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# mONETARY AGGREGATES AND MONEY MARKET CONDITIONS 

## Prepared for the Federal Open Market Committee

By the Staff<br>board of governors of the federal reserve system

MONETARY AGGERGATES AND
MONEY MARKET CONDITIONS
Recent developments
(1) Late January data are still partially estimated, but there appear to have been sizable shortfalls from the expected growth path for the narrowly defined money supply $\left(M_{1}\right)$ in the last two weeks of the month, as shown in the table on the following page. It now appears that growth of the money stock for all of January was at about a 3 per cent annual rate, below the $5-1 / 2$ per cent rate projected at the time of the last Committee meeting. In contrast to the shortfall in $M_{1}$, more broadly defined money supply ( $M_{2}$ ) increased somewhat more than expected in January, as time and savings deposits other than large CD's grew more rapidly in January than in December. The bank credit proxy grew in January nearly as rapidly as expected at the last meeting.
(2) The sluggish January growth in the money supply occurred despite efforts of the Trading Desk to achieve a faster rate of growth by fostering easier money market conditions. For most of the period since the last FOMC meeting, the daily effective Federal funds rate was in a 3-7/8--4-1/4 per cent range, with heavy U.S. Government security dealer positions built up in consequence of the refunding exerting some upward pressure on the funds market. In the weeks immediately following the last Committee meeting the Desk was aiming at a Federal funds rate around $4-1 / 4$ per cent, somewhat below the most typical rate prevailing

Recent Paths of Key Monetary Aggregates (Seasonally adjusted, billions of dollars)
Narrowly Defined
Money Supply $\left(\mathrm{M}_{\mathrm{I}}\right)$

Indicated at Actual Last Meering2/ Results

Month


Broader Based Money Supply( (M2)

Adjusted Credit Proxy

| Indicated at <br> Last Meeting2/ | Actual <br> Results | Indicated at <br> Last Meeting2/ | Actual <br> Results |
| :---: | :---: | :---: | :---: |
| 419.0 | 419.0 | 331.1 |  |
| 422.7 | 423.4 | 334.5 | 331.2 |
|  |  |  | 334.2 |
| 420.0 | 422.2 |  |  |
| 421.8 | 423.2 | 331.5 | 333.3 |
| 423.4 | 424.1 | 334.4 | 332.5 |
| 424.1 | 427.4 | 337.0 | 334.0 |
| 425.5 |  | 337.9 | 335.4 |

\% Annual Rates of Change
\% Annual Rates of Change

1/ M1 plus bank time ana savings deposits other than large CD's.
2/ Alternative $B$ path of previous Bluebook.
3/ 3.8 per cent annual rate for fourth quarter average over third quarter average.
4/ Adjustment to correct for the effect on bank credit of Ex-Im Euro-dollar issue would raise this to $11-1 / 2$ per cent.
before the meeting. When the large shortfall of $M_{1}$ below path for the week of January 20 was finally confirmed (around January 28), the Federal funds target was lowered to 4 per cent or a shade lower, and most recently, with $M_{1}$ data for the final week of January also coming in low, the target was lowered to $3-3 / 4$ per cent. In the latest two statement weeks, net borrowed reserves averaged around $\$ 30$ million and borrowing at the Federal Reserve $\$ 320$ million. This compares with $\$ 310$ and $\$ 375$ million, respectively, for the preceding two statement weeks.
(3) The lower Federal funds rate in January, along with the further cuts in the discount rate and in the commercial bank prime rate, strengthened market expectations of further rate declines. In consequence, seasonally enlarged flows of funds to banks and other financial institutions were invested aggressively, and both short- and long-term market interest rates dropped sharply. The 3-month Treasury bill, for example, was most recently bid at around 4 per cent, about 65 basis points below its level at the time of the meeting, Long-term rates are about $35-70$ basis points below levels at the time of the last meeting, after taking account of the back-up in such yields over the past week.
(4) In the generally strong market environment, the Treasury's quarterly financing operation, which included a pre-refunding of $\$ 13.5$ billion of November 1971 and February 1972 maturities, was highly successful. A total of $\$ 10.8$ billion of the $\$ 19.5$ billion of publicly held eligible issues were exchanged, with $\$ 5.8$ billion going into the new 4-1/2 year, $5-7 / 8$ per cent note and $\$ 5.6$ billion into the 7 -year, $6-1 / 4$ per cent issue. Attrition on the $\$ 6.0$ billion of February and March 1971
maturities totalled only $\$ 1,1$ billion, or 18 per cent, despite the absence of a short-term anchor issue in the refinancing. Most recently, dealer positions in coupon issues maturing in more than a year totaled \$1. 7 billicn, although dealers have reported fairly good progress in distributing their awards of about $\$ 1.1$ billion of new issues.
(5) The following table summarizes seasonally adjusted annual rates of change in major financial aggregates for selected periods.


## Prospective developments

(6) The further shortfall of $M_{1}$ in January relative to FOMC expectations indicates that a greatly accelerated rate of growth in $M_{1}$ will be required in February and March if the FOMC still wishes to attain the March average level of the money stock that was targeted at the previous two FOMC meetings. With January behind us, there is obviously less time to make up a shortfail, and as a result a considerable amount of reserves would have to be supplied over a relatively short period, with a consequent sharp easing effect on money market conditions. A more gradual make-up of recent shortfalls would require a less rapid provision of reserves and less of an easing of money markets. Two alternatives for making up the shortfall in $M_{1}$ are indicated below in an effort to clarify policy alternatives for the Committee. A third alternative, which assumes no change from the money market conditions most recently prevailing and involves no deliberate further effort to make up for past shortfalls i. $M_{1}$, is presented at a later point.
(7) The table below summarizes two alternative paths for making up the $M_{1}$ shortfall. The first column--called alternative A-makes up the shortfall by March and continues with a 6 per cent rate of growth in the second quarter. The second column, alternative $B$, shows a path which does not make up the shortfall by March; in other words, this alternative does not retain as a target the March average level of $M_{1}$ set at the previous two FOMC meetings. It does assume, however, that growth in $M_{1}$ would be greater than 6 per cent in the second quarter as the shortfalls of the fourth quarter and January are made up over a longer period. The particular path
would reach the same average level in June for $M_{1}$ as indicated for alternative A. And the growth rate over the 9 months from September 1970 to June 1971 would be just under 6 per cent. In either case the growth rates for the second quarter and the June level could, of course, be greater if the Committee should decide that a trend growth rate of more than 6 per cent is desirable for the longer run.

Alternative A Alternative B
End of Quarter
Level (Mo. Ave.)
(Billions of $\$$ )

| December | 214.6 | 214.6 |
| :--- | :---: | :---: |
| March | 218.8 | 218.3 |
| June | 222.1 | 222.1 |
| Quarterly Growth Rate |  |  |
| (Per cent annual rate) |  |  |
| 1st Qtr. (March over Dec.) | $8=1 /$ | 7 |
| 2nd Qtr. (June over March) | 6 | 7 |

1/ This growth rate is 8 per cent, rather than the $7-1 / 2$ per cent of the Iast FOMC meeting, because of a small downward revision in the December average level of the money supply. Thus, starting from a somewhat lower base, a somewhat higher growth rate is required to attain the previous desired March level.
(8) The table on the next page shows monthly levels and growth rates for all of the monetary aggregates that are believed to be consistent with the $M_{1}$ quarterly pattern shown for alternatives $A$ and $B$ in paragraph (7).
(9) To achieve either alternative $A$ or $B$, an easing of the money market appears to be required between now and the next meeting of the Committee, for reasons indicated in paragraph (6). The alternative A pattern of growth in monetary aggregates--which contemplates about a
-8-
Alternacive Paths of Key Monetary Aggregares--ihonchly and Quart:erly
(Seasonally adjusted, billions of dollars)

| Concepts of Money |  |  |  | Adj. Credit Proxy |  | Total Reserves |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| A1t.A | Alt. B | Alt.A | Alt. B | Alt.A | Alt. B | Alt.A | Alt. B |

1970
December
1971

January
February
March

1st Q 1971
2nd Q 1971

| January | 215.1 | 215.1 | 423.4 | 423.4 | 334.2 | 334.2 | 30.2 | 30.2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| February | 217.0 | 216.8 | 430.7 | 430.5 | 336.9 | 336.7 | 30.6 | 30.6 |
| March | 218.8 | 218.3 | 436.1 | 435.6 | 341.5 | 340.7 | 30.9 | 30.8 |
| June |  |  |  |  |  |  |  | 31.4 |
|  | 222.1 | 222.1 | 451.3 | 451.3 | 352.3 | 351.1 | 31.2 |  |

214.6
214.6
419.0
419.0
$331.2 \quad 331.2$
29.929 .9 Per Cent Annual Rates of Growth
12.6
12.6
10. 9
10.9
12.2
12.2
20.5
20.0
9.5
9.0
14.5
14.5
15.0
14.0
16.5
14.5
10.5
8.0
8.0
7.0
16.5
16.0
12.5
11.5
12.5
11.5
6.0
7.0
14.0
14.5
12.5
12.0
8.5
5.5

10 per cent annual rate of growth in $M_{1}$ for February and March together --may entail a much lower Federal funds rate, perhaps ranging around 2-1/2 per cent, with the 3 month bill rate dropping to around 3 per cent. And the net free reserve position of member banks is likely to average $\$ 150$ million or a little more, as excess reserves build up, given the low interest rates. It would be anticipated, however, that by early spring, the Federal funds rate would have to rise rather sharply-to around $4-1 / 2=-5$ per cent, with a concurrent snapback in bill rates-as reserves are provided less generously in order to move down to the assumed longer-run growth rate, typified in alternative $A$ by a 6 per cent growth in $M_{1}$ for the second quarter.
(10) Since the alternative $B$ pattern of growth in monetary aggregates involves a somewhat less rapid February--March annual growth rate $f o r M_{1}$ of 9 per cent, attainment of this rate would seem to involve a smaller reduction in the Federal funds rate than under alternative $A-$-perheps a funds rate in a 3--3-1/2 per cent range-mand a net free reserve position of $\$ 50-\$ 150$ million. The accompanying drop in the 3 month Treasury bill rate might be into a $3-1 / 4-3-3 / 4$ per cent range. Because of the more gradual approach to making up the shortfall in $M_{1}$ under alternative $B$, a sizable later snapback in money market rates would not be expected. Still, in early spring the Federal funds rate and the bill rate might be somewhat above the upper end of these ranges as reserves are adjusted to bring growth in M1 onto a 7 per cent growth path for the second quarter as a whole.
(11) The weekly paths for the monetary aggregates that would be consistent with the monthly patterns for alternatives $A$ and $B$ between now and the next meeting are shown in the table on the next page.
(12) The rate of inflow of time deposits other than large CD's is expected to slacken later in February and March, following the unusually rapid growth of the previous two months. A number of banks have adjusted downward interest rates offered on consumer-type time and savings accounts. This tendency is likely to become more widespread, especially under alternative $A$, and may serve, along with an increase of consumer spending as projected in the Green Book, to moderate savings inflows. However, given the very rapid growth in time and saviugs deposits other than large $C D$ 's that has already occurred and taking account of the expected increase in $M_{1}$, the rate of growth in $M_{2}\left(M_{1}\right.$ plus time and savings deposits other than large $C D^{\prime} s$ ) is expected to be a very sizable 16-1/2 per cent annual rate in the first quarter. Under alternative $E$, the rate of growth in $M_{2}$ would be expected to be only slightly less rapid than under alternative A. These estimates of $M_{2}$ behavior in the future are highly problematical because of uncertainties about the timing and extent of bank cuts in offering rates on consumer-type accounts and the effect of this on savers in a period of declining market interest rates.
(13) Growth in the adjusted credit proxy (rates of growth are shown for alternatives $A$ and $B$ in the table on p. 8) will be influenced by continued more moderate growth in large negotiable CD's following the sharp expansion of earlier months. Banks have dropped offering rates sharply, and the spread of $C D$ rates over bill rates has narrowed. A pick-up in business loan demand might make banks more willing borroners through CD's, but bank

|  | -11- |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Alternative Weekly Paths of Key Monetary Aggregates |  |  |  |  |  |  |  |
|  | (Seasonally adjusted, billions of dollars)Concepts of Money |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | M1 |  | $\mathrm{M}_{2}$ |  | Adj. Credit Proxy |  | Total Reserves |  |
|  | Alt.A | Alt. B | Alt.A | A1t.B | Alt.A | Alt. B | A1t.A | Alt. B |
| 1971 |  |  |  |  |  |  |  |  |
| January ${ }^{27}$ | 214.6 | 214.6 | 424.1 | 424.1 | 335.4 | 335.4 | 30.2 | 30.2 |
| February $3^{\text {e }}$ | 216.1 | 216.1 | 427.4 | 427.4 | 335.9 | 335.9 | 30.3 | 30.3 |
| 10 | 216.4 | 216.4 | 428.9 | 428.9 | 336.2 | 336.2 | 30.5 | 30.5 |
| 17 | 217.3 | 217.2 | 430.8 | 430.7 | 336.5 | 336.4 | 30.7 | 30.7 |
| 24 | 217.3 | 217.0 | 431.8 | 431.5 | 337.9 | 337.5 | 30.6 | 30.6 |
| March 3 | 217.5 | 217.1 | 433.1 | 432.7 | 337.3 | 336.8 | 30.8 | 30.8 |
| 10 | 218.5 | 218.0 | 437.7 | 434.2 | 339.3 | 338,6 | 30.8 | 30.7 |

p -- Preliminary
e -- Estinated from partial data.
liquidity is substantial enough so that they could easily accommodate borrowers by diverting funds from securities. Bank-related commercial paper is expected to continue running off at about the recent $\$ 50-\$ 100$ million per waek rate. We have assumed only minor further declines in Euro-dollar borrowings.
(14) The preceding discussion has indicated that the money market would probably have to be eased significantly further in order to make up for recent shortfalls in $M_{1}$. The Committee, however, may wish to consider a policy of stabilizing the money market at around recently prevailing conditions, given the sizable growth in $M_{2}$ and the adjusted credit proxy ard the recent sharp drop in interest rates. Prevailing money market conditions can be taken to include a Federal funds rate around 3-3/4--4 per cent, which would reflect the most recent objectives of the Trading Desk; the 3 -month bill rate might be in a 3-3/4--4-1/4 per cent range. Assuming such conditions are maintained, monetary aggregates for the remainder of the first quarter and for the second quarter, as well as weekly paths, are shown in the accompanying table.
(15) With a policy of keeping to prevailing money market conditions, termed alternative $C, M_{1}$ growth in the first quarter would be at a 6 per cent annual rate and no pick-up from this rate would be anticipated in the second quarter. Thus, if the staff is correct in this projection, the shortfalls in $M_{1}$ growth for the fourth quarter and January would not be recovered. A relatively rapid $M_{1}$ growth would, however, be expected in February and March as the effects of recent

Paths of Key Monetary Aggregates-Monthly and Quarterly (Alternative C) (Seasonally adjusted, billions of dollars)

|  |  | Concepts of Money |  | Adj. Credit Proxy | Total <br> Reserves |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $M_{1}$ | $\mathrm{M}_{2}$ |  |  |
| 1970 |  |  |  |  |  |
| December |  | 214.6 | 419.0 | 331.2 | 29.9 |
| 1971 |  |  |  |  |  |
| January |  | 215.1 | 423.4 | 334.2 | 30.2 |
| February |  | 216.7 | 430.4 | 336.6 | 30.6 |
| March |  | 217.9 | 435.2 | 340.1 | 30.8 |
| June |  | 221.1 | 450.3 | 349.1 | 31.0 |
|  |  | Per Cent Annual Rates of Growth |  |  |  |
| January |  | 2.8 | 12.6 | 10.9 | 12.2 |
| February |  | 9.0 | 20.0 | 8.5 | 14.5 |
| March |  | 6.5 | 13.5 | 12.5 | 6.5 |
| 1st Q 1971 |  | 6.0 | 15.5 | 10.5 | 11.0 |
| 2nd Q 1971 |  | 6.0 | 14.0 | 10.5 | 3.5 |
|  |  | Paths of Key Monetary Aggregates-Weekly (Alternative C) |  |  |  |
| 1971 |  |  |  |  |  |
| January <br> February | 27p | 214.6 | 424.1 | 335.4 | 30.2 |
|  | 3 e | 216.1 | 427.4 | 335.9 | 30.3 |
|  | 10 | 216.4 | 428.9 | 336.2 | 30.5 |
|  | 17 | 217.1 | 436.6 | 336.3 | 30.7 |
|  | 24 | 216.8 | 431.3 | 337.3 | 30.6 |
| March | 3 | 216.9 | 432.5 | 336.5 | 30.8 |
|  | 10 | 217.8 | 434.0 | 338.2 | 30.7 |

interest rate declines gradually have an impact on demand for money and on the assumption that the staff projection of a rapid GNP growth in the first quarter materalizes.
(16) With the money market unchanged from recent easier conditions, long-term interest rates may show some further declines, on balance, over the coming weeks, as the sizable corporate and municipal calendar and the overhang of new Treasury financing issues is worked off. If money market conditions ease further-as would appear to be necessary under alternatives $A$ and $B-$ long-term yields could be expected to decline more sharply as banks make further aggressive efforts to attract corporate borrowers and as investors react in anticipating further rate declines.

## Possible directive language

(17) This section presents possible language for the second paragraph of the directive for the three alternative policy courses discussed atove.
(18) Alternative $A_{\text {s }}$ As noted earlier, this alternative is proposed for possible use if the Committee decides that the shortall in January from the path associated with its earlier first-quarter target growth rate (which in itself allowed for a make-up of the shortfall that occurred in the fourth quarter) is to be made up in the remaining part of the first quarter.
"To implement this policy, the Committee seeks to promote ascommodative conditions in credit narkets; GREATER GKOHM IN


#### Abstract

THE NARROWLY DEFINED MONEY STOCK, MAKING UP THE SHORTFALL FROM THE DESIRED GROWTH PATH THAT HAS DEVELOPED: and medezaをe CONIINUED SUBSTANTIAL expansion in OTHER monetary and credit aggregates. System open market operations until the next meeting of the Committee shall be conducted with a view to maintaining bank reserves and money market conditions consistent with those objectivess-taking-aceernt-ef-the 


 The indicated language with respect to the aggregates (i.e., the reference to the "narrowly defined money stock," followed by a separate reference to "the other monetary and credit aggregates") is suggesced to make clear (1) that it is with respect to $M_{1}$ that a shortfall is to be made up, and (2) that the Committee is also taking account of the behavior of key monetary aggregates other than $M_{1}$.(19) Alternative B. This alternative is proposed for possible use if the Committee decides that past shortfalls are to be made up over a period extending through the second quarter, and that the target for growth of $M_{1}$ in the first and second quarters should be set at 7 per cent. The Committee might choose such an approach in order to avoid the type of "whipsawing' of money market conditions that paragraph (9) suggests would be required to achieve annual rates of growth for $M_{1}$ of 8 per cent in the first quarter and 6 per cent in the second quarter.
"To implement this policy, the Comittee seeks to promote accommodative conditions in credit markets, GREATER GROWTH IN THE NARROWLY DEFINED MONEY STOCK, AND mederate CONTINUED RAPID expansion
in OTHER monetary and credit aggregates. Syatem open market operations until the next meeting of the Committee shall be conducted with a view to maintaining bank reserves and money market conditions consistent with those objectives,-taking


As will be noted, the language of alternative $B$ differs from that of alternative $A$ only in the omission of the clause (following the reference to the narrowly defined money stock) reading 'making up the shortfall from the desired growth path that has developed," Such a clause might be considered unnecessary in this alternative in light of the extended period over which the shortfall is to be made up.
(20) Alternative C. As will be noted, this alternative is similar to the second paragraph of the directive issued by the committee on December 15, 1970. It is suggested for possible use if the Committee decides not to seek to make up past shortfalls in $M_{1}$ even over the more extended time period, if doing so would require the degree of easing in money market conditions suggested by the analysis in paragraphs (9) and (10) above.

```
    "To implement this policy, the-Gemmittee-seeks-&e-pfrmote
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menetary-azd-ezedít-agg%egates: System open market operations
until the next meeting of the Committee shall be conducted with a
view to maintaining PREVAILING bamk-resefves-ared monf% werket conm
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aggregates appear to be expanding at ieast as fast as projected." The Committee may wish to have the proviso clause interpreted in terms of the projections of $M_{1}$ (or of $M_{1}, M_{2}$, and the bank credit proxy) shown in the table on $\mathrm{p}, 13$, based on the assumption of a continuation of prevailing money market conditions. The proviso clause--like that in the December directive--is formulated in a manner that would permit growth in the aggregates at rates higher than projected, but would call for easing of money market conditions to make up any shortfalls from projections associated with this alternative.

## monetary aggregates



## INTEREST BEARING SOURCES OF BANK FUNDS



## MONEY MARKET CONDITIONS AND INTEREST RATES



|  | Period | Adjusted Credit Proxy |  | Money Supply |  | U.S. Government Demand Deposits |  | Time Deposits |  | Nondeposit Sources of Funds |  | Total Reserves |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Path } \\ \text { as of } \\ \text { Jan. } 12 \end{gathered}$ | $\begin{aligned} & 2 \\ & \text { Current } \\ & \text { Proj } \end{aligned}$ | $\begin{array}{r} 3 \text { Path } \\ \text { as of } \\ \text { Jan. } 12 \end{array}$ | $\overbrace{\text { Current }} \begin{gathered} 4 \\ \text { Proj. } \end{gathered}$ | $\begin{gathered} 5 \text { Path } \\ \text { as of } \\ \text { Jan. } 12 \end{gathered}$ | $\square$ | 7 Path as of Jan. 12 | $\begin{aligned} & 8 \text { Current } \\ & \text { Prol } \end{aligned}$ | $\begin{aligned} & 9 \text { Path } \\ & \text { as of } \\ & \text { Jan. } 12 \end{aligned}$ | $\begin{gathered} 10 \\ \text { Current } \\ \text { Prol } \end{gathered}$ | $\begin{gathered} 11 \text { Path } \\ \text { as of } \\ \text { Jan. } 12 \\ \hline \end{gathered}$ | $T 12$ <br> Current Prol. |
| Monthly Pattern in Billions of Dollars |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1970: | Sept. | 324.5 | 324.5 | 212.8 | 212.8 | 6.2 | 6.2 | 218.5 | 218.5 | 16.5 | 16.5 | 29.2 | 29.2 |
|  | Oct. | 324.8 | 324.8 | 213.0 | 213.0 | 5.2 | 5.2 | 222.2 | 222.2 | 14.2 | 14.2 | 29.4 | 29.4 |
|  | Nov. | 326.7 | 326.7 | 213.5 | 213.5 | 6.0 | 6.0 | 225.0 | 225.0 | 12.7 | 12.7 | 29.5 | 29.5 |
|  | Dec. | 331.1 | 331.2 | 214.7 | 214.6 | 6.1 | 6.2 | 230.3 | 230.4 | 11.6 | 11.6 | 29.9 | 29.9 |
| 1971: | Jan. p | 334.5 | 334.2 | 215.7 | 215.1 | 6.4 | 6.7 | 234.6 | 235.4 | 10.7 | 10.1 | 30.3 | 30.2 |
|  | Feb. (proj.) | 337.9 | 336.6 | 217.5 | 21.6 .7 | 6.7 | 6.9 | 239.3 | 240.6 | 10.6 | 8.5 | 30.7 | 30.6 |
|  | Mar. (proj.) | 339.9 | 340.1 | 218.8 | 217.9 | 4.7 | 6.8 | 242.2 | 244.4 | 10.6 | 8.1 | 30.7 | 30.8 |
| Annual Percentage Rates of Change--Quarterly and Monthly |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1970: | $\begin{aligned} & \text { 1st Qtr. } \\ & \text { 2nd Qtr. } \\ & \text { 3rd Qtr. } \\ & \text { 4th Qtr. } \end{aligned}$ | 0.5 | 0.5 | 5.9 | 5.9 |  |  | 1.4 | 1.4 |  |  | -2.9 | -2.9 |
|  |  | 6.5 | 6.5 | 5.8 | 5.8 |  |  | 14.1 | 14.3 |  |  | 2.6 | 2.6 |
|  |  | 17.2 | 17.2 | 6.1 | 6.1 |  |  | 32.2 | 32.2 |  |  | 19.2 | 19.1 |
|  |  | 8.1 | 8.3 | 3.6 | 3.4 |  |  | 21.6 | 21.8 |  |  | 6.6 | 6.7 |
| 1971: | 1st Qtr. (proj.) | 10.5 | 10.5 |  | 6.0 |  |  | 20.5 | 24.5 |  |  | 7.5 | 11.0 |
| 1970: | Sept. | 9.7 | 9.7 | 5.7 | 5.7 |  |  | 29.8 | 29.8 |  |  | 27.5 | 27.5 |
|  | oct. | 1.1 | 1.1 | 1.1 | 1.1 |  |  | 20.3 | 20.3 |  |  | -1.9 | -1.9 |
|  | Nov. | 7.8 | 7.0 | 2.8 | 2.8 |  |  | 15.1 | 15.1 |  |  | 3.6 | 3.6 |
|  |  | 16.2 | 16.5 | 6.7 | 6.2 |  |  | 28.3 | 28.8 |  |  | 18.0 | 18.4 |
| 1971: | $\begin{array}{ll}\text { Jan. } & \text { p } \\ \text { Feb. } & \text { (proj.) } \\ \text { Mar. } & \text { (proj.) }\end{array}$ | 12.5 | 10.9 | 5.5 | 2.8 |  |  | 22.5 | 26.0 |  |  | 15.5 | 12.2 |
|  |  | 12.0 | 8.5 | 10.0 | $9.0$ |  |  | 24.0 | 26.5 |  |  | 14.5 | 14.5 |
|  |  | $\text { Weekiy }{ }^{0}$ | 12.5 ${ }^{12}$ | Hilions of | $\text { Mollars }{ }^{6.5}$ |  |  | 14.5 | 19.0 |  |  | -0.5 | 6.5 |
| 1970. | Dec. 2 | 1 328.3 | 328.3 | 214.5 | 214.5 | 5.3 | 5.3 | 227.2 | 227.2 | 11.7 | 11.7 | 29.7 | 29.7 |
|  | 9 | 330.7 | 330.7 | 214.2 | 214.2 | 7.1 | 7.1 | 228.8 | 228.8 | 12.1 | 12.1 | 29.7 | 29.7 |
|  | 16 | 330.1 | 330.1 | 215.3 | 215.3 | 5.6 | 5.6 | 229.7 | $229.7$ | 11.6 | 11.6 | 29.8 | 29.8 |
|  | 23 | 331.4 | 331.6 | 213.6 | 213.5 | 7.6 | 7.6 | 231.6 | 231.6 | 11.8 | 11.8 | 30.1 | 30.0 |
|  | 30 | 331.7 | 332.0 | 214.8 | 214.7 | 6.0 | 6.0 | 232,1 | 232.3 | 11.2 | 11.2 | 30.0 | 30.1 |
| 1971: | Jan. $\begin{array}{r}6 \\ 13 \\ 20 \\ \\ \\ 27\end{array}$ | 331.5 | 333.3 | 214.1 | 215.4 | 5.1 | 5.3 | 232.8 | 233.6 | 10.2 | 10.2 | 30.5 | 30.5 |
|  |  | 332.6 | 332.5 | 215.4 | 215.3 | 5.1 | 5.3 | 233.6 | 234.2 | 10.7 | 10.5 | 30.0 | 29.8 |
|  |  | 334.4 | 334.0 | 216.1 | 215.0 | 6.0 | 6.0 | 234.9 | 235.7 | 10.9 | 10.5 | 30.3 | 30.4 |
|  |  | 337.0 | 335.4 | 216.4 | 21.4 .6 | 8.7 | 8.1 | 235.7 | 236.5 | 10.8 | 10.0 | 30.3 | 30.2 |
|  | Feb. $\begin{array}{r}3 \text { pe } \\ 10\end{array}$ | 337.9 338.4 | 335.9 336.2 | 217.3 217.8 | 216.1 | 8.2 8.3 | 8.4 | 236,7 238 | 238.1 | 10.7 | 8.8 | 30.4 | 30.3 |
|  |  | 338.4 | 336.2 | 217.8 | 216.4 | 8.3 | 7.8 | 238.5 | 239.5 | 10.6 | 8.6 | 30.6 | 30.5 |

[^1] pe -- partially estimated.

RETROSPECTIVE CHANGES. SEASONALLY ADJUSTED
(Annual rates in percent)

| Period | Reserve Aggregates |  | Monetary Variables |  |  |  |  |  | Addenda |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Reserves | 12 <br> Nonborrowed Reserves | 3 Total Member Bank Deposits | ```4 Adjusted Credit Proxy``` | Money Supply |  |  | Time Deposits Adjusted | 9  <br>  Thrift <br> Instit.  <br>   <br>  Deposits | 10 <br> Nonbank Commercial Paper |
|  |  |  |  |  | $5$ | $76$ <br> Currency | $\left\lvert\, \begin{gathered} \text { Private } \\ \text { Demand } \\ \text { Deposits } \end{gathered}\right.$ |  |  |  |
| Anfually |  |  |  |  |  |  |  |  |  |  |
| 1968 | $+7.8$ | $+6.0$ | $+9.0$ | n.a. | + 7.8 | + 7.4 | + 7.9 | +11.1 | $+6.3$ | n.a. |
| 1969 | - 1.6 | - 3.0 | - 4.0 | ก.a. | + 3.1 | $+6.0$ | + 2.4 | - 5.0 | + 3.4 | t.a. |
| 1970 | $+6.4$ | + 9.5 | +11.8 | +8.3 | + 5.4 | +6.3 | $+5.1$ | $+18.4$ | + 7.6 | +7.3 |
| Senimannually |  |  |  |  |  |  |  |  |  |  |
| 1st Half 1969 | + 0.7 | - 3.7 | - 3.5 | п.a. | $+5.1$ | +6.5 | $+4.7$ | - 3.5 | $+4.8$ | n.a. |
| 2nd Half 1969 | - 3.9 | - 2.4 | - 4.6 | - 1.2 | + 1.2 | $+5.4$ | + 0.1 | - 6.6 | + 1.9 | +28.3 |
| 1st Half 1970 | - 0.2 | +1.9 | $+3.3$ | $+3.5$ | $+5.9$ | + 7.8 | $+5.3$ | + 7.8 | $+4.3$ | +12.8 |
| 2nd Half 1970 | $+13.0$ | +17.1 | $+20.0$ | +12.9 | $+4.8$ | $+4.6$ | $+4.7$ | +27.9 | +10.6 | +1.7 |
| Quarterly |  |  |  |  |  |  |  |  |  |  |
| 3ra Qtr. 1969 | - 9.3 | - 4.8 | - 9.4 | - 4.3 | $+0.8$ | $+4.5$ | -- | -12.7 | $+2.3$ | +31.6 |
| 4th Qtr. 1969 | + 1.4 | - 0.1 | + 0.1 | $+2.0$ | + 1.6 | + 6.2 | + 0.3 | - 0.4 | + 1.4 | +23.2 |
| 1 st Qtr. 1970 | -2.9 | - 0.4 | + 0.6 | $+0.5$ | + 5.9 | + 6.1 | + 5.3 | $+1.4$ | $+1.7$ | +17.8 |
| 2nd Qtr. 1970 | + 2.6 | + 4.1 | +6.0 | +6.5 | + 5.8 | + 9.4 | +5.3 | +14.1 | +6.9 | +7.5 |
| 3rd Qtr. 1970 | +19.1 | $+24.4$ | +24.1 | $+17.2$ | $+6.1$ | +3.3 | +6.7 | +32.2 | +10.0 | -16.2 |
| 4th Qtr. 1970 | $+6.6$ | + 9.4 | +15.1 | +8.3 | $+3.4$ | + 5.8 | + 2.7 | +21.8 | +11.0 | +20.4 |
|  |  |  |  |  |  |  |  |  |  |  |
| 1970: Jan. | $+3.1$ | $+7.2$ | -4.2 | - 3.5 | $+9.4$ | + 5.2 | + 9.9 | - 8.0 | - 4.2 | +12.6 |
| reb. | -12.0 | -15.6 | - 8.0 | - 5.5 | -4.1 | + 5.2 | - 6.8 | + 1.2 | + 2.8 | +26.2 |
| March | -- | $+7.5$ | +14.0 | +10.7 | +12.3 | + 7.8 | +12.9 | +11.2 | + 6.6 | +13.8 |
| April | +21.3 | +25.4 | +16.8 | $+13.7$ | + 9.9 | +10.3 | $+10.5$ | +19.7 | +8.1 | $+34.4$ |
| May | -13.9 | -19.0 | -4.5 | - 1.2 | + 5.2 | +15.3 | +3.0 | +10.9 | + 5.3 | +18.9 |
| June | +0.5 | +6.2 | + 5.8 | $+7.0$ | $+2.3$ | + 2.5 | + 2.2 | $+11.4$ | $+7.0$ | -30.0 |
| July | + 6.0 | -16.1 | +22.7 | +18.1 | + 5.7 | $+7.5$ | $+4.4$ | +35.6 | +13.3 | -87.5 |
| Aug. | +23.3 | +48.8 | $+29.2$ | +23.2 | + 6.8 | $+2.5$ | +8.9 | +28.8 | +6.1 | -7.2 |
| Sept. | +27.5 | +40.1 | +19.0 | $+9.7$ | $+5.7$ | -- | $+6.6$ | +29.8 | +10.5 | +49.6 |
| Oct. | - 1.9 | -- | +10.1 | + 1.1 | + 1.1 | $+7.5$ | - 0.7 | +20.3 | +10.5 | +32.3 |
| Nov. | 1.9 +3.6 | +4.4 +22.8 | +13.1 | +7.0 +16.5 | +2.8 +6.2 | +4.9 +4.9 | +2.2 +6.6 | +15.1 +28.8 | +9.2 +13.0 | -28.7 +58.0 |
| Dec. | +18.4 | +22.8 | +21.4 | +16.5 | + 6.2 | $+4.9$ | + 6.6 | +28.8 | +13.0 |  |





NOTES. Aggregate reserve serjes bave been adjusted to eliminate rhanges in percentage reserve requirements against deposits, but reserve requirements on Eurodollar borrowings are included beginning October 16,1969 , and requirements on bank-related commercial paper are included beginning October 1 , 1970 lon Adjusted credit proxy includes mainit toral member bank borromings of tigures which are for last day of month.

Table 4
MARGINAL RESERVE MEASURES
(Dollar amounts in millions, based on period averages of daily figures)


SOURCE OF FEDERAL RESERVE GREDIT
Retrospective Changes
(Dollar amounts in millions of dollars, based on weekly averages of daily figures)


1/ Figures in parenthesis reflect reserve effect of inatch sale-purchase agreement.

Table 6
MATOR SOURCES AND USES OF RESERVES
Retrospective and Prospective Changes
(Dollar amounts in millions, based on weekly averages of daily figures)


1 For retrospective details, see Table 5.
2 Includes $\$ 400$ million in special drawing account,
p - Preliminary.


[^0]:    ${ }^{1}$ In some cases, original copies needed to be photocopied before being scanned into electronic format. All scanned images were deskewed (to remove the effects of printer- and scanner-introduced tilting) and lightly cleaned (to remove dark spots caused by staple holes, hole punches, and other blemishes caused after initial printing).
    ${ }^{2}$ A two-step process was used. An advanced optical 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]:    NOTES: Annual rates of change other than those for the past are rounded to the nearest half per cent.

