INFLATION TARGETING: MONETARY POLICY CONTRIBUTION TO A RULES-BASED APPROACH TO MANAGING THE CUBAN ECONOMY

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It gives me great pleasure to have been invited to this conference to share some thoughts with this distinguished and well informed audience on how monetary policy could contribute to a transition from the present situation in Cuba's economy, where arbitrary policies dominate decision-making, to a governing framework that produces economic decisions that markets and voters perceive to be fair, sound, and based on clear and simple rules.

In the early stages of Cuba's eventual transition to democracy and a market economy, the public and private institutions necessary to organize a modern society and sustain political processes will be absent. Until these essential elements are in place, it should be possible to develop a consensus on a set of rules to guide macroeconomic management. The absence of such rules could lead to a long disorderly and politically divisive transition period characterized by high inflation, loss of output, and rising unemployment. These conditions could vitiate the political process and delay the beginning of the transformation of the Cuban economy.

In the initial phase of transition, some disruption of economic activity can be expected as controls are eliminated, government spending is re-prioritized, and relative prices realign and production patterns change. Realignments in the economy will be necessary but can be achieved in short order. Aided by private investment flows, remittances, and travel receipts, a process of transformation can quickly take off provided key policy areas are not allowed to fall prey to the political fray.

One key policy area where a foundation will be needed is the fiscal balance. Agreement will be required at an early stage on whether the economy needs fiscal stimulus and, if so, for how long it should continue. If financing is necessary, the form, conditions, and outer bounds of public borrowing also need to be considered. The exchange and payments system is another policy area that should be kept free of political interference, once consensus is reached regarding management of the exchange rate and modalities of intervention to build international reserves. A fully independent monetary authority, entrusted with the maintenance of the value and convertibility of the currency, is a third supporting pillar to ensure policies that will facilitate a process of rapid transformation.

The speed at which Cuba emerges from its present impoverished state obviously will not be defined solely by action on the three areas just cited. The pace of advance will also depend critically on the time it takes to construct a governance framework that is re-

1. The views expressed in this paper are those of the author and should not be attributed to the International Monetary Fund, its Executive Board, or its management.

sponsive and accountable to the electorate and supportive of sound decision-making. Laws and public institutions will need to be developed to re-establish and protect property rights, apply without a heavy administrative burden a straight-forward investment code, administer a fair and equitable tax system with appropriate enforcement mechanisms, deliver essential social services and public goods efficiently, and ensure domestic security to encourage commerce and trade.

This paper describes the advantages and requirements of a framework for monetary policy—a facet of the third supporting pillar—that New Zealand first adopted a decade and a half ago, which has come to be known as "inflation targeting." Twenty two other countries[2] have since explicitly adopted this framework, of which seven are industrial countries,[3] and sixteen are emerging market countries[4] (see also Table 1). Among the converts to this approach to controlling inflation is the new Chairman of the Board of Governors of the United States Federal Reserve, Ben S. Bernanke.[5]

THE INFLATION TARGETING FRAMEWORK: BASIS, CAUSATION, REQUIREMENTS, AND IMPLEMENTATION ISSUES

Typically, an inflation targeting system operates as follows: the central bank forecasts the future inflation rate using an array of tools (below); it then establishes an inflation target for a pre-designated period of time; it uses a monetary instrument, usually a short-term interest rate, preemptively to bring actual inflation to converge with the inflation objective, without making use of an explicit intermediate target (such as the money supply, or the exchange rate); and at all times it communicates to the public the factors influencing its decisions and generally the timing and scope of its actions.

Basis

In the political milieu that is likely to follow a change in government in Cuba, control of inflation and, more importantly, of inflationary expectations will be one of the biggest challenges facing a new administration. High and erratic rate of price increases can exact a heavy price on the economy and should be avoided at all costs. But inflation, other than at relatively low levels, will not be conducive to attaining rapid economic growth on a sustained basis. The complexities that inflation, even only in the low double digits, can bring to policy making, especially in connection with wage setting and external competitiveness, cannot be underestimated. The damage to consumer and investor confidence would be reflected in rates of economic growth well below potential. Erosion of confidence would translate into slow progress in the redeployment of labor to productive activities. Unemployment would prove a drag on the economy and efforts to reduce it would be drawn out. Concerns that public dissatisfaction with eco-

2. The listing of countries in Table 1 is based on standard classifications, e.g., Scott Roger and Mark Stone, "On Target: The International Experience with Achieving Inflation Targets," IMF Working Paper 05/163 2005; Edwin Truman, "Inflation Targeting in the World Economy," Institute for International Economics, ISBN Paper October (2003); or Frederic Mishkin and Klause Schmidt-Hebel, "One Decade of Inflation Targeting in the World: What Do We Know and What Do We Need To Know," Central Bank of Chile Conference on 10 Years of Inflation Targeting: Design, Performance, Challenges, November 2000.

3. Industrial inflation targeters in addition to New Zealand include Canada, the United Kingdom, Sweden, Australia, Iceland, and Norway. Switzerland and the European Central Bank are not included, although their monetary policy frameworks have many features of inflation targeting, but the central banks do not accept this classification of their frameworks.

4. Israel, Czech Republic, Poland, Brazil, Chile, Colombia, South Africa, Thailand, Korea, Mexico, Hungary, Peru, Philippines, Slovak Republic, Indonesia, and Romania.

5. Remarks by Ben Bernanke at the Conference of the National Association of Business Economists (March 25, 2003), and other writings. Also see, among others, Lars Svensson, "Inflation Targeting: Implementing and Monitoring Inflation Targets," Volume 41, *European Economic Review,* June 1997.

Table 1. Inflation Targeters[a]

	Inflation Targeting Adoption Date	Inflation Rate at Start (percent)	Unique Numeric Target = Inflation	Current Inflation Target (percent)	Forecast Process	Publish Forecast
Emerging market countries						
Israel	1997Q2	8.5	Y	1–3	Y	Y
Czech Rep.	1998Q1	13.1	Y	3 (+/- 1)	Y	Y
Poland	1998Q4	9.9	Y	2.5 (+/- 1)	Y	Y
Brazil	1999Q2	3.3	Y	4.5 (+/- 2.5)	Y	Y
Chile	1999Q3	2.9	Y	2–4	Y	Y
Colombia	1999Q3	9.3	Y	5 (+/- 0.5)	Y	Y
South Africa	2000Q1	2.3	Y	3–6	Y	Y
Thailand	2000Q1	1.7	Y	0–3.5	Y	Y
Korea	2001Q1	3.2	Y	2.5–3.5	Y	Y
Mexico	2001Q1	8.1	Y	3 (+/- 1)	Y	Y
Hungary	2001Q2	10.5	Y	3.5 (+/- 1)	Y	Y
Peru	2002Q1	-0.8	Y	2.5 (+/- 1)	Y	Y
Philippines	2002Q1	3.8	Y	5–6	Y	Y
Slovak Rep.	2005Q1	3.2	Y	3.5 (+/- 1)	Y	Y
Indonesia	2005Q3	7.8	Y	5.5 (+/- 1)	Y	Y
Romania	2005Q3	8.8	Y	7.5 (+/- 1)	Y	Y
Industrial countries						
New Zealand	1990Q1	7.0	Y	1–3	Y	Y
Canada	1991Q1	6.2	Y	1–3	Y	Y
United Kingdom	1992Q4	3.6	Y	2	Y	Y
Sweden	1993Q1	4.8	Y	2 (+/- 1)	Y	Y
Australia	1993Q2	1.9	Y	2–3	Y	Y
Iceland	2001Q1	3.9	Y	2.5	Y	Y
Norway	2001Q1	3.7	Y	2.5	Y	Y

Source: National authorities.

a. The listing of countries and timing of adoption is based on standard classification. See e.g., Roger and Stone (2005), Truman (2003), or Mishkin and Schmidt-Hebbel (2005). Switzerland and the ECB are not included in this table because, although their monetary policy frameworks have many features of inflation targeting, the central banks reject this classification of their frameworks.

nomic conditions might lead to a weakening of fiscal discipline, and lead to higher inflation, could exacerbate these concerns.

The main objective of an inflation targeting system is to help remove uncertainty as to the future path of the price level. The aim is to persuade the public of the monetary authorities' strong resolve to keep inflation within a low narrow band over a medium-term horizon. A key justification for setting a firm inflation objective is the potential of this action to contribute to stronger and more stable growth by stabilizing inflation expectations. For this to happen, the views of the fiscal authorities and the central bank on macroeconomic objectives need to be reconciled, to avoid sending conflicting signals to financial markets and the public. The fact that such an agreement is reached in itself would contribute to creating positive expectations about the future course of inflation.

Traditionally, central banks have carried out monetary policy by targeting intermediate monetary aggregates—such as credit limits in the case of small open economies with fixed exchange rates, or base money or other monetary aggregates in economies operating under flexible exchange rate regimes or managed floats—on the expectation that a stable relationship existed between these aggregates and changes in domestic prices. Beginning in the 1980s, however, the advent of financial innovation blurred the distinctions between the various monetary aggregates and weakened the robustness of demand for money relations. Alternative monetary policy strategies, notably exchange rate pegging, have also been found wanting, as evidenced in the nineties by the balance of payments crisis in Latin America, Asia, and Russia.

More generally, the growing popularity of inflation targeting is due to some extent to the apparent success of these policies in reducing inflation and in anchoring inflationary expectations.[6]

Causation

Much has been written in favor of inflation targeting and the positive experience in a large number of countries attests to its effectiveness. I have expressed my preference here for such a system to be applied in Cuba to anchor expectations (and bind spending ministries into a prudent fiscal stance). But it needs to be emphasized that inflation targeting is not a panacea, whereby merely announcing an inflation target will magically improve the public's expectations about future inflation. Financial and fiscal problems have deeper roots than the monetary regime and, therefore, "a mere change in monetary regime is unlikely to solve all the problems of economic development, miraculously transforming developing countries into G7 nations."[7]

It is possible that the successful cases of inflation targeting benefited from the new regime because, at the time of adoption, they were able to clearly precommit to reduce inflation. In other words, is it the case that inflation targeting has led adopting countries to have outperformed others, or is it that better macroeconomic management, the existence of institutions, the credibility of these institutions, and a more predictable inflationary environment allowed these countries to successfully adopt inflation targeting and, therefore, sped up the process of attaining a more stable economy?

These questions raise causation as an issue that needs to be considered. As implied above, it is possible that causation points in one direction, but it is also possible that there is two-way causation.

If causation is one-way, from stable conditions on adoption of the framework to success as an inflation targeter, the UK experience with inflation targeting[8] suggests that a country with zero monetary policy credibility (the UK in the early 1990s), with interest rates at three times their normal level, and the economy in free fall, should not have been a good candidate for inflation targeting. Conversely, the argument for two-way causation is that, indeed, certain conditions need to be put in place, but inflation targeting does help to strengthen transparency and accountability. The anchoring of inflation expectations with the proper adoption of this system helps to strengthen economic preconditions. It can be argued therefore that causality is two-way: it goes from having a certain number of preconditions in place but, at the same time, adopting inflation targeting helps strengthen and bolster that initial commitment. The positive experience of the UK, Canada, Sweden, and New Zealand, where a strong economic turnaround and a drop in inflation and interest rates in the early 1990s followed closely their adoption of inflation targeting, strongly suggests that at least in these four countries a two-way relationship may have been at work. Table 1 presents data on inflation conditions on all countries currently classified as inflation targeters. In most cases, the improvement on the inflation front since the introduction of the system is striking.

Requirements

Certain enabling requirements need to be in place before a country credibly can be said to be a true inflation targeter. Some of these requirements are institutional; others are technical in nature or call for a good understanding of transmission mechanisms and inflation forecasting. As it will become apparent from

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

7. Barry Eichengreen, "International Monetary options for the Twenty First Century," *The Annals of the American Academy of Political and Social Science*, Volume 579, February 2002.

8. Aandrew Haldane, "Ghostbusting: The UK Experience with Inflation Targeting," Bank of England Mimeo, 1999.

the discussion that follows, it will take some months before the inflation targeting system can be fully rolled out. This notwithstanding, merely by working assiduously to ensure that expectations of rising inflation do not get in the way of an orderly modernization of the Cuban economy and society, the financial authorities will be making a major contribution to creating a confidence-building environment.

Institutional Requirements: Critical among the institutional requirements are central bank autonomy and government recognition of the desirability of a stated inflation objective, with the responsibility for carrying out this objective resting solely with the central bank. In other words, it is not sufficient to give the central bank the responsibility for achieving a certain inflation target. As noted, it is essential that the government is fully cognizant that fiscal policy must not undermine the objectives and instruments of monetary policy. Public support for an inflation-free economic environment and for a transparent monetary framework that clearly states the inflation objective and the means to deliver it is another essential element.

Other important institutional requirements include the ability of the monetary authorities to influence monetary conditions, preferably with indirect policy instruments. Therefore, a flexible exchange rate or a managed float is needed to give the central bank control over the money supply. It follows that the central bank must have at least one effective policy instrument, usually a policy interest rate, to achieve its objectives; clarity in the application of this instrument serves to communicate to the public the central bank's desired stance in order to influence expectations of inflation. For indirect monetary instruments to be effective, a market for government securities or central bank paper must be developed, and a network of primary dealers organized to provide sufficient depth and liquidity to the market. Inflation targeting cannot operate with a rudimentary financial system, but a high degree of banking sophistication also is not necessary.

Technical Requirements: Most of the technical requirement to operate an inflation targeting system are no different than those needed to operate other monetary policy frameworks. Inflation targeting requires that the central bank possess analytical expertise in the transmission mechanisms of monetary policy. It also must have accurate and timely financial information. The inflation target must be set in terms of a price index with a wide coverage, available at least monthly, and recognized by the public as an accurate reflection of changes in their purchasing power. The central bank also must develop the tools to be able to forecast inflation, and to react in a forward-looking manner to projected deviations from the inflation target. The latter does not necessarily imply the need to develop and rely exclusively on sophisticated econometric models; reliable current and forward-looking information from financial markets, technical competence, rough estimates of the countries potential output, and the exercise of good judgment constitute important complements to quantitative forecasting.

The foregoing is not meant to imply that this complex web of requirements must be in place for an inflation targeting system to operate properly. They are best viewed as a compendium of best practices which have produced positive results in a number of countries. Absence of some of these elements should not be taken as an excuse to dismiss the system. In fact, some emerging market countries who consider themselves inflation targeters do not fully meet all these requirements, but have been successful nonetheless in reducing inflation and maintaining it at low levels since the introduction of inflation targeting. Their experience suggests that the technical and institutional requirements needed for inflation targeting may be less stringent than generally believed. In any case, irrespective of whether an inflation targeting system is adopted in Cuba, ultimately, the tools and institutional arrangements described herein will be needed, if the country is to move along a steady development path with social harmony.

Implementation Issues

Anchoring expectations through effective communication and outreach of policy intentions is at the core of inflation targeting regimes. Because of lags between policy actions and their impact on inflation, the public has difficulty monitoring policy commitments to inflation targets on an ongoing basis. This difficulty is particularly marked in emerging market countries with a history of high and volatile inflation. To help assure that short-term deviations from inflation targets do not unhinge expectations, the monetary authorities should produce, preferably on a quarterly basis, brief inflation reports explaining in plain language the dynamics of future inflation, and the means by which they intended to guide expected inflation to the official target. The latter is particularly important to ensure that markets are fully aware of the policy instrument used to influence monetary conditions, usually an overnight or policy interest rate, and that use of this instrument consistent with the stated inflation objective does not come as a surprise.

To the extent that the central bank derives inflation forecasts from capital markets, there is a certain degree of circularity in the approach since markets look to central bank actions to assess inflationary prospects. Therefore information derived from forward-looking market surveys should be used with caution as a forecast tool.

Another frequent source of tension arises when two contradictory nominal goals coexist—for instance, a crawling exchange rate band and an inflation target—supported by one instrument, the interest rate. Conflict between the two nominal objectives often leads to sterilized intervention with associated quasi-fiscal costs (as the central absorbs liquidity) if the exchange rate appreciates outside the band; or pressure on prices if the exchange rate falls below the band, and the central bank intervenes on the selling side while injecting liquidity to sterilize the international reserve loss. Dealing with these tensions calls for a more flexible approach to exchange rate management together with productivity-enhancing structural reforms to counter upside exchange rate pressures. If the pressure is on the downside, a tighter fiscal will be needed to avoid placing the burden of adjustment entirely on monetary policy.

CONCLUSION

To sum up, inflation targeting has emerged in recent years as the leading framework within which monetary policy is conducted in many parts of the world. The positive experience in emerging market countries suggests that the technical and institutional requirements for inflation targeting may be less demanding than generally believed. Nevertheless, a number of preconditions remain important for success. In particular, there is a need for central bank autonomy, a sound fiscal stance, and an effective communication strategy. Above all, there must be a commitment in the society not to permit inflation to inflict pain on the economy.

In Cuba, substantial operational and capacity constraints would need to be overcome if inflation targeting is to be adopted and for it to succeed. The effort will be well worth it if, with inflation expectations firmly anchored and macroeconomic conditions on a sound footing, the Cuban society is not distracted from the task of creating the institutions to restore the country as a vibrant democracy.