The Choice of Short-Run Targets for Monetary Policy

Part II: An Historical Analysis

By Gordon H. Sellon, Jr., and Ronald L. Teigen

In the past 30 years, Federal Reserve operating procedures have undergone considerable changes aimed at improving the performance of monetary policy. While recent attention has focused on changes in operating targets announced in October 1979, the significance of these actions is best understood by examining the evolution of Federal Reserve policymaking over a longer time horizon.

The purpose of this article is to analyze the development of operating procedures from 1951 to the present, using a theoretical framework that integrates the choice of short-run policy targets with longer run policy goals such as inflation and real output. In Part I of the analysis, presented in the April *Economic Review*, it was shown that the choice of short-run targets depends on the type of disturbance causing the goal variables to differ from their desired values and on the relative weights assigned to the goal variables. In Part II, changes in the Federal Reserve's targeting procedures are interpreted as a response to changing views as to the predominant type of disturbance affecting the economy and to growing concern with the problem of inflation.

The first section of the article provides a brief description of the role of short-run targets in monetary policy and summarizes the major conclusions of Part I regarding the appropriate choice of targets for various types of disturbances. The second section examines the evolution of Federal Reserve targeting procedures, using the theoretical framework to highlight the advantages and disadvantages of each set of procedures. The development of targeting procedures is divided into three stages: (1) the 1951-70 period, when the Federal Reserve generally focused on money market conditions as short-run targets, (2) 1970-79, when the Federal Reserve used a mixture of interest rate and monetary aggregate targets, and (3) the period beginning in October 1979, when the Federal Reserve employed money and reserve aggregate targets with less emphasis on interest rates.

THE ROLE OF SHORT-RUN TARGETS

The Federal Reserve takes monetary policy actions with the ultimate purpose of achieving desired values for long-run goals, such as prices and real output. From the standpoint of day-to-day decisions and operations, however, it is difficult to focus directly on these goal variables. Information on movements in the

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goal variables is available only with a considerable delay, and Federal Reserve actions affect the goal variables with a lag. As a result, the Federal Reserve focuses its attention on short-run targets which it can influence more directly and observe more frequently than the goal variables.

A variety of money and reserve aggregates and interest rates are possible candidates for selection as short-run targets. A two-stage process links these targets to the goal variables. At the first stage, there is the selection of an "intermediate target," a variable that is thought to be closely linked to output and prices, but which is not controlled precisely over a short period of time. A monetary aggregate or longer term interest rate would qualify as an intermediate target under this definition. At the second stage, there is the selection of an "operating target," a variable that is closely linked to the intermediate target and over which policymakers can exercise close control. Examples of possible operating targets are a reserve aggregate, such as nonborrowed reserves, or a short-term interest rate like the Federal funds rate.

Part I of this article identified four classes of disturbances which move the economy away from the desired values for the goal variables:

- *Spending disturbances:* unanticipated changes in consumer, investment, and government spending, in net exports, or in the tax system.
- *Portfolio disturbances:* unexpected changes in investors' preferences for holding securities relative to money.
- *Money supply disturbances:* unexpected changes in depository institutions' desired holdings of excess reserves or borrowings at the discount window.
- *Supply-side disturbances:* unanticipated changes in energy and agricultural prices or wage changes in excess of productivity changes.

The price and output changes generated by these disturbances will be associated with shifts in the demand for money, the supply of money, and the demand for reserves, causing changes in monetary growth and interest rates. Depending on its selection of intermediate and operating targets, the Federal Reserve faces a decision as to whether to restore the original interest rate or stock of money and whether to maintain the original level of nonborrowed reserves. The analysis showed that these decisions depend upon the source of the disturbance. The following brief discussion of these conclusions is summarized in Table 1.

Spending Disturbances

In the case of a spending disturbance, money and reserve aggregate targets are superior to interest rate targets at both the intermediate and operating levels. For example, an increase in spending tends to raise both output and prices above their desired levels. If the Federal Reserve follows a set of interest rate targets, it will increase the supply of reserves and money, expanding aggregate demand and pushing output and prices further away from their target levels. In contrast, the use of money and reserve aggregate targets permits an increase in interest rates that tends to counter the original increase in spending. As a result, prices and output remain closer to their desired levels than under a set of interest rate targets.

Portfolio Disturbances

In the case of a portfolio disturbance, interest rate targets are preferred to aggregate targets at both the intermediate and the operating level. If investors increase their demand for money, they will cause upward pressure on interest rates. The increase in interest rates tends to reduce aggregate demand, pushing prices and output below their desired levels. With a set of interest rate targets, the Federal Reserve will accommodate the increased demand for money in order to keep the interest rate from increasing. This action removes the depressing effect of higher interest rates on aggregate demand and maintains prices and output at their desired levels. In contrast, with a set of aggregate targets, the portfolio disturbances would not be offset by Federal Reserve actions.

Money Supply Disturbances

In the case of a money supply disturbance, money and interest rate targets are interchangeable at the intermediate level, while an interest rate is the preferred operating target. For example, a change in depository institutions' demand for excess or borrowed reserves which places downward pressure on interest rates will also stimulate monetary growth and lead to an expansion in output and prices. A policy that attempts to restore the target interest rate or the money supply target will offset this disturbance and will maintain output and prices at their desired levels. However, a nonborrowed reserves operating target will only partly offset this disturbance and so is generally inferior to an interest rate operating target.

Supply-Side Disturbances

In the case of a supply-side disturbance, the choice of intermediate and operating targets depends upon the relative weights that policymakers assign to the two goal variables, prices and real output. If control of inflation is given priority, aggregate targets are preferred to interest rate targets at both the intermediate and the operating levels. Alternatively, interest rate targets are appropriate if real output is given greater weight. The explanation for these differing results is that an adverse supply-side disturbance causes both higher prices and lower real output than policymakers desire. A set of aggregate targets implies a restrictive monetary policy which leads to a reduction in aggregate demand. While this action alleviates the upward pressure on prices, it does so at the expense of a further reduction in real output. In contrast, if policymakers employ interest rate targets, they will undertake an expansionary policy which raises aggregate demand. This

Table 1
THE CHOICE OF SHORT-RUN TARGETS

Type of Disturbance	Appropriate Intermediate Target	Appropriate Operating Target
Spending Disturbance	Monetary Aggregate	Reserves Aggregate
Portfolio Disturbance	Interest Rate	Interest Rate
Money Supply Disturbance	Monetary Aggregate or Interest Rate	Interest Rate
Supply-Side Disturbance	a) Monetary Aggregate for Inflation Goal b) Interest Rate for Real Output Goal	a) Reserves Aggregate for Inflation Goal b) Interest Rate for Real Output Goal

policy tends to restore real output to its desired level but at the cost of further inflationary pressures.

THE EVOLUTION OF FEDERAL RESERVE TARGETING PROCEDURES

To study the development of Federal Reserve targeting procedures using the theoretical framework summarized above, certain simplifying assumptions are necessary. First, it is assumed that policymakers agree with the substance of the analysis, that is, that the choice of short-run targets depends upon the types of disturbances affecting the economy. Second, since policymakers rarely have timely and reliable information about the source of a particular disturbance, it is assumed that they will choose targets that will offset what they view as the predominant type of disturbance. Finally, it is assumed that policymakers will modify their targeting procedures for two reasons: when they feel that they have misjudged the predominant type of disturbance over an extended period of time, and when there is a change in the relative weights assigned to the goal variables.[1]

1951-70: Targets Linked to Money Market Conditions

The Federal Reserve's choice of short-run monetary policy targets during the 1951-70 period was greatly influenced by the Treasury-Federal Reserve Accord of 1951. During and immediately after World War II, the Federal Reserve conducted its open market operations in such a way as to peg the structure of interest rates on government securities so as to assist Treasury financing. Realizing the inflationary implications of pegging interest rates in an expanding postwar economy, the Federal Reserve sought to terminate this arrangement. The Accord permitted monetary authorities to abandon this practice and to pursue a more independent policy.[2]

In the post-Accord period, it was generally believed that monetary policy should be carried out in a way that maintained stability in financial markets. In practice, financial market stability tended to be interpreted as gradual changes in interest rates and securities prices. This emphasis stemmed partly from a concern over the large amount of government debt held by financial institutions. It was feared that a rapid increase in interest rates would depress the prices of government securities to such an extent as to impair the functioning of these institutions. Furthermore, in attempting to restore the role of market forces in determining interest rates, the Federal Reserve was reluctant to take actions that would have a substantial impact on market rates.

Monetary policy was also influenced by the development of Keynesian economics. In this framework, monetary policy has its immediate

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1 It is important to note that the analysis is concerned with the structure of short-run targeting procedures over an extended period of time and not with temporary adjustments in the targets. For example, policymakers might believe that spending disturbances are dominant and so choose aggregate targets at both the intermediate and operating levels. Should a short-term portfolio disturbance occur, however, they might choose to adjust their aggregate targets temporarily so as to offset the portfolio disturbance. An analysis of this type of adjustment of the short-run targets is beyond the scope of this article. The analysis also assumes that the goal variables are initially at their desired levels. If one or more goal variables are not at their desired values, the analysis becomes considerably more complex. In this event, a detailed discussion of the form of the policymakers' "loss function" or the weights attached to the goal variables is required.

2 A good discussion of the events leading up to the Accord can be found in H. Stein, *The Fiscal Revolution in America*, University of Chicago Press, 1969, pp. 241-80. For a description of Federal Reserve operating procedures prior to 1979, see H. Wallich and P. Keir, "The Role of Operating Guides in U.S. Monetary Policy, a Historical Review," *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, Washington, D.C., September 1979, pp. 679-91.

impact on short-term interest rates. Through a process of portfolio substitution, changes in short-term rates are transmitted to long-term rates and thus to investment and spending decisions. The prevailing view was that monetary policy was a relatively ineffective means of controlling economic activity because spending decisions were insensitive to interest rate changes. Thus, interest rate changes sufficient to affect aggregate demand in the short run might disrupt financial markets.

In the Keynesian framework, discretionary fiscal policy in the form of tax and spending changes was seen as the principal method of controlling the business cycle. Monetary policy had two roles: to provide the necessary growth in money and credit to meet the needs of an expanding economy and to prevent the occurrence of financial crises that might adversely affect the level of economic activity.

During the 1951-70 period, discussions about monetary policy centered on the Federal Reserve's choice of an operating target. The concept of "free reserves" played an important role in these discussions. Free reserves, the difference between excess reserves held by the banking system and bank borrowing from the Federal Reserve, was supposed to measure the thrust of monetary policy. In this view, a decrease in free reserves was interpreted as a tightening of policy, while an increase in free reserves was viewed as an easing of policy. Policymakers would attempt to maintain appropriate conditions in the money market by using open market operations and discount rate changes to maintain the desired level of free reserves.[3]

The choice of free reserves as an operating target came under attack in the early 1960s. Critics argued that the level of free reserves was an ambiguous measure of the direction of monetary policy. In addition, it was shown that a free reserves target could result in a procyclical monetary policy, that is, a policy that was too expansionary in an inflationary environment and too restrictive in a recession.[4]

Two distinct viewpoints developed from this controversy. Some observers felt that the Federal Reserve could best maintain stability in financial markets by targeting short-term interest rates directly. Unlike the earlier experience, the Federal Reserve would not peg interest rates. Rather, policymakers would attempt to maintain an interest rate target that was thought to be consistent with desired growth in money and credit. An opposing view suggested that interest rate operating targets were not substantially different from a free reserves target.[5] Those taking this position advocated targeting money and reserve growth directly. In practice, the Federal Reserve adopted an interest rate targeting procedure and by the latter part of the 1960s focused on the Federal funds rate as an operating target.

During the 1951-70 period, the concept of an intermediate target was not well defined. However, in terms of the Keynesian view of monetary policy, it is logical to view longer term interest rates as intermediate policy targets. In the Keynesian framework, longer term rates are closely connected to spending decisions and hence the goal variables of prices

3 A discussion of Federal Reserve operating procedures and the role of free reserves can be found in J. Guttentag, "The Strategy of Open Market Operations," *Quarterly Journal of Economics,* Vol. 80, February 1966, pp. 1-30.

4 Some of the influential studies critical of the free reserves approach are A. J. Meigs, *Free Reserves and the Money Supply,* University of Chicago Press, 1962; K. Brunner and A. Meltzer, *The Federal Reserve's Attachment to the Free Reserve Concept,* U.S. House Committee on Banking and Currency, 88th Congress, Second Session, Washington, D.C., 1964; and W. Dewald, "Free Reserves, Total Reserves, and Monetary Control," *Journal of Political Economy,* Vol. 71, April 1963, pp. 141-53.

5 The two are equivalent only for certain types of disturbances—for example, portfolio disturbances. For a discussion, see Guttentag.

and real output. At the same time, the Federal Reserve does not control these rates directly, but rather attempts to influence them through changes in the short-term interest rates chosen as operating targets.

In terms of the analytical framework used in this article, then, the Federal Reserve can be viewed as using interest rates as short-run policy targets at both the intermediate and the operating levels during much of the 1951-70 period. The analysis suggests that there are both advantages and disadvantages to the use of interest rate targets. Interest rate targets will successfully stabilize prices and real output when most disturbances arise in financial markets. In the case of portfolio disturbances, actions to stabilize interest rates serve to accommodate changes in the demand for money balances and to offset the impact of the disturbance on prices and output. Similarly, for a money supply disturbance, actions to moderate interest rate changes prevent the disturbance from adversely affecting the goal variables.

The disadvantage of interest rate targets is that they can lead to undesirable, procyclical movements in prices and output when spending disturbances predominate. For example, if there is an unexpected increase in spending, or a tax decrease, the expansion in aggregate demand will raise prices and output above their desired levels. In this situation, a set of interest rate targets calls for an expansion in reserves and money, which aggravates the upward pressure on prices and output. In the opposite case, when there is an unexpected drop in aggregate demand, a set of interest rate targets leads to a more restrictive monetary policy, which intensifies the downward pressure on prices and output. Thus, if spending disturbances predominate, interest rate targeting leads to a monetary policy that is too easy during an economic expansion and too restrictive in a recession.

The Federal Reserve's reliance on interest rate targets during the 1951-70 period could be interpreted as a view that financial disturbances are more significant than spending disturbances.[6] It is probably more accurate, however, to view monetary policy in terms of the limited role accorded it by the prevailing version of Keynesian theory. As noted earlier, this approach assigns fiscal policy the task of offsetting spending disturbances by appropriate countercyclical tax and spending changes. Thus, monetary policy has the responsibility of preventing financial disturbances from affecting prices and output.

The difficulties with this division of labor between monetary and fiscal policy became apparent in the latter part of the 1960s. As the Vietnam War expanded, fiscal policy ceased to be an effective countercyclical force and placed additional responsibilities on monetary policy. The expansion in government purchases, a spending disturbance, increased aggregate demand and put upward pressure on prices and output. With the economy near capacity, most of the impact took the form of higher prices. In this environment, the use of interest rate targets was no longer appropriate. Attempts to moderate interest rate increases would have resulted in greater money growth and higher rates of inflation. As a result, toward the end of the 1960s, the Federal Reserve was under increasing pressure to modify its targeting procedures.

1970-79: Transition Period

The 1970-79 period marks the second stage in the evolution of Federal Reserve operating

6 It should be noted that policymakers had concern with the U.S. balance of payments during this period. At times, the price and real output goals were constrained by balance of payments considerations, and the impact of interest rate changes on the balance of payments weighed heavily in monetary policy decisions.

procedures. In 1970 the Federal Reserve began to specify target growth rates for various monetary aggregates. Interest rates continued to play an important role, however, as the monetary aggregate objectives were subject to the qualification that they not conflict with financial market stability. During the 1970-79 period, Federal Reserve operating procedures gradually evolved into a system in which monetary aggregates were viewed as intermediate targets, while interest rates continued to be used as operating targets.[7]

The immediate cause of this change in monetary policy procedures was the growing concern over high rates of inflation and money growth in the late 1960s.[8] Monetarist critics of the Keynesian view of monetary policy attributed the inflation and money growth problems to the Federal Reserve's use of interest rate targets. They argued that the Federal Reserve should abandon interest rate targets altogether and should focus its attention on controlling money and bank reserves directly. In light of this criticism the Federal Reserve's choice of a combination of money and interest rate targets can be interpreted in two ways. On the one hand, the decision may simply represent a compromise between sometimes conflicting objectives—monetary control and financial market stability. On the other hand, the Federal Reserve's choice may be viewed as a technical decision that adequate control of a monetary aggregate intermediate target can be achieved by the use of an interest rate operating target.

The theoretical framework used in this analysis suggests that the combination of a monetary aggregate intermediate target and an interest rate operating target is generally suboptimal. For three types of disturbances—spending, portfolio, and supply-side—it was shown in Table 1 either that aggregate targets are appropriate at both levels or that interest rate targets are appropriate at both levels. The reason is that each of the three types of disturbances leads to a change in the demand for nominal money balances that causes money growth and interest rates to move in the same direction. The use of an interest rate operating target means that this change in money demand will be accommodated in the short run. As a result, the impact of the disturbance on money growth is amplified by the actions of the Federal Reserve. Thus, whether or not policymakers are ultimately successful in stabilizing prices and output, the use of an interest rate operating target makes it difficult to hit a monetary aggregate intermediate target.

The combination of an interest rate operating target and a monetary aggregate intermediate target works well only for a money supply disturbance. The reason is that for this type of

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7 The transition from interest rate targets to monetary aggregate targets was not as abrupt as it might appear from the representative dates used in this discussion. In 1966, the Federal Open Market Committee made an initial movement toward aggregate targeting when it adopted a "Proviso Clause" as part of its policy directive. According to the proviso, policy actions were to be directed toward maintaining a given interest rate operating target unless bank reserves or bank credit were growing outside a specified range. In practice, the Proviso Clause had little substantive impact on policy actions. A good discussion of the transition to aggregate targeting can be found in S. Maisel, *Managing the Dollar,* W. W. Norton, New York, 1973.

A detailed description of Federal Reserve operating procedures in the 1970-79 period is contained in R. Lombra and R. Torto, "The Strategy of Monetary Policy," *Economic Review,* Federal Reserve Bank of Richmond, September/October 1975, pp. 3-14.

8 In addition to concern within the Federal Reserve System over inflation and money growth, Congress took an increasingly active role in emphasizing the use of monetary aggregate targets. Thus, in 1975 Congress adopted H. CON. RES. 133, which recommended the setting of explicit money and credit targets as well as periodic reports by the Federal Reserve to Congress. These procedures were refined in the Federal Reserve Reform Act of 1978 and the Full Employment and Balanced Growth Act of 1978.

disturbance, money growth and the interest rate move in opposite directions. For example, a money supply disturbance that causes downward pressure on interest rates also leads to faster money growth. Consequently, policy actions designed to keep the interest rate from falling also serve to prevent this expansion in money growth.

Why, then, did the Federal Reserve adopt this mixture of interest rate and money targets? An explanation that is consistent with the analysis above is that policymakers believed that money supply disturbances were most important. The problem with this interpretation, however, is that it represents a policy perspective that is narrower than that of the 1951-70 time period. As shown earlier, the use of interest rate operating and intermediate targets is effective if either portfolio or money supply disturbances predominate. Thus, if financial disturbances are particularly important, a set of interest rate targets dominates a mixture of interest rate and monetary aggregate targets. Furthermore, the breakdown of the assignment of roles to monetary and fiscal policy in the late 1960s suggests a broader rather than a narrower role for monetary policy.

It is probably more accurate to view 1970-79 as a transition period that reflected an uneasy compromise between the objectives of monetary control and financial market stability. If spending, portfolio, or supply-side disturbances are prevalent, one might expect the intermediate and operating targets to come into frequent conflict. That is, close control over interest rates at the operating level may require the abandonment of the money intermediate target. Alternatively, hitting the intermediate money growth objectives may necessitate frequent changes in the operating target.[9] As a consequence, one might expect this system to evolve into a system of aggregate targets at both the intermediate and operating levels or back into a system of interest rate targets.

1979-Present: Aggregate Targets

The change in Federal Reserve operating procedures in 1970 toward the use of monetary aggregate intermediate targets was motivated by concerns over a rising inflation rate and rapid monetary growth. These problems worsened in the 1970-79 period as energy and agricultural price increases and declining productivity made adverse supply-side disturbances a major concern of policymakers. In October 1979, the Federal Reserve announced a second change in operating procedures, a shift from an interest rate operating target to a reserve operating target —on a day-to-day basis, nonborrowed reserves. The purpose of this policy change was to achieve better control over the monetary aggregates so as to reduce inflation and inflationary expectations.[10]

The decision to employ a system of money and reserve aggregate targets is significant in two respects. First, the use of a nonborrowed reserve operating target should generally lead to better control over a monetary aggregate

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9 The importance of an increased emphasis on monetary aggregate targets is measured in E. Feige and R. McGee, "Has the Federal Reserve Shifted from a Policy of Interest Rate Targets to a Policy of Monetary Aggregate Targets?" *Journal of Money, Credit, and Banking,* Vol. XI, No. 4, November 1979, pp. 381-404. However, a study by Hetzel documents the conflicts that arose between the interest rate operating target and money intermediate target during the 1970-79 period. Hetzel concludes that most of the conflicts were resolved in favor of interest rate stability rather than monetary control. See R. Hetzel, "The Federal Reserve System and Control of the Money Supply in the 1970's," *Journal of Money, Credit, and Banking,* Vol. XIII, No. 1, February 1981, pp. 31-43.

10 For a detailed description of these operating procedures, see "Description of the New Procedures for Controlling Money," hearings on the conduct of monetary policy before the Committee on Banking, Finance, and Urban Affairs of the House of Representatives, February 29, 1980.

intermediate operating target than use of an interest rate operating target. For spending, portfolio, and supply-side disturbances, the use of a nonborrowed reserve operating target means that the impact of a change in money demand on money growth rates will tend to be partly offset by a change in the interest rate. In contrast, an interest rate operating target would lead to an accommodation of these changes in money demand making it more difficult to hit a money target.

Second, the adoption of aggregate targets at both the intermediate and the operating levels is consistent with a policy that emphasizes the control of inflation as a long-run goal. Inflationary pressures are generally attributed either to spending disturbances or to adverse supply-side disturbances. For example, an unanticipated increase in spending or decrease in taxes would increase aggregate demand, raising prices and output above their desired levels. The use of money and reserve aggregate targets at the intermediate and operating levels partly offsets this disturbance by permitting a rise in interest rates that dampens the upward pressure on prices. In contrast, the use of interest rate targets would encourage a further increase in aggregate demand and additional inflationary pressures.

The use of aggregate targets also counters inflationary pressures in the case of an adverse supply-side disturbance. For example, an increase in energy prices might cause a reduction in aggregate supply which raises prices and lowers real output. Once again, the use of money and reserve aggregate targets permits a rise in interest rates that acts to counter the upward pressure on prices. In contrast, the use of interest rate targets in this situation would lead policymakers to expand reserve and money growth, putting additional upward pressure on prices.

The advantages of aggregate targets in dealing with inflation must be balanced against potential disadvantages, however. First, while use of a reserve operating target may lead to better control over money, there are times when improved monetary control may be undesirable. When portfolio disturbances occur, a reserve operating target will lead to better monetary control than will an interest rate operating target. However, in this situation, an interest rate and not a monetary aggregate is the proper intermediate target. Second, whether inflation originates from spending disturbances or supply-side disturbances, a policy that focuses on short-run control over reserves and money results in higher interest rates and slower growth in output and employment. Particularly in the case of supply-side disturbances, policymakers must weigh inflation gains against these costs in deciding between the two targets.

Future Developments

This article has analyzed the evolution of Federal Reserve operating procedures from the period of interest rate targets to the current system of money and reserve aggregate targets. While the present system of aggregate targets is particularly useful in an inflationary environment, the faster pace of financial innovation and regulatory changes in recent years may require further changes in Federal Reserve targeting procedures.

Since the mid-1970s, it has been difficult to define a monetary aggregate for use as an intermediate target. In an environment of inflation and high interest rates, new types of financial instruments have been developed which compete with the traditional forms of money and which have led investors to implement more sophisticated cash management practices.[11] As a result of these

11 For a good discussion of these factors, see T. Simpson and R. Porter, "Some Issues Involving the Definition and

developments, the Federal Reserve announced a major redefinition of the monetary aggregates in 1980. Further difficulties in defining money may result from recent financial legislation which legalizes nationwide NOW accounts and which authorizes the phaseout of deposit interest ceilings.

In a narrow sense, these developments increase the technical difficulty of selecting a monetary aggregate that is sufficiently related to the longer run policy goals to qualify as an intermediate target. In a broader sense, the persistence of these financial disturbances raises questions as to the desirability of using monetary aggregate targets and as to the usefulness of the two-stage targeting procedure.[12]

The uncertainty surrounding the definition and use of monetary aggregate intermediate targets extends to the choice of an operating target. Some observers feel that the Federal Reserve should return to an interest rate target in order to offset the impact of these financial disturbances. Others argue that the Federal Reserve has not gone far enough in its attempts to control money and so advocate the use of the monetary base rather than a nonborrowed reserves operating target. In the final analysis, future changes in Federal Reserve operating procedures will probably depend upon the success of the present system in dealing with the current focus of policymakers—the problem of inflation.

Interpretation of Monetary Aggregates," in *Controlling Monetary Aggregates III,* Federal Reserve Bank of Boston, October 1980, pp. 161-233.

12 See N. Berkman, "Abandoning Monetary Aggregates," pp. 76-100, and B. Friedman, "Discussion," pp. 234-39, both in *Controlling Monetary Aggregates III.*