INFLATION TARGETING

by

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Inflation targeting is a recent monetary policy strategy that 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. 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 requires that a decision be made on what price stability means in practice. Alan Greenspan has provided a widely-cited definition of price stability as a rate of inflation that is sufficiently low that households and businesses do not have to take it into account in making everyday decisions. This definition of price stability is a reasonable one and operationally, any inflation number between zero and 3% seems to meet this criterion. Although some economists such as Feldstein (1997) argue for a long-run inflation goal of zero, others, such as Akerlof, Dickens and Perry ((1996), argue that setting inflation at too low a level produces inefficiency and will result in increase the natural rate of unemployment. The Akerlof, Dickens and Perry argument is, however, highly controversial, and a possible stronger argument against setting the long-run inflation target at zero is that a target of zero would make deflations more likely and deflations can lead to financial instability and sharp economic contractions (see Mishkin, 2001, for further discussion). In practice, all inflation targeters have chosen long-run inflation targets above zero, with point targets or midpoints of target ranges between 1 and 3%. Once inflation has reached low levels, inflation targeters have also made their inflation targets symmetrical, with undershoots of the targets considered to be as costly as overshoots. Indeed, inflation targeters have argued that symmetrical inflation targeting helps central banks to stabilize real output, because in the face of a weak economy, an inflation targeter can ease more aggressively without being worried that the easing will cause inflation expectations to rise.

Inflation targeting has several advantages as a medium-term strategy for monetary policy. In contrast to an exchange rate peg, inflation targeting enables monetary policy to focus on domestic considerations and to respond to shocks to the domestic economy. In contrast to monetary targeting, another possible monetary policy strategy, 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 has the potential to reduce the likelihood that the central bank will fall into the time-inconsistency trap. Moreover, since the source of time-inconsistency is often found in (covert or open) political pressures on the central bank to undertake overly expansionary monetary policy, inflation targeting has the advantage of focusing the political debate on what a central bank can do in the long-run -- i.e., control inflation -- rather than what it cannot do -- raise output growth, lower unemployment, increase external competitiveness-- through monetary policy.

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; in fact, these features have been central to the strategy's success in industrialized countries. As illustrated in Mishkin and Posen (1997), and in Bernanke, et. al. (1999), 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 can be 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.

Critics of inflation targeting have noted seven major disadvantages of this monetary policy strategy. Four of those disadvantages -- that inflation targeting is too rigid, that it allows too much discretion, that it has the potential to increase output instability, and that it will lower economic growth-- have been discussed in Mishkin (1999) and in Bernanke, et al. (1999), and are in reality not serious objections to a properly designed inflation targeting strategy which is best characterized as Aconstrained discretion@. The fifth disadvantage, that inflation targeting can only produce weak central bank accountability because inflation is hard to control and because there are long lags from the monetary policy instruments to the inflation outcome, is an especially serious one for emerging market countries. The sixth and seventh disadvantages, that inflation targeting cannot prevent fiscal dominance, and that the exchange rate flexibility required by inflation targeting might cause financial instability, are also very relevant in the emerging market country context.

In contrast to exchange rates and monetary aggregates, the inflation rate cannot be easily controlled by the central bank; furthermore, inflation outcomes that incorporate the effects of changes in instruments settings are revealed only after a substantial lag. This requires that the central bank engage in what Svensson (1997) has described as Ainflation forecast targeting@ in which the central bank seeks to make its inflation forecast equal to the inflation target over the relevant policy horizon. The difficulty of controlling inflation creates a particularly severe problem when inflation is being brought down from relatively high levels. In those circumstances, inflation forecast errors are likely to be large, inflation targets will tend to be missed, and it will be difficult for the central bank to gain credibility from an inflation targeting strategy, and for the public to ascertain the reasons for the deviations. This suggests that, as noted by Masson, et al. (1997), Bernanke, et. al. (1999) and Mishkin and Savastano (2001), inflation targeting is likely to be a more effective strategy if it is phased in only after there has been some successful disinflation.

A sixth shortcoming of inflation targeting is that it may not be sufficient to ensure fiscal discipline or prevent fiscal dominance. Governments can still pursue irresponsible fiscal policy with an inflation targeting regime in place. In the long run, large fiscal deficits will cause an inflation targeting regime to break down: the fiscal deficits will eventually have to be monetized or the public debt eroded by a large devaluation, and high inflation will follow. Absence of outright fiscal dominance is therefore a key prerequisite for inflation targeting, and the setting up of institutions that help keep fiscal policy in check are crucial to the success of the strategy (Masson et al., 1997 and Mishkin and Savastano, 2001). Similarly, a sound financial system is another prerequisite for successful inflation targeting because when financial systems blow up, there is typically a surge in inflation in emerging market countries. However, as pointed out in Mishkin and Savastano (2001), a sound financial system and the absence of fiscal dominance are also crucial to the sustainability and success of any other monetary policy strategy, including a currency board or full dollarization. Indeed, inflation targeting may help constrain fiscal policy to the extent that the government is actively involved in setting the inflation target (including through the coordination of future adjustments to government-controlled prices).

Finally, a high degree of (partial) dollarization may create a potentially serious problem for inflation targeting. In fact, in many emerging market countries the balance sheets of firms, households and banks are substantially dollarized, on both sides, and the bulk of long-term debt is denominated in dollars (Guillermo Calvo, 1999). Because inflation targeting necessarily requires nominal exchange rate flexibility, exchange rate fluctuations are unavoidable. However, large and abrupt depreciations may increase the burden of dollar-denominated debt, produce a massive deterioration of balance sheets, and increase the risks of a financial crisis along the lines discussed in Mishkin (1996). This suggests that emerging market countries cannot afford to ignore the exchange rate when conducting monetary policy under inflation targeting, but the role they ascribe to it should be clearly subordinated to the inflation objective. (See Mishkin and Savastano, 2001, for details on how this can be done.)

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 (Bernanke, et. al, 1999, and Corbo et.al., 2000). 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 (Bernanke, et.al, 1999, Cecchetti and Ehrmann, 2000, and Corbo et al., 2000). Despite inflation targeting=s successes, it is no panacea: it requires that basic institutional infrastructure with regard to fiscal policy and the soundness of finanical institutions be addressed and improved in order to attain and preserve low and stable inflation.

References

Akerlof, George, Dickens, William, and George Perry, "The Macroeconomics of Low Inflation," *Brookings Papers on Economic Activity* 1, 1996: 1-59.

Bernanke, Ben S.; Laubach, Thomas; Mishkin, Frederic S. and Posen, Adam S. *Inflation Targeting: Lessons from the International Experience.* Princeton, NJ: Princeton University Press, 1999.

Calvo, Guillermo. ACapital Markets and the Exchange Rate,@ mimeo, University of Maryland, October, 1999.

Cecchetti, S. and M. Ehrmann,ADoes Inflation Targeting Increase Output Volaitility? An International Comparison of Policymakers Preferences and Outcomes,@ *Central Bank of Chile Working Papers* 69, April 2000.

Corbo, Victorio and Klaus Schmidt-Hebbel, AInflation Targeting in Latin America,@ Paper presented at the Latin American Conference on Financial and Fiscal Policies, Stanford University, November 2000.

Feldstein, Martin, 1997. "Capital Income Taxes and the Benefits of Price Stability," NBER Working Paper No. 6200, September.

Masson, Paul R., Savastano, Miguel A. and Sharma, Sunil. AThe Scope for Inflation Targeting in Developing Countries,@ IMF Working Paper 97/130, October, 1997.

Mishkin, Frederic S. "UnderstandingFinancial Crises: A Developing Country Perspective,"in Michael Bruno and Boris Pleskovic, eds., *Annual World Bank Conference on Development Economics* 1996. Washington D.C.: World Bank, 1996: 29-62.

Mishkin, Frederic S. AInternational Experiences with Different Monetary Regimes,@ *Journal of Monetary Economics*, 43, 1999: 579-606.

Mishkin, Frederic S., "Issues in Inflation Targeting," in *Price Stability and the Long-Run Target for Monetary Policy*, (Bank of Canada: Ottawa, Canada, forthcoming 2001).

Mishkin, Frederic S. and Savastano, Miguel, A. AMonetary Policy Strategies for Latin America,@ *Journal of Development Economics*, forthcoming, October 2001.

Mishkin, Frederic S. and Posen, Adam S. AInflation Targeting: Lessons from Four Countries,@ *Federal Reserve Bank of New York Economic Policy Review*, August 1997: 9-110.

Svensson, Lars, AInflation Forecast Targeting: Implementing and Monitoring Inflation Targets,@ *European Economic Review*, 41, 1997: 1111-1146.