $A, M 2$ growth would not be expected to moderate much over the next three months. Expansion of this aggregate, at an 8 percent rate from March to June, would leave M2 only a little below the upper end of its annual target cone. Opportunity costs of holding retail deposits within M2 would
continue the declines begun last fall. Inflows into small time deposits might abate as their rates completed their downward adjustment, but growth of NOWs, savings deposits and MMDAs could pick up noticeably. With some boost to required compensating demand balances of businesses also coming from lower market rates, M1 might well grow at a 6 percent annual rate from March to June. M3 would be strengthened somewhat less than the other aggregates over the three months, as lower market interest rates shift some credit demands to nonbank sources in light of lagging bank lending rates, but this aggregate would still record a 7 percent increase from March to June.

## Directive language

(18) Draft language for the operational paragraph, including the usual options and updating, is shown below. The second sentence calling for continued flexibility in operations is shown in brackets. The decision on whether to retain this or a similar sentence might depend on an assessment of the state of financial markets as well as the Committee's discussion of operating procedures.

OPERATIONAL PARAGRAPH

In the implementation of policy for the immediate future, the Committee seeks to DECREASE SOMEWHAT (Alt. A)/ maintain (Alt. B)/INCREASE SOMEWHAT (Alt. C) the sizightzy fedueed degree of pressure on reserve positions sought-in recent-days. [The Committee agrees that the current more normal approach to open market operations remains appropriate; still sensitive conditions in financial markets and uncertainties in the economic outlook may continue to call for some flexibility in operations.] Taking account of conditions in financial markets, somewhat (SLIGHTLY) lesser reserve restraint WOULD (MIGHT), or somewhat (SLIGHTLY) greater reserve restraint would (MIGHT) be acceptable depending on the strength of the business expansion, indications of inflationary pressures, developments in foreign exchange markets, as well as the behavior
of the monetary aggregates. The contemplated reserve conditions are expected to be consistent with growth in
beth M2 and M3 over the period from Nevembez-threugh March
THROUGH JUNE at annual rates of about ___ PERCENT AND ___ 6 te- 7 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 ___ 4-te-8 percent.




 cominiments for l-year, adjustable-rate mortgages(ARMs) it SALs offering both fRHs and ARHs with the cane number of discount points.

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| Perlod | Money slock masaures and liquid assels |  |  |  |  |  | Bank crodil | Dornostic nonfinancial debi² |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M1 | 42 | nontransacilions components |  | M3 | 1 | $\qquad$ | US. government ${ }^{2}$ | other ${ }^{2}$ | total ${ }^{2}$ |
|  |  |  | $\ln \mathrm{M}^{2}$ | In M3 only |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 9 | 10 |
| penceat aumual geonthe A HUALLI (UI! TO OIV) |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1985 | 12.0 | 8.9 | 7.9 | 3.4 | 7.7 | 0.5 | 10.2 | 15.2 | 12.7 | 13.3 |
| 1986 | 15.6 | 9.4 | 7.4 | 6.2 | 9.2 | 0.3 | 9.7 | 14.7 | 12.8 | 13.3 |
| 1987 | 6.3 | 4.0 | 3.3 | 10.8 | 5.4 | 5.2 | 1.9 | 8.9 | 10. 1 | 9.8 |
| gumprals atennge |  |  |  |  |  |  |  |  |  |  |
| 157 UTE. 1981 | 13.2 | 6.5 | 4.2 | 6.1 | 6.5 | 6.2 | 10.4 | 12.2 | 10.4 | 10.8 |
| 200 UTE. 1981 | 6.6 | 2.7 | 1.3 | 12.7 | 4.6 | 4.1 | 8.2 | 8.7 | 9.0 | 8.9 |
| 3RD UTM. 1981 | 0.8 | 2.8 | 3.5 | 10.9 | 4. 5 | 4.2 | 6.2 | 5.9 | 9.0 | 0.2 |
| ¢TH UTE. 1987 | 4.0 | 4.0 | 4.0 | 11.1 | 5.5 | 6.0 | S. 8 | 7.5 | 10.6 | 9.8 |
| nowthli |  |  |  |  |  |  |  |  |  |  |
| 1987--788. | -0.2 | 0.6 | 0.9 | 11.9 | 2.6 | 3.5 | 3.6 | 9.4 | 5.4 | 6.4 |
| HAB. | 4.8 | 2.1 | 1.2 | 5.7 | 2. 6 | -0.5 | 6. 1 | 11.2 | 6.1 | 7.3 |
| APR. | 17.2 | 5.5 | 1.5 | 6.5 | 5.7 | 4.4 | 12.0 | 7.6 | 10.4 | 9.7 |
| Hat | 2.9 | 0.1 | 0.0 | 22.4. | 5.0 | 8. 1 | 7. 8 | 8.2 | 10.9 | 10.2 |
| JUEL | -7.1 | 1.1 | 3.9 | 24.8 | 5.9 | 4.7 | 6.3 | 7.4 | 9.6 | 9.1 |
| JULT | 2.4 | 2.7 | 2.8 | 0.7 | 2.3 | 0.5 | 2.5 | 1.8 | 8.1 | 6.6 |
| 1UG | 4.7 | 4.8 | 4.8 | 9.4 | 5.7 | 5.9 | 9.7 | 0.8 | 7.8 | 6.1 |
| SEPT. | 1.6 | 4.8 | 5.9 | 6.0 | 5.0 | 7.0 | 8.6 | 6.5 | 10.3 | 9.4 |
| OCT. | 14.0 | 6.0 | 3.1 | 12.6 | 7.4 | 8. 3 | 7.0 | 3.9 | 11.5 | 9.7 |
| H07. | -5.6 | 1.0 | 3.4 | 20.2 | 5.0 | 3.7 | 2.6 | 12.6 | 11.3 | 11.6 |
| DEC. | -2.9 | 1.8 | 3.6 | -0.3 | 1.4 | 1.6 | -1.0 | 8.0 | 8.9 | 8.7 |
| 1988--Jay. | 12.8 | 9.7 | 8.5 | 2.4 | 8. 2 | 11.5 | 5.9 | 5.2 | 8.9 | 8.0 |
| 7EB4 | 1.1 | 0.7 | 11.4 | 15.9 | 10.2 |  | 8.4 | 11.3 | 10.4 | 10.6 |
| MOMTHLI LEVELS (EBELBIONS) 1981-58PT. | 747.5 |  | 2133.4 |  | 3620.9 |  | 2214. 7 | 1913.1 | 6201.4 |  |
| 1987-SEPT. | 756.2 | 28895.8 | 2138.9 | 747.9 | 3620.9 | 4381.7 | 2288.7 | 1913.1 1919.3 | 6201.4 | 8111.5 |
| 10 V. | 752.7 | 2897.7 | 2144.9 | 760.5 | 3658. 2 | 4324.9 | 2432.1 | 1919.5 | 6319.6 | 8259.0 |
| DEC | 750.9 | 2902.1 | 2151.3 | 760.1 | 3662.4 | 4330.6 | 2230.6 | 1954.4 | 6366.7 | 8319.1 |
| 1988--Jaf. | 750.9 | 2925.5 | 2166.6 | $76 \%$ | 3687. 3 | 4372.2 | 2242.0 | 1960.8 | 6413.8 | 8374.6 |
| 188. | 759.6 | 2946. 6 | 2181.2 | 771.9 | 3718. 7 |  | 2<57. 7 | 1979.2 | 6469.4 | 8448.6 |
|  |  |  |  |  |  |  |  |  |  |  |
| 1988-738. | 764.1 | 2941.3 | 2177.2 | 765.9 | 1701.2 |  |  |  |  |  |
| 8 | 761.1 | 2940.4 | 2179.2 | 769.2 | 3709.6 |  |  |  |  |  |
| 15 | 759.9 | 2946.6 | 2186.8 | 774.5 | 3721.1 |  |  |  |  |  |
| 22 | 762.1 | 2953.2 | 2191.1 | 710.8 | 3724.0 |  |  |  |  |  |
| 29 | 754.9 | 2947.5 | 2192.5 | 774.1 | 3721.6 |  |  |  |  |  |
| Aata. $\begin{array}{r}7 \\ 10\end{array}$ | $\begin{aligned} & 755.8 \\ & 760.5 \end{aligned}$ | $\begin{aligned} & 2954.3 \\ & 2965.5 \end{aligned}$ | $\begin{aligned} & 2198.5 \\ & 2205.1 \end{aligned}$ | $\begin{aligned} & 771.1 \\ & 774.8 \end{aligned}$ | $\begin{array}{r} 3725.5 \\ 7740 \end{array}$ |  |  |  |  |  |

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Components of Money Stock and Related Measures
eillions of dollars, sessonally adjusted unless otherwise noted


[^4]Net Changes In System Holdings of Securities'
Millions of dollars, not seasonally adjusted

| Period | Treasury bills |  |  | Treasury coupons |  |  |  |  |  | Federal agencies redemptions (-) | Net change outright holdings total ${ }^{4}$ | Net $\mathrm{RPs}^{5}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net purchases ${ }^{2}$ | Redemptions ( - ) | Net change | Net purchases ${ }^{3}$ |  |  |  | Redemptions ( - ) | Net change |  |  |  |
|  |  |  |  | within 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 |
| 1986--03 | 4,668 | -- | 4,668 | -- | -- | -- | -- | - | -- | 90 | 4,577 | 4,044 |
| Q4 | $9,668$ | -- | 9,668 | 190 | 893 | 236 | 158 | -- | 1,476 | 218 | 10,927 | 9,925 |
| 1987--Q1 | -1,914 | 800 | -2,714 | -- | -252 | -- | -- | -- | -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 |
| 1987--Sept. | 4,528 | 3,657 | 871 | 143 | 2,551 | 619 | 493 | -- | 3,805 | -- | 4,676 | 26 |
| 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 |
| 1988--Jan. 6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -2,320 |
| 13 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -2,527 |
| 20 | -- | 600 | -600 | -- | -- | -- | -- | -- | -- | 131 | -731 | -290 |
| 27 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2,451 |
| Feb. 3 | -330 | -- | -330 | -- | -350 | -- | -- | -- | -350 | 21 | -701 | -4,565 |
| 10 | -157 | 1,000 | -1,157 | -- | -450 | -175 | -- | -- | -625 | -- | -1,782 | -6,495 |
| 17 | -100 | 600 | -700 | -- | -- | -- | -- | -- | -- | -- | -700 | 10,863 |
| 24 | 10 | -- | 10 | -- | -- | -- | -- | -- | -- | -- | 10 | -2,643 |
| Mar. 2 | 336 | -- | 336 | -- | -- | -- | -- | -- | -- | -- | 336 | 309 |
| $9$ | -- | -- | -- | -- | -- | -- | -- | - | -- | -- | -- | -1,963 |
| 16 | 42 | -- | 42 | -- | -- | -- | -- | -- | -- | -- | 42 | 2,055 |
| 23 | -- | -- | 1 | -- | -- | -- | -- | -- | -- | 3 | -3 | -100 |
| $\begin{aligned} & \text { Memo: LRVEL (bil. } \${ }^{6} \\ & \\ & \\ & \text { Mar. } 23 \end{aligned}$ | -- | -- | 110.1 | 23.0 | 47.6 | 14.2 | 25.5 | -- | 110.2 | -- | 227.7 | -4.7 |

1. Change from end-of-period to end-ot-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. Reflects 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 |
| :---: | :---: | :---: | :---: | :---: |
| 2.6 | 3.4 | 1.2 | .2 | 7.4 |


[^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 only period in recent years in which the federal funds rate fluctuated around or below the discount rate for some time was from late 1982 to the spring of 1983 . The borrowing objective averaged $\$ 225$ million through this period.
[^2]:    2. On a quarterly average basis the growth rates of M2 and M3 would increase somewhat in the second quarter; this pattern primarily reflects the damping effects on the first quarter growth of the weakness in money growth late in 1987. The velocities of M2 and M3 would be expected to decline in the second quarter by $2-1 / 2$ and $1-1 / 2$ percentage points, respectively, somewhat more than seems in train in the first quarter.
[^3]:    3. A special adjustment was made to prevent last year's tax payments from distorting demand deposit seasonal factors.
[^4]:     FROM SMALL TIAE DEPOSITS
    2f EXCLODES IBA AEO KBOGH ACCOUMTS
    $3 /$
    
    -PRELIMIGARE

