

THE EVOLUTION OF MONETARY POLICY AND THE FEDERAL RESERVE SYSTEM OVER THE PAST THIRTY YEARS: AN OVERVIEW

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Over the past thirty years, the activities of the Federal Reserve System have undergone major change. Public interest and confidence in monetary policy have grown immensely. Low inflation has emerged, if not as the primary objective of monetary policy, at least as a more central focus than it was thirty years ago. The Federal Reserve System has also undergone changes. Reserve Banks now charge for many of their financial services, rather than providing them free to banks that are System members. Placed in competition with commercial banks in providing financial services, Reserve Banks have striven to be more efficient, more responsive, and more innovative. At the same time, Reserve Banks have played increasingly active and increasingly visible roles in their communities and their Districts, providing economic expertise and civic leadership.

Frank E. Morris, President of the Federal Reserve Bank of Boston from 1968 to 1988, was a key contributor to all these developments. The year after he took office, the Boston Fed sponsored a conference on "Controlling Monetary Aggregates," at which the role of the monetary aggregates in the conduct of monetary policy was vigorously debated. This was the first of a series of conferences on important public policy issues that continues to this day.

Frank was also a champion of regional research and of the Reserve Banks using their expertise to contribute to the economic well-being of their Districts. In the mid 1970s, Frank and the Boston Bank played a leadership role in helping the Commonwealth of Massachusetts resolve a critical financial crisis, by providing credible analysis of the state's

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economic and fiscal situation to the financial community. Later, Frank became very active in local employment and training policy and in trying to improve the schools in the City of Boston.

Under Frank, the Boston Fed was also very influential in the development of the payments process. A Bank conference in 1974 broached the possibility of charging for financial services. The conference and subsequent work shaped the thinking of one of the Bank's directors, William Miller. When Miller became Chairman of the Board of the Federal Reserve System, he was a strong supporter of the concept and instrumental in passage of the Monetary Control Act of 1980, which required the Fed to price its services.

Frank made many other important contributions to the Federal Reserve Bank of Boston and the Federal Reserve System. However, his influence was felt most strongly in the conduct of monetary policy, in the evolution of the payments system, and in shaping the role that Reserve Banks play in their regions. Accordingly, this conference focused on these three areas and on the developments that have occurred since Frank became president of the Boston Fed in 1968 and the prospects and challenges ahead. Three sessions addressed issues in monetary policy, and one each tackled payments and the role of the regional Banks.

A theme that emerges from this conference is the importance of the Federal Reserve System communicating clearly and repeatedly its commitment to a low rate of inflation. In the early 1970s, the conduct of monetary policy was shaped by a plethora of objectives and concerns. Many economists questioned whether monetary policy should place much weight on inflation, as compared to low unemployment, or even whether monetary policy could affect inflation. Today, no one doubts that monetary policy can affect inflation.

The current emphasis on low inflation does not mean that other objectives are ignored. While some central banks have adopted formal rules limiting inflation, the Federal Reserve's past success in combating inflation and its forceful communication of its commitment to low inflation have given it the best of both worlds. The public seems persuaded that inflation will remain low, while the Fed retains the flexibility to respond to economic conditions, including a softer economy, as seems fit.

That a clearly defined, overarching goal may allow some discretion in implementation is apparent in the Federal Reserve's response to international developments. A review of the Fed's actions over the past thirty years reveals that international developments have often affected policy. However, few, if any, doubt that U.S. monetary policy is driven by U.S. concerns and that foreign developments are taken into consideration primarily because of their potential to affect the United States.

While the Federal Reserve must communicate its message clearly, the public must be receptive. In this regard, the regional Reserve Banks play

a critical role. Reserve Bank officials, staff, and directors function as ambassadors and goodwill representatives to the residents of the Districts. Interactions on issues often far removed from monetary policy help to ensure that the communication channels are there when it becomes necessary to justify an unpopular policy.

In this regard, developments pertaining to the payments system are both supportive and potentially threatening. By making financial services available to all depository institutions at a price rather than providing them free to System members, the Federal Reserve System serves a broader array of institutions. Smaller institutions now look to the Fed for services, whereas once they saw the Fed as working more for large banks. However, while the process of competing has led the Fed to expand and diversify its contacts, it has also created pressures to cut costs and consolidate. If carried sufficiently far, these actions could undermine the stature of individual Reserve Banks.

MONETARY POLICY AND THE MONETARY AGGREGATES

Frank Morris joined the Federal Reserve System at a time of fierce debate over the role that the monetary aggregates should play in the conduct of monetary policy. **William Poole**, who was an active participant in these debates, reviewed their evolution and the lessons he draws for today's policymakers.

While the Federal Open Market Committee was beginning to pay attention to the monetary aggregates and actually changed its directive in 1970 to include an explicit reference to modest growth in money and bank credit, considerable skepticism existed in academia and in the Fed itself about whether the Fed could actually control the aggregates and, if it could, whether it should. Opponents were concerned not only about the impact on aggregate demand and unemployment, but also about the consequences for individual sectors of the economy. However, the failure to contain inflation in the 1970s eventually led to the adoption of a monetary target in 1979. While some believe that the target was adopted, not through monetarist sentiments, but as a cover for letting interest rates rise to unprecedented heights, the outcome was a sharp decline in inflation. While the cost in terms of a recession was high, there was no doubt that monetary policy could affect inflation.

Subsequently, the relationship between the monetary aggregates and the growth in economic activity broke down and the monetary aggregates were abandoned as a target. Not abandoned were the commitment to low inflation and the recognition that monetary policy can achieve it. Another lesson that Poole takes from the debates over the monetary aggregates is the importance of a forward-looking, focused strategy. In the early 1970s, the FOMC conducted monetary policy meeting by meeting. No consideration was given to how changes in monetary policy

might affect the public's expectations and how such changes in expectations might, in turn, feed back to affect policy. While the type of formal rule that Milton Friedman advocated for money growth may not be necessary, central bankers need to think strategically and to take the public's reactions to their actions into account.

Jerry Jordan agreed that the key to successful monetary policy is the objective. As another active participant in the debates of the 1970s, Jordan had thought that the primary issue was choosing the appropriate monetary aggregate. He now sees the debate over rules versus discretion and the choice of the monetary aggregate as stemming from the absence of a clear objective that could anchor monetary policy. If the central bank is firmly committed to price stability and people believe in this commitment, then they will act in ways that tend to bring this about and the choice of an intermediate target is secondary.

Charles Freedman recounted the experience of the Bank of Canada. Canada moved to a monetary target somewhat earlier than the United States; but there as well, financial innovations caused the relationship between the monetary target and economic activity to break down in the 1980s. Efforts to develop an alternative monetary target failed; and in the early 1990s, Canada adopted an explicit inflation target. This experience has been quite favorable.

Operationally, the Bank of Canada targets forecast, rather than current, inflation; and this forward-looking focus overcomes many of the disadvantages thought to be associated with inflation targeting. Freedman believes that an inflation target can be very helpful in achieving low rates of inflation. A number of countries in addition to Canada have adopted explicit inflation targets, and most of these have succeeded in moving from the ranks of relatively high-inflation countries to the low-inflation group.

A focal point of the **general discussion** was the credibility of the central bank's commitment to low inflation. An established track record in achieving low inflation and a supportive fiscal policy were seen as enhancing credibility. However, in part because institutional arrangements change, sensitivity to the dangers of inflation tends to wax and wane—even more within the economics profession, perhaps, than among the public at large. Thus, monetary policymakers should take advantage of every opportunity to communicate the virtues of a low-inflation environment.

MONETARY POLICY AND CREDIT MARKETS

Benjamin Friedman observed that while interest rates were the instrument of monetary policy thirty years ago and still are today, the way policy is conducted is very different. Reinforcing the theme developed in the first session, Friedman noted that the commitment to price

stability is much stronger today. However, the problem that plagued policymakers in the 1960s and 1970s—choosing the appropriate level of interest rates—is still with us. Particularly when inflation and expectations of inflation are changing, it is difficult to distinguish movements in nominal and real interest rates. Although U.S. policymakers have coped satisfactorily with this problem in recent years, many observers are uncomfortable that there is no nominal target to guide policy. Inflation targeting has a number of adherents, but Friedman is skeptical. In particular, he believes that one of the supposed virtues of inflation targeting—its transparency—is greatly overstated. Most central banks that target inflation now acknowledge that they also care about output, but decline to be pinned down as to how much. So while they may be clear about inflation, they are opaque about the real side of the economy.

Friedman is concerned that financial innovations, particularly the growth of electronic transactions, may eventually undermine central banks' ability to conduct monetary policy. All standard conceptions of how monetary policy works depend upon banks having reserves with the central bank. With the growth of electronic commerce, more and more financial transactions may bypass the banking system, so that changes in reserves may have less impact on economic activity than in the past.

In his comments, **James Duesenberry** stressed that tightening monetary policy requires public support. No one likes higher interest rates; presenting them under the cover of a money or inflation target may make them more palatable. He also observed that our ability to forecast economic activity and our understanding of the links between interest rates, output, and inflation have not advanced greatly over the past thirty years. Given these uncertainties, the Fed should act cautiously, moving interest rates in small increments; and should more turbulent times call for larger changes, the Fed must be ready to reverse direction if these moves prove to be too much.

Stephen Axilrod commented on some of the operational issues associated with an interest rate policy. One virtue of a money supply target is that it is relatively stable, while interest rates change frequently. Until recently, the Fed was silent as to its interest rate target, and occasionally this led to confusion in financial markets and unanticipated effects. Reiterating the difficulty of knowing whether a change in interest rates is sufficient, Axilrod was dubious about relying exclusively on forecasts of future economic activity and suggested that the monetary base could be a useful source of information on current conditions.

In the **general discussion**, participants considered Friedman's concerns about the growth of electronic transactions. It was generally agreed that the issue is not e-transactions per se but whether they pass through the central bank's books. In this regard, the challenge for the Fed is maintaining its advantage in interbank settlements. Could another institution emerge as a serious competitor? The decline in the availability of

U.S. government securities was not seen as an impediment to the conduct of monetary policy; the Fed can operate in other assets.

MONETARY POLICY AND INTERNATIONAL DEVELOPMENTS

The past thirty years have been characterized by profound changes in the international economic and financial environment. The U.S. economy has become increasingly linked—and exposed—to the rest of the world through trade and investment flows. Although the conventional wisdom is that U.S. monetary policy is conducted with solely a U.S. focus, **Richard Cooper** and **Jane Little** reviewed the FOMC's Records of Policy Actions and found numerous instances in which international developments affected policy. While the FOMC's intent was to ensure a favorable outcome for the U.S. economy, external events were clearly influential.

Cooper and Little also found that, despite the increasing openness of the U.S. economy, the FOMC has become more reluctant to intervene since the late 1980s and has allowed certain facilities for engaging in such transactions to lapse. Cooper and Little believe that exchange rates are vulnerable to large swings that are not driven by economic fundamentals and, consequently, that the FOMC might wish to follow a more activist policy in the future, particularly if the dollar were to fall sharply in value. Accordingly, they recommended that the Fed prepare for such a possibility by acquiring foreign securities or establishing lines of credit.

In addition to affecting the FOMC's monetary policy deliberations, international developments also influenced U.S. regulatory policy and helped foster financial innovation. Cooper and Little's review revealed important instances in which the activities of foreign banks and the competition they posed to U.S. banks had far-reaching consequences for U.S. financial markets, leading to changes in both regulatory and monetary policy. For example, foreign bank competition provided an impetus for both interstate banking and the removal of barriers between commercial and investment banking.

In his comments, **Norman Fieleke** observed that the U.S. economy may have become even more open than Cooper and Little's data on the growth of trade suggest. A country might be very open to international influence, in the sense of having no barriers to international goods and capital flows, but not actually engage in much international commerce if its tastes, production technologies, and resource endowments were similar to those of its trading and investment partners. Labor movements should also be considered.

While Fieleke believes that the openness of the U.S. economy helped hold down inflation during the 1990s expansion, he expressed concern about the growth in the U.S. trade deficit. Because the U.S. economy is so large relative to those of its trading partners and because, despite growing openness, traded goods comprise a comparatively small share of

U.S. production, reducing the deficit could require a sharp decrease in the value of the dollar. In response, Cooper noted that rates of return are higher in the United States than in most of the rest of the world and that the share of world saving going to the United States is not large relative to the U.S. share of world economic and financial activity.

Robert Solomon suggested that Cooper and Little might have overstated the role that international forces have played in shaping U.S. financial markets, and specifically in the breakdown in the relationship between the monetary aggregates and the growth in GDP. He also pointed out that large fluctuations in U.S. exchange rates were frequently due to domestic rather than external developments.

Much of the **general discussion** focused on a suggestion by Cooper and Little that the Fed and other major central banks evaluate inflation trends using Producer Price Indexes, rather than Consumer Price Indexes. Because PPIs are composed primarily of traded goods, they would show more similar patterns than the corresponding CPIs and thus, would induce more coordinated policies. However, a number of participants expressed concerns about the volatility of producer prices, the relevance of the PPI in more services-oriented economies, and the difficulty of communicating concerns about inflation to the public using the PPI rather than the CPI. On the issue of volatility, Cooper pointed out that the PPI's greater variance might be advantageous, as a policy focused on the PPI would tend to be more countercyclical.

THE FEDERAL RESERVE IN THE PAYMENTS SYSTEM

The Federal Reserve is unusual among central banks in being actively involved in processing checks and other forms of retail payments. **Robert Eisenmenger** and **Paul Connolly** explained why the Fed was given this responsibility and how its role has evolved. At the beginning of the twentieth century, the check collection process was characterized by lengthy delays and considerable uncertainty of payment; improving efficiency through the creation of a unified national check collection system was one of the original mandates of the Federal Reserve System. Over the years, the Fed worked with the banking industry on a number of important initiatives to accelerate the check collection process, including the development of high-speed sorting equipment and machine-readable routing and account numbers.

Until the Monetary Control Act of 1980 (MCA), the Fed followed a pricing model for its payments services that was reminiscent, in Eisenmenger and Connolly's words, of a "country club." Banks paid the equivalent of annual dues to be members of the Federal Reserve System in the form of the interest that they lost on the reserves maintained with the System; in return, they received check-clearing and other services

free. Large correspondent banks were able in turn to charge their respondents for these same services.

With the passage of the MCA, the Fed was required to price most of its payments services and to make them available to all depository institutions, not just members. This put the Fed in the position of competing with some of the large banks that were its biggest customers and also induced the Fed to adopt a more customer-oriented mind-set. As part of this new mind-set, the Fed became more aggressive in promoting electronic forms of payment. For example, in the mid 1980s, the Boston Fed embarked on a long-term research program to develop digitized check images that could be transmitted electronically.

In the late 1990s, the Federal Reserve undertook a comprehensive review of its role in retail payments under the leadership of Alice Rivlin, who was then Vice Chairman of the Board of Governors. The Rivlin Report reaffirmed the Fed's involvement. Smaller banks, which prior to the MCA had tended to view the Fed as more aligned with larger institutions, were particularly supportive of the Fed remaining an active provider. The report also called for the Fed to play a more active role in improving the efficiency of existing payment systems and developing lower-cost and lower-risk alternatives.

Elliott McEntee agreed that the Federal Reserve System has played a beneficial role in the payments system and has encouraged improvements. However, he thinks that the Fed's view of its appropriate role over the next five years is too narrow—too focused on its own operations and on the Automated Clearing House, in particular. McEntee recommended that the Fed think more broadly about the possibilities offered by electronic payments, mentioning debit cards as an example. He also questioned whether the Fed's presence in retail payments would be justified beyond five years, as bank consolidation and the growth in electronic commerce are likely to reduce check volumes considerably.

Much of the **general discussion** dealt with the outlook for paper checks. Eisenmenger and Connolly acknowledged that the Federal Reserve System's check business was likely to decline; but they also pointed out that people have been predicting a decline in check activity for a long time—and it has not happened. Checks are very convenient for many transactions. While more explicit pricing for checks might lead to some reduction in use, corporations continue to write checks despite explicit charges.

Several participants commented that electronic transactions are *not* convenient for some transactions and that safety is an issue. Moreover, among electronic mechanisms, credit and debit cards dominate ACH for some purposes. It was also suggested that one reason the Rivlin Report found even large banks to be favorably disposed to the Fed's continued presence in retail payments is that banks see the Fed as an ally against nonbank providers of electronic payments services. The Fed should

promote efficient payments systems, whether they are bank- or nonbank-based.

THE ROLE OF RESERVE BANKS

Gary Stern discussed the role of the Reserve Banks in the conduct of monetary policy and some of the challenges they now face. The Federal Reserve must balance independence and political accountability. It must be prepared to take unpopular positions, but ultimately it must respond to the public. In Stern's judgment, the Reserve Banks are very important to Federal Reserve independence. Traditionally, the operational responsibilities of the Bank presidents and their visibility within their communities gave them a high degree of stature and public credibility. Accordingly, Stern had been concerned that efforts to increase the operational efficiency of the Federal Reserve System, particularly through consolidation, might diminish the Reserve Banks, reduce the caliber of people willing to serve as presidents, and eventually affect the Fed's independence in conducting monetary policy. The status quo had value.

Now, Stern believes that the opportunities for efficiency from greater centralization have become so large that public accountability requires that the Fed take advantage of them. In addition, technological advances and the growth of new payments forms may mean that the Federal Reserve finds its operational responsibilities declining. However, several countervailing developments may make the consequences for Fed independence and the conduct of monetary policy less dire than previously feared. First is the increased public awareness of the importance of low inflation and the role of monetary policy in achieving it. Second, the Reserve Banks have become intellectual resources on a wide variety of economic subjects. But whether the expanded intellectual capacity and contributions of the Reserve Banks will prove sufficient to offset the consequences of reduced operational responsibilities is not assured.

Cathy Minehan shares Stern's view that the regional contribution to monetary policy is critical to Federal Reserve independence. The Reserve Banks are important actors in their communities, as Frank Morris demonstrated with his involvement in improving the Boston school system. This participation in regional affairs builds support for the Federal Reserve and helps to ensure that decision-making is grounded in the real world. However, Minehan differs from Stern in seeing less of a threat to the Reserve Banks' operational role. Large dollar transfers will likely remain a Fed responsibility. And checks have proved remarkably durable; volumes have been rising. Operational staffing in the Federal Reserve Banks is down just 10 percent or so from what it was before the Monetary Control Act. Looking forward, Minehan is more optimistic about the Fed's ability to remain an important player in the payments

system, provided it focuses on understanding its markets and devising innovative products and solutions to problems.

In the general discussion, Chuck Freedman of the Bank of Canada observed that most central banks have narrowed their focus and questioned why the Fed felt it should be expert on such a wide range of subjects. Stern and Minehan responded that many issues are relevant to central banks and that there is a strong demand for expertise from the individual regions; in addition, the Congress has been increasing the Fed's responsibilities, particularly in the supervisory area.

Most of the discussion dealt with the Reserve Banks' role in their regions. Participants were generally very supportive of the contribution of the Reserve Banks to the policy process. In particular, Reserve Banks were seen to play an important role in communicating policy decisions. They were said to provide a "public face," with the presidents functioning as "ambassadors" to the public. Directors have been effective supporters of Federal Reserve independence, as well. The intellectual independence of the research functions of the Reserve Banks also contributes importantly to monetary policy, as the different orientations and approaches of the twelve Banks stimulate debate and fresh thinking.

Several participants expressed a note of caution. The favorable performance of the U.S. economy through most of the 1990s generated positive feelings towards the Federal Reserve System and muted criticism. If economic conditions were to deteriorate, attitudes towards the Fed would change. People would look at the Fed more critically, and questions about the desirability of the Reserve Bank presidents participating in the monetary policy process would reemerge. The Reserve Banks must balance the need to use resources efficiently with maintaining a structure that most participants agreed is critical to monetary policy independence.

CONFERENCE THEMES AND CONCLUSIONS

At the beginning of the conference, Cathy Minehan commented that Frank Morris had said that being President of the Boston Fed was the best job in the country. While not all the conference participants shared Frank's enthusiasm for Boston, being associated with the Federal Reserve System was seen as a very positive experience by everyone who had worked in the System or served as a director. The opportunity to participate in deliberations over monetary policy was intellectually stimulating. Representing the Federal Reserve System to the public was rewarding. Developing a more efficient payments system was challenging. Time and again, people spoke of the satisfactions of working with good people on big problems in service of the public.

Reviewing the experience of the past thirty years is, in some ways, unsettling. The spirited debates in the 1970s over the role of the monetary

aggregates in the conduct of monetary policy can be seen as a struggle to define the appropriate objective for monetary policy. Today, the importance of price stability is generally acknowledged. However, the U.S. experience of the late 1990s was so favorable that the depth of this commitment was not really tested. Moreover, the operational problems associated with using interest rates as the instrument of monetary policy are unresolved, and the conceptual attractiveness of a nominal anchor or guidepost remains.

International developments have been more influential than generally given credit. Not only have they affected monetary policy directly, but, in addition, competition from overseas financial institutions has shaped the U.S. financial system and indirectly influenced policy. While the United States has benefited greatly from growing international ties, increasing dependence on the saving of the rest of the world poses risks. Attractive investment opportunities in the United States may justify these inflows now, but international financial markets are prone to abrupt reversals.

Reserve Banks contribute importantly to monetary policy. They were active in the debates over the roles of the monetary aggregates in the 1970s. They provide valuable information on regional conditions and communicate policy decisions to the public. The stature of the Reserve Banks and of their presidents is enhanced by their prominent role in the payments system. The Reserve Banks have been very successful in adapting to a competitive environment in which they must charge for payment services they provide. They have become more efficient and more innovative. They are actively promoting more electronic payments mechanisms. However, care must be taken that efforts to improve payments efficiency do not undermine the Reserve Banks' intellectual independence or their ability to serve as the public face of monetary policy.