Reducing Inflation in New Zealand: Some Practical Issues

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I have been set a large task today, and will necessarily be rather selective in dealing with the questions posed. In particular, I will concentrate on just a few aspects of the topic assigned to me: first, the importance of an overall macro- and micro-policy framework which is supportive of a price stability goal; second, how our inflation target has been made operational; third, the results to date; and, finally, an assessment of the public response to this brave new world of contracted price stability.

The framework for price stability

My starting point is very simple. A sound monetary policy may be the essential ingredient for achieving price stability but, if it has to act on its own in an otherwise hostile environment, it may fail or only succeed at a very high cost. In particular, it is important for there to be widespread political support for the goal of price stability, not just among those who compose the government of the day, but among those who are thought likely to have a reasonable chance of forming future governments. If that support does not exist, then, however well-intentioned and skilled the central bank may be in implementation of monetary policy, that policy will lack credibility as there will be a widespread expectation that the goal will not endure. If expectations of inflation are not reduced to low levels, then inevitably, the realization of price stability will be costly and

difficult to achieve. A framework which makes the objectives of monetary policy transparent to everybody—government, central bank, financial market participants, and members of the public—can be enormously helpful in reducing inflation, and in reducing the transitional costs of getting there.

In an important respect, New Zealand's ability to persist with a rigorous reform program over a period of twelve years sprang from the demonstrable failure of prior policy approaches. I won't dwell on the New Zealand experience prior to 1984, since many of you will have some general familiarity with it. Very broadly, deteriorating economic performance over the period from the 1950s had been met with policy responses that relied heavily on protection, administrative controls, and subsidies. Not surprisingly, the result was slow growth, growing internal and external indebtedness, rising unemployment, and persistent double-digit inflation.

There was popular will for change and a new government was elected in 1984. That government was ready to adopt a fundamentally different view of the role of the public sector, and to embark on a breathtakingly broad program of reforms to put that view to work. Primarily, this involved two strands: the development of a prudent and sustainable set of macroeconomic policies, of which price stability was a key part; and secondly, a comprehensive program of microeconomic or structural reforms, involving removal of barriers to domestic and international competition, the elimination of subsidies and other sectoral incentives, a complete overhaul of the tax system, a reshaping of the public sector to make it operate more efficiently, and a significant reform of functioning of the labor market, aimed at increasing flexibility.

On the macroeconomic policy front stand two "landmark" policy initiatives—the Fiscal Responsibility Act of 1994 and the Reserve Bank of New Zealand Act of 1989. Both adopt a common framework which aims to check the normal incentives of governments to put short-term electoral gains ahead of longer-term public interests. Both rely heavily on mandated transparency and public accountability to achieve that incentive shift. Both require public political

commitment to longer-term objectives, and periodic public accounts of progress toward those longer-term objectives. Together they have been successful in facilitating a significant shift with respect to behavior and outcomes in fiscal and monetary policy.

Both of these major pieces of legislation now command substantial public and political support, although I would have to acknowledge that it is monetary policy and the Reserve Bank Act which remain the more controversial and more "challenged" at this point.

The Reserve Bank Act establishes the framework within which monetary policy is to be conducted. It specifies an objective, defines responsibilities and accountabilities, and mandates transparency of the policymaking process at each stage. Very briefly, the act specifies "stability in the general level of prices" as the sole objective of monetary policy, requires the establishment of a contract or Policy Targets Agreement (PTA) between the Governor and the Minister of Finance to give specificity to that objective (currently defined as the achievement of consumer price index [CPI] inflation between 0 and 2 percent over each 12-month period, after adjusting for specified "caveats" to allow for supply shocks), and provides authority for the Governor to formulate and implement monetary policy to achieve that objective without further reference to the government.

In this way, the objective of monetary policy remains firmly in the hands of the public's elected representatives, but constrained by:

- the need for the PTA to be consistent with some reasonable interpretation of the act's requirement for the single monetary policy objective of "stability in the general level of prices;"
- the requirement that the PTA be made public and tabled in Parliament; and
- the need to find a Governor who is prepared to accept the PTA and commit himself to achieving it.

Under this framework, the formulation of day-to-day monetary policy lies squarely in the hands of the Governor. The performance of the Governor is assessed, and his continued tenure in office is determined, with direct reference to the terms of the PTA. I can assure you that the combination of a public contract, and formal accountability for producing outcomes in accordance with that contract, provides very powerful incentives for the Governor to ensure that monetary policy decisions are, indeed, consistent with the PTA.

Perhaps as important, this same structure provides similarly powerful constraints on politicians who might wish for a little more latitude in the conduct of monetary policy on occasion. Within the terms of the act, the Minister of Finance can direct the Governor to take account of other economic objectives in addition to (or even in substitution for) price stability. However, such instructions must be issued formally and publicly, and will lapse after twelve months unless renewed.

To appreciate the force of these provisions, put yourself in the position of a Minister of Finance who thinks that the tough stance being adopted by the central bank is hurting his re-election prospects. You want the central bank to ease up, but they are simply seeking to achieve the objectives laid down in the publicly agreed policy target, and are being seen by the financial market to be doing just that. Your only route to getting the central bank to ease up is to publicly direct that it drop, for twelve months, the statutory price-stability-only objective and replace it with something else. It is very hard to conceive of anything other than a negative market reaction to the news that price stability had been modified or abandoned. And it is very hard to conceive of a net benefit arising to electoral prospects from the ensuing rise in interest rates and fall in the exchange rate.

Transparency of the objective-setting and policy formulation and implementation process is clearly the key to effective accountability, and is also essential to the willingness of politicians and the public to devolve operational independence to the central bank. In our case,

the transparency mechanism is provided by the PTA and the requirement to publish at six monthly intervals a *Monetary Policy Statement*, which must review the implementation of monetary policy during the preceding period, specify the means by which the bank intends to achieve the objectives of the PTA in future, and state the reasons for adopting those policies and means.

These statements are required to be referred to Parliament. In addition, they may be reviewed (and generally are) by a Select Committee of Parliament, which may (and usually does) call the Governor to give evidence and further explanation in a public hearing.

The accountability process is given further substance by way of the bank's board of directors. The board has no role in the formulation of policy—as noted earlier, that responsibility rests solely with the Governor. Rather, it is the role of the board to scrutinize the performance of the Governor in terms of the requirements of the PTA. Accordingly, the board formally reviews each *Monetary Policy Statement* with respect to its consistency with the PTA. Moreover, where inflation outcomes depart from those specified in the PTA, the board formally reviews the adequacy of the Governor's performance, and reports publicly on its findings to the Minister of Finance. Again, I can assure you, from uncomfortable recent experience, these processes are taken very seriously by all concerned, and the transparency of the process imposes a very high standard of discipline, rigor, and credibility on all participants.

Translating an inflation target into an operational target

In New Zealand, as in most countries, monetary policy has its effects on inflation through three main channels:

- directly through effects on inflationary expectations;
- directly through the exchange rate and its impact on domestic prices; and
- —indirectly through interest rates and the exchange rate,

and the effect which they have on incomes and hence, via demand pressures, on prices.

Most discussion tends to center on the interest rate and exchange rate mechanisms, but we have put a lot of weight on the role of inflationary expectations and, therefore, on policy credibility. We have put a great deal of effort into conditioning public inflationary expectations. It is important that price setters understand and accept that shocks will not result in inflation being allowed to move beyond our target range (or, if it does, that the departure will be temporary). To that end, we try to make our monetary policy "reaction function" as clear as possible.

Policy operates in a forward-looking framework. Each quarter, we make a projection for inflation two to three years ahead, on the basis of some stylized and publicly disclosed assumptions about fiscal policy, interest rates, and the exchange rate. We then spell out what monetary conditions will be required if inflation is to be in the middle of our target range one to two years ahead. We also explore how the reality may depart from our stylized projection, and discuss how monetary policy might respond to such departures. These quarterly inflation forecasts have become by far and away the single most important ingredient in the monetary policy decisionmaking process.

In making our projections, we rely on estimates of the effect that changes in the exchange rate and interest rates have on inflation.

The direct effect from the exchange rate to inflation, via import prices (and those of exportables), tends to be the fastest and most predictable, and in the early years of the disinflation process we tended to give predominant attention to what the exchange rate was doing. Indeed, for some years we gave the impression that adjusting monetary policy to ensure that the trade-weighted measure of the New Zealand dollar moved within our perceived exchange rate "comfort zone" was our only concern.

A change in interest rates also has some early effect on the CPI

since, unlike many other countries, New Zealand has new house prices captured directly in its CPI. However, this direct interest rate effect is relatively small.

The indirect effects of both the exchange rate and interest rates work their way through to the CPI in a more diffuse fashion, but are mostly felt within two years.

The New Zealand dollar is freely floating in that, while we certainly do seek to ensure, by adjusting monetary policy, that the exchange rate evolves in a way consistent with our inflation target, we have not intervened in the foreign exchange markets since the New Zealand dollar was floated in March 1985. Nor does the bank "fix" any particular interest rate. Access to the bank's discount window is priced at a margin over short-term market interest rates, and so varies from day to day. We recognize, of course, that we cannot determine the *mix* of monetary conditions at any point; we cannot shift the balance between the exchange rate channel and the interest rate channel. It is, therefore, necessary to accept a degree of "trading off" of interest rate and exchange rate pressures, while looking for outcomes which are consistent with our inflation target.

In our stylized and transparent world, we have sometimes thought it might be helpful and efficient to have a Monetary Conditions Indicator that combined the exchange rate and interest rate effects into one readily communicated measure. However, despite quite extensive work in that area, we have not yet found a single set of coefficients that adequately captures that tradeoff in a manner which is useful for policy communication purposes.

Between our quarterly publication of either a formal *Monetary Policy Statement* or a set of *Economic Projections*, our internal Monetary Policy Committee meets weekly to review market conditions and new data. That committee also sets the longer-term agenda for research, and reviews the products of our research effort. While those weekly deliberations on current monetary conditions may occasionally lead us to a conclusion that current conditions are inconsistent with the longer-term price stability goal, and thus cause

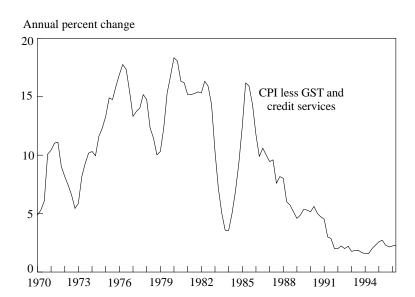
us to take some action, we prefer to base any such responses or shifts in policy stance on the more substantial quarterly projections. Either way, the trigger for action is a judgment that a continuation of current monetary conditions would risk inflation outcomes at or near the edges of our targeted inflation range within the policy relevant period.

One useful consequence of this approach to the operation of monetary policy is that we rarely actually *do* anything other than publish inflation projections, and occasionally comment on the evolution of market conditions relative to those assumed in our projections. So long as market participants understand our policy reaction function, believe that we will act consistently with that reaction function, and accept that we have the capacity to inflict some bottom-line pain when taking action, then their incentives are to anticipate the monetary conditions consistent with our inflation target, and trade accordingly. As a consequence, there have been only three events since early 1991 in which we have felt obliged to take explicit monetary policy actions by varying our key policy instrument.

Action, in our case, generally means an adjustment to the aggregate quantity of "settlement cash" provided to our settlement or "clearing" banks. Adjustments to that quantity alter the risk of banks being forced into discounting to clear their daily settlement obligations or, alternatively, finding themselves holding surplus settlement cash (or reserves) at the end of the day earning sub-market returns. Other possible, but less preferred, forms of action for us include adjustments to the margin-over-market rates applied at the discount window, or adjustments to the volume of "discountable" securities provided to the system.

In essence, our monetary policy implementation structure retains the hallmarks of its quantity-based origins. However, over the years we have tended to de-emphasize the significance of the underlying quantities, and focus a little more on the key prices: interest rates and the exchange rate. One point of philosophy has remained constant through this evolution: we have little, if any, informational advantage over the market. Market participants know what our objectives are, and they know how we think monetary conditions

Chart 1 New Zealand's CPI Inflation, 1970 to 1996



affect inflation. Hence when actual conditions move, that provides us with useful information and a need to reassess our views in the light of that information.

Results to date

As can be seen in Chart 1, the period since the passage of the Reserve Bank Act in 1989 has seen a dramatic improvement in New Zealand's inflation record. We cannot and should not ascribe all of that improvement to the act. Significant progress in the fight against inflation was being made in the years immediately prior to 1989 (the bank had been explicitly instructed to aim for inflation of between 0 and 2 percent at least as early as the beginning of 1988), and we cannot claim that such progress would not have been maintained subsequently without the act. Other countries with poor inflation performances through the 1970s and 1980s have also made the

transition to low single-digit inflation without resorting to such dramatic changes in institutional structures as occurred in New Zealand.

I must rely largely on assertion here, but I have little doubt that New Zealand's progress toward long-term price stability has been significantly aided by the passage of the Reserve Bank Act. And I make that assertion for three reasons.

First, the act and the PTA have been instrumental in achieving a clear downward shift in inflationary expectations, and in anchoring those expectations at low single-digit levels. Given New Zealand's inflation and monetary policy history, one might well have expected serious problems in getting price-setting behavior to adapt to a low inflation environment. And though it is by no means the case that general inflation expectations have yet conformed to the 0 to 2 percent target in the PTA, the extent of the adaptation has been considerable. New Zealand's most recent economic cycle has been of large amplitude, with unemployment falling from 11 percent to 6 percent in less than four years. Yet inflation as defined in the PTA (exclusive of certain policy-driven changes in government charges) is expected to peak at no more than 2.6 percent (in the year to September 1996). By our historical standards, this is remarkable, and almost certainly says something about the expectations and behavior of price and wage setters.

Second, the act, and its transparency and accountability provisions, have had a discernable impact on the way the Reserve Bank approaches policy formulation. Given the pressures which even central bankers are always under, the clear and public statement of the acceptable limit to inflation provides a crucial discipline. I have no doubt that hard decisions have been taken earlier and presented more forcefully than would have occurred under our previous charter.

Third, those same transparency provisions have had a discernable impact on the way politicians think about, and comment upon, the objectives and conduct of monetary policy. In particular, politicians apparently perceive a need to ensure that any comments on the

stance of monetary policy are firmly grounded within a credible view of the future path of inflation, and none sees electoral advantage in advocating a tolerance of more than low single-digit inflation. The upper limits of that inflation tolerance may vary between 2 percent and something closer to, perhaps, 3.5 percent, but that is clearly a substantial shift from the sort of levels regarded as acceptable prior to 1989.

One striking change in the way the Reserve Bank of New Zealand goes about its task under the new charter is found in the emphasis we now place on public education and advocacy. In our strategic planning, the communications function has assumed an increasingly important role as we have come to recognize that building a broad public constituency for price stability is the single most important challenge the bank faced. To that end, we have devoted considerable, and increasing, resources to public information programs. Such programs take the form of pamphlets and other publications, a very active speaking program (I believe we are currently undertaking upward of 200 speaking commitments annually, throughout the country), production of resource material on inflation and monetary policy for schools, background briefings for each of the major media, and sponsoring a Visiting Professorial Fellowship in monetary economics (appointments thus far have been Bennett McCallum, Ralph Bryant, and, currently, Larry Ball). We proactively target and seek out particular audiences where we discern there to be concerns about the objectives and impact of monetary policy. To date, judging by the indications we receive from a variety of opinion surveys, the communications programs have been beneficial in both lowering inflationary expectations and building a stronger public acceptance of the merits of our price stability target.

Incidentally, the framework established by the act and PTA has produced one other interesting by-product, and that relates to an apparent reduction in exchange rate volatility. We have a floating exchange rate, as mentioned, but we do adjust monetary policy to ensure that the exchange rate stays within bounds consistent with inflation staying inside the inflation target range, and the market has a very clear understanding of this fact. That might be thought of as

an exchange rate intermediate target, but using that description can easily mislead: our exchange rate "target" or "comfort zone" is heavily conditional on what is happening to inflation pressures. The net result of approaching monetary policy implementation in this way seems to have been an exchange rate which is relatively stable, in a month-to-month variability sense, but relatively flexible. So far, at least, we have avoided the "excessive" high-frequency variability of entirely unconstrained floating exchange rates and also avoided the problems of unduly rigid targeted exchange rates.

For all the effort and improved structures in New Zealand, staying within our 0 to 2 percent CPI target range has not proved to be a straightforward task. Indeed, while we stayed within the target range consistently from 1991 until June 1995, the outcomes were always in the top half of the target range. Moreover, since June 1995, we have been either just at the upper 2 percent level, or slightly above. As noted, we expect our targeted inflation measure to peak at 2.6 percent for the year to September 1996 before again falling under 2 percent in the first half of 1997.

So how come I still have my job? On two occasions over the past year, the nonexecutive members of my board have conducted a formal review of the adequacy of my performance. On both occasions, the review was sparked by our own projections that inflation would exceed the target range. Those reviews have covered the reasons for the projected inflation excesses, the monetary policy stance being adopted over the year or so prior (that is, during the period when a tighter policy might have been able to avert inflation outcomes above the target range), the rationale underlying the policy stance at that time, the quality of our policymaking processes (including the quality of our inflation forecasting methodologies), and the future outlook for inflation (that is, is there a reasonable expectation that inflation will move back into the target range promptly?).

To my considerable relief, on each occasion, the nonexecutive directors have found in my favor. I have no doubt that the fact that we have been running a demonstrably "tight" monetary policy since 1994, and have been consistently more pessimistic than most other

forecasters about the course of future inflation, were important elements in that judgment. Also key was the specification of the PTA which requires me to operate monetary policy "with the intention" of being within the target inflation range: outcomes beyond the target range are not, of themselves, grounds for automatic dismissal.

But I hasten to add that this performance review process is not one that any of the participants takes lightly. In no sense can the nonexecutive directors' review be regarded as "hollow" or essentially "presentational." Moreover, while my nonexecutive directors have found my performance to be consistent with the intentions of the PTA, and the Minister of Finance has been prepared to accept their judgment on that issue, both the minister and the nonexecutive directors have gone on record as indicating that their judgments are conditional on future inflation outcomes being brought back within the target range within a reasonably short period. Note also that the nonexecutive directors' reports to the Minister of Finance, and his responses, are public documents. In this process, as in others associated with the operation of the Reserve Bank Act, transparency acts as a very powerful discipline on all concerned.

Public response to the "new" brand of monetary policy

This is an excellent time at which to make an assessment of the public's response to our new approach to monetary policy. I say that for several reasons.

First, New Zealand has now had more than four years of uninterrupted growth. That makes it one of the longest periods of uninterrupted economic growth in New Zealand since the early 1960s. Moreover, this growth phase has also included some of the most vigorous growth that New Zealand has experienced in recent times. Strong growth, and more particularly growth above the economy's long-term potential output capability, brings monetary policy challenges and the risk of public resentment as monetary policy moves to restrain demand.

Second, New Zealand's monetary policy has been unambiguously

(some would say, aggressively) tight for the past couple of years as we have grappled with this strong growth phase. The interest rates on 90-day bank bills rose from around 4.5 percent in January 1994 to over 9 percent in December of that year, and have remained within a range of 8.2 and 10.3 percent ever since. In late November 1994, yields on 90-day bills moved sharply above yields on 10-year bonds, and have remained there since. The trade-weighted measure of the exchange rate has increased by 15 percent since January 1994 (and by 23 percent since the trough in January 1993), while the New Zealand dollar has moved up even more sharply against the U.S. dollar over the same period.

Third, we are just over one month out from an election—the first to be held under a new German-style proportional representation system. Elections tend to bring any public criticisms to the fore, and maximize the likelihood of public criticism of a firmly anti-inflationary monetary policy. Inevitably, those who perceive themselves to be hurt by policy are more outspoken than those who are benefiting, or who can see benefits coming.

Given that environment, is there public criticism of the Reserve Bank Act, and the single-minded pursuit of price stability? Of course—some of it vocal and emanating from people of significant influence.

What is very gratifying, however, is how strong support for the act and its objectives remains. Market research commissioned by the bank recently suggested that 63 percent of the public were aware that delivering low inflation was the bank's key objective, and 73 percent were in favor of that objective. Other market research, not commissioned by the bank, has suggested that 42 percent of New Zealanders think that the Reserve Bank Act itself has been good for New Zealand, while only 17 percent think it has been detrimental.¹

Within the political sphere, there are four major parties and three minor ones with some prospect of representation in the new Parliament. Of these, two of the major parties and all three of the minor parties favor retention of the Reserve Bank Act in essentially its present form. The other two major parties, holding combined support in recent opinion polls of about 32 percent, both favor widening the objectives of monetary policy to include economic growth and employment. All but one of the seven parties have also specified, in numerical terms, what their inflation target would be if they became government: most favor retention of the current 0 to 2 percent target, one favors widening the range to -1 to +3 percent (retaining a mid-point of 1 percent), while one favors targeting inflation below 3.5 percent, on the basis that that is the (unweighted) inflation rate in our ten largest export markets. The point which I think is relevant here is that none of our significant political parties is suggesting that price stability is unimportant, and none has found electoral advantage in advocating a wholesale shift away from price stability, in some fairly constrained definition, as the primary objective of monetary policy. This, in itself, reflects, and represents, a substantial transformation of the political landscape in New Zealand over the past decade or so.

Within the business and farming community there are groups who are currently under quite intense financial pressure—from weak commodity prices, increased competition as protective barriers have fallen, and the impact of rising interest rates and rising exchange rates. Certainly, some within those groups question whether we have our policy settings right, and ask whether we can find other, nonmonetary, means to assist in the restraint of inflation. However, almost unanimously, those same people are very quick to reject any thought of a return to the days of high and variable inflation.

Summary and conclusions

I am in no doubt that our structure of inflation targeting has yielded New Zealand significant advantages as we tackled a long history of high inflation. Equally, I am in no doubt that the comprehensive nature of reform in New Zealand has been a significant aspect of the country's ability to turn from being a chronic underperformer, to a country which looks to have put itself on a long-term, sustainable, low-inflation growth track. Monetary policy could not do that in isolation.

The institutional structure has been important in the reform of monetary policy. In particular, it has been important to find mechanisms by which the natural incentives on politicians, and central bankers, to opt for the soft decisions could be countered by incentives to confront emerging inflationary pressures. Achieving that in a way that still recognizes the centrality of the democratic political process is no simple feat. After almost seven years' experience with our structure, and having gone through a couple of political cycles, and the tests of both recession and a sustained growth cycle, I think we can safely say that the New Zealand structure is proving constructively and positively robust to all of those pressures.

Fundamental to every aspect of that outcome has been transparency: transparency in the establishment of the inflation target, transparency in the formulation and implementation of monetary policy, transparency in regard to accountability for the outcome. The fact that financial markets very largely implement policy for us is demonstrative of the power of that transparency.

Endnote

¹New Zealand Insight, Vol. 5 (4), April 1996, UMR Insight Limited.