

# NBER RESEARCH SUMMARY

## Monetary Policy

Frederic S. Mishkin\*

October 2001

\*Frederic S. Mishkin is the Alfred Lerner Professor of Banking and Financial Institutions at the Graduate School of Business, Columbia University and an NBER research associate.

From the beginning of my academic career, my research has always been driven by an interest in the role of monetary policy in the economy even when it dealt with somewhat different topics which focused on econometric technique or financial instability and banking issues.<sup>i</sup> My stint inside the Federal Reserve System as the director research at the Federal Reserve Bank of New York naturally further stimulated my interest in monetary policy issues and so has led me to think more about how central banks actually conduct monetary policy and how the conduct of monetary policy might be improved. This research summary reports on my research over the last several years on monetary policy strategy and tactics, not only in the United States, but also in emerging market and other industrialized countries.

## MONETARY POLICY STRATEGIES: THE INTERNATIONAL EXPERIENCE

In recent years a growing consensus has emerged to elevate price stability to be the overriding, long-run goal of monetary policy. Thus it is not surprising that a central feature of monetary policy strategies is the use of a nominal anchor in some form. There are four basic types of monetary policy strategies, each of which uses a different nominal anchor: 1) exchange-rate targeting, 2) monetary targeting, 3) inflation targeting and 4) monetary policy with an explicit, but not an explicit nominal anchor (what I call the "just do it" approach.)

### **Monetary Targeting**

My work on monetary policy strategy began with a paper written with Ben Bernanke in 1992 that focused on monetary targeting in six industrialized countries, which has been followed by a series of other papers analyzing monetary targeting in industrialized countries.<sup>ii</sup> Monetary targeting has been used as a successful strategy for monetary policy in two countries, Germany and Switzerland and is the reason that monetary targeting still has strong advocates and is reflected in one of the two pillars of the official policy strategy for the European Central Bank. The key fact about monetary targeting in Germany and Switzerland is that the targeting regimes were very far from a Friedman-type monetary targeting rule in which a monetary aggregate is kept on a constant-growth-rate path and is the primary focus of monetary policy. Instead, monetary targeting in Germany and Switzerland should be seen as a method of communicating the strategy of monetary policy that focuses on long-run considerations and the control of inflation. The very flexible approach to monetary targeting -- e.g., the Bundesbank missed its target ranges on the order of fifty percent of the time -- was adopted because the relationship between monetary aggregates and goal variables such as inflation and

nominal income has not remained strong, nor reliable, in Germany and Switzerland, as well as in other industrialized countries.<sup>iii</sup> Indeed, the key elements of monetary targeting that led to its success in Germany and Switzerland -- flexibility, transparency and accountability -- are also central elements in inflation targeting regimes. Other industrialized countries that have pursued monetary targeting, such as the United States, Canada, and the United Kingdom, have found it to be an even less successful strategy, partially because it was not pursued seriously, but also because of the dramatic breakdown of the relationship between monetary aggregates and inflation when monetary targeting was adopted.

Emerging market countries have also toyed with the idea of monetary targeting, particularly in Latin America, but as my paper with Miguel Savastano points out, despite what is often said, no central bank in Latin America has truly practiced monetary targeting.<sup>iv</sup> The monetary policy frameworks of many Latin American central banks have used the information conveyed by a monetary aggregate to conduct monetary policy, but the other two elements (public announcements of the targets and some type of accountability mechanism) rarely have been present at the same time. The instability of the money-inflation relationship has also been very visible in emerging market countries and so it is not surprising that monetary targeting has not been pursued very seriously in these countries.

### **Exchange-Rate Targeting**

Exchange-rate targeting is discussed in several of my papers.<sup>v</sup> Exchange-rate targeting has been an effective means of reducing inflation quickly in both industrialized and emerging market countries. However, exchange-rate targeting results in the loss of independent monetary policy and also means that shocks to the anchor country, to whose currency the domestic currency is pegged, are transmitted to the targeting country because domestic interest rates are determined in the anchor country. Exchange-rate targets are thus likely to lead to higher output volatility and this is exactly the experience that has been found in Latin America.<sup>vi</sup> Exchange-rate targeting comes in two basic varieties, "soft pegs", in which the commitment to the peg is not institutionalized, and "hard pegs", where the institutional commitment comes either from establishment of a currency board or from dollarization. Soft pegs leave countries open to speculative attacks and currency crises, which can be costly in industrialized countries, but are frequently devastating to emerging market countries as we have seen recently in Latin America (Mexico and Ecuador), East Asia (Thailand, Korea and Indonesia) and Turkey. The breakdown of soft pegs in emerging market countries is so damaging in emerging market countries because their debt structure is generally short-term and is denominated in

foreign currency, so that a successful speculative attack leads to a sharp deterioration in balance sheets which leads to a financial crisis.<sup>vii</sup>

Given the past experience with soft pegs, fewer economists advocate their use as a monetary policy strategy. However, hard pegs may be desirable particularly in countries whose political and monetary institutions are particularly weak because they may be the only way to break inflationary psychology and stabilize the economy.<sup>viii</sup> Hard pegs can then be thought of as the stabilization policy of last resort in which it is necessary to allow little or no discretion to the monetary authorities. However, hard pegs will not be successful in promoting a healthy economy unless government policies create the right institutional environment. Without rigorous prudential supervision, which ensures the safety and soundness of the financial system, and sound and sustainable fiscal policy, hard pegs will not be able to stabilize the economy.

### **Inflation Targeting**

Inflation targeting is a recent monetary policy strategy that has been a major focus of my recent research.<sup>ix</sup> It encompasses five main elements: 1) the public announcement of medium-term numerical targets for inflation; 2) an institutional commitment to price stability as the primary goal of monetary policy, to which other goals are subordinated; 3) an information inclusive strategy in which many variables, and not just monetary aggregates or the exchange rate, are used for deciding the setting of policy instruments; 4) increased transparency of the monetary policy strategy through communication with the public and the markets about the plans, objectives, and decisions of the monetary authorities; and 5) increased accountability of the central bank for attaining its inflation objectives. The list should clarify one crucial point about inflation targeting: it entails *much more* than a public announcement of numerical targets for inflation for the year ahead. This is especially important in emerging market countries because many of these countries routinely reported numerical inflation targets or objectives as part of the government's economic plan for the coming year and yet their monetary policy strategy should not be characterized as inflation targeting, which requires the other four elements for it to be sustainable over the medium term.<sup>x</sup> Since 1990, inflation targeting has been adopted by many industrialized countries (New Zealand, Canada, the United Kingdom, Sweden, Israel, Australia and Switzerland), by several emerging market countries (Chile, Brazil, Korea, Thailand, and South Africa) and by several transition countries (Czech Republic, Poland and Hungary).

Inflation targeting has several advantages as a medium-term strategy for monetary policy. In contrast to an exchange rate target, inflation targeting enables monetary policy to focus on domestic

considerations and to respond to shocks to the domestic economy. In contrast to monetary targeting, inflation targeting has the advantage that a stable relationship between money and inflation is not critical to its success: the strategy does not depend on such a relationship, but instead uses all available information to determine the best settings for the instruments of monetary policy. Inflation targeting also has the key advantage that it is easily understood by the public and is thus highly transparent. Because an explicit numerical target for inflation increases the accountability of the central bank, inflation targeting also has the potential to reduce the likelihood that the central bank will fall into the time-inconsistency trap even though it allows for some discretion on the part of the central bank. Indeed, Ben Bernanke and I have coined the phrase "constrained discretion" to describe what inflation targeting is all about.<sup>xi</sup> For inflation targeting to deliver these outcomes, there must exist a strong institutional commitment to make price stability the primary goal of the central bank. Inflation-targeting regimes also put great stress on the need to make monetary policy transparent and to maintain regular channels of communication with the public and these features have been central to the strategy's success. As illustrated in case studies of both industrialized and emerging market countries,<sup>xii</sup> inflation-targeting central banks have frequent communications with the government, and their officials take every opportunity to make public speeches on their monetary policy strategy. Inflation targeting central banks have taken public outreach a step further: they publish *Inflation Report*-type documents (originated by the Bank of England in February 1993) to clearly present their views about the past and *future* performance of inflation and monetary policy. Another key feature of inflation-targeting regimes is that the transparency of policy associated with inflation targeting has tended to make the central bank highly accountable to the public. Sustained success in the conduct of monetary policy as measured against a pre-announced and well-defined inflation target has been instrumental in building public support for an independent central bank, even in the absence of a rigidly defined and legalistic standard of performance evaluation and punishment.

Inflation targeting has been a success in the countries that have adopted it. The evidence shows that inflation targeting countries have been able to reduce their long-run inflation below the levels that they would have attained in the absence of inflation targeting, but not below the levels that have been attained by some industrial countries that have adopted other monetary regimes.<sup>xiii</sup> Central bank independence has also been mutually reinforced with inflation targeting, while monetary policy has been more clearly focused on inflation under inflation targeting and is likely to have been toughened by inflation targeting. Despite inflation targeting's successes, it is no panacea: it requires that basic institutional infrastructure with regard to fiscal policy and the soundness of

financial institutions be addressed and improved in order to attain and preserve low and stable inflation.

### **The "Just Do It" Strategy**

Several countries in recent years, most notably the United States, have achieved excellent macroeconomic performance (including low and stable inflation) without using an explicit nominal anchor such as a target for the exchange rate, a monetary aggregate target, or inflation. Although in the U.S. case no explicit strategy has been articulated, a coherent strategy for the conduct of monetary policy exists nonetheless. This strategy, which I call the "just do it" strategy, involves an implicit, but not an explicit nominal anchor in the form of an overriding concern by the Federal Reserve to control inflation in the long run. In addition it involves forward-looking behavior in which there is careful monitoring for signs of future inflation, coupled with periodic "preemptive strikes" by monetary policy against the threat of inflation.

The main argument for the "just do it" strategy is its demonstrated success and so "if it ain't broke, why fix it?" However, the "just do it" strategy suffers from a lack of transparency and accountability of the central bank, which not only may weaken the support for anti-inflationary monetary policy but also is not fully consistent with democratic principles.<sup>xiv</sup> Also replacement of the "just do it" with an inflation-targeting approach would help to depersonalize U.S. monetary policy, which would strengthen the central bank's commitment to the long-run goal of price stability and make the achievement of low inflation less dependent on the competence or convictions of a few individuals.

### **MONETARY POLICY TACTICS**

My recent research has also focused on tactical issues for the conduct of monetary policy. For example, in a series of papers with Arturo Estrella I have looked at what information might be valuable for monetary policymakers in forecasting inflation and the real economy.<sup>xv</sup> Also my research has explored how the NAIRU concept might be used in the conduct of monetary policy.<sup>xvi</sup> I have also examined the transmission mechanisms of monetary policy to explore what implications they might have for policy.<sup>xvii</sup>

My hope is that my research on monetary policy strategy and tactics outlined here might help policymakers design monetary policy more effectively, thereby improving the performance of their economies.

## Endnotes

- i. Summaries of some of my other lines of my research can be found in previous issues of the *NBER Reporter*: F.S. Mishkin, "A Rational Expectations Approach to Macroeconometrics," *NBER Reporter* (Winter 1982/83): 4-7 and F.S. Mishkin, "Financial Crises," *NBER Reporter* (Winter 1996/7): 10-12.
- ii. B.S. Bernanke and F.S. Mishkin, "Central Bank Behavior and the Strategy of Monetary Policy: Observations from Six Industrialized Countries," NBER Working Paper No. 4082 and in *NBER Macroeconomics Annual*, 1992, pp. 183-228; F.S. Mishkin, "Strategies for Controlling Inflation," NBER Working Paper No. 6122 and in Phillip Lowe, ed., *Monetary Policy and Inflation Targeting* (Reserve Bank of Australia: Sydney 1997), pp. 7-38; F.S. Mishkin, "International Experiences with Different Monetary Policy Regimes," NBER Working Paper No. 6965 and in *Journal of Monetary Economics*, Vol. 43, #3 (June 1999), pp. 579-606; and F.S. Mishkin, "From Monetary Targeting to Inflation Targeting: Lessons from the Industrialized Countries," in *Stabilization and Monetary Policy: The International Experience* (Bank of Mexico: Mexico City, forthcoming).
- iii. See for example, A. Estrella and F.S. Mishkin, "Is There a Role for Monetary Aggregates in the Conduct of Monetary Policy," NBER Working Paper No. 5845 and in *Journal of Monetary Economics*, 40:2, (October 1997): 279-304.
- iv. F.S. Mishkin and M. Savastano, "Monetary Policy Strategies for Latin America," (with Miguel Savastano), NBER Working Paper No. 7617 and in *Journal of Development Economics*, (October 2001, forthcoming).
- v. F.S. Mishkin, "Strategies for Controlling Inflation," F.S. Mishkin, "International Experiences with Different Monetary Policy Regimes," F.S. Mishkin and M. Savastano, "Monetary Policy Strategies for Latin America," and F.S. Mishkin, "The Dangers of Exchange Rate Pegging in Emerging-Market Countries" *International Finance*, Vol 1, # 1 (October 1998), pp. 81-101.
- vi. See F.S. Mishkin and M. Savastano, "Monetary Policy Strategies for Latin America."
- vii. For example, see F.S. Mishkin, F., "Understanding Financial Crises: A Developing Country Perspective," NBER Working Paper No. 5600 and in Michael Bruno and Boris Pleskovic, eds., *Annual World Bank Conference on Development Economics 1996* (World Bank: Washington D.C. 1996), pp. : 29-62, and F.S. Mishkin, "Lessons from the Asian Crisis," NBER Working Paper No. 7102 and in *Journal of International Money and Finance*, 18, 4 (August 1999), pp. 709-723.
- viii. Hard pegs may also be desirable as a means of furthering economic integration with the anchor country, but this is a completely separate issue from whether a hard peg is a desirable

monetary policy strategy.

- ix.B.S. Bernanke and F.S. Mishkin, "Inflation Targeting: A New Framework for Monetary Policy?" NBER Working Paper No. 5893 and in *Journal of Economic Perspectives* 11, 2 (Spring 1997), pp. 97-116; F.S. Mishkin and A.S. Posen, "Inflation Targeting: Lessons from Four Countries," NBER Working Paper No. 6126 and in Federal Reserve Bank of New York, *Economic Policy Review*, vol. 3, #3 (August 1997), pp. 9-110; F.S. Mishkin, "Strategies for Controlling Inflation,"; F.S. Mishkin, "International Experiences with Different Monetary Policy Regimes,"; B.S. Bernanke, T. Laubach, F.S. Mishkin, and A.S. Posen *Inflation Targeting: Lessons from the International Experience* (Princeton University Press: Princeton, 1999); "Inflation Targeting in Emerging Market Countries," *American Economic Review* (May 2000), Vol. 90, #2, pp. 105-109; F.S. Mishkin, "Issues in Inflation Targeting," in *Price Stability and the Long-Run Target for Monetary Policy*, (Bank of Canada: Ottawa, Canada, 2001), pp. 203-222; F.S. Mishkin and M. Savastano, "Monetary Policy Strategies for Latin America,"; F.S. Mishkin, "From Monetary Targeting to Inflation Targeting: Lessons from the Industrialized Countries,"; F.S. Mishkin and K. Schmidt-Hebbel, "One Decade of Inflation Targeting in the World: What Do We Know and What Do We Need to Know?" NBER Working Paper No. 8397 and in Norman Loayza and Raimundo Soto, eds., *A Decade of Inflation Targeting in the World* (Central Bank of Chile: Santiago, forthcoming.)
- x. See F.S. Mishkin and M. Savastano, "Monetary Policy Strategies for Latin America".
- xi.B.S. Bernanke and F.S. Mishkin, "Inflation Targeting: A New Framework for Monetary Policy?"
- xii.F.S. Mishkin and A.S. Posen, "Inflation Targeting: Lessons from Four Countries,"; B.S. Bernanke, T. Laubach, F.S. Mishkin, and A.S. Posen *Inflation Targeting: Lessons from the International Experience*; and F.S. Mishkin and M. Savastano, "Monetary Policy Strategies for Latin America."
- xiii.B.S. Bernanke, T. Laubach, F.S. Mishkin, and A.S. Posen *Inflation Targeting: Lessons from the International Experience*.
- xiv.F.S. Mishkin, "Central Banking in a Democratic Society: Implications for Transition Countries," *Zagreb Journal of Economics*, Vol 3, #3 (1999), pp. 51-74 and in Mario Blejer and Marko Skreb, eds. *Central Banking, Monetary Policy and the Implications for Transition Economies* (Kluwer Academic Publishers: Boston 1999) pp. 31-53 and "What Should Central Banks Do?" Federal Reserve Bank of St. Louis *Review*, vol. 82, #6 (November/December 2000), pp. 1-13.
- xv.A. Estrella and F.S. Mishkin, "The Predictive Power of the Term Structure of Interest Rates: Implications for the European Central Bank," NBER Working Paper No. 5279, *European Economic Review*, Vol. 41 (1997), pp. 1375-1401; A. Estrella and F.S. Mishkin, "Predicting

U.S. Recessions: Financial Variables As Leading Indicators," NBER Working Paper No. 5379 and in *Review of Economics and Statistics*, Vol 80, No. 1 (February 1998) pp. 45-61; and A. Estrella and F.S. Mishkin, "Is There a Role for Monetary Aggregates in the Conduct of Monetary Policy."

xvi.A. Estrella and F.S. Mishkin, "The Role of NAIRU in Monetary Policy: Implications of Uncertainty and Model Selection," NBER Working Paper No. 6518 and in John Taylor, ed., *Monetary Policy Rules* (University of Chicago Press for the NBER: Chicago 1999), pp. 405-430.

xvii.F.S. Mishkin, "The Channels of Monetary Transmission: Lessons for Monetary Policy," NBER Working Paper No. 5464, and in *Banque De France Bulletin Digest* No. 27 (March 1996) pp. 33-44; and F.S. Mishkin, "The Transmission Mechanism and the Role of Asset Prices in Monetary Policy," (mimeo. October 2001).