Research Department
Federal Reserve
Bank of
San Francisco

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# Tracking Money

In recent years the Federal Reserve's Open Market Committee (FOMC) has been increasingly concerned with controlling the money supply. Each monthly meeting of this body, which is attended by the seven Federal Reserve Governors and the twelve Federal Reserve Bank Presidents, results in the issuance of a directive to the government-securities trading desk at the Federal Reserve Bank of New York, spelling out the monetary policy plans of the FOMC. Since early 1972, this directive has been accompanied by quantitative targets for several monetary aggregates—$M_1$ (currency plus demand deposits), $M_2$ (currency plus total deposits except large negotiable time certificates), and RPD's (reserves available to support private non-bank deposits). Also included has been an interest-rate target, in the form of the Federal-funds rate (the borrowing rate on unused member-bank reserves). More recently the FOMC has begun to include information on short-run operating targets in its "policy record," which is published 90 days after each meeting and republished in both the **Federal Reserve Bulletin** and the Board's **Annual Report.**

**Intent and results**

Publication of quantitative short-run targets began with the record for January 1974, as found in the May 1974 **Bulletin.** Consequently, the public now has a chance to mull over the FOMC's recent short-run targets and to assess the difficulties involved in achieving short-run control over money growth and interest rates.

Consider, for example, the targets established at the August FOMC meeting, as published in the November 1974 **Bulletin.** These called for annual rates of growth over the August-September period in the range of 4¾ to 6¾ percent for $M_1$, 5½ to 7½ percent for $M_2$, and 7¾ to 9¾ percent for RPD's; and in addition, for a weekly-average Fed-funds rate in the range of 11½ to 12½ percent for the statement weeks in the period before the next meeting. The actual results for the period varied considerably, in both directions, from these targets.

Money growth during the August-September interval was particularly surprising. $M_1$ growth averaged about minus 1 percent, compared to its 4¾-6¾ percent target. Although the Fed's reserve (RPD) target was exceeded, this performance was not transmitted into more rapid money growth. (At the same time, the targeted funds rate was easily achieved.) In view of this performance, it is easy to see how the public errs in basing its view of Federal Reserve policy on very short-run (even weekly!) money-supply movements.

While the Federal Reserve can control short-run movements in the Fed-funds rate, this does not mean



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that other open-market rates will necessarily show the same direction of movement. For example, in October the Fed-funds rate fell from 11.04 to 9.72 percent, while the Treasury-bill rate rose from 6.53 to 7.92 percent, reflecting such factors as the increased activity of foreign central banks in the Treasury securities market. Thus, while a declining Fed-funds rate may at first glance appear to increase the demand for money by the private sector, divergent movements in other market rates cast doubt on such an interpretation. The Fed-funds rate is only one of many short-term interest rates, and the transmission mechanism between these interest rates and money demand is far less clear than money-market watchers often suggest.

**Monetary base**

The Fed's ability to expand the money supply since mid-1974 has been hampered by a shift in the composition of that aggregate—a shift in the public's preference away from demand deposits in favor of currency. From June to November demand deposits held by the public increased by less than $1.0 billion dollars, while currency holdings rose by $2.7 billion. The monetary base—Federal Reserve assets, the uses of which include total reserves and currency—increased even more rapidly in the second half than in the first half of the year. However, this growth supported considerably less $M_1$ growth in the second half, because of the rise in the public's currency-demand deposit ratio, which acted to reduce the multiplier between the monetary base and $M_1$. From January to June, the monetary base grew at an 8.1 percent annual rate and $M_1$ at a 6.0 percent rate, while the comparable growth rates in the second half were 8.6 percent and 2.8 percent, respectively. Those who use the monetary base (high-powered money) as an indicator of Federal Reserve policy thus conclude that—despite sluggish money growth—aggregate policy was changed little over the course of the year.

The FOMC does not use the monetary base in its policy deliberations. All the same, the monetary base could be considered a good measure of monetary behavior because it captures shifts in open-market operations, reserve-requirement changes and discount-rate policy, such as no other broad monetary aggregate does. In addition, the multiplier between money and the monetary base has been relatively stable over long periods of time, although sometimes unstable in shorter periods. Thus it was with some concern that base watchers saw the multiplier fall from around 2.62 in January to 2.52 in November. If an uncertain public continues to increase its preference for currency relative to demand deposits, the value of the multiplier might remain unstable, thereby casting doubt on the usually close relationship between the monetary base and the money supply.

**Money watching**

While a major segment of the economics profession has stressed the importance of the narrowly defined money supply ($M_1$) in influencing economic behavior, it is not at all clear that a narrow definition of money is the most appropriate measure. Statistical evidence indicates that a great deal of substitutability exists between demand and time deposits. This substitutability has led some economists to prefer a broader measure of money, such as $M_2$, and the FOMC has acknowledged the value of this argument by establishing both short- and long-run policy targets for $M_2$ as well as for $M_1$.

The broader $M_2$ target is relevant also because $M_2$ income velocity (GNP divided by $M_2$) has been surprisingly stable over time, particularly since the early 1960's. Some monetary theorists, such as Milton Friedman, consequently argue that this stability is indicative of a stable demand for money, so that policy makers could infer aggregate nominal income from a projected growth in the broader money stock. The drawback here is that significant errors can occur in forecasting nominal GNP on the basis of $M_2$ growth—errors as large as 5 percent, a substantial portion of GNP, over long periods of time. Still, the decade-long stability of the $M_2$ velocity measure supports the quantity theorists' argument that more attention should be paid to the trend rate of growth of this monetary aggregate.

**Fed watching**

Controlling the money supply is analogous to walking a dog with a very long leash. Long-run control is feasible under these circumstances, but short-run control is much less so, because of the difficulties involved in measuring what the money supply actually is, determining which movements are merely random, and changing money-supply direction in the short-run. The public tends to underestimate the difficulty of holding a tight leash on the money-supply, and thus tends to believe that short-run movements in this aggregate are directly caused by conscious Fed decisions. For example, security dealers pay close attention to the Fed-funds rate, trying to match funds-rate movements with weekly changes in the money supply. This exercise is of little use in understanding the basic thrust of Fed policy or the ultimate effect of current policy on real economic variables. Even the published short-run money targets should be interpreted with caution, for they may reflect FOMC attempts to compensate for earlier short-falls or overshoots.

Finally, while the publication of the FOMC's short-run targets aids in public understanding of Fed behavior, it must be remembered that the Fed itself is learning from its own successes and failures at achieving targeted money growth. The publication of the short-run targets should help the public realize the problems involved in money control.

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## BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

| Selected Assets and Liabilities Large Commercial Banks | Amount Outstanding 1/15/75 | Change from 1/8/75 | Change from year ago Dollar | Change from year ago Percent |
|---|---|---|---|---|
| Loans (gross, adjusted) and investments* | 86,701 | −271 | +7,406 | + 9.34 |
| Loans (gross, adjusted)—total | 67,450 | −393 | +7,177 | + 11.91 |
| Security loans | 1,609 | − 60 | + 379 | + 30.81 |
| Commercial and industrial | 24,171 | −158 | +2,863 | + 13.44 |
| Real estate | 20,028 | + 2 | +1,584 | + 8.59 |
| Consumer instalment | 9,886 | − 10 | + 739 | + 8.08 |
| U.S. Treasury securities | 6,280 | + 63 | + 18 | + 0.29 |
| Other securities | 12,971 | + 59 | + 211 | + 1.65 |
| Deposits (less cash items)—total* | 84,140 | −655 | +8,791 | + 11.67 |
| Demand deposits (adjusted) | 23,377 | −251 | +1,080 | + 4.84 |
| U.S. Government deposits | 331 | −115 | − 492 | − 59.78 |
| Time deposits—total* | 59,078 | −134 | +8,282 | + 16.30 |
| States and political subdivisions | 7,483 | −119 | + 225 | + 3.10 |
| Savings deposits | 18,279 | + 5 | + 535 | + 3.02 |
| Other time deposits‡ | 29,910 | − 4 | +6,810 | + 29.48 |
| Large negotiable CD's | 16,754 | − 27 | +5,983 | + 55.55 |

| Weekly Averages of Daily Figures | Week ended 1/15/75 | Week ended 1/8/75 | Comparable year-ago period |
|---|---|---|---|
| **Member Bank Reserve Position** | | | |
| Excess Reserves | − 2 | − 3 | 80 |
| Borrowings | 21 | 78 | 267 |
| Net free (+) / Net borrowed (−) | − 23 | − 81 | − 187 |
| **Federal Funds—Seven Large Banks** | | | |
| Interbank Federal fund transactions | | | |
| Net purchases (+) / Net sales (−) | +1,653 | +1,635 | +1,580 |
| Transactions of U.S. security dealers | | | |
| Net loans (+) / Net borrowings (−) | + 977 | + 962 | + 180 |

*Includes items not shown separately. ‡Individuals, partnerships and corporations.

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