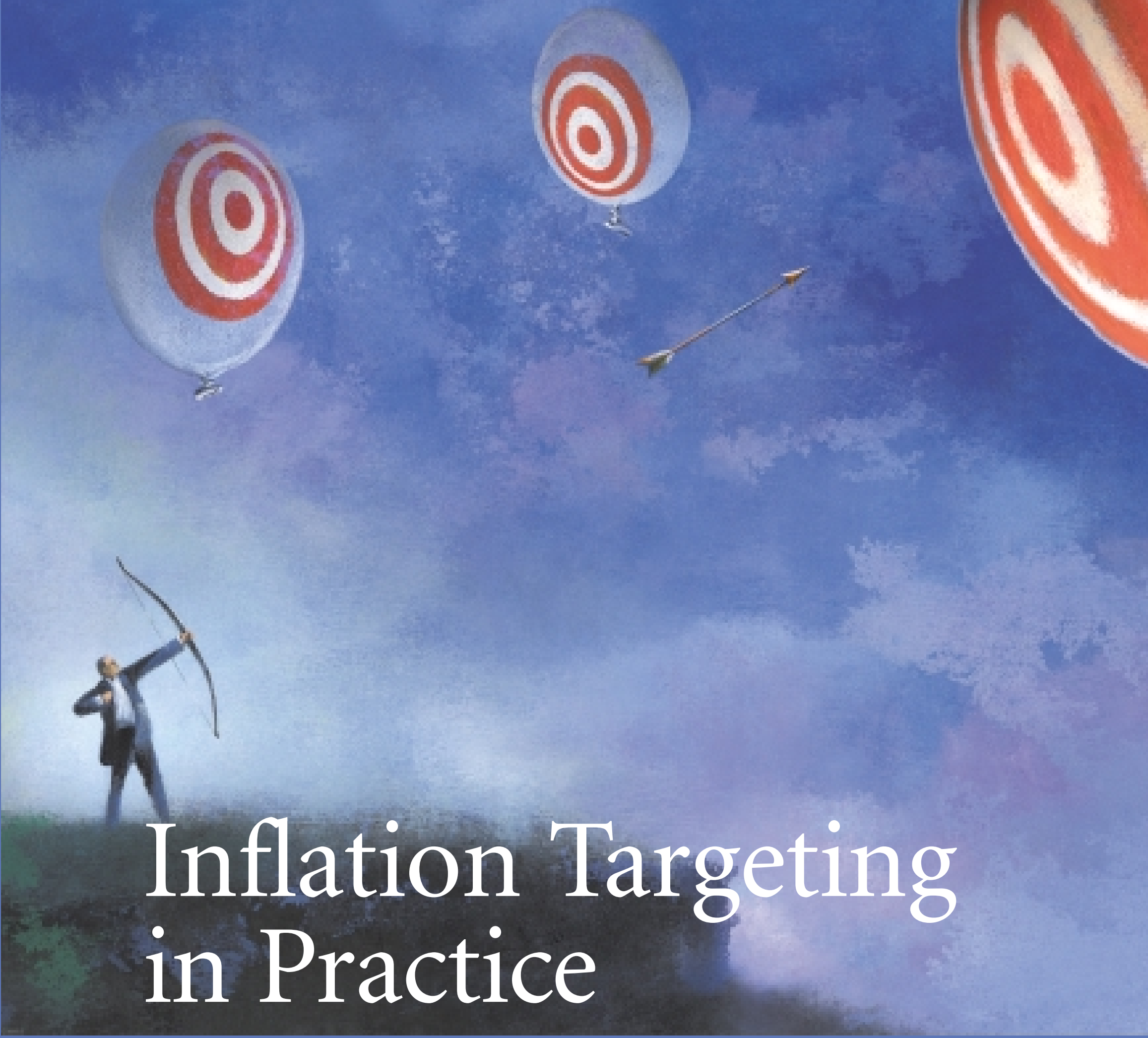

Inflation Targeting in Practice

Strategic and Operational Issues and Application to Emerging Market Economies

Editors
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Preface

In the aftermath of its resolution, in January 1999, to float the exchange rate of the real, the Central Bank of Brazil decided also to change the operational framework of its monetary policy and to adopt an explicit inflation targeting approach. In so doing, Brazil followed an increasing number of economies, both industrial and emerging, that have moved toward this type of arrangement. To inform the process of preparing for the introduction of the new scheme, the Central Bank of Brazil and the Monetary and Exchange Affairs Department of the International Monetary Fund held a seminar on inflation targeting in Rio de Janeiro on May 3–5, 1999. Its purpose was to analyze the experience to date of the countries that have been operating under an inflation targeting framework, and to identify and review the steps that Brazil should consider in adopting such a framework, to enhance the chances of its success.

Experts from 10 central banks joined their Brazilian counterparts and officials from the IMF in an in-depth examination of the recent experience, including practical aspects of the design and operation of inflation targeting in both industrial and emerging economies. A paper on the usefulness of inflation targeting in pursuing price stability and comprehensive papers on each of nine countries were presented and discussed. This volume gathers together the summaries of those presentations, which treat the main relevant points raised in the papers without entering into the most country-specific details. The objective is to present a concise but complete guide to the theoretical considerations and practical aspects that are important in assessing the benefits and costs of this increasingly popular monetary strategy.

The editors are grateful to the contributing authors for their efforts in preparing the concise versions of their papers, and to their colleagues at the Central Bank of Brazil and in the Monetary and Exchange Affairs Department and the Western Hemisphere Department of the IMF. They are also thankful to Nora Mori-Whitehouse for her efficient logistical and technical support in the preparation of this volume.

1 Introduction and Overview

Mario I. Blejer and Alfredo M. Leone

It is not an easy task to find many areas in economics where almost full agreement has emerged in the last few years. However, there is today a widespread and growing consensus that the single most important goal of monetary policy should be the pursuit of price stability. Reflecting this recognition, an increasing number of central banks have been granted independence and charged with the exclusive objective of controlling inflation and preserving the stability of prices. But embracing price stability as the explicit primary goal for monetary policy does not preclude the adoption of different operating mechanisms, and the choice of monetary regime that will best serve the objective of price stability has, indeed, generated much debate.

There are two basic persuasions on this matter, which boil down to the old debate over discretion versus rules. Those who believe in the superiority of policymaker discretion insist that, in practice, monetary policy tends to be largely judgmental. Although certain variables may be useful indicators of inflationary trends, policymakers fighting inflation look at a great many factors at the same time, interpret them in the manner that seems to them most correct, and decide on policies accordingly. Those who believe in rules, on the other hand, resolutely support the adoption of definite and precise targets—whether for growth in specific monetary aggregates, a level or path of the exchange rate, or a rate of inflation. The main argument for the adoption of targets is the notion that to conquer inflation, and thereafter to preserve price stability, requires policy credibility, and credibility, in turn, requires consistency, commitment, and transparency, which cannot be achieved without the accountability that arises from the adoption of explicit targets.

Although the debate remains unresolved, a growing number of countries have come out in favor of explicit rules. Among them, a significant number have chosen to eschew the growth path of a monetary aggregate as the explicit target for monetary policy. Instead they have decided to operate within a so-called *pure inflation targeting regime,* defined as the *public declaration of a quantitative target for inflation* in the medium run, coupled with a commitment by the central bank to pursue and reach this target. New Zealand was the first country to adopt this monetary strategy, but it was soon followed by a number of other industrial countries, among them Australia, Canada, Finland, Sweden, and the United Kingdom. More recently, several emerging economies have also moved in this direction, including Chile, Israel, Mexico, and in 1999, Brazil. Many other central banks are now actively considering the applicability of this regime to their countries, and some are making definite preparations to adopt the scheme.

One of the reasons why an explicit inflation targeting regime is so popular today is that it seems to lack some of the drawbacks of alternative monetary policy regimes. For example, the targeting of monetary aggregates—such as the monetary base or a broader measure of money—has a number of benefits, but in reality it is only advantageous when one can establish a high and predictable correlation between the chosen aggregate and nominal income. In fact, the demand for money has displayed strong fluctuations and frequent structural changes over time, rendering the relationship between the money supply (as reflected by the most relevant aggregate) and the policy objective (a particular level of inflation or of nominal income growth) highly unstable. Therefore the adoption of monetary aggregates as the target variable for monetary policy has become troublesome, and many countries have abandoned the practice and engaged in an active search for an alternative nominal anchor.

The other popular nominal anchor, particularly for small, open economies, has been the adoption of a preannounced (or at least predetermined) path for the exchange rate. Such an anchor may take the form of a fixed exchange rate regime (or even a currency board) or a crawling peg with well-defined rules for the crawl. Clearly, however, with the adoption of a fixed exchange rate rule, the central bank gives up the ability to control its own monetary policy and accepts limits on its capability to respond to domestic and external shocks. Moreover, as the recent financial crises in emerging economies have shown, fixed exchange rate regimes can suffer discrete breakdowns. The resulting violent changes in exchange rates may be extremely disruptive, not least because they can result in systemic banking and financial crises and broadly affect the level of economic activity.

It was this growing disappointment with quantity-based monetary policy, on the one hand, and the problems faced by many countries operating under an exchange rate rule, on the other, that induced some emerging economies to adopt—and many more to consider adopting—explicit inflation targeting. In particular, in emerging economies that are increasingly operating in a context of free capital mobility and liberalized financial markets, both monetary aggregates and the velocity of money have been rendered largely unstable. In addition, in time of crisis (such as in the Mexican crisis of 1994–95), the rule for money growth was often unable to prevent the sudden depreciation of the domestic currency, and therefore could not have the desired effect on inflationary expectations and the price level. As a result, the use of monetary targets as operational objectives was deemphasized. This is not to say that monetary aggregates were discarded altogether as policy indicators, but their prominence diminished significantly. Under these conditions, the adoption of an inflation target was seen as the most appropriate way of establishing and announcing to the public an explicit inflation objective, backed by a commitment to its attainment through supportive monetary policy.

In all the countries whose experiences are reviewed in this book, inflation targeting was adopted in the context of a move from a fixed (or predetermined) exchange rate toward a more flexible exchange rate regime, although the degree of flexibility varied across countries. In some cases a fixed exchange rate regime was replaced with a system of exchange rate bands, whereas in others a floating exchange rate system was adopted. Although the move to a more flexible exchange rate regime was seen as removing, or at least significantly moderating, one source of exogeneity in the behavior of monetary variables, in all cases the authorities were clearly concerned that the move could increase inflation expectations and result in inflationary pressures. Since low inflation continued to be recognized as the primary objective of monetary policy, the adoption of an inflation targeting framework was seen as key to anchoring expectations and guiding monetary policy decisions.

The Transition to Inflation Targeting

Prerequisites

The experience of several inflation targeters points to several prerequisites for successful adoption of an inflation targeting framework. First, the central bank must be given complete *instrument independence.* That is, it must have the freedom to adjust its instruments of monetary policy in the manner it believes will best achieve the objective of low inflation. Instrument independence mainly implies that the central bank is not constrained by the need to finance the government budget. Once all of the government's funding requirements are being met directly from private markets, another major exogenous influence on central bank liabilities is removed.

Second, the central bank must have an *effective monetary policy instrument,* one that has a relatively stable relationship with inflation. Most countries that have adopted inflation targeting use indirect instruments of monetary control, such as short-term interest rates, rather than direct instruments, such as credit controls.

Third, central bank independence under inflation targeting must be accompanied by *improved accountability, transparency, and communication with the public.* It is important to keep the public well informed about how the central bank operates and, in particular, about how new information causes the central bank to update its views of future prospects and to modify its policy stance. This is needed to ensure the public's understanding of the inflation target and its role as an anchor for inflation expectations. In many countries that have adopted an inflation targeting framework, central banks publish periodically an inflation report, which provides a flow of information and analysis that permits the central bank to explain its policy actions and to deflect accusations that could damage its credibility. Several other vehicles can be used to ensure accountability and transparency of monetary policy in these countries. One of these is the mandatory issuance by the central bank of an open letter, when the targets are breached, explaining the causes of the breach, the measures to be adopted to ensure that inflation returns to tolerated levels, and the period of time that will be needed for these measures to have an effect. Another is appearances of members of the central bank's governing body before parliamentary committees. A third is publication of the minutes of the meetings of the monetary policy committee that decides on interest rates.

Technical Issues

The country experiences summarized here also highlight several technical issues that any inflation targeting framework must address if it is to succeed. One of these is the selection of a *relevant price index* as the measure of inflation to target. Also, it must be decided whether to focus for policy purposes on an underlying or "core" measure of inflation, one that excludes certain more variable components of the price index adopted. If this is done, the authorities will need to provide clear definitions of and explanations for these exclusions before adopting the price index.

A decision will also need to be made on *whether to specify the inflation target as a point, as a band, or as a medium-term average;* the *time horizon* for meeting the target must be specified as well. In considering these alternatives, the authorities will need to take into account the trade-off between retaining some flexibility to deal with transitory inflationary impulses and providing a suitable and credible anchor for inflation expectations and policy decisions.

Most important, the authorities must have a clear target and be explicit about the definition of this target and the target horizon.

The monetary authorities must have a clear view about the *monetary policy transmission mechanism*. In particular, there should be a clear understanding of the roles of short-term interest rates, the exchange rate, and money and credit. They should also be aware of the major shocks that have typically affected aggregate demand and inflation in their country in the past. All these elements should be useful in identifying the channels that are most suitable for achieving the inflation target over time.

The authorities must be able to count on *reliable forecasts of inflation*. This is a key element, because the inflation targeting framework is necessarily forward-looking, given the lagged effects of any monetary policy action. Although it may not be essential at the outset to develop a reliable economic model of inflation that draws together all the relevant information and produces reliable forecasts, such a model is desirable in the long run.

In building *supporting models* to simulate the monetary transmission mechanism and produce inflation forecasts, the best advice is to keep these models small and simple, especially at first. Research should focus on small to medium-size models that embody the main features needed for the conduct of monetary policy. Most inflation targeters impose theoretical restrictions on these models when appropriate, as well as other suitable prior assumptions derived from smaller models and vector autoregressive (VAR) models.

However, in all cases it must be recognized that the use of models for economic projections is always supplemented by *judgment*. It is also important to monitor data that become available between projections, including data on variables that may not be included in the models but can help the authorities form a judgment on the path of inflation. These variables normally include monetary and credit aggregates, measures of the output gap, and measures of the public's inflation expectations.

Trade-offs

The experience so far with inflation targeting has brought to light a trade-off between flexibility and credibility. The more flexible the framework, the less credible it tends to be. The choice of a particular measure of the inflation rate (for instance, the use of an underlying or core measure), the adoption of measures to enhance credibility (including frequent and transparent communication with the public), and the choice of the policy horizon all affect this trade-off. Too much flexibility may undermine the public's confidence in the regime. But too much rigidity may result in unnecessarily large variability of output. The main message from the experience so far is the need to establish credibility as early as possible, to weaken the trade-off and thus allow greater flexibility in the longer run.

Under an inflation targeting framework, the monetary authorities can conceivably pursue additional objectives, *but only to the extent that they are consistent with the inflation target*. Experience to date clearly shows that the coexistence of multiple anchors (typically, a crawling currency band together with an inflation target, or a monetary aggregate target together with an inflation target) sooner or later becomes a source of policy conflict, which usually damages credibility.

The Plan of the Book

The experience of the countries surveyed in this volume seems to demonstrate that the adoption of explicit inflation targeting, and the way in which the choices for that framework have been made, have had an impact on the manner in which monetary policy was implemented and on the results observed. There has been no lack of variety in the design and implementation of inflation targeting strategies, and this variety has yielded some important insights on the consequences of alternative options.

This book can be analytically divided into three parts. The first, which consists of Chapter 2, is devoted to a discussion by Marvin Goodfriend of the reasons why inflation targeting is useful, in the context of an analysis of the importance and implications of pursuing the price stability objective.

The second part, comprising Chapters 3 through 7, examines the details of implementation of inflation targeting in five industrial countries. Although these chapters discuss many of the same analytical and practical issues, they also emphasize different aspects of inflation targeting according to the experience of each country. In Chapter 3, which presents the case of New Zealand—the inflation targeting pioneer—Murray Sherwin stresses the adoption of the new monetary framework as one of several overall strategic choices within a comprehensive reform program. On the other hand, the case of Sweden, as discussed by Claes Berg in Chapter 4, emphasizes the role of inflation targeting in dealing with uncertainty. The Canadian experience, as considered by David Longworth in Chapter 5, highlights the importance of specifying the transmission mechanism and of reliable inflation forecasts. The potential conflict between inflation targeting and the pursuit of other objectives, particularly output stabilization, is emphasized in Chapter 6, on Australia, by Guy Debelle, and the role of the institutional framework is highlighted in Andrew Haldane's discussion of the U.K. experience in Chapter 7.

The third part of the book, Chapters 8 through 11, deals with emerging economies and the ways in which inflation targeting has been adapted to their circumstances. Chapter 8, by Felipe Morandé and Klaus Schmidt-Hebbel, describes the Chilean experience and stresses the importance of regime credibility. The case of Israel, analyzed by Leonardo Leiderman and Gil Bufman in Chapter 9, points out the difficulties in switching from exchange rate to inflation targeting, whereas in Chapter 10, on Mexico, Agustín Carstens and Alejandro Werner focus on the role of inflation targeting in dealing with supply shocks. Finally, the case of Brazil, which adopted inflation targeting in mid-1999, is discussed in Chapter 11. Written by the research department of the Central Bank of Brazil, this final chapter focuses on the issues involved in planning and designing the introduction of inflation targeting.

Taken as a whole, the brief but wide-ranging discussions presented in this volume indicate that inflation targeting has been successful in many countries in reducing inflation and maintaining it at low levels—something that many of these same countries had failed to achieve in the past. In addition, the chapters present no evidence that the introduction of an inflation targeting framework has had unwanted consequences for the real economy beyond the very short run. Both these conclusions seem to apply to both industrial and emerging economies. Since inflation targeting offers a number of operational advantages and relatively few and manageable drawbacks, it indeed constitutes a monetary strategy that other countries should seriously study and further consider.