Commentary: Challenges of inflation targeting for emerging-market economies: The South African case

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Fourteen years ago Charles Goodhart – the famous monetary economist and central banker – spoke to an audience in Stellenbosch, South Africa, about the experience of the pioneers of inflation targeting: the Reserve Bank of New Zealand. He focused on the potential role that this policy framework could play in helping to build credibility for the commitments made by the monetary authorities, while leaving discretion to allow for flexible responses to potential disruptive shocks. A substantial body of literature has since confirmed that reality for New Zealand and other developed country inflation targeters have been consistent with Goodhart's optimistic early expectations (see, for example, Bernanke et al., 1999). Brian Kahn's excellent paper shows that these ideas are applicable to the emerging-market world too, and specifically to South Africa. In particular, he shows evidence of (1) observed inflation, (2) real interest rates, (3) real output, and (4) the cyclicality of monetary policy and its response to various shocks. The evidence he presents is not just favourable for the South African case, but also, as he points out, for the experience of inflation-targeting countries more broadly, especially for the emerging-markets group.

But this is an extraordinary story: approximately 30 years ago Arthur Burns – then recently retired as the Chairman of the Federal Reserve Board – spoke memorably about the challenges of central banking in his Per Jacobsson lecture. His concern was with the following paradox:

> Why . . . have central bankers, whose main business one might suppose is to fight inflation, been so ineffective in dealing with the worldwide problem? . . . [D]espite their antipathy to inflation and powerful weapons they could wield against it, central bankers have failed so utterly in this mission in recent years. In this paradox lies the anguish of central banking. (Burns, 1979: 7.)

Since Burns spoke, and leaving aside present problems for the moment, central bankers have lost this anguish. Most crucially, they have accepted the fact that "the inflation rate in a monetary economy is ultimately decided by the monetary authorities" (Buiter, 2006: 13) and while Burns knew this, he felt unable to act against inflation in any way stronger than 'undernourishing' inflation for a while. The constraints were institutional, or so he saw it, and associated with what he called "the philosophical and political currents that have been transforming economic life in the United States" (Burns, 1979: 9). Milton Friedman (1977) had argued along similar lines in his Nobel acceptance lecture a few years earlier.

Kahn's paper shows how inflation targeting helps to avoid the anguish of central banking. Along many dimensions, inflation targeting captures what Marvin Goodfriend (2007) has called "the modern consensus on monetary policy"; a consensus on the following issues: assigning priority for price stability; making a serious effort to untangle absolute and relative price movements (or core and headline inflation); transparent objectives; a forward-looking operating procedure; and the importance of credibility for the successful pursuit of the goals of monetary policy. This consensus stands in sharp contrast to the environment as Burns saw it in the 1970s.

This commentary expands on two themes in Kahn's paper, instead of criticising his paper. The two themes are (1) the importance of credibility for the successful conduct of monetary policy and (2) the insufficiency of any particular rule to attain that credibility. A third theme is the social and political support needed to support any sustained efforts made to achieve monetary stability. Finally, I will briefly touch on the way that the South African Reserve Bank (the Bank) has applied inflation targeting in South Africa over the past few years, a period that has, as Kahn argued, provided a real test for inflation-targeting regimes internationally.

Rules and credibility

Kahn correctly observes that all inflation-targeting central banks implement the system flexibly, that is to say, that they are not 'inflation nutters'. In practice, this means that the horizon over which forecasted inflation is held consistent with the target is sensitive to what is happening on the real side of the economy. This sensitivity leaves substantial discretion in the hands of the policy-makers. Kahn then examines the hard question whether this flexibility might not undermine the credibility of the commitment.

He answers the question using two kinds of empirical evidence:

1. He reports on the improvements in outcomes with respect to inflation, real interest rates and output volatility, and he refers to the papers of Janine Aron and John Muellbauer (2007), and Geof Woglom (2005) that show, for example, the extent to which inflation has become more predictable. There is also recent work by Monique Reid (2008) following in the tradition of Gurkaynak, Sack and Swanson (2003) who uses real and nominal forward rates to consider the extent to which long-term inflation expectations have become anchored in South Africa. She finds that in South Africa, as in the United Kingdom and other inflation-targeting countries, and in contrast with the United States of America (US), these long-term expectations have indeed become firmly anchored.

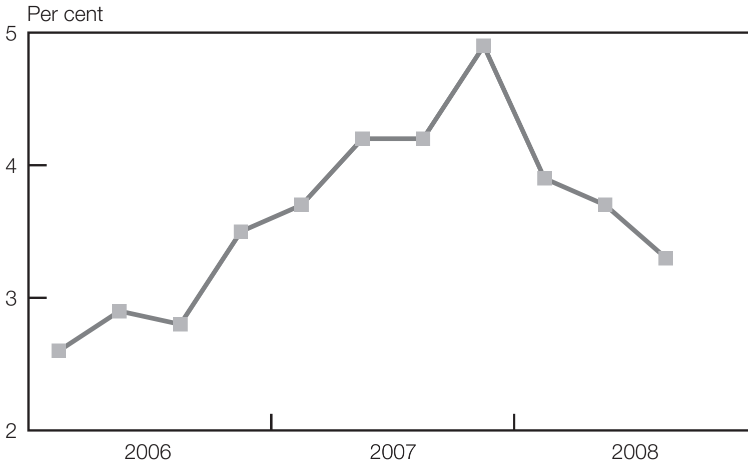
2. Brian Kahn also addresses the question whether inflation targeting is too flexible, by demonstrating how the system operates when flexibility is needed, for example, when faced with a relative price shock. Such a shock is a major test for inflation targeting, and the detractors of the system both in South Africa and abroad have claimed that it is a test that inflation targeting is bound to fail. In a widely circulated, if ill-informed essay earlier in 2008, Joseph Stiglitz (2008) argued with respect to inflation-targeting countries that "[i]nflation in these countries is, for the most part, imported. Raising interest rates will not have much impact on the international price of grains or fuel". We have heard the same views over and over again domestically: the Bank is using a "blunt instrument", this is the wrong sort of inflation and so on (Garrow, 2007; Mondi, 2007). It is implausible that Stiglitz fails to distinguish between absolute and relative prices, but he certainly suggests that developing-country bankers would not be able to and, hence, they would chase the headline consumer prices index around, while failing to understand the nature of the price shock. Kahn's paper shows how the Bank actually engages with the issue, with a real effort to identify the nature of the price shock before it proceeds with policy changes. He demonstrates this with his three scenarios:

   a. A temporary mean-reverting shock, to which the appropriate response is: look through the shock.
   b. A one-off permanent-level increase, to which the appropriate response is to tighten modestly so as not to accommodate the impact on the absolute price level. The fact that he distinguishes between the variability of the headline index (which is often dominated by relative price movements) and the core (where relative price movements are much less important) shows that the Bank's conceptual framework does not work as Stiglitz assumed it would.
   c. He also identifies a third category, namely persistent increases in a relative price shock. He observes, correctly in his paper, that such trends cannot last indefinitely, but that they can last long enough to be quite troublesome and it is really hard to know upfront whether one is dealing with the level change of the second kind or the long-lasting increases of the third kind. One cannot tell, but, fortunately, the policy response follows the same pattern, that is, tighten modestly to prevent the long-lasting relative price shock from becoming embedded in absolute price increases.

I think the Bank has operated in a similar fashion since the start of the most recent round of interest rate tightening back in 2006 and Figure 1 summarises the evidence. The graph shows the real forward-looking

repurchase (repo) rate in South Africa from the first quarter in 2006 until the last interest rate rise seen in the second quarter of 2008. I calculated inflation expectation by using the Bureau for Economic Research (BER) at Stellenbosch University's inflation expectations survey for the next year.

Figure 1: Real repurchase rate in South Africa since 2006



The real interest rate was calculated as the difference between the nominal repo rate and expected inflation (for the next year) measured as the average of the three surveys conducted quarterly by the BER.

The consumer price index excluding mortgage interest cost for metropolitan and other urban areas (CPIX) proxy for inflation rose form 4,5 per cent to 13 per cent over this period, or 850 basis points. How did the Bank respond with interest rates? The repo rate was tightened in total by 500 basis points and with the pattern visible in the graph: in 2006 the real interest rate was tightened by just more than 50 basis points, with further tightening of about 100 basis points maintained through 2007, and as the economy seemed to have passed beyond the peak in the cycle in 2008 the Bank has allowed the real rate to ease very moderately. In total, the Bank raised the repo rate by 500 basis points, while this proxy of inflation (closer to core) went up by 370 basis points. It certainly was a tightening, but a modest one: just enough to maintain the Taylor principle (or a real tightening) and just enough to avoid accommodating the process of inflation, which Arthur Burns (1979) described as "undernourishing", though accommodating inflation.

Therefore, the Bank has built credibility and it has done so not only by having a more systematic and rule-like framework, but crucially by using its flexibility, and using it in combination with a supportive policy and a social and political environment. This is not some unique insight into

inflation targeting; credibility for monetary policy regimes has always been about more than mere rules.

Recent scholarship on the gold standard highlighted this point. The gold standard has often been used as an example of a binding policy rule (though it was a little adjustable) and one that showed sufficient commitment to monetary stability to ensure credibility. The rewards of adopting this commitment mechanism would be seen in lower-risk premiums for borrowers on the gold standard. In an influential paper in the literature, Obstfeld and Taylor (2000: 260) summarised the case as follows: “Gold was apparently a good enough seal of approval by itself, and risk was priced without much references to public debt levels, the terms of trade, or whether the country was part of the British Empire.”

But this claim about the *sufficient* power of rules to establish credibility has never been wholly persuasive. In Blinder’s survey (2000) “Central bank credibility: why do we care? How do we build it?” from a few years ago not only the central bankers, but the academic economists too, gave the next-to-lowest ranking to “being rule bound” among the seven suggested ways of building credibility. Factors such as “a history of honesty” and “central bank independence” emerged as much more important contributors to credibility from that survey.

Recent scholarship has revealed that this was also true of the gold standard. Ferguson and Schularick (2008) have recently constructed a much larger dataset of bond investments under the gold standard to remove the kind of sample selection bias that also plagued the early convergence literature. Their results are striking: for all the countries combined in their broader dataset, they find little benefit in terms of risk premium for going onto the gold standard after controlling for other features of the economy, such as fiscal circumstances and other macroeconomic aggregates. Furthermore, they found that the more developed countries experienced a credibility gain (as measured) from joining the gold standard. However, in countries with higher political risk and vulnerability to economic shocks “monetary policy commitments” did not offer a short cut to credibility.

An important lesson from the gold standard, Bretton Woods and from the anguish of Arthur Burns is that one needs more than technically appropriate policy design and even a good institutional structure for the monetary policy regime. One also needs political and social support for the focus on low and stable inflation.

Brian Kahn has reminded us of the same with respect to inflation targeting. For the constrained discretion of inflation targeting to improve credibility, the supporting institutions need to be in place. Fiscal policy

and the instrument independence of the central bank are major issues and on both these counts the Bank has benefited over the past decade and more from a highly supportive environment, and this has been seen in the studies on credibility too.

However, I want to add to this a set of metrics not usually covered in the assessment of inflation targeting, but which is highly pertinent to the circumstance of developing countries, namely the international dimension. Inflation targeting combined with a floating exchange rate regime and openness to capital markets is a coherent monetary policy regime. So too is money growth targeting instead of inflation targeting in the same configuration or, alternatively, a hard peg with capital flows. The Bretton Woods system, with fixed but adjustable exchange rates and little capital flow was another coherent, though ultimately unsustainable system.

Andrew Rose (2006) has placed the well-known observation that no country has ever abandoned inflation targeting against the history of other monetary policy regimes in the post-war era and found the following striking results:

First, inflation targeting has been more robust than any of the rival systems, with only three exceptions: (1) the eclectic system in the US and (2) Japan, and (3) the currency board in Hong Kong. The South African inflation target is now almost nine years old. Rose (2006: 9) found that in a population of inflation-targeting countries and a control group of 42 comparable countries, the probability of sustaining any given monetary policy regime for even eight years was less than one third.

Rose goes on to describe inflation targeting as achieving a sustainable, though unplanned, international monetary system, which he called "Bretton Woods reversed". The features of the reversed Bretton Woods based on inflation targeting can be seen from a series of contrasts with the erstwhile Bretton Woods system (Rose, 2006: 9).

Second, monetary policy was partly focused on external events under Bretton Woods, while it focuses locally under inflation targeting.

Third, capital flows were controlled and the scope for current-account imbalances were severely limited under Bretton Woods, while capital flows have surged and current-account imbalances have been facilitated by inflation targeting.

Fourth, while Bretton Woods required continuous and sometimes difficult international co-operation, none is required under inflation targeting.

Fifth, while the International Monetary Fund, the US and gold had central roles under Bretton Woods, none of that is true under inflation targeting.

Sixth, central banks had little transparency, but with greater political dependency under Bretton Woods, while they have achieved extensive independence, transparency and accountability under inflation targeting.

The reason for repeating Rose's contrast is that I wanted to contrast the outcomes under various monetary policy regimes; all of which are or were characterised by constrained discretion, that is, they were rules-based. The point I want to emphasise is that the success is not only, or even mainly, a function of the fact of having a rule. It turns out that rules are not enough to build and maintain credible monetary policy; one also needs supportive institutions and a supportive environment.

In summary, the answer to Kahn's question: "Does the flexibility of inflation targeting undermine its credibility?" is therefore "no".

Social and political support for low and stable inflation

The flexibility of inflation targeting is also important to help the central bank to prioritise the goal of low and stable inflation in the long run. Burns and Friedman, and the scholars of the seventies argued precisely that central banks did not have the scope to prioritise inflation and to take responsibility for the outcomes. Indeed, Burns felt that he could do no better than undernourishing inflation and Allan Meltzer has, in his study of the US Federal Reserve System's (the Fed) history, argued that this kind of self-censoring had been true for the Fed throughout the post-war period. If the Bank responds inflexibly to the threat of inflation, there is a real risk that the social and political support for the system would be eroded and, ultimately, there is no independence for the central bank from society and from politics.

Practically, this means that the Bank needs to double and redouble its efforts to explain the nature of the price developments that are being experienced. To confront head-on the claims about over-reaction which, as Brian Kahn argues and as shown above, are empirically unsupportable. The Bank needs to persist with this, or it might lose the larger debate; the debate in the public domain.

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