
Institutional frameworks for inflation targeting

An address by Murray Sherwin, Deputy Governor of the Reserve Bank of New Zealand to the Bank of Thailand Symposium “Practical Experiences on Inflation Targeting” Shangri-La Hotel, Bangkok on 20 October 2000

Introduction

Governor, distinguished guests, fellow central bankers, ladies and gentlemen. It is always a pleasure to find an opportunity to visit Thailand and this is no exception. Thank you, Governor, for the invitation.

It is also a considerable honour to be invited to address this symposium on the subject of inflation targeting. The subject of today's deliberations is an important one and I applaud the Bank of Thailand's decision to convene this public symposium to air the issues. That decision is in the best traditions of transparency which characterises inflation targeting central banks.

I have been asked to discuss institutional frameworks for inflation targeting. Inflation targeting has attracted increasing attention around the world over recent years. We have seen this approach to monetary policy spread from the small, open, OECD economies to a number of the emerging economies – in Eastern Europe, Latin America and now in Asia. The concept first emerged in my own country, New Zealand, in the late 1980's. In our case, it gained a formal institutional structure with the passage of a new charter for the Reserve Bank of New Zealand in 1989.

Inflation targeting arose in New Zealand in an environment that will seem rather familiar to many of our Asian friends – at least in some important respects. It was developed in a very small, open, economy that was adjusting to a newly-opened capital account, a newly-floated exchange rate, and newly-deregulated financial markets. It was developed with the recognition that a more traditional structure for monetary policy, perhaps one focused on targeting particular definitions of money supply, was likely to prove inadequate in this newly deregulated and rapidly evolving environment.

While many other countries have now adopted inflation targeting, each country brings its own history, traditions and institutions to these decisions. For that reason, we find a variety of institutional structures are utilised.

My comments today obviously will draw heavily on the New Zealand regime. And while I will attempt to generalise the lessons we have learned, and to draw from the experience and structures of other inflation targeting central banks, it is important to highlight up front that there are few fixed points for the architects of a new inflation targeting regime to fasten on. We are still learning and adapting as we go. So too are other inflation targeting central banks.

Context

These are awkward times for small open economies as they struggle to find monetary and financial structures that will facilitate growth, prosperity and stability in a world characterised by increasing openness to trade and capital flows and, it seems, increasing volatility. The events of 1997 and 1998 demonstrated how rapidly stresses in one economy can be transmitted to others. They also underlined just how important are strong institutions, strong balance sheets – in both the public and the private sector – and strong risk management practices to ensuring robustness in the face of shocks.

Dr Grenville, our next speaker, will deal with the issues of inflation targeting in a world of volatile capital flows. I see that as a key component of our discussions today because we know that we have to be able to devise structures that enable us to live in such a world. The evolution towards more open capital accounts and greater capital mobility is being driven largely by technological developments. Those new technologies bring us all enormous advantages and are fuelling extraordinary growth internationally.

The challenge we all face is how to gain the advantages of the new technologies without being swamped by their other consequences – such as the enhanced mobility of capital, of goods, ideas, skills, people and resources generally. Amongst other things, this requires us to find institutional and policy structures that enable us to take advantage of the new

technologies while acquiring the flexibility to adapt rapidly and without undue stress to new developments and shocks.

The institutional structure employed for the conduct of monetary policy is just one of the factors that policy makers need consider in thinking about these issues. Trade policy, prudential regulation, accounting and audit standards, legal structures and bankruptcy provisions – amongst other elements of policy – are all very important and should not be overlooked in the design of robust institutional frameworks. But today we are here to consider just monetary policy.

What is inflation targeting?

First, a couple of definitional points to help locate the discussion we will be engaging in over the rest of the day. What is inflation targeting?

A substantial study of inflation targeting was published in 1999 by Ben Bernanke, Thomas Laubach, Rick Mishkin and Adam Posen.¹ In their book, they described it in the following way:

“Inflation targeting is a framework for monetary policy characterised by the public announcement of official quantitative targets (or target ranges) for the inflation rate over one or more time horizons, and by explicit acknowledgement that low, stable inflation is monetary policy’s primary long-run goal. Among other important features of inflation targeting are vigorous efforts to communicate with the public about the plans and objectives of the monetary authorities, and, in many cases, mechanisms that strengthen the central bank’s accountability for attaining those objectives.”

In providing that definition, the authors of this study take some care to describe inflation targeting as a framework as opposed to a rule. In other words, inflation targeting fits somewhere between the extremes which feature in the “rules versus discretion” debate which raged in monetary policy circles in earlier years. Inflation targeting is not “automatic” in the sense of a Friedman-like rule by which growth in the money supply is governed in order to achieve the ultimate goal of price stability. But nor does inflation targeting allow

the central bank full discretion to take decisions in any ad hoc or unconstrained fashion. Rather, inflation targeting can be described as a form of “constrained discretion”. To quote Bernanke et al again, “By imposing a conceptual structure and its inherent discipline on the central bank, but without eliminating all flexibility, inflation targeting combines some of the advantages traditionally ascribed to rules with those ascribed to discretion.”

Of course, even within an inflation targeting regime, countries can choose the nature or extent of discretion they wish to leave with their central bankers. Such flexibility is one of the prime attractions of the inflation targeting approach.

In New Zealand, the development of inflation targeting owed a lot more to the Harvard Business School than to the Chicago monetarists we are sometimes accused of following. The Reserve Bank of New Zealand was just one of a number of state agencies in the process of undergoing reform in the late-1980’s, and the guiding principles for those reforms came from the text books on corporate governance rather than from those on monetary policy. The key concerns were for organisational effectiveness, with state agencies generally required to:

- establish clear **objectives**;
- provide for clear divisions of **responsibility** between the key decision makers;
- provide for clear **delegations** of decision-making power which are aligned with the established responsibilities;
- specify clear **accountabilities** so that those given the authority to make decisions may be held firmly accountable for the quality of their decisions; and
- ensure **transparency**, so that all can see what decisions have been taken, by whom, against what objectives, and for what reason.

Applying those principles to the central bank, we can see how the inflation targeting framework falls out fairly naturally. In the case of the Reserve Bank of New Zealand:

- The **objective** is clear – we must deliver inflation outcomes of between 0 and 3 per cent.

¹ Bernanke et al, (1999).

- Also clear is the division of **responsibility** – it is the Governor who is solely charged with delivering the agreed inflation objective.
- To that end, the Governor has decision-making authority required to undertake the task **delegated** to him – ministers are not consulted on monetary policy matters in the normal course of events. Indeed, to preserve the independence of the central bank, ministers are not informed of our periodic monetary policy decisions until just ahead of the public announcement and well after the decisions have been formally committed.
- Having assigned the Governor the responsibility and authority to make decisions in line with the specified objective, we have a board of directors whose primary task is to monitor the Governor's performance and thereby to hold him **accountable** for the quality of his decisions. Ultimately, the board could recommend the Governor's dismissal should they feel that he is not diligently or competently pursuing the objective established for him – although, of course, there are intermediate courses of action available to the board before reaching such a drastic conclusion.
- And finally, our framework demands a high degree of **transparency**. For example, the formal target for monetary policy is established in a published agreement. The Bank is obliged to publish formal statements laying out how monetary policy has evolved and why, and pointing the way forward for future decisions. A Select Committee of the Parliament routinely reviews the Bank's conduct of policy in a public hearing. And while the Act provides for the government to over-ride the agreed policy targets agreement in certain circumstances, it also requires that to be done in a public process.

Specific issues of institutional form

Let me deal with a selection of the more specific issues which emerge in the design of an inflation targeting regime. This is necessarily just a small subset of the issues we could discuss, but hopefully I can shed some perspectives on some of the more significant institutional choices.

An independent central bank?

Inflation targeting and central bank independence tend to go hand in hand although it is certainly possible to conceive of structures where that is not the case.

The case for central bank independence is well understood and well covered in the literature on time inconsistency. In essence, the public, and particularly its elected representatives, are likely to face incentives which bias them in favour of tolerating the risk of increased inflation. That bias emerges as a consequence of the long and variable lags associated with monetary policy decisions. The benefits of long-run price stability lie in the future. The costs that may be associated with attaining or preserving price stability are borne up front. And faced with the immediate imperatives of political life, our democratic representatives face pressures to defer the immediate investment in future price stability in favour of the immediate benefits of lower interest rates and/or faster growth.

An independent central bank specifically charged with maintaining price stability, effectively empowered and resourced to do the job, and held accountable against the achievement of that objective, is a fairly logical response to dealing with that inherent inflationary bias by institutionalising a contrary bias in favour of long-run price stability.

A common and understandable concern about the concept of an independent central bank is that it is inconsistent with the traditions of democratic parliamentary structures. We normally expect the authority of the state to be exercised by our elected representatives rather than by central bank bureaucrats.

So how can we overcome that inconsistency?

In our case, we have an Act of Parliament that spells out the medium term objective of the central bank in language that is quite broad and uncontentious. The Reserve Bank of New Zealand is obliged to pursue "stability in the general level of prices".

But what is meant by "stability in the general level of prices"? That is not defined in the Act. But the Minister of Finance and the Governor are obliged to agree an operational target and to publish that in a Policy Targets Agreement (PTA)

covering the five-year term of the Governor. In effect, this is the Governor's employment contract.²

We find this an important mechanism. It confers a degree of democratic legitimacy on the inflation target by openly committing the Minister and his government to the inflation target.

Just as importantly, the government can over-ride this agreement where it feels there is good reason – perhaps in some situation of crisis or unusual shock. That is provided for. But there are rules to be complied with. The over-ride must be published and must be tabled in the Parliament for debate. Any such over-ride can persist for no more than one year without again being subjected to Parliamentary scrutiny.

As usual, there are alternative models available. In our case, we have instrument independence – in other words, the central bank has wide discretion in how it goes about achieving its inflation target. But we do not have goal independence – we do not establish for ourselves the target for monetary policy in the way, for instance, that the US Federal Reserve Board or the European Central Bank are empowered to do.

We feel very comfortable with a structure that requires active government participation in establishing the goal of monetary policy. Indeed, we believe it is an important provision reinforcing the legitimacy of the central bank's task. But it is clear that both models are viable and can operate effectively in their particular circumstances.

Before leaving the subject of central bank independence, I should touch on one other important question – the funding of the central bank. We, like other central banks, have traditionally generated substantial profits through seignorage – issuing bank notes to the public and investing the proceeds in government bonds. Under our old structures, those profits were applied to the administration of the Bank at our own

discretion with the residual surplus turned over to the government.

It was clear at an early stage of our reforms that such a comfortable arrangement was never going to survive. But how to have an independent central bank while still imposing some reasonable degree of external financial constraint? Clearly the usual governmental process of annual appropriations was not suitable since this could provide a very direct route by which the independence of the Bank could be quickly undermined.

This dilemma has been resolved, satisfactorily in my view, by a five-year funding agreement in which the Bank and the Minister agree on the quantum of funds that the Bank will be able to spend on its own operations. Any spending over that cap must be drawn from the Bank's reserves, and under-spending of the agreed limit may be added to reserves.

Our non-executive directors also play an important review role in monitoring the efficiency of our spending and internal management processes, just as they do in scrutinising the Governor's monetary policy decisions.

Decision-making structures

As noted, the design of the Reserve Bank of New Zealand Act drew heavily on the principles of effective management. In that framework, it is not surprising that the Chief Executive – the Governor – is assigned all of the key decision-making powers of the central bank. While this is not a unique provision, it is not that common. More often seen are arrangements where the key monetary policy powers are assigned to a board or a committee. The Federal Reserve Board's Federal Open Market Committee, the Bank of England's new Monetary Policy Committee, the Swedish Riksbank's Executive Board and the Reserve Bank of Australia's Board of Directors all provide alternative structures.

In the New Zealand case, the single decision-maker model reflected a concern to retain clear accountability - if there is any fault to be found with the decisions of the central bank, there is no doubt about whom is to be held responsible.

This is one area which is currently under review in New Zealand. Professor Lars Svensson of Stockholm University has been appointed to review a number of aspects of our

² Note that the RBNZ Act does not specifically oblige us to operate an inflation targeting regime. In principle, the PTA could specify some other intermediate target, eg a monetary aggregate, nominal GDP or even, at a stretch, the exchange rate. The significant constraint is that the intermediate target chosen must be consistent with some reasonable definition of "stability in the general level of prices".

monetary policy, including decision-making and governance structures. (I should note that, in commissioning this review, the government has specifically ruled out any change to the independence of the central bank or to the concept of a single, price stability target for monetary policy.)

In preparing its submission for the Svensson review, the non-executive directors of our board, who are charged with monitoring the performance of the Governor, have looked at whether they should recommend the adoption of a committee-based decision-making structure in place of the current single decision-maker model.

The potentially negative features of a single decision-maker model include:

- Exposure to single person risk.
- Decision-making may be captured by a single train of thinking and result in inferior decisions.
- A public perception may develop that a single individual, the Governor, has excessive power. If such a perception were to develop, the “legitimacy” of the central bank’s operational independence may come under question.
- A single decision-maker may be insufficiently in touch with what is actually happening in the economy, or may have only a partial view of developments, thus resulting in inferior decisions.

After careful deliberation, our non-executive directors have chosen to recommend the retention of the current single decision-maker structure. Their reasoning relates primarily to a preference for the greater clarity of accountability inherent in the current structure. Also important was a sense that the single decision-maker facilitates greater coherence and consistency in communication of monetary policy issues than is likely with committee structures, and greater effectiveness in the management of the organisation. Also, they felt that the risks of the current structure were significantly mitigated within our framework by such provisions as:

- A rigorous process for appointing a Governor in which the Minister of Finance must make the appointment from candidates nominated by the board.

- Constraints on the Governor’s decision-making authority which are inherent in the RBNZ Act and in the Policy Targets Agreement.
- The monitoring of the Governor’s performance by the board to ensure that the Governor acts in a collegial manner, and has proper regard for the wide range of advice and input which is obtained from sources internal and external to the Bank.
- The transparency provisions which ensure a close external scrutiny of the Governor’s decisions including, importantly, by financial markets.

Further, the non-executive directors have recommended some changes intended to strengthen the board’s scrutiny of the decision-making processes and thereby reduce further any risks inherent in the single decision-maker model.

Another consideration which emerged during the consideration of alternative decision-making structures related to concerns about potential conflicts of interest where external appointees are involved in monetary policy decision-making and the limited pool of available expertise and experience suited for such a task in a small country like New Zealand.

Overall, I doubt that there are many general principles or lessons from international experience that can be applied in this area. In many cases, it seems that the formal differences between a single decision-maker and a committee structure are less obvious in practice than they are on paper. Moreover, it seems that some of the more interesting approaches to committee structures, such as that of the Bank of England and the Riksbank, are still evolving and settling down. For that reason it may be too soon to draw firm conclusions about the preferred decision-making structures.

Single or multiple goals?

The New Zealand framework quite deliberately and explicitly directs monetary policy towards a single objective – price stability. This approach stems from an understanding that, in the medium-term, monetary policy affects only the price level; it is not possible to engineer a higher trend rate of real growth merely from monetary expansion.

The charters of some other central banks are broader, typically requiring monetary policy to place some weight on other objectives of economic policy such as growth and employment.

In the New Zealand case, we felt that having a single price stability objective was helpful in providing clarity of purpose in the earlier stages of a significant disinflationary process. It also supports a clear accountability framework and fits with what we think monetary policy is able to achieve.

But this is not to say that we see no connection between monetary policy and real variables such as growth and employment. On the contrary, maintenance of medium-term price stability we see as an important part of the environment required in order for resources to be allocated to where they can best be used. That, of course, is what achieving real growth and maximum employment is all about. Moreover, the way in which monetary policy is conducted in pursuit of price stability can also matter. Just as price stability is conducive to growth, so too is an environment of "monetary stability" in which interest and exchange rates are sufficiently stable to act as effective allocative mechanisms.

In our case, as inflation has settled at low levels, we have come to devote considerably more attention to the nature of the trade-offs we may face in our day-to-day monetary policy strategies. In particular, we have been looking more closely at issues relating to the variability of inflation, on the one hand, and the variability of output, interest rates and the exchange rate, on the other hand. With a longer track record of successfully maintaining price stability comes a better anchoring of the public's expectations about future inflation risks. From that comes the possibility that we can be more relaxed about short-term variations in inflation, particularly where looking through such short-term inflation "noise" enables us to deliver a greater degree of stability in interest rates, the exchange rate and, possibly, output.

Again, in this area we find that the differences in practice between the New Zealand model, with the single goal of price stability, and other inflation targeters with a broader mandate, may be rather smaller than a casual reading of the respective charters might suggest.

Conclusions

We now have a decade of experience with inflation targeting in an increasingly diverse range of countries and circumstances. There seems little doubt that inflation targeting is proving to be an effective framework for monetary policy within these diverse settings. It seems especially well adapted to small open economies with flexible exchange rates – providing the essential nominal anchor for monetary policy at a time when some of the more familiar guideposts have become less reliable.

The core characteristics of inflation targeting relate to the public announcement of a target for inflation, explicit acknowledgement that low, stable inflation is monetary policy's primary long-run goal, transparency about the objectives of policy and the rationale for monetary policy decisions, and strengthened accountability for the achievement of the goals of policy.

The institutional framework for inflation targeting is important – to be effective, inflation targeting must assist in shaping decisions and behaviour. Well-designed institutional structures can be influential in shifting incentives and conditioning decision-making. But that does not mean that there is a particular formula or set of institutional arrangements that can readily be picked up and transplanted.

No doubt, the Bank of Thailand is bringing its own perspectives to these issues, and adapting the experience and practice of others to find structures that best suit local conditions.

I wish them well in that endeavour.

References

- Bernanke, Ben S, Thomas Laubach, Frederick S Mishkin, Adam S Posen, (1999), "Inflation targeting. lessons from the international experience". Princeton University Press.
- Brash, D (1999) "Inflation targeting: an alternative way of achieving price stability". A speech delivered on the occasion of the 50th anniversary of central banking in the Philippines. *Reserve Bank of New Zealand Bulletin*, 62, 1, pp36-45.
- King, Mervyn (1999), "The MPC two years on," Lecture delivered to Queen's University, Belfast.

Reddell, Michael (1999), "Origins and early development of the inflation target." *Reserve Bank of New Zealand Bulletin*, 62, 3, pp63-71.

Sherwin, Murray (1999), "Inflation targeting: 10 years on." Paper delivered to the New Zealand Association of Economists Conference in Rotorua. *Reserve Bank of New Zealand Bulletin*, 62, 3, pp72-80.

Sherwin, Murray (1999), "Strategic choices in inflation targeting: the New Zealand experience" . Paper delivered to an IMF and Central Bank of Brazil Seminar on inflation targeting.

Stevens, Glenn (1999), "Six years of inflation targeting" . Address to Economic Society of Australia.

Svensson, Lars E O (1997), "Inflation forecast targeting: Implementing and monitoring inflation targets" . *European Economic Review*, Vol 41.