Part II. Design Issues in the Implementation of Inflation Targets

Part I has outlined the reasons why several countries have chosen to base their monetary strategies on the targeting of inflation. It also raises a set of issues about the design of an inflation-targeting regime. Before examining in detail how inflation targeting has worked in the countries we examine here, we briefly outline the choices policymakers face in designing an inflation-targeting strategy. The fundamental question is how best to balance transparency with flexibility in operation, given the uncertainties of monetary policy and the economic environment. The simpler and tighter the constraints on policy, the easier it is for the public to understand and hold policy accountable, but the harder it is for policy to respond to events and maintain credible performance. Choices about target design are therefore critical in setting this balance appropriately.

In the case studies that follow, we will see that the design choices for an inflation-targeting regime fall into four basic categories: definition and measurement of the target, transparency, flexibility, and timing.

Definition and Measurement of the Target

Because inflation targeting by its very nature requires a numerical value for the target, setting such a target requires explicit answers to several questions about how the target is defined and measured.

What does price stability mean in practice? Inflation targeting requires a quantitative statement as to what inflation rate is consistent with the pursuit of price stability in the next few years. Because of innovation and changing tastes, all inflation measures have a net positive bias. For example, measurement error for consumer price index (CPI) inflation in the United States has been estimated to be in the range of 0.5 to 2.0 percent at an annual rate (Shapiro and Wilcox 1996; Advisory Commission to Study the Consumer Price Index 1996). Another factor to be taken into account in setting the target level of inflation is the asymmetric dangers from deflation. That is, through financial and other channels, the costs to the real economy from undershooting zero inflation outweigh the direct costs to the economy from overshooting zero inflation by a similar amount. These potential costs might warrant a price stability objective in which the inflation rate, corrected for any measurement error, might be set slightly above zero.

What inflation series should be targeted and who should measure it? A target series must be defined and measured. The series needs to be considered accurate, timely, and readily understandable by the public, but it may also need to exclude from its definition individual price shocks or one-time shifts that do not affect trend inflation, which is what monetary policy can influence.

Price-level or inflation target? Both price-level and inflation targets imply a targeted path for the price level. A price-level target sets the path for the price level so that if inflation is above the targeted rate in one period, it must be below the targeted rate in the next period in order to hit the price-level target. By contrast, an inflation target allows for "base drift," in which bygones are bygones, and the miss on the inflation target does not need to be offset. Relative to an inflation target, a price-level target has the advantage of

helping to pin down price-level expectations over very long time horizons, but it may increase the volatility of the price level over shorter time horizons.

TRANSPARENCY

An important rationale for inflation targeting is that it promotes transparency in monetary policy. Two questions need to be answered if transparency is to be achieved.

How should inflation targets be used to communicate with the public and the markets? Inflation targets can be an effective way of increasing transparency by communicating information to the public and the markets about the stance and intentions of monetary policy. A variety of institutional arrangements, published materials, testimony, and speeches can help in this communication process and can emphasize the forward-looking nature of monetary policy. In addition, clear, regular explanations of monetary policy by central banks can build public support for and understanding of the pursuit of price stability.

How should central banks be held accountable for target performance? Because monetary policy has such important effects on the public, inflation targeting cannot be done without democratic accountability. The extent to which this accountability takes the form of structured discussion rather than political pressure can in part be determined by target design. Who should set the inflation target: the government, the central bank, or both together?

FLEXIBILITY

As McDonough (1996a) suggests, price stability is a means to an end—the creation of a stable economic environment that promotes economic growth—rather than an end in itself. Control over inflation that is too tight might be costly in terms of higher output variability. Thus, the design of an inflation-targeting regime must answer questions about how much flexibility should be built into it.

What deviations from the inflation target should be allowed in response to shocks? As the discussion of the merits of an inflation target versus a nominal income growth target suggests, a rigid inflation target may not be sufficiently flexible in response to some shocks. Because both policymakers and the public care about output fluctuations, and the ultimate reason for price stability is to support a healthy real economy, an inflation-targeting regime may need escape clauses or some flexibility built into the target definition to deal with supply and other types of shocks.

Should the target be a point or a range? Because of shocks to the inflation process and uncertainty about the effects of monetary policy, inflation outcomes will have a high degree of uncertainty even with the best monetary policy settings. Should an inflation target have a range to allow for this uncertainty? Estimates of this uncertainty are quite high (see, for example, Haldane and Salmon [1995] and Stevens and Debelle [1995]), and so an inflation target band would have to be quite wide—on the order of 5 or 6 percentage points—in order to allow for this uncertainty. However, a band this wide might cause the public and the markets to doubt the central bank's commitment to the inflation target. An alternative approach is a point target, which—in order to address the uncertainties of inflation outcomes—would be accompanied by discussion of the shocks that might drive inflation away from the target goal.

Should inflation targets be varied over time? If there is substantial inertia in the wage- and price-setting process and inflation is initially very high, the monetary authorities might want to avoid a rapid transition to the price stability goal. In this case, they might well choose a transition path of inflation targets that trends downward over time, toward the price stability goal. Similarly, even if the price stability goal were achieved, shocks to the economy might move the economy away from this goal, again raising the issue of whether the inflation targets should be varied over time. Varying inflation targets over time may thus be used as another tool to increase the flexibility of the inflation-targeting regime so that it can cope with supply and other types of shocks to the economy.

Timing

Two questions arise with respect to the timing of inflation targets:

What is the appropriate time horizon for an inflation target? Because monetary policy affects inflation with long lags, monetary policy cannot achieve a specific inflation target immediately, but instead achieves its goal over time. Also, economic shocks can occur in the intervening period between policy and effect. Monetary policymakers must thus decide what time horizon is appropriate for meeting the inflation target.

When is the best time to start implementing inflation targets? To establish credibility for an inflation-targeting regime, it may be important to have some initial successes in achieving the inflation targets. This suggests that certain periods may be better than others to introduce inflation targets. Furthermore, obtaining political support for the commitment to price stability underlying an inflation-targeting regime may be easier at certain times than at others, so choosing the correct time to implement inflation targeting may be an important element in its success or failure.

Case Studies

We will see that these four categories of decisions about operational design are recurring themes in the case study discussions that follow. What is striking is the extent to which a number of the target-adopting countries have converged on a few design choices, perhaps indicating an emerging consensus on best practices.

The case studies are structured as follows. The first section outlines why and under what circumstances the targeting regime was adopted. The next section describes the operational framework of the targeting regime. The third section describes the actual targeting experience. The final section provides a brief summary of the key lessons to be drawn from each country's experience. The case studies begin with Germany because it was one of the first countries (along with Switzerland) to implement many of the features of an inflation-targeting regime, even though Germany is not an inflation targeter per se. Although Germany focuses principally on monetary aggregates as the target variables, there is much to learn from its experience, which has been longer than that of the other countries discussed here. The remaining case studies then proceed according to the order in which the countries adopted inflation targeting: New Zealand, then Canada, and finally the United Kingdom.

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