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INFLATION TARGETING IN EMERGING MARKET ECONOMIES

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It is a pleasure to be here in Morocco, and an honour to be invited to address this distinguished audience. I very much welcome the focus of this seminar on inflation targeting, which is being adopted by a growing number of emerging market economies. It is particularly appropriate that the venue for this meeting is the Bank Al-Maghrib, which is responsible for monetary policy in a country where low inflation has been achieved in recent years. The revised statutes of the Bank, promulgated in February last year, specify price stability as a core mandate.

I hardly need to remind you why a credible monetary policy framework is essential. First, it leads to better-anchored inflation expectations. Well–anchored price expectations allow policymakers to respond more flexibility to economic shocks, which can be particularly large in emerging market economies. When expectations of future inflation are well anchored, price shocks are less likely to lead to second-round effects on the inflation rate. Temporary shocks to inflation can therefore be accommodated to a greater extent. There is indeed some recent evidence suggesting that inflation expectations are better anchored in inflation-targeting emerging economies than in non-inflation-targeting emerging economies.[1]

Second, more stable inflation expectations allow a gradual extension of the maturities of the fixed-income instruments for which there are liquid secondary markets – that is, to a lengthening of the yield curve. As you know, the yield curve can be particularly short in emerging economies which frequently suffer from thin and illiquid financial markets. Volatile inflation expectations can cause large fluctuations in nominal bond yields that make investors worried about possible losses on holdings of longer-term bonds. By better anchoring inflation expectations, an inflation-targeting monetary policy reduces the volatility of long-term bond yields. This makes investors more prepared to hold such bonds. Mexico's experience is instructive in this regard. For many years up to the mid-1990s the Mexican government could only borrow at

[1] See N Batini and D Laxton (2006), "Under what conditions can inflation targeting be adopted? The experience of emerging markets", Central Bank of Chile Working Papers No 406. Other evidence indicates that inflation expectations declined when inflation targeting was introduced in EMEs, and continued to decline subsequently, but that they already started to decline before the introduction of inflation targeting (see A Levin, F Natalucci and J Piger (2004), "The macroeconomic effects of inflation targeting", The Federal Reserve Bank of St Louis Review, July/August, 86(4), p 51-80).

home at maturities of less than one year. However, the introduction of inflation targeting, combined with arrangements that ensured that the central bank was able to set the policy interest rate to achieve its inflation target, meant that market participants' inflation expectations were gradually reduced. As a result, the maximum maturity of Mexican government bond issues could be steadily increased. Government bonds at the five-year maturity were first issued in 2000, followed by first issues of 10- and 20-year bonds in 2001 and 2003, respectively. The growth of such markets has improved financial stability in Mexico.

There are many other benefits from a longer yield curve. Market-determined interest rates make the transmission mechanism of monetary policy more effective. And forward-looking monetary policy can use the information contained in market-determined longer-term interest rates to inform policy decisions. Moreover, it gives increased scope for the government to enhance its debt management policies.

There are, of course, other monetary frameworks that could also be credible. But some of the alternatives to inflation targeting do have serious drawbacks. Take, for instance, targeting monetary aggregates which was once popular. Major structural changes in emerging economies – especially greater international integration of financial systems – have made monetary aggregates much less reliable as predictors of future inflation. In emerging economies, rapid growth of monetary aggregates can often be a reflection of a desirable trend to financial deepening, rather than an inflation threat.

Because an appropriate monetary policy requires the authorities to display a clear commitment to low inflation, some form of inflation target – even an implicit target – seems desirable. Let me highlight three particular advantages of an explicit inflation target as a monetary policy framework.

First, inflation targeting improves transparency, leading to better communication and so helping public understanding of the central banks' goals. In turn, better public understanding helps to make the monetary framework more credible and thus to anchor inflation expectations. Transparency measures often include regular public reports by the central bank giving its inflation forecasts and the motivation behind its monetary policy decisions.

Second, the forward-looking nature of inflation targeting encourages a focus on **future** inflation. Such a focus on future inflation allows policymakers to smooth the impact of shocks, leading to shorter or shallower recessions at times when demand for domestic output weakens. Provided that inflation expectations remain well anchored, temporary shocks that have a large near-term impact on inflation need not lead to a monetary policy overreaction.

Third, inflation targeting makes central banks accountable. Since the framework is transparent, the public can easily see whether the central bank is achieving its inflation target. Accountability is important for public acceptance of a central bank's independence in setting monetary policy instruments. Such independence is vital for policy to be credible.

At the same time, inflation targeting is not a panacea. It must be supported by sustainable **fiscal policies**. A first requirement is that direct automatic central bank financing of government deficits is prohibited. The monetisation of large government deficits sooner or later always leads to higher inflation. Second, fiscal policy needs to

be set in a sustainable framework. My own country, Canada, only got on top of its inflation problem after action had been taken to cut budget deficits in a durable way.

By now, emerging economies with very diverse structures have successfully adopted inflation targeting. This suggests that inflation targeting is a flexible framework that can be adapted to the conditions of a particular country and over time. In a number of countries, inflation targeting was introduced under adverse circumstances, often after other nominal anchors such as monetary growth or the exchange rate had failed. Such countries include, for example, Brazil, the Czech Republic and Turkey. In some emerging economies the inflation targeting framework has already passed some pretty challenging tests. In the case of Brazil for example, such tests included large currency depreciations, including those following the LTCM and Russian crises.[2]

There is no conclusive evidence that any particular form of inflation targeting is best. Rather, a number of choices have to be made by countries adopting inflation targeting. The specific form depends on the circumstances in each country. So let me say something about three important strategic choices.

The first is the **choice of inflation target**. What the central bank needs to do is to focus on future inflation. One aspect of this is the choice between a core inflation index versus a headline inflation index. This is an issue all central banks have to face. The US Federal Reserve focuses on core inflation because in the United States this measure has proved to be a better predictor of future headline inflation. By contrast, the European Central Bank focuses on headline inflation, and there is evidence that in the Euro area headline inflation is a better predictor of future inflation.

The main advantage of using a measure of core inflation is that it is less affected by temporary supply shocks, which can be particularly large in emerging economies. On the other hand, a core measure may be unrepresentative of increases in the cost of living, so that its calculation may not be credible in the eyes of the public. Headline inflation does indeed better reflect cost of living increases, and perhaps does dominate the public's inflation expectations.

In emerging economies, matters are further complicated by the fact that food prices and administered prices have a greater weight in the consumer price index than they do in industrial countries. The issue of adjustments in administered prices during a transition period of rapid structural change was addressed in the Czech Republic by targeting an inflation measure net of administered prices until 2001. Another difficulty is that rapid structural change can lead to large changes in relative prices. The experiences of central European economies is again instructive. As the Polish and Hungarian economies became more market-oriented and were integrated into the

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[2] See A Bevilaqua and E Loyo (2005), "Brazil's stress test of inflation targeting", in Globalisation and monetary policy in emerging markets, BIS Papers No 23, p 98-108.

global economy, the prices of non-tradable goods and services rose much faster than those of tradable prices.[3]

Another aspect is the time horizon over which the inflation target is to be achieved. The target horizon should match the length of the lags in the monetary policy transmission mechanism. If the target horizon is too short, the inflation target can easily be missed following shocks. This risks damaging the credibility of the policy framework, and may lead to excessive output volatility. Inflation targets can have annual, multi-year, or indefinite horizons. They can also be required to be satisfied on average over a business cycle, such as in Australia.

The second strategic choice concerns the **role of macroeconomic forecasts**. A particular challenge is the production of inflation forecasts. Developing techniques to produce reliable forecasts of inflation helps to nurture public confidence in the professionalism of a central bank's inflation assessment. In addition, devoting analytical resources to rigorous macroeconomic assessment helps central banks to better understand the different channels of the monetary policy transmission mechanism. It can give policymakers new information about the length of the lags in monetary transmission. This in turn helps the central bank to choose the right horizon of the inflation target.

Producing inflation forecasts in emerging economies faces particular challenges. Let me highlight several. Exchange rates are inherently not very predictable. Since they have a greater effect on emerging economies, inflation forecasts in emerging economies could be less accurate and more volatile than in industrial countries. In addition, economic and financial shocks tend to be larger, and structural changes can make the estimation of statistical models difficult. Moreover, the links between the policy interest rate and bank lending rates may be weaker. Finally, economic data may be available in a less timely manner. Central banks in emerging economies may therefore have to apply more judgement in generating inflation forecasts. It may also be useful to emphasise the uncertainty surrounding the forecasts, as is also done in many industrial countries, to help avoid the danger of a loss of credibility if outturns are very different from forecasts.

How sophisticated does the publication of inflation forecasts have to be? This was much debated at a meeting of central bank governors from Africa and several other regions held at the BIS last year.[4] The consensus was that it was quite feasible to adopt an inflation targeting regime given only very simple analytical tools and control mechanisms. Many industrial countries began their inflation targeting regimes with simple processes, which were gradually refined over time. There was, for the central banks involved, a process of "learning by doing".

The third strategic choice concerns **exchange rate policy**. Inflation targeting is not consistent with a rigid exchange rate target. In the longer term, inflation targeting

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[3] The divergence was around 5 to 8 percentage points annually on average between 1994 and 2001, to a large extent because of higher productivity growth in the tradable sector (see D Mihaljek and M Klau (2003), "The Balassa-Samuelson effect in central Europe: a disaggregated analysis", BIS Working Paper No 143).

[4] See M Knight (2006), "Central banks and the challenge of development: an overview of a roundtable debate", in *Central banks and the challenge of development*, Bank for International Settlements, Basel, Switzerland.

works best with a fully flexible exchange rate and an open capital account. I believe this should be the ultimate goal. But in the shorter term, there may still be some scope to manage the exchange rate during a transition period. Such exchange rate management must be clearly subordinated to the objective of maintaining low and stable inflation. It also needs to be restricted to managing short-term volatility. In many emerging economies, the foreign exchange market is very thin, and the central bank can help to stabilise this market. However, managing the exchange rate too tightly runs the risk of holding back the development of the forex markets. Implementing inflation targeting with a flexible exchange rate creates the incentives for developing domestic financial markets. In particular, private sector participants will develop new markets and tools to trade and manage exchange rate risk.

To conclude, inflation targeting represents a very promising and flexible monetary policy framework. As I have said, fiscal policy must also play its proper part. It is worth noting that fiscal deficits have indeed fallen in much of the developing world. And many countries now prohibit the direct financing of fiscal deficits by the central bank. So the environment in which central banks are setting monetary policy has become more favourable than it was 10 years ago.

There has also been progress in developing rules or understandings that give central banks autonomy in setting monetary policy instruments. I was particularly encouraged to learn that the Bank Al-Maghrib's revised statutes contain measures in support of a successful conduct of monetary policy. These include: independence in the operation of monetary policy; enhanced transparency through the publication of press releases following the Bank's board meetings; and the effective prevention of direct financial assistance to the government.[5]

I have tried to suggest to you that careful thinking is required about three strategic choices: the nature of inflation target; the role of macroeconomic forecasts; and the management of the exchange rate. You understand that these are not easy issues. I trust that the discussions at this seminar will help to illuminate these challenging issues. Thank you.

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[5] With the exception of a regulated cash facility.