The 2012 Policy Targets Agreement: an evolution in flexible inflation targeting in New Zealand

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The Policy Targets Agreement (PTA) frames monetary policy conduct. It sets out New Zealand's approach to 'flexible' inflation targeting, which seeks to maintain price stability over the medium term while accommodating, to some degree, shocks that can cause unnecessary economic volatility. A new PTA took effect in September 2012 with the appointment of Governor Graeme Wheeler. This article discusses the new PTA and how the changes fit within the overall monetary policy framework.

1 Introduction

As required by the Reserve Bank of New Zealand Act 1989 (the Act), the Policy Targets Agreement (PTA) between the Minister of Finance and the Governor of the Reserve Bank sets an operational target for the conduct of monetary policy. The target must be consistent with the statutory purpose, set out in section 8 of the Act, of maintaining stability in the general level of prices. The PTA also sets out a range of agreed matters that the Reserve Bank must consider in pursuing the target. The PTA is a key part of the framework for holding the Reserve Bank accountable for its handling of monetary policy.

A new PTA must be agreed whenever there is a change of Governor, and so a new one took effect in September 2012. It retains a CPI inflation target, but now gives explicit mention to the midpoint of the target range. The new PTA also explicitly requires the Reserve Bank to monitor asset prices, and reiterates the Reserve Bank's longstanding statutory obligation to have regard to the efficiency and soundness of the financial system when pursuing price stability. The rest of this article discusses the main features of the new PTA and how it sets out New Zealand's approach to flexible inflation targeting, and briefly reviews some recently proposed alternatives to CPI inflation targets.

2 Price stability, the PTA and flexible inflation targeting

It is now well established across many countries with floating exchange rates that monetary policy should be geared towards maintaining price stability, reflecting the strong evidence that this is the best contribution monetary policy can make to long-run growth. Flexible inflation targeting is a common way of making operational the conduct of monetary policy focused on price stability. More than 20 countries now maintain inflation targeting monetary policy regimes (Roger, 2009).

The basic features of flexible inflation targeting are:

a. a numerical inflation target, usually specified in terms of CPI inflation;

b. responding to shocks in such a way that when inflation deviates from the target it returns to target over the medium term (and is expected to do so), without generating unnecessary volatility in the economy in the process; and

c. transparency about the inflation target and how the central bank responds to shocks, with quantitative economic forecasts often a key feature.

These features aim to provide a high degree of medium-term predictability about the inflation rate (constraining the central bank), while providing the short-term flexibility to recognise broader economic

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1 Tim Ng is now employed by The Treasury. This article was substantially written while he was at the Reserve Bank of New Zealand.

2 Both the current and previous PTAs can be viewed at http://www.rbnz.govt.nz/monetary-policy/policy_targets_agreement/

3 See Gillmore (2008) for reviews of the relevant literature.
circumstances. If successful, they help provide a clear anchor for inflation expectations, and facilitate public understanding and endorsement of the role of monetary policy.

Each country sets out its flexible inflation targeting framework somewhat differently. In some cases, the central bank itself sets the target. In other cases, the Minister of Finance sets the target. In many countries, the target is set jointly, as in New Zealand. New Zealand, though, is one of the few countries with a statutory requirement to have, and publish, a formal operational goal.

New Zealand’s current (2012) PTA is reproduced in the Appendix.

The numerical inflation target is set out in clause 2. That clause provides the constraint: it requires the Reserve Bank to target a specific, low rate of inflation, which in turn provides a reference point for inflation expectations.

The flexibility around that target is provided by such features as:

- the “on average over the medium term” articulation of the target;
- the 2 percentage point wide target range;
- the special circumstances (such as indirect taxes, price effects of natural disasters and commodity price fluctuations) that are recognised as reasons for temporary deviations of CPI inflation from the target range (clause 3); and
- the requirement, in the pursuit of price stability, to avoid unnecessary volatility in a range of other macroeconomic variables (output, interest rates, the exchange rate), and (as of the 2012 PTA) to have regard to the soundness and efficiency of the financial system (clause 4).

The PTA’s inflation target specification is similar to those in other countries, both in terms of its expression and its quantitative parameters. Some emphasise a band while others emphasise a point (Table 1). In most developed countries, inflation targets are clustered around 2 percent.

### Table 1
Inflation target specifications in selected economies

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Inflation target</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td>Future CPI inflation outcomes between 1 and 3 percent on average over the medium term, with a focus on keeping future average inflation near the 2 percent target midpoint</td>
</tr>
<tr>
<td>Australia</td>
<td>CPI inflation between 2 and 3 percent, on average, over the cycle</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2 percent as measured by the 12-month increase in the CPI</td>
</tr>
<tr>
<td>Sweden</td>
<td>Annual CPI inflation of 2 percent</td>
</tr>
<tr>
<td>Canada</td>
<td>2 percent midpoint of the 1 to 3 percent inflation-control range for the 12-month rate of change in the total CPI</td>
</tr>
<tr>
<td>Norway</td>
<td>Annual CPI of approximately 2.5 percent over time</td>
</tr>
<tr>
<td>Israel</td>
<td>Annual rate of increase in the CPI between 1 and 3 percent</td>
</tr>
<tr>
<td>United States</td>
<td>Inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures</td>
</tr>
<tr>
<td>Euro area</td>
<td>A year-on-year increase in the Harmonised Index of Consumer Prices for the euro area of below 2 percent, aim to maintain inflation rates close to 2 percent over the medium term</td>
</tr>
<tr>
<td>Japan</td>
<td>2 percent in terms of the year-on-year rate of change in the CPI</td>
</tr>
<tr>
<td>Poland</td>
<td>Continuous inflation target of 2.5 percent with a permissible volatility bandwidth of ±1 percentage point assessed on the basis of the CPI on a year-over-year basis</td>
</tr>
<tr>
<td>Chile</td>
<td>Annual CPI inflation around 3 percent most of the time, within a tolerance range of plus or minus one percentage point</td>
</tr>
</tbody>
</table>

The source documents cited above outline both inflation targets and other considerations that the central bank takes into account (whether by choice or by formal requirement) in conducting monetary policy. In that sense, they have some parallels to New Zealand’s PTA. Such documents, read as a whole, make clear that there are short-term trade-offs between keeping inflation near target and other economic variables, including output and employment. For example, in the United Kingdom, the Chancellor of the Exchequer’s recently renewed monetary policy ‘remit’ to the Bank of England stated that it may wish to allow inflation to deviate from the target temporarily, in order to avoid undesirable volatility in output or the exacerbation of financial imbalances. In Sweden, the Riksbank’s explanation of the monetary policy framework mentions a concern to stabilise production and employment around long-term sustainable paths and to avoid risks linked to developments in the financial markets. Both are important considerations in the conduct of Sweden’s inflation-targeting monetary policy.

New Zealand’s PTA is unusual in explicitly mentioning unnecessary interest rate and exchange rate volatility as concerns. Hunt (2004) discusses the reasoning behind this provision. Volatility in interest rates creates uncertainty for businesses and households, and may cause incorrect or delayed decisions. Volatility in the exchange rate may adversely affect the export sector by squeezing profits when the exchange rate is very high, and could lead to the demise of some firms that might otherwise have turned out to be innovative and profitable in the long run. A very low exchange rate could encourage marginal businesses to set up that then become unprofitable when the exchange rate returns to more typical levels, utilising scarce resources that might have been better employed elsewhere. Reflecting these concerns, the PTA also requires that the Bank, in conducting monetary policy in pursuit of price stability, seek to avoid unnecessary instability in the exchange rate and interest rates.

The desire to avoid unnecessary variability in output, interest and exchange rates has been one of the reasons why countries have consistently preferred a flexible approach to inflation targeting. Countries have recognised that attempting to offset the short-term impact on inflation of an oil price shock, for example, would typically exacerbate any associated economic downturn. Doing so would be unnecessary if the public remains confident that inflation will settle back in the target range over the medium-term. While the principle is uncontroversial, putting it into practice can be more challenging. In general, the concern to avoid unnecessary variability means that interest rates are sometimes adjusted more gradually than they would be otherwise.

Changes to the PTA in 2012

PTAs have evolved considerably since the first one in 1990. In general, PTAs have, over time, become more explicit about the nature of the flexibility the Reserve Bank should exercise in pursuing the inflation target (see Reserve Bank of New Zealand, 2000). In 2002 and 2007, the Reserve Bank reviewed the successive PTAs in the light of domestic and international experience with inflation targeting. More recently, the global financial crisis has led many central banks to focus more heavily on how financial system developments should be treated by monetary policy, and there has also been renewed debate about the role of monetary policy in stabilisation policy more generally.

There were three additions to the 2012 PTA.

First, clause 2a of the PTA now explicitly requires the Reserve Bank to monitor “asset prices” among the "range of price indices" it regularly examines. Successive PTAs have required that, while targeting CPI inflation, the Reserve Bank monitor a range of prices. The Bank has always monitored asset prices and taken them into account in both monetary and prudential policy (see

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4 The exchange rate can also play an important shock-absorbing role. For example, when New Zealand’s terms of trade weaken (and hence inflationary pressures decline), the exchange rate typically depreciates, providing some cushion for tradables sector producers and economic activity.

Bollard, 2004, for further discussion). The Monetary Policy Statement regularly reports analysis of movements in a range of price measures, including asset prices. The new reference to asset prices in the PTA explicitly recognises the important role played by asset prices in the recent domestic and international global financial cycle and in the crises experienced in many countries, even though asset prices are not part of the formal target.

Second, clause 4b incorporates in the PTA the longstanding statutory requirement (section 10 of the Act) that the Reserve Bank have regard to “the efficiency and soundness of the financial system” in pursuing price stability. This addition recognises that monetary policy decisions often have implications for financial stability. For example, very low interest rates, that might be consistent with low CPI inflation outcomes, can exacerbate growing credit and asset prices imbalances, or high interest rates aimed at countering CPI inflation pressures might intensify a downturn in asset prices. The phrasing of the clause makes financial system considerations clearly subsidiary to the inflation target in the conduct of monetary policy. But, at times, such considerations might be relevant to judging how quickly to act to keep inflation on target over the medium term.

The global financial crisis galvanised debate about how monetary policy should respond to financial system developments. This debate is not particularly new (see Bloor et al., 2008 for a discussion), but the enormous macroeconomic and financial disruption of 2008/09 has shifted many policymakers and analysts towards considering a more pre-emptive approach for monetary policy (see e.g. White, 2009). Even before the crisis, the Bank envisaged a case for being pre-emptive in some circumstances (Bollard, 2004), and the additions to clause 2a and clause 4b are consistent with an increased emphasis on asset price and credit developments.

Finally, clause 2b adds “a focus on keeping future average inflation near the 2 percent target midpoint” to the CPI target itself. The target midpoint has been increased twice (in 1996 and 2002), but the 1 to 3 percent range has remained since 2002. Inflation expectations have been close to the upper end of the target band for most of the inflation targeting period (figure 1). The addition to clause 2b, in conjunction with the recent period of surprisingly low inflation, should help anchor inflation expectations more firmly around the 2 percent level. It explicitly requires the Reserve Bank, while remaining flexible, to aim to return inflation to the midpoint of the target band over the medium term. Acting, when required, to keep projected inflation near 2 percent will reinforce public and market confidence that longer-term inflation outcomes will average around 2 percent. Well-anchored expectations reduce the degree to which the OCR needs to be adjusted in response to future economic shocks.

Figure 1
CPI inflation and inflation expectations (annual)

Sources: Statistics NZ, RBNZ

The additions to the PTA are incremental in nature, as part of a framework that has combined flexibility and constraint since its inception. The clause 4b addition continues in the direction of making more explicit the flexibility considerations that have always been important, while the clause 2b addition adds some additional constraint by adding a midpoint focus (making it more explicit that not all areas of the target range are equally satisfactory for projected medium-term inflation). How monetary policy is conducted over time will be the key determinant of the impact of the new provisions.

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6 Other measures of inflation expectations have also tended to be above the midpoint of the target range.
3 The PTA and the conduct of monetary policy in practice

Since low inflation was re-established in New Zealand in the early 1990s, monetary policy has faced several episodes that illustrate some of the trade-offs between keeping projected inflation close to target, and not generating unnecessary volatility in the economy in the process.

For example, during the mid-2000s, the Official Cash Rate (OCR) was raised from 4.75 percent in 2002 to 8.25 percent in 2008. Despite that marked tightening, core inflation measures rose to around the 3 percent upper end of the range, while headline inflation was often outside the target range. During this time, output was growing strongly, as were house, farm and commercial property prices and credit. As well, the exchange rate was highly elevated and, later in the period, commodity prices were booming. With hindsight, monetary policy should probably have been tightened earlier during that period, in view of the credit developments at the time (see Chetwin and Reddell, 2012). However, in facing these emerging pressures there was a real concern that a sharper tightening might also have exacerbated pressures on the exchange rate “unnecessarily”. Another example during this period relates to the oil price spike in 2008, when oil prices rose to US$150 per barrel and headline inflation rose well above the upper end of the inflation target range. The Reserve Bank expressed concerns about the risks of inflation expectations becoming unanchored, but was able to use the flexibility in the framework to cut the OCR in July 2008 even while CPI inflation was above the top of the target range. Dealing with such issues is, of course, not unique to New Zealand. In fact, the conduct of monetary policy in New Zealand in response has been similar to other countries over the past two decades, including Australia (Kendall and Ng, 2013).

More recently, the New Zealand economy has again shown signs of pressures in different dimensions that the PTA requires monetary policy to consider. While CPI inflation has been very low during much of 2012 and 2013, tracking near or below the bottom of the target range, the exchange rate has been quite high relative to historical averages, reflecting strong commodity export prices and domestic interest rates at levels well above those of most major trading partners. At the same time, house prices and credit growth have strengthened materially. One element of the PTA might have pointed to further cuts in the OCR, possibly easing pressure on the exchange rate in the short-term, while other elements might instead have suggested earlier increases in the OCR, which might have further increased the near-term pressure on the exchange rate.

Considered judgement of the specific circumstances at hand, and transparent conduct of policy, are central to handling these sorts of pressures. They are also central to the accountability of the Reserve Bank to its Board, to the Minister of Finance, and to the general public as the Bank makes those choices and trade-offs.

4 Alternatives to the current flexible inflation-targeting framework

The new Policy Targets Agreement was agreed against a backdrop of more challenging times for monetary policy in many other countries. During the global financial crisis, several advanced economies, such as the United States, the United Kingdom, Canada, Switzerland, and Sweden, reached the “zero lower bound” effective constraint on how low short-term nominal interest rates could go. This experience has led to renewed debate about whether alternatives to a low CPI inflation target might better stabilise inflation and economic activity in the presence of extreme economic weakness. Suggestions have included nominal GDP targeting (e.g. McCallum, 2011) and price level targeting (Carney, 2012).

Both price level targeting and nominal GDP (level or growth rate) targeting can be quite consistent with the goal of medium-term stability in the general level of prices. Proponents argue that these approaches would reduce overheating during boom times and, in particular, would better stabilise economies in severe downturns, especially when the zero bound is hit. In the current international...
context, the argument is that a credible commitment to get nominal GDP back to its pre-crisis trend - which in some countries might require several years of strong GDP growth and rapid inflation – would help to reduce real interest rates and build greater confidence that monetary conditions would be kept loose for a lengthy period.

There has been little debate over any of these options in the New Zealand context. That is understandable, since even after the deep recession of 2008/09, interest rates have still been consistently well above the zero lower bound. But even internationally, despite the debate, no country has abandoned its inflation target. Indeed, in the United States and Japan the respective central banks have recently moved to adopt explicit inflation targets. The costs involved with a regime shift may be quite large, due to a lack of public familiarity with the target measures, and revisions in the case of nominal GDP, creating transparency and accountability issues. Level targets, based on either prices or nominal GDP, could be more difficult to credibly commit to than inflation targets, because, faced with some types of shocks, cycles in economic activity may need to be larger. Carney (2012) discusses nominal GDP targeting and price level targeting and the choice of the Bank of Canada – where the idea of price level targeting was explored in considerable depth over several years – to retain its flexible inflation targeting framework.

Alternative treatments of exchange rate volatility within an inflation-targeting framework have also come under consideration internationally in recent years, with the IMF being among those prompting renewed debate, especially for emerging economies (see e.g. Ostry et al., 2012). Intervention in foreign exchange markets to smooth short-term exchange rate volatility alongside inflation targeting is most likely to be effective in economies with less developed and integrated financial markets. In developed economies, however, the evidence suggests little effect of intervention beyond very short time horizons (e.g. Fatum, 2006). IMF authors (Blanchard et al. (2013, p8)) have recently noted that "the answer to the feasibility question [regarding using foreign exchange market intervention to actively target the exchange rate] is probably no for economies with highly integrated financial markets (and almost certainly no for small, very open, advanced economies–say, New Zealand)."

5 Conclusion

Price stability is the statutory goal for New Zealand’s monetary policy. That reflects the widely-accepted principle that monetary policy’s best contribution to long-run economic growth comes through ensuring low and stable inflation. Experience – and the bulk of the theory – suggests that monetary policy is unable to do much to improve the long-run productive potential of the economy. Potential output is determined by structural factors such as innovation and the supply of labour and capital. Monetary policy, by maintaining medium-term price stability, helps sets the background for these other factors to flourish.

Monetary policy also has an important role to play in handling the shorter-term economic shocks that face every economy. Responding very actively with monetary policy to shocks that boost inflation temporarily can generate unnecessary and costly volatility. But excessively lax policy can allow imbalances to build up and inflation expectations to increase, which is also costly.

The New Zealand monetary policy framework – very similar in its essential features to those of other advanced countries with floating exchange rates – recognises all these imperatives. However, it does not, and cannot, specify a mechanical approach to handling all possible economic circumstances; instead, the complex and difficult trade-offs have to be judged and explained by the Reserve Bank in each particular case.

New Zealand’s PTA-based approach to flexible inflation targeting has evolved with experience. The modification of the inflation target in the 2012 PTA, to require a focus on keeping future average inflation near the 2 percent target midpoint, is intended to help to solidify the midpoint as an anchor for inflation expectations. The explicit inclusion of requirements to have regard to the

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9 See Chetwin and Munro (2013) for a discussion of different emerging and developed economies’ choices regarding exchange rate intervention, independent monetary policy and openness of capital markets.
efficiency and soundness of the financial system and to monitor asset prices emphasises the post-crisis world in which financial developments are given more prominence. These amendments to the PTA continue the evolution of New Zealand’s approach to flexible inflation targeting, while keeping a strong emphasis on the importance of transparency in the conduct of monetary policy.

References


Blanchard, O, G Dell’Ariccia and P Mauro (2013) ‘Rethinking macro policy II: getting granular’, IMF Staff Discussion Note 13/03.


Appendix A

Policy Targets Agreement

This agreement between the Minister of Finance and the Governor of the Reserve Bank of New Zealand (the Bank) is made under section 9 of the Reserve Bank of New Zealand Act 1989 (the Act). The Minister and the Governor agree as follows:

1. Price stability
   a) Under Section 8 of the Act the Reserve Bank is required to conduct monetary policy with the goal of maintaining a stable general level of prices.
   b) The Government's economic objective is to promote a growing, open and competitive economy as the best means of delivering permanently higher incomes and living standards for New Zealanders. Price stability plays an important part in supporting this objective.

2. Policy target
   a) In pursuing the objective of a stable general level of prices, the Bank shall monitor prices, including asset prices, as measured by a range of price indices. The price stability target will be defined in terms of the All Groups Consumers Price Index (CPI), as published by Statistics New Zealand.
   b) For the purpose of this agreement, the policy target shall be to keep future CPI inflation outcomes between 1 per cent and 3 per cent on average over the medium term, with a focus on keeping future average inflation near the 2 per cent target midpoint.

3. Inflation variations around target
   a) For a variety of reasons, the actual annual rate of CPI inflation will vary around the medium-term trend of inflation, which is the focus of the policy target. Amongst these reasons, there is a range of events whose impact would normally be temporary. Such events include, for example, shifts in the aggregate price level as a result of exceptional movements in the prices of commodities traded in world markets, changes in indirect taxes, significant government policy changes that directly affect prices, or a natural disaster affecting a major part of the economy.
   b) When disturbances of the kind described in clause 3(a) arise, the Bank will respond consistent with meeting its medium-term target.
4. Communication, implementation and accountability

a) On occasions when the annual rate of inflation is outside the medium-term target range, or when such occasions are projected, the Bank shall explain in Policy Statements made under section 15 of the Act why such outcomes have occurred, or are projected to occur, and what measures it has taken, or proposes to take, to ensure that inflation outcomes remain consistent with the medium-term target.

b) In pursuing its price stability objective, the Bank shall implement monetary policy in a sustainable, consistent and transparent manner, have regard to the efficiency and soundness of the financial system, and seek to avoid unnecessary instability in output, interest rates and the exchange rate.

c) The Bank shall be fully accountable for its judgements and actions in implementing monetary policy.