

# Recent Developments in U. S. Monetary Policy\*

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## I. Monetary Policy until 1979

The monetary policy of the Federal Reserve (Fed) has undergone substantial changes during the 1970s. Until 1970 money market conditions represented the dominant short-run target for open-market policy. At the beginning of 1970 the Federal Open Market Committee (FOMC) shifted its emphasis for short-run operations to bank credit and money supply. Explicit growth rate ranges for M-1 and M-2 were first introduced in January 1974. In the years 1972 and 1973 those growth rates had been announced only in reference to the growth of total reserves.<sup>1</sup>

Two-month target rates for M-1 and M-2 have been published since 1975. In response to House Current Resolution 133, which led ultimately to the Federal Reserve Reform Act of 1977, the Board of Governors of the Fed had decided each quarter on target annual growth rates for M-1, M-2, and M-3, and had presented this target to Congress. According to the Full Employment and Balanced Growth Act of 1978, also known as the *Humphrey-Hawkins Act*, the FOMC was obliged to establish growth ranges for money and credit for each year and the Board of Governors was required to report the Fed's objectives by February 20 and July 20.<sup>2</sup>

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<sup>1</sup> For this development see: *Henry C. Wallich and Peter M. Keir*, The role of Operating Guides in U.S. Monetary Policy: A Historical Review, *Kredit und Kapital* 1978, pp. 38 - 43; *Neil G. Berkman*, The New Monetary Aggregates, *Journal of Money, Credit and Banking*, May 1980, pp. 141, 142; *Edward J. Kane*, Politics and Fed Policymaking, *Journal of Monetary Economics*, April 1980, pp. 200 - 203.

<sup>2</sup> For the implications of this change in calculating growth rates see *Richard W. Lang*, The FOMC in 1979: Introducing Reserve Targeting, *Federal Reserve Bank of St. Louis, Review*, March 1980, pp. 206; *J. A. Cacy*, Monetary Policy in 1980 and 1981, *Federal Reserve Bank of Kansas City, Economic Review*, December 1980, pp. 18 - 20.

In spite of the greater emphasis laid on monetary aggregates, the immediate target of the Fed's policy during that period was still an interest rate, i. e., the federal funds rate which is the market rate on loans for deposits at Federal Reserve banks on one-day's notice. At each meeting the FOMC set a tolerance range for the federal funds rate and a two-month tolerance range for M-1 and M-2. Within the range expressed for the federal funds rate, the FOMC specified an initial level which was supposed to be consistent with the two-month growth rate for the monetary aggregates.

This policy stance is documented by the following domestic policy directive issued by the FOMC to the Federal Bank of New York: "... operations shall be directed at maintaining the weekly average federal funds rate within the range of 9 - 3/4 to 10 - 1/2 percent. In deciding on the specific objective for the federal funds rate the Manager shall be guided mainly by the relationship between the latest estimates of annual rates of growth in the April-May period of M-1 and M-2 and the following ranges of tolerance: 4 to 8 percent for M-1 and 4 to 8-1/2 for M-2. If, with approximately equal weight given to M-1 and M-2, their rates of growth appear to be close to or beyond the upper or lower limits of the indicated ranges, the objective for the funds rate is to be raised or lowered in an orderly fashion within its range. If the rates of growth in the aggregates appear to be above the upper limit or below the lower limit of the indicated ranges at a time when the objective for the funds rate has already been moved to the corresponding limit of its range, the Manager will promptly notify the Chairman, who will then decide whether the situation calls for the supplementary instruction from the Committee."<sup>3</sup>

## II. The New Procedure

A special meeting of the FOMC was called by the Chairman for October 6 "to consider actions that might be taken ... to improve control over the expansion of money and bank credit in the light of developing speculative excesses in financial and commodity markets and additional evidence of strong inflationary forces in the economy."<sup>4</sup>

It had become obvious that following the old procedure monetary policy had not prevented monetary aggregates from expanding at un-

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<sup>3</sup> Federal Reserve Bulletin, June 1979, pp. 141 - 142.

<sup>4</sup> Federal Reserve Bulletin, December 1979, p. 972.

desirable high rates. The actual growth rate at this time had accelerated to annual rates of about 9.5 percent for M-1, 12 for M-2 and 10.25 for M-3 compared with target ranges of 3 - 6, 5 - 8, and 6 - 9 percent. The members of the FOMC still wanted these objectives to be maintained and agreed that additional measures were necessary to attain them. Most members supported a shift in open market policy to controlling the supply of bank reserves more directly. The relationship between interest rates and monetary growth had been more and more disturbed by the influence of rapid inflation; specifically, the growth of monetary aggregates had accelerated during 1979 despite substantial increases in short-term interest rates.<sup>5</sup>

So far open market policy had tried to manage bank reserves in order to achieve the target. The shift from the federal funds rate to bank reserves as the immediate target of monetary policy is expressed in the following directive (October 6, 1979) of the FOMC to the Federal Reserve Bank of New York: "In the short run, the Committee seeks to restrain expansion of reserve aggregates to a pace consistent with deceleration in growth of M-1, M-2, and M-3 in the fourth quarter of 1979 to rates that would hold growth of these monetary aggregates over the whole period from the fourth quarter of 1978 to the fourth quarter of 1979 within the Committee's longer run ranges, provided that in the period before the next regular meeting the weekly average federal funds rate remains within a range of 11-1/2 to 15-1/2 percent. The Committee will consider the need for supplementary instruction if it appears that operations to restrain expansion of reserve aggregates would maintain the federal funds rate near the upper limit of its range."<sup>6</sup>

Although bank reserves obviously became the immediate target of monetary policy, the FOMC makes decisions on growth rates for monetary aggregates, not on bank reserves. It's therefore the task of the staff to derive weekly targets for steering bank reserves on a level consistent with the FOMC's short-run monetary target.<sup>7</sup>

Total reserves consist of borrowed (from the discount window) and non-borrowed reserves. Open market policy can control only the level of non-borrowed reserves. If, for example, total reserves are above the target level, non-borrowed reserves could be reduced by open market

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<sup>5</sup> Federal Reserve Bulletin, December 1979, p. 974.

<sup>6</sup> Federal Reserve Bulletin, December 1979, p. 977.

<sup>7</sup> For a more detailed description of this procedure see *Lang* pp. 13 - 16.



operations and/or borrowed reserves influenced by raising the discount rate.

Moreover, the staff calculates growth paths for the monetary base (currency in circulation plus total reserves of member banks) consistent with the target for the monetary aggregates.

### III. The New Monetary Aggregates

Since the early 1960s a number of innovations in the financial system have occurred. Therefore, the Board of Governors had already in 1974 appointed an advisory committee for the study of the consequences these innovations might have for the reliability of the traditional monetary aggregates.

These innovations, which have continued to accelerate since the mid 1970s, are caused by three factors.<sup>8</sup>

(1) Regulatory changes enforced competition between different kinds of financial institutions. As a consequence new types of financial assets emerged.

(2) This development was fostered by the rapid spread of computer technology in financial institutions.

(3) Rising rates of inflation led to ever higher interest rates thus increasing the opportunity costs of holding money. In response to the public's desire of economizing in holdings of non-interest-bearing demand deposits, competing financial institutions offered several new kinds of interest-bearing highly liquid assets.

Those include NOW accounts (Negotiable Order of Withdrawal), being savings accounts from which payments can be made by draft. Thus, NOW accounts are equivalent to interest-bearing checking accounts with a ceiling rate of 5-1/4 percent. They were first offered in 1972 in Massachusetts and were introduced nationwide at the beginning of 1981.<sup>9</sup>

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<sup>8</sup> For a detailed survey see *Marvin Goodfriend, James Parthemos, and Bruce Summers, Federal Reserve Bank of Richmond, Economic Review, March/April 1980, pp. 14 - 27.*

<sup>9</sup> NOW accounts increased by \$ 16 billion in the first two weeks of January 1981. The effect on M1-B, which rose by \$ 9.7 billion during the same period, was uncertain because the increase in NOW's could include transfers from checking accounts — leaving M1-B unchanged — as well as shifts from saving and time deposits.

Automatic Transfer Services (ATS) — transfers from savings to demand accounts — have significantly increased the liquidity of savings deposits at commercial banks. The same effects is true for Credit Union share drafts, which are payments directly from share accounts.

Those and some related changes have significantly diminished the differences between financial assets separated so long in different monetary aggregates. As a consequence M-1 defined as currency plus demand deposits no longer represented an accurate measure of total transactions balances.

Consequently, on February 7, 1980 the Fed announced new definitions of money. In addition to the four monetary aggregates, a broad measure of liquid assets has been adopted.<sup>10</sup>

These new definitions are now used in the conduct of monetary policy. Thus, growth range targets have been announced for M-1A, M-1B, M-2 and M-3 for the period from the fourth quarter of 1980 to the fourth quarter of 1981.<sup>11</sup> M-1A corresponds with the previous M-1 (minus demand deposits due to foreign commercial banks and official institutions). In addition M-1B includes all other checkable deposits as (mainly) NOW's, ATS accounts, and credit union share draft balances. The rationale for this definition represents a functional and no longer an institutional approach, e. g., it distinguishes no longer between banks and savings associations, but it includes all deposits at any institutions that can be used for transactions purposes. M-2 and M-3 are not expounded here in detail. The new aggregate L, the broadest measure, equals new M-3 plus Eurodollar holdings of U.S. residents other than banks, bankers acceptances, commercial paper, savings bonds and liquid Treasury obligations.<sup>12</sup> In contrast to the practice followed by the Deutsche Bundesbank, the Fed has finally taken into account in some limited fashion the existence of an external market for dollar deposits, in defining monetary aggregates.<sup>13</sup>

<sup>10</sup> Federal Reserve Bulletin, February 1980, pp. 97 - 111.

<sup>11</sup> Federal Reserve Bulletin, May 1980, p. 404.

<sup>12</sup> Overnight Eurodollars held by U.S. nonbank residents issued by Caribbean branches of member banks are included in M-2, because those data are available on a timely basis.

By shifting amounts (over the weekend) between the internal and the Euro-dollar markets, U.S. banks achieve substantial savings in reserve requirements. In a letter the Fed requested that this kind of Eurodollar arbitrage be terminated. Federal Reserve Bank of Chicago, International Letter, No. 440, January 30, 1981.

<sup>13</sup> See *Dufey and Issing*, *Mindestreservpolitik, Geldmengensteuerung und Euromärkte*, paper forthcoming 1981.

However, the problems that these innovations in financial markets have posed for the conduct of monetary policy have not been solved simply by redefining monetary aggregates. For instance, the broadened spectrum of monetary aggregates means also that there are now assets included which are issued by financial institutions beyond the immediate control of monetary policy.

#### IV. First Experiences with the New Procedure

Viewing the results of 1980 as a whole, monetary policy seems to have been successful to a certain extent in achieving its monetary objectives (see Table 1). But this conclusion neglects the fact that huge excesses on both sides happened and almost cancelled out over the year.

In the short run the Fed has mostly missed the growth paths established to guide policy during the year. Having shifted from the Federal funds rate to bank reserves as immediate target of monetary policy, wider fluctuations of interest rates had to be expected, of course. Nevertheless the wild swings in interest rates that occurred came still as a surprise. The federal funds rate rose from around 14 percent on January 1st, 1980 to 19 percent in the first week of April. Then it dropped sharply to around 9 percent at the end of June and again started an upward trend reaching its peak at almost 20 percent in the midst of December (see chart I). Other interest rates show a similar pattern,

Table 1\*

#### Actual Growth Rates and Target Ranges in 1980

Actual Rate	M-1A	M-1B	M-2	M-3
First Quarter	4,6	5,8	7,3	8,0
Second Quarter	— 4,4	— 2,6	5,6	5,8
Third Quarter	11,5	14,6	16,0	13,0
Fourth Quarter	8,1	10,8	9,1	11,6
1980 target range <sup>a)</sup>	3 1/2 - 6	4 - 6 1/2	6 - 9	6 1/2 - 9 1/2

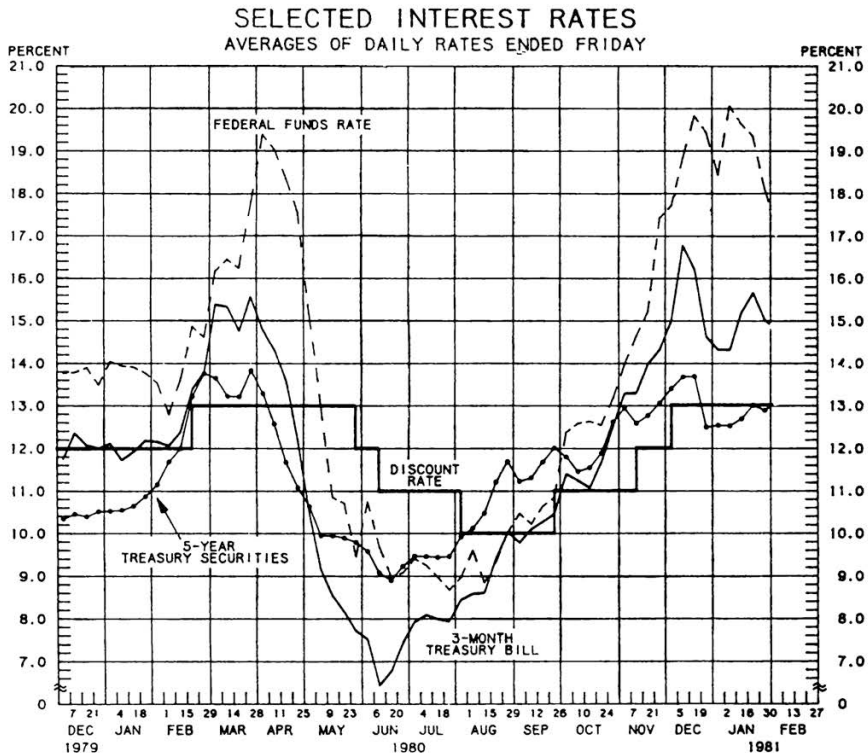
\* Source: Federal Reserve Bulletin, February 1981, p. A3.

a) From fourth quarter of 1979 to fourth quarter of 1980.

The wild swings in the monetary growth rates become even more clear if one looks at different periods. Thus, M-1A increased at an annual rate of almost 6 percent from October 1979 to February 1980; it fell at over 9 percent from February to April, and it rose again at over 10 percent from April to September. See: International Institute for Economic Research, *Controlling Money: A Discussion*, November 1980, p. 5.



Chart I\*



the prime rate, e. g., rising from around 15 percent in the beginning of 1980 to 20 percent in April, declining to 11 percent in August and rising again to 21.5 percent at the end of the year.

Even more confounding was the fact that the growth rates of the monetary aggregates also showed huge fluctuations during the year (see Table 1). While actual growth rates were about in line with the established paths for the first quarter, the money supply as measured by M-1A and M-1B declined in the second quarter, rebounded sharply during the third quarter and continued being strong in the fourth quarter.

In view of this performance it is not surprising that the Fed has been criticized from all directions. Two opinions may illustrate the full spectrum of criticism. For *Gardner Ackley* the answer to the question why

the Fed “put on this incredible up-and-down-performance” is “basically, that the Fed has been trying to satisfy a small audience of extreme monetarist critics who think that stability of short-run money growth is both possible and important and who have frightened quite a few influential people in the financial and political communities into accepting their ideas.”<sup>14</sup> On the other side, *Milton Friedman*, also blaming the Fed for its bad performance, claims: “An alternative procedure of controlling the base directly and letting the market determine interest rates could produce steady and predictable monetary growth and at the same time avoid wide swings in interest rates.”<sup>15</sup>

In the memorandum just quoted *Friedman* argues that the Fed is still trying to control the money supply by pegging the federal funds rate. If the officially announced shift to bank reserves is not convincing by itself, one has at least to consider that the new procedure of the Fed is characterized by wide ranges for the federal funds rate for the short run. Thus, the Fed on March 18, 1980 set a proviso clause for the federal funds rate of 13 to 20 percent for the period until the next meeting.<sup>16</sup>

Bank reserves as an intermediate target of monetary policy raise, of course, many questions — above all about the linkages with the money supply. Most of these questions, however, also apply to the monetary base.<sup>17</sup>

Apart from the technical aspects which are doubtless important, the central problem of the performance of U.S. monetary policy during 1980 boils down to the question whether the up-and-down movements of the economy and the wild fluctuations in interest rates have to be judged as an exogenous factor with respect to monetary policy or whether they were caused by it. It is no surprise that the Fed is claiming monetary policy to have been confronted with heavy nonmonetary shocks like dangerous turmoil in the Middle East, a tremendous surge in energy prices, etc. as expressed in a statement by chairman Paul Volcker.<sup>18</sup> In contrast to this opinion, *Milton Friedman* claims that the

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<sup>14</sup> *Gardner Ackley*, *Let's Save the Federal Reserve from the Monetarists*, *Dun's Review*, February 1, 1981, p. 10.

<sup>15</sup> *Milton Friedman*, A Memorandum to the Fed, *Wall Street Journal*, January 30, 1981, p. 16.

<sup>16</sup> *Federal Reserve Bulletin*, May 1980, p. 404.

<sup>17</sup> See *Carl M. Gambs*, *Federal Reserve Intermediate Targets: Money or the Monetary Base?* *Federal Reserve Bank of Kansas City, Economic Review*, January 1980, pp. 3 - 15.

<sup>18</sup> *Federal Reserve Bulletin*, December 1980, p. 944, pp. 948n.



“sharp second-quarter recession very likely was produced and certainly was intensified, by the Fed’s own actions” (see memorandum).

In view of the huge volatility of both monetary conditions and non-monetary influences the overall performance of the U.S. economy in 1980 was not bad. For the very short run the Fed could argue that in the second quarter of 1980 both interest rates as well as M-1A and M-1B were declining at the same time. If the Fed had tried to expand the money supply in this period the decline of interest rates might have been even more dramatic with the consequence of substantial negative real interest rates even before taxation. Despite all the convincing arguments against an interest rate orientation for monetary policy, high negative real interest rates are certainly not a good device to combat inflation.

The main problem of U.S. monetary policy seems to be deciding on the length of the period in which the monetary targets should be achieved. Monetarists plead for controlling the monetary base in a very steady manner, allowing interest rates to fluctuate in the short-run, but claiming also that in the course of time interest rates would be far less volatile. Opponents to this concept ask if huge fluctuations of interest rates are not an unnecessary burden and could be avoided without abandoning the longer run monetary target. The importance of setting a monetary target seems to be less contested than ever.<sup>19</sup>

## Zusammenfassung

### Neue Entwicklungen in der Geldpolitik der Vereinigten Staaten

Jahrelang versuchte die Federal Reserve ihre Geldmengenziele über die Steuerung des Zinssatzes für Federal Funds zu erreichen. Diese Konzeption wurde jedoch offiziell aufgegeben, als die Wachstumsrate der verschiedenen Geldmengenaggregate die angestrebten Zielwerte immer stärker überstieg. Seit der Entscheidung des Federal Open Market Committees vom 6. Oktober 1979 sind die Bankreserven an die Stelle des Federal-Funds-Satzes getreten, d. h. die Geldpolitik versucht, ihre Geldmengenziele via Steuerung der Bankreserven zu erreichen.

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<sup>19</sup> One might, however, doubt that it is reasonable to set (range) targets for four different monetary aggregates at the same time — even if one considers the influence of financial innovations on the reliability of a single aggregate.

In a new study evidence is found for M-1B as satisfying best the requirements of a monetary indicator. *Keith M. Carlson and Scott E. Hein*, Monetary Aggregates as Monetary Indicators, Federal Reserve Bank of St. Louis, Review, November 1980, pp. 20, 21.

Wenig später, nämlich im Februar 1980, wurden die Geldmengenaggregate neu definiert. Dieser Schritt war dringend notwendig geworden, weil durch eine Reihe von Neuerungen verschiedene Einlagearten für Zahlungszwecke verfügbar und damit faktisch so liquide wie Scheckguthaben wurden. Das neue Aggregat M-1B trägt dieser Änderung Rechnung und schließt neben dem bisherigen „Zahlungsmittelbestand“ (M-1, jetzt M-1A) auch alle anderen Guthaben ein, über die per Scheck verfügt werden kann.

Die „neue Geldpolitik“ wurde ziemlich einhellig sowohl von monetaristischer wie von keynesianistischer Seite scharf kritisiert. Der Grund für diese Kritik ist vor allem in den extremen Schwankungen der Zinssätze und der Wachstumsraten der verschiedenen Geldmengenaggregate zu suchen, die seitdem eingetreten sind.

## Summary

### Recent Developments in U.S. Monetary Policy

For years, the Federal Reserve Board tried to achieve its money supply objectives by controlling the interest rate for Federal Funds. This conception was officially given up, however, when the growth rate of the various money supply components exceeded the desired target values to an ever greater extent. Since the decision of the Federal Open Market Committee of October 6, 1979, bank reserves have taken the place of the Federal funds rate, i.e., monetary policy is attempting to reach its money supply goals by controlling bank reserves.

A little later, in February 1980, the aggregates of the quantity of money redefined. This step had become urgently necessary because a number of innovations had made various types of deposit available for payments purposes and in effect as liquid as cheque account deposits. The new aggregate M-1B takes account of this change and comprises, in addition to the former supply of legal tender (M-1, now M-1A), also all other credit balances available by drawing cheques on them.

The “new monetary policy” was sharply criticized fairly unanimously by both monetarists and Keynesians. The reason for the criticism is above all the extreme fluctuations of the interest rates and the growth rates of the various money supply aggregates which have since occurred.

## Résumé

### Développement récents de la politique monétaire des Etats-Unis

Pendant des années la Reserve Fédérale tenta de réaliser ses objectifs en matière de masse monétaire en contrôlant les taux d'intérêt des fonds fédéraux. Cette conception fut toutefois officiellement abandonnée, lorsque les

taux de croissance des différents agrégats de la masse monétaire dépassèrent de plus en plus les objectifs recherchés. Depuis la décision du Federal Open Market Committee du 6 octobre 1979 les réserves bancaires ont pris la place du taux d'intérêt des fonds fédéraux, c.à.d. que la politique monétaire tente d'atteindre ses objectifs en matière de masse monétaire par le contrôle des réserves bancaires.

Peu après, soit en février 1980, les agrégats de la masse monétaire ont été nouvellement définis. Cette initiative était devenue urgente depuis que par une série d'innovations différentes catégories de dépôts étaient rendu disponibles pour des paiements, acquérant ainsi de fait un degré de liquidité égal à des avoirs en compte courant. Le nouvel agrégat M-1B tient compte de cette modification et inclut outre les anciens "avoirs en comptes de virement" (M1-, maintenant M-1A), tous les autres avoirs dont on peut disposer par chèque.

La "nouvelle politique monétaire" fut fortement critiquée presque unanimement tant du côté des monétaristes que des keynésiens. Le motif de cette critique doit principalement être recherché dans les variations extrêmes des taux d'intérêt et des taux de croissance des différents agrégats de la masse monétaire, qui sont intervenues depuis.