

Introduction

Donald P. Morgan

Monetary policy operates in a different environment than it did a decade ago. Financial market innovations have eroded the distinctions among monetary assets, **making** the definition of money increasingly arbitrary. Deregulation of interest rates and banking activity is changing the behavior of the monetary aggregates, as banks pay interest on monetary assets and **nonbanks** offer monetary-like assets. And globalization of markets has increased the international effects of domestic policy through trade accounts and exchange rates.

The evolution in world financial **and** goods markets raises a number of questions about monetary policy. What should be the long-run goal of monetary policy? What short-run procedures should monetary policy adopt to achieve this goal? How should monetary policy respond to trade imbalances and volatile exchange rates?

To confront such questions, the Federal Reserve Bank of Kansas City invited distinguished central bankers, academics, and industry representatives to a symposium entitled "Monetary Policy Issues in the 1990s." The symposium was held August 30—September 1, 1989, in Jackson Hole, Wyoming.

Participants **generally** agreed that the goal of monetary policy in the **1990s**, above all else, should be price stability. The challenge to monetary policymakers will be to achieve price stability in the face of rapidly changing financial markets and competing **interna-**

Donald P. Morgan is an economist at the Federal Reserve Bank of Kansas City.

tional goals of monetary policy. Most participants agreed that price stability cannot be achieved by targeting monetary growth because the relationship between money and prices will remain unstable in the 1990s. Participants disagreed, however, on whether competing international goals of monetary policy—stable exchange rates and balanced trade—would, or should, compromise the goal of price stability.

This article summarizes the papers and commentary presented at the symposium. The first section discusses the lessons from the 1970s and 1980s that have led monetary policymakers to believe their primary goal should be price stability. The second section examines the operational challenges to price stability arising from the evolution in financial markets. The third section discusses international obstacles to achieving price stability. The final section summarizes the views of four prominent central bankers participating in the symposium.

Price stability: The goal of monetary policy in the 1990s

Historically, central banks have pursued a number of economic goals: price stability, full employment, exchange rate stability, and balanced trade. Defining the proper long-run goal of monetary policy in the 1990s was an important issue at the symposium.

The symposium's first presenter, Charles Freedman, set the stage for this issue. In "Monetary Policy in the 1990s—Lessons and Challenges," Freedman reviewed some important lessons for monetary policy from preceding decades. Freedman argued that high inflation and unemployment in the 1970s, followed by the high cost of disinflation in the 1980s, have convinced central bankers their foremost goal in the 1990s should be price stability.

The principal lesson from the 1970s, according to Freedman, is that monetary policy should not try to stabilize the unemployment rate. He explained the long-run unemployment rate depends on such real factors as labor force mobility and minimum wage laws, rather than on the supply of money. If policymakers increase the money supply in an effort to reduce unemployment, the only long-run effect will be inflation. **Policymakers** learned this lesson when they expanded the money supply to prevent unemployment from increasing after

the price of oil tripled in the 1970s. The result was stagflation—high unemployment and high inflation.

Turning to the 1980s, Freedman argued that the high cost of disinflation—the recession in 1981 and 1982—taught policymakers to be vigilant against inflation. If policymakers ignore inflation the public will doubt policymakers' commitment to ending inflation. Policymakers in this predicament cannot change the public's expectations merely by announcing that inflation will decline. To overcome inflationary expectations, monetary policy must eventually become severely restrictive, even at the risk of a recession. To avoid this outcome, Freedman advised policymakers to respond quickly to signs of inflation.

Looking ahead to the 1990s, Freedman identified three major challenges for monetary policy. First, the deregulation of interest rates and exchange rates and the greater integration in world financial markets will change the channels of monetary policy. Second, ongoing financial innovation will result in continued instability in the relationship between prices and money. And third, greater international capital mobility may prevent central banks from achieving both price stability and exchange rate stability.

In discussing Freedman's paper, Lyle E. **Gramley** said it **may be** politically impossible for monetary authorities to aim only at price stability while ignoring the unemployment rate. He recalled the Bush Administration criticized the Federal Reserve for worrying too much about inflation in 1989, even though the unemployment rate was low at the time. **Gramley** predicted political pressure to stabilize the economy may increase in the event of disturbances to the vulnerable international or financial sectors. If policymakers are forced to try to stabilize the economy, **Gramley** advised them to remember that monetary policy has only a temporary effect on real variables, but a lasting effect on prices.

Achieving price stability: Operational challenges

As Freedman observed, rapidly changing financial markets pose an operational challenge to the goal of achieving price stability. Four papers at the symposium addressed this issue. Benjamin **Friedman** investigated how the monetary transmission mechanism has been changed by deregulation, innovation, and globalization in the 1980s.

Central bank economists from three countries then discussed how monetary operating procedures in the 1990s must adapt to these changes if price stability is to be achieved.

The changing monetary transmission mechanism

In "Changing Effects of Monetary Policy on Real Economic Activity," Benjamin **Friedman** identified three changes in the U.S. economy in the 1980s that may have altered the behavior of major spending components. First, the elimination of deposit interest-rate ceilings and the emergence of secondary mortgage markets may have weakened the strong effect of monetary policy on the housing industry. Second, rising indebtedness of U.S. corporations and consumers may have made them more sensitive to changes in interest rates. And third, the increased openness of the U.S. economy may have made the exchange rate a more important channel of monetary policy.

Friedman conducted statistical tests of these hypotheses. He found the housing industry has become less susceptible to monetary policy. Business investment in plant and equipment, on the other hand, has become more sensitive to interest rates. **Friedman** found consumer spending in the 1980s was less affected by changes in interest rates and stock prices than previously. And finally, **Friedman** found the flow of imports and exports was less sensitive to changes in the dollar's value in the 1980s; he calculated the decline was large enough to decrease the importance of foreign trade as a channel for monetary policy, even accounting for the larger share of U.S. **GNP** that is traded internationally. In sum, **Friedman** judged, the ability of monetary policy to affect aggregate spending has not changed, but its relative impact on housing, business investment, consumption, and foreign trade has changed. Policymakers in the 1990s must take these changes into account.

Discussant Ralph Bryant disagreed with some of **Friedman's** conclusions. Bryant questioned **Friedman's** finding that consumer spending responded more now to changes in interest rates and stock prices. In Bryant's view, not enough data have accumulated since deregulation to measure accurately its effects on consumer spending. Bryant also doubted that trade flows have become less sensitive to financial variables. Even granting that result, Bryant thought the increased share of U.S. **GNP** constituted by foreign trade would enhance the

importance of trade as a channel for monetary policy.

Bryant did agree with Friedman's conclusions that the housing industry has probably become less affected by monetary policy. He also agreed that business investment has become more sensitive.

In Bryant's view, monetary policy will remain effective in the 1990s, but its effects will be more uncertain. Greater uncertainty will force policymakers to proceed cautiously and to be candid about the possibility of mistakes.

Policy targets and operating procedures

Papers by central bank economists from the United States, Australia, and **Japan** examined how short-run monetary policy must operate in the 1990s to achieve price stability. The central question was whether price stability could be achieved by targeting the monetary aggregates in the context of financial deregulation, globalization, and innovation.

In "Policy Targets and Operating Procedures in the 1990s," Donald Kohn began with the premise that the only reasonable long-run objective for monetary policy is price stability. He then examined operating procedures that might achieve this objective in the United States.

Kohn first considered intermediate targeting as a short-run operating procedure. Under this procedure, Kohn explained, policymakers try to achieve their ultimate goal by controlling some intermediate variable—the supply of bank credit, for example. He noted that policymakers must abandon a particular target if the short-run relationship between the target and their ultimate goal becomes unstable. For example, bank credit was abandoned as a target in the 1960s after firms began borrowing more in open markets and less from banks, thus altering the relationship between bank credit and spending. For much the same reason, Kohn added, monetary targets were deemphasized in the late 1980s. Kohn concluded that the intermediate targeting procedure may be inherently inefficient because it ignores information from other variables. As an alternative to targeting a single variable, Kohn advocated a strategy of small, frequent policy adjustments in response to many different variables. Uncertainty about underlying relationships among financial and economic variables forces **policymakers** to "cast a wide net" by monitoring several

variables, including interest rates and indicators of real activity. Uncertainty also calls for small, frequent adjustments in policy to avoid making cumulative errors, Kohn argued.

Under this strategy, warned Kohn, policymakers risk losing sight of the long-run goal of reducing inflation. In Kohn's view, the Federal Reserve has avoided this danger by "leaning against the wind" to avoid excess demand that might cause higher inflation. Doing so has enhanced the credibility of the Federal Reserve's commitment to control inflation. In turn, greater credibility has helped reduce inflation by keeping inflation expectations low.

In "Policy Targets and Operating Procedures: The Australian Case," Ian Macfarlane observed that Australia did not reduce its inflation rate in the 1980s as much as many other industrialized countries. He said that reducing inflation further would be the major challenge in the 1990s.

Macfarlane described how monetary policy procedures in Australia had evolved from exchange rate targeting to monetary targeting and then to interest rate targeting: He explained targeting the exchange rate in the 1970s and 1980s constrained the central bank's ability to achieve domestic objectives. For example, whenever the central bank tried to slow the economy by raising interest rates, capital inflows from foreign investors put upward pressure on the exchange rate. Then, to stabilize the exchange rate, the central bank had to sacrifice its domestic objectives. To free monetary policy from this constraint, exchange rate targets were abandoned in 1983.

Macfarlane reported that targeting various monetary aggregates proved to be unreliable in controlling inflation. The narrow aggregates were potentially useful, though, since changes in the narrow aggregates usually preceded changes in spending. But the relationship became unpredictable after interest rates were deregulated in the 1980s. The broader monetary aggregates, on the other hand, bore a lagging relationship to spending, which limited their usefulness as targets. Consequently, the Reserve Bank abandoned monetary targeting in 1985.

Macfarlane explained that the Australian Reserve Bank now operates by adjusting interest rates to achieve price stability. He acknowledged the tendency under this procedure for interest rates themselves to become an objective. The risk with this procedure, he explained, lies in keeping interest rates steady in the face of

accelerating inflation. He felt, however, that the Australian central bank had avoided this risk in recent years. Besides, he could see no better alternative, as exchange rate targets and monetary targets had not performed well in Australia.

In "Policy Targets and Operating Procedures in the 1990s: The Case of Japan," Yoshio **Suzuki** predicted the Japanese central bank will continue to rely on monetary targeting to maintain price stability. **Suzuki** reported that the relationship between money and prices in Japan remained relatively stable in the 1980s. He attributed the stability to the gradual pace of interest rate deregulation in Japan, which is not yet complete, and to relatively stable inflation and interest rates in the 1980s.

Suzuki suggested that deregulation would change the channels of monetary policy. Under current deposit and loan interest rate ceilings, a rise in market interest rates leads to a reduction in bank deposits and bank credit. **Suzuki** predicted this credit availability channel would weaken when deposit ceilings are abolished in the 1990s. A stronger channel may arise from the effect of monetary policy on wealth. He explained that higher interest rates reduce wealth by depressing the stock market and the value of bonds, and the reduction in wealth in turn reduces consumer spending. This wealth effect channel will likely strengthen as Japanese wealth increases in the 1990s.

Achieving price stability: International challenges

Integration of world markets has given international issues greater prominence in policy debates. Two papers examined the possible conflict between the domestic goal of price stability and competing international goals. Jacob A. Frenkel, Morris Goldstein, and Paul R. **Masson** examined whether price stability could be reconciled with the goal of exchange rate stability. Rudiger Dornbusch argued that policymakers should not be too concerned with price stability in pursuing balanced trade and full employment.

Price stability versus exchange rate stability

In "International Dimensions of Monetary Policy: Coordination Versus Autonomy," Jacob A. Frenkel, Morris Goldstein, and Paul R. **Masson** examined the tension between central banks' coordinated

pursuit of exchange rate stability and their independent pursuit of domestic price stability.

The authors argued that stabilizing exchange rates is sometimes a legitimate goal of monetary policy. They cited theoretical and empirical evidence that destabilizing speculation can cause excessively volatile exchange rates. Because excess volatility creates needless uncertainty for investors, the authors argued, it would be a mistake for policymakers to ignore exchange rates. On the other hand, since excess volatility is the exceptional case, it would also be a mistake for policymakers to fix exchange rates. As an intermediate solution, the authors proposed that central bankers in larger countries should keep exchange rates within "loose and quiet" target zones.

Will maintaining exchange rate zones compromise the goal of price stability? Not for high-inflation countries, said the authors, since maintaining the exchange rate vis-à-vis a low-inflation country disciplines the central bank of the high-inflation country. However, for larger countries with low inflation rates, enforcing the zones will occasionally require central banks to intervene in exchange markets or to make coordinated adjustments in their domestic policies. In these events, the goal of domestic price stability has to be ignored since monetary policy cannot simultaneously control the domestic and international value of the currency.

Can fiscal policy control the domestic price level when monetary policy is aimed at the exchange rate? The authors offered several reasons why, in their view, fiscal policy is not suited to this purpose. First, fiscal policy is too inflexible to function as a tool of demand management. For evidence, they pointed to persistent and, in their view, inappropriate budget deficits in the United States in the 1980s. Second, too little is known about the effects of fiscal policy on the economy. Third, fiscal policy should be guided by long-run issues, such as economic growth and income distribution, not by the short-run goal of demand management.

Discussant Robert Solomon agreed that excessively volatile exchange rates will occasionally be a major concern for monetary policy in the 1990s. He disagreed, however, that aiming monetary policy at exchange rates requires abandoning the goal of price stability. In his view, fiscal policy could be used to control the price level. While it may be less flexible than monetary policy, fiscal policy may affect the economy faster than monetary policy. He asserted that nearly

a decade of large U.S. budget deficits should not disqualify fiscal policy as a useful policy tool.

Discussant John Williamson agreed with most of the authors' arguments, but disagreed on two points. First, he argued that monetary authorities should announce the exchange target zones publicly. Second, he objected to assigning monetary policy exclusively to controlling inflation or the exchange rate, while assigning fiscal policy solely to balancing the budget. In his view, price stability and exchange rate stability could both be achieved by the appropriate mix of fiscal and monetary policy. He echoed Solomon's point that large U.S. budget deficits should not disqualify fiscal policy as a useful instrument of demand management.

Price stability versus balanced trade

Rudiger Donbusch, in "The Dollar in the 1990s: Competitiveness and the Challenges of New Economic Blocs," argued that U.S. monetary policy cannot be "overconscious" of inflation if the United States is to improve its trade account in the 1990s without suffering a recession.

Dornbusch observed that increased financial integration in the 1980s increased the **international** spillover of domestic policy. The combination of large U.S. budget deficits and tight monetary policy in the 1980s resulted in higher U.S. interest rates, which attracted foreign capital. The capital inflow moderated the increase in interest rates but increased the value of the dollar. The resulting increase in the trade deficit allowed the United States to run large budget deficits without displacing domestic investment. In Dornbusch's view, there is ample evidence that trade deficits caused by budget deficits are cause for concern.

Next, Dornbusch argued that the trade deficit could remain large unless the exchange value of the dollar declines. The dollar is overvalued, as evidenced by the fact that some U.S. export prices remain above their 1980 levels. The U.S. competitive position appears even worse, he added, in light of the superior quality of some foreign goods compared with U.S. goods. The U.S. competitive position is weakened further, he asserted, because Japanese markets are closed to U.S. exports.

A change in macroeconomic policies is needed to reduce the trade

deficit, Dornbusch reasoned. He stressed that domestic policy must be coordinated toward this end. If monetary policy is eased to lower the dollar without an accompanying reduction in the budget deficit, the economy would overheat and inflation would accelerate. Alternatively, if the budget deficit is reduced without an accompanying ease in monetary policy, a recession could follow. Thus, in the event the budget deficit is reduced, the Federal Reserve should ease monetary policy to lower the value of the dollar in order to increase U.S. exports. The risk is that the Federal Reserve, fearing inflation, would not ease policy as the budget deficit is reduced.

Dornbusch also argued that the emergence of "inward-looking" trading blocs in Europe and Asia threaten the U.S. competitive position and the international role of the dollar. He noted that Europe 1992 has already led some U.S. firms to build plants in Europe to avoid being locked out of that market. He also predicted an Asian trading bloc centered in Japan would emerge in the 1990s as the United States closes its deficit with Japan and Japan seeks new markets. Furthermore, Dornbusch predicted the emergence of a single currency unit in each of these blocs would displace the dollar as a world currency.

Discussant Jeffrey A. **Frankel** agreed with Dornbusch that the current U.S. budget deficit should be reduced in order to improve the trade balance. He also agreed that the Federal Reserve should accommodate a fiscal contraction by lowering real interest rates and the value of the dollar. **Frankel** emphasized, however, that inflation would worsen if monetary policy becomes expansionary before the budget deficit is reduced.

Frankel objected to Dornbusch's assertion that European and Asian integration threaten the role of the dollar. He predicted the dollar would remain the preeminent world currency into the next century. A more important trend, in his view, was the increasing share of world output produced in Japan and Europe. To the extent this change reflects slow U.S. productivity growth in the 1980s, it is cause for concern. He noted, however, that integration and economic success among our trading partners would not necessarily be at the expense of the United States.

Discussant Alexander Swoboda warned against focusing too much attention on the exchange rate, lest it be elevated to the undeserved status of a target of monetary policy. In his view, monetary policy

should be assigned to price stability in the long run and stabilizing output in the short run. The U.S. current account deficit should be addressed at its source: large budget deficits. Swoboda also thought Dornbusch overemphasized Japanese-U.S. trade relations, pointing out that opening Japan's markets would benefit all nations, not only the United States. On a separate point, Swoboda observed that while the U.S. dollar is still the predominant world currency, its role is declining *vis-à-vis* the yen. He predicted a further, albeit slow, decline in the dollar's role in the 1990s.

Central bank overview

The symposium also provided a forum for the opinions of four prominent central bankers. The luncheon address on the first day was delivered by Robin Leigh-Pemberton, the Governor of the Bank of England. The symposium concluded with an overview panel comprising John Crow, Governor of The Bank of Canada; Leonhard Gleske, Member of the Directorate, Deutsche Bundesbank; and Alan Greenspan, Chairman of the Board of Governors of the Federal Reserve System of the United States.

Robin Leigh-Pemberton's address was entitled "Europe 1992: Some Monetary Policy Issues." He noted that integration of Europe in 1992 will enable goods, capital, and labor to move as freely among the nations in the European Community as they do currently throughout the United States. This unity may constrain the autonomy of member countries in conducting monetary policy, perhaps leading eventually to a common currency and monetary authority. Leigh-Pemberton asserted it is "more important than ever" to understand that the "first and overriding goal" of **monetary** policy should be price stability.

Leigh-Pemberton discussed the pace at which monetary integration should occur. It is often argued, he noted, that since an integrated Europe will resemble the United States, Europe should adopt a common currency and single monetary authority modeled after the Federal Reserve System. In his view, this argument ignores the fact that European goods and labor markets will likely remain less integrated than U.S. markets for some time. Lacking the adjustment mechanism that integrated markets provide, each European nation may still need an independent monetary authority to accommodate disruptions to its

own economy. For this reason, Leigh-Pemberton warned against allowing monetary integration to race ahead of goods and labor market integration.

Leonhard Gleske addressed two issues in his remarks: the role of monetary targeting in the 1990s and the implications of a tri-polar currency system for monetary policy.

Gleske reaffirmed the majority view that the primary responsibility of a central bank is price stability. Monetary targeting has been useful to the Bundesbank in fulfilling that responsibility, said Gleske, especially when the Bundesbank was attempting to reduce inflation in the early 1980s. More recently, however, German monetary policy has not been guided exclusively by the monetary aggregates; some overshooting of the monetary targets has been tolerated to prevent the deutsche mark from appreciating. In Gleske's opinion, this compromise was justified by the need to protect West Germany's large foreign sector from misaligned exchange rates. Furthermore, because the external sector will likely grow with the integration of Europe, he expects the monetary aggregates to serve as long-run policy guides in the 1990s rather than formal targets.

Gleske speculated that strict monetary targeting might be feasible under a tri-polar currency system. Because each bloc's foreign sector would constitute a smaller share of the bloc's aggregate output, each bloc could better withstand shocks to its exchange rate. Gleske felt, however, that a common monetary authority in Europe is still remote, and a common authority in the Pacific rim may never occur.

John Crow observed in his remarks that central banks are officially charged with many responsibilities. For example, the Bank of Canada Act calls upon the bank to protect "the international value of the currency, and to mitigate by its influence fluctuations in the general level of production, trade, prices and employment." Crow argued that monetary policy is best suited to achieving price stability; therefore, price stability should be the foremost goal of monetary policy.

Crow urged central bankers to resist having too many duties foisted upon them, lest they fail in their primary duty of stabilizing prices. He acknowledged that monetary policy has a comparative advantage over fiscal policy in controlling the exchange rate. Crow reasoned, however, that exchange rate is best stabilized by preserving the domestic value of the currency—that is, by eliminating inflation.

Alan Greenspan predicted central bankers in the 1990s will face more instability in the international financial system due to the accelerating volume of international financial transactions. He explained that most international transactions are not concurrent: a period of "float" separates the commitment and final settlement of a transaction. During such a period, the transaction is essentially a loan. If the borrower defaults, the lender may in turn default on transactions the lender agreed to when still expecting payment from the borrower. Such a chain reaction of defaults could destabilize the international financial system. Greenspan judged that we cannot hope to eliminate such systemic risk. He concluded, however, that because the stability of financial markets ultimately depends on the performance of the world economy, systemic risk is best controlled through the "pursuit of sound economic policies both domestically and, to the extent relevant, on a coordinated international basis."

Conclusion

Participants at The Federal Reserve Bank of Kansas City's 1989 symposium discussed a wide range of issues for monetary policy in the 1990s. One issue, however, forced itself center stage: price stability. **Virtually** all participants agreed that price stability should be the foremost goal of monetary policy in the 1990s.

With this goal in mind, participants acknowledged a number of obstacles to achieving price stability. Deregulation and innovation in financial markets have changed the transmission of monetary policy in uncertain ways. Just as important, the evolution in financial markets has destabilized the short-run relationship between money and prices, depriving policymakers of a useful tool for short-run policy operation. At the same time, the integration of world markets has forced policymakers to look beyond their borders in deciding policy. International issues, such as volatile exchange rates and trade imbalances, now compete with price stability for policymakers' attention. To achieve price stability in the coming decade, monetary policymakers must overcome these operational and international challenges.