Monetary policy implementation: changes to operating procedures

The following reproduces the document released to the financial markets on 8 February 1999, in which the Bank announced its intention to adopt an official cash rate as its primary instrument for implementing monetary policy.

Over the last six months or so, the Reserve Bank has been reviewing the techniques used to implement monetary policy. As a result of that review, we have concluded that its monetary policy implementation procedures can be improved, and hence today's announcement. This note sets out a series of modifications to the operating arrangements, which will come into effect on 17 March 1999.

The review has been of a technical nature. Neither the inflation target itself, nor the weights placed on the various economic and financial indicators we use in deciding on the required policy stance, have been on the table. The review has been about how we implement the intended policy in the simplest, clearest, and most effective way possible.

The New Arrangements

Overview

The core of the new operating system will be an announced overnight interest rate target - the Official Cash Rate - the rate around which the Reserve Bank will borrow and "lend".[1] By directly managing the market cash rate, we will be able to influence the level of other short-term interest rates and, hence, monetary conditions more generally.

The first Official Cash Rate will be announced on 17 March in the March *Monetary Policy Statement*. Thereafter, the Official Cash Rate will be formally reviewed eight times a year. Reviews will take place at the time of each *Monetary Policy Statement*, and approximately halfway between each *Statement*.

The Official Cash Rate will replace various elements of the current system. The daily settlement cash target, as the formal lever to influence conditions, will disappear, and with it will go some of the supporting apparatus such as the float tender, and Reserve Bank bills with their special penal discounting arrangements. The weekly Wednesday morning "window" for commenting on conditions will be discontinued. The Monetary Conditions Index (MCI) will continue to play a useful role as a summary indicator of monetary conditions, and as a way of helping to tell the story about the future outlook for monetary policy. But in our *Monetary Policy Statements*, policy settings will be stated in terms of the Official Cash Rate rather than in terms of a desired level of the MCI, consolidating a change of emphasis that has been underway since the middle of last year.

The changes will alter quite substantially, and will materially simplify, the mechanics of the Reserve Bank's interactions with the financial markets. The new arrangements are similar to those used in other developed economies.

Rationale

There are three broad elements to monetary policy. The first – and of by far the greatest significance – involves assessing the strength of inflation pressures relative to the target, and determining whether, and to what extent, monetary policy should respond. Nothing in this area is changed by today's announcements: fluctuations in the economy and in inflation pressures will continue, and with them substantial cyclical fluctuations in interest and exchange rates.

The second element involves signalling to markets the direction in which the central bank's policy thinking is running. And the third involves adjusting the "levers" to ensure that financial prices are consistent with the intended stance of policy.

Over the years, the formal levers of monetary policy have been adjusted only rarely – the settlement cash target was last changed in August 1995. And for a number of years

[1] More details are contained later in this document. Funds will, in fact, be provided to the market by way of securities repurchase agreements. These transactions are very similar, in economic effect, to secured loans, hence the shorthand usage, but are not in fact loans and take a form that is designed to strengthen the legal position, in the event of a default, of the party providing the funds.

there has been some dissatisfaction with elements of the New Zealand signalling and implementation system. At the heart of that difficulty was the central role played by the settlement cash target. The link between the settlement cash target and key financial prices was unreliable: no one knew with any confidence what impact a change in the target would have. And any particular settlement cash target was consistent with a very wide range of monetary conditions over the course of the economic cycle. So, paradoxically, the key formal monetary policy instrument, the cash target, actually played very little role either in signalling our policy intentions or in managing monetary conditions. Instead, we had to put considerably greater weight on other techniques - in particular, statements of one sort or another. That gave monetary policy implementation a considerably higher profile than was necessary.

By late 1996 we had determined that changes were needed, and in particular recognised the need for a better way of communicating our policy intentions, and for assuring markets that both interest and exchange rates mattered in setting monetary policy. In a consultative process undertaken in early 1997, we explored the possibility of introducing a cash-rate-based system, although that proposed scheme differed in several material respects from what is being announced now. After extensive consultations with commentators and market participants, we decided not to proceed to a cash rate system at that stage.

However, changes were made. Expressing our short-term policy intentions in terms of a desired level of the MCI provided a quantitative guide as to what financial prices we believed were consistent with the intended stance of policy (in both interest rate and exchange rate terms), something that had been missing previously. In the attempt to be even clearer about what was intended, initially we stated indicative bands around the desired level of the MCI. However, we discovered that the use of tight indicative bands increased the day-to-day and week-to-week volatility of interest rates, and did not allow sufficiently for the range and scale of events that impact on the New Zealand economy. Comments on conditions were still required, or threatened, sometimes on an uncomfortably frequent basis. Although the volatility was unnecessary and uncomfortable, we do not believe that it had any lasting or material macroeconomic impact.

We progressively moved away from enunciating intra-quarter bands around the stated desired level of the MCI, allowing greater intra-quarter flexibility in monetary conditions. However, the trade-off has been some reduction in the meaningfulness of any particular stated level of the MCI. In the meantime, the internationally-unusual, and unnecessarily complex, operating system remained in place.

The changes outlined in this document will consolidate the change in emphasis evident since the second half of 1998 and build on the thinking underway since late 1996. The changes will simplify our operations. They will give us a clear and effective mechanism for signalling, and provide us effective and reliable leverage when we need it (by directly managing a financial price that has a reasonably well-understood linkage to other interest rates and monetary conditions). But, at the same time, they will take day-to-day implementation issues off the front pages. When market participants ponder whether and how the Reserve Bank might act, they will be able to focus exclusively on the medium-term outlook for inflation and the appropriate policy response to it, which will be expressed clearly in terms of the level of the Official Cash Rate.

How will all this affect financial markets?

Shifting to a cash-rate-based implementation system is likely to lead to some changes in the way financial markets behave in the periods between reviews. The change is largely about tidying up the implementation arrangements, making them simpler, cheaper, and less obtrusive. However, we also expect some further reduction in the short-term volatility in 90-day rates (which has remained quite high by international standards), and a rather closer relationship between market cash and 90-day rates than has been evident in recent years.

The new operating system will anchor the cash rate, but 90-day rates will still be free to fluctuate. Typically, those fluctuations will occur in response to data that lead the market to reassess the chances of a change in the Official Cash Rate at the next review. Those data will be the fundamental economic information and movements in other financial prices (including the exchange rate) that affect our assessment of the medium-term inflation outlook. Because of the reduced volatility of short-term interest rates, the Reserve Bank will be able to read accurately market expectations about changes in the Official Cash Rate, and factor those expectations into our decision-making. The gap between market expectations and actual changes in the Official Cash Rate will largely determine how monetary conditions react to decisions to adjust, or leave unchanged, the Official Cash Rate.

Managing the overnight interest rate (through the Official Cash Rate) as the policy lever does not change the importance of the exchange rate to monetary policy. In an open economy such as New Zealand's, exchange rate changes will always be an important influence on the outlook for demand, activity and, therefore, inflation. It is important to appreciate the distinction between the **instrument** we use to implement policy – in future the Official Cash Rate - and the **indicators** we use in deciding what the Official Cash Rate should be – of which the exchange rate will be an important one. Changes in the Official Cash Rate can be expected to affect the exchange rate, but there will be no tight or invariant relationship – and no such relationship is being sought.

Among the indicators, the MCI will continue to play an important role, along the lines of what was originally envisaged. The MCI is a useful summary **indicator** of the behaviour of monetary conditions. It is, however, only one broad indicator – it is a useful way to talk about movements in overall conditions, but not in isolation from what else is going on in other financial markets prices.

As noted earlier, we will no longer express our policy intentions for the next quarter in the form of a desired level for the MCI. However, the indicative conditional forward path for monetary policy, contained in the projections included with our *Monetary Policy Statements*, will continue to be expressed in MCI terms.

There is a wide range of plausible schemes for implementing monetary policy, each of which would deliver reasonably similar medium-term outcomes. The choice between them is essentially a technical matter. The changes made here will, to some extent, change the way financial markets behave in the short-term. They will also make the operating arrangements simpler and more comprehensible. But these are not the big issues facing monetary policy-makers - or markets. Shifting to an Official Cash Rate, and adopting the best possible implementation and signalling systems, does not materially alter the nature of the judgements we have to make about the state of the cycle and the outlook for inflation a couple of years ahead. Nor would using such a system over the last few years have materially altered the nature of the last cycle, or the response of monetary policy to it.

Operational Details

Announcement and Review

The Official Cash Rate will be reviewed at approximately six-weekly intervals. Six-weekly review is broadly in line with the practice in other central banks, where key policy-making bodies typically meet either monthly (eg Australia, the United Kingdom) or six-weekly (the United States).

Full economic and inflation projections will continue to be done each quarter. These will, as at present, be published in our *Monetary Policy Statements*. In each *Monetary Policy Statement*, both the Official Cash Rate for the coming period and the date of the next review will be announced – that review will be approximately halfway to the next *Monetary Policy Statement*. Any change at one of the intra-quarter reviews will be announced in an explanatory statement, which will be released at 9am on a Wednesday.[2] At this stage, we envisage that the quarterly reviews, with the transparency and discipline that the formal projections process helps provide, will be the main opportunity for substantial changes in the stance of policy. However, the intra-quarter review will allow us to react to major surprises in the data that have come out since the previous published projections. It will also, for example, give us the ability to adjust the Official Cash Rate gradually if we are uncertain about the strength of emerging trends, the durability of recent exchange rate changes, or the like.

Adjustments to the Official Cash Rate will be made in multiples of 25 basis points.

[2] A very brief statement will also be released if there is no change.

The Reserve Bank will, of course, reserve the right to make unscheduled adjustments to the Official Cash Rate, but this facility would be used only in clearly exceptional circumstances.

Implementing the Official Cash Rate

The announced Official Cash Rate will be implemented in the markets using a "channel" type of system, in which we will borrow and "lend" overnight on demand at fixed rates around the Official Cash Rate.

The Reserve Bank will not be actively operating in the market to keep the market interbank cash rate precisely at the Official Cash Rate. However, the operating procedures outlined below will limit the extent to which the market cash rate deviates from the Official Cash Rate. The market cash rate itself can be expected to be very stable between reviews – as it is in countries with similar systems, such as Australia and Canada.

The Reserve Bank will pay an interest rate 25 basis points below the Official Cash Rate on overnight balances in the exchange settlement accounts held at the Reserve Bank. As there will, in future, be no limit on the size of balances on which interest will be paid,[3] this deposit rate will normally act as a floor to the market overnight cash rate.

Similarly, the Bank will be willing to enter into overnight repos - in effect, secured loans - on demand, with those parties who have entered a Master Repurchase Agreement with the Reserve Bank. The effective interest rate on these transactions will be 25 basis points above the Official Cash Rate. Because cash will be available, on demand, at this overnight repo rate, it should limit any upward pressure on the market cash rate.

In these operations, the Reserve Bank will be borrowing and "lending" overnight only. This is sufficient to give us the required leverage over broader monetary conditions, but will keep to a minimum the portion of the interest rate yield curve directly managed by the Reserve Bank. It leaves the rest of the yield curve free to respond to information that affects market expectations of future changes in the Official Cash Rate; in effect, to anticipate the Reserve Bank.

Acceptable securities for these repos will be the same as those for our existing inter-day repos; that is, government securities and, until they all mature, Reserve Bank bills. All transactions will be for round multiples of $1 million.

The overnight repo facility will be open each banking day as follows:

- for settlement account holders, from 9am until midday, from 1pm until 4pm, and then from 7:30am to 8am the following day,
- for other counterparties, from 9am until midday, and from 1pm to 2:30pm.

All transactions will be settled on the same banking day as they are entered into.

Daily Liquidity Management Operations

The Reserve Bank's daily open market operations (OMOs) will continue as at present. Under the cash-rate-based system, the volume of settlement cash will be largely determined by settlement account holders themselves. The level of settlement cash will no longer be a policy lever (although it may at times be a useful indicator). At this stage, it is not clear how much the demand for settlement cash will increase once a near-market rate is being paid. The Bank's operations will be structured to meet the market's demand for settlement cash as efficiently as possible.To avoid introducing an undue degree of discretion, the size of our daily open market operations will normally be determined by aiming to leave a pre-determined level of settlement cash in accounts at the end of the day (before any use of the overnight repo facility). That level will have no policy significance, and might be altered quite often as required (in light of changing demand). The level would simply be noted on our pages on the electronic news services.We will start out cautiously, assuming only a modest increase in demand and, hence, aiming to leave a relatively low level of settlement cash balances. However, if there is a high demand for settlement cash, it is

3 At present, interest is paid on only the first $20 million in each settlement account.

more efficient - and cheaper for the parties we deal with - to provide that cash by longer-term repos in the OMOs, rather than through the overnight facility.If the demand for settlement cash balances does increase markedly, there might in future be less need for active day-to-day liquidity smoothing operations. However, the new arrangements will have to be well-established before we consider any other material changes to OMO policy.

Autorepos

To help facilitate real-time gross settlement (RTGS), the Reserve Bank enters into automated intra-day repo agreements (autorepos) with settlement account holders. To keep a very clear separation between intra-day and inter-day liquidity (the latter being the focus of monetary policy), very heavy penalty rates have been levied when autorepos are not repaid by the end of the banking day, and are "rolled over" to the next day.

Shifting from controlling inter-day settlement cash balances as the policy lever, to managing the cash rate, means there is much less need to retain a tight distinction between intra-day and inter-day liquidity. Once this scheme is implemented, the penalty rate for rolling over autorepos will be substantially reduced, to a margin of just 100 basis points above the Official Cash Rate.As was foreshadowed when RTGS was introduced, after a year of live operations the Reserve Bank is reviewing the arrangements for the provision of intra-day liquidity. We expect to be in a position to indicate the preliminary results of that review by the end of March.

Release of Data

The changed operating system will involve some changes to the information provided to markets through the Reserve Bank's pages on the electronic news services. At the time the daily OMO is announced, we will also put information on screen showing total overnight repos outstanding and total autorepos rolled over. We would welcome feedback from interested parties as to whether there will still be a useful role for the settlement cash estimate currently published at around 7:15 am each day.

Transitional Arrangements

Effective immediately, no further Reserve Bank bills will be issued. Although the new system does not come into effect until 17 March, Reserve Bank bills have had a 63-day term. Even in the days immediately prior to 17 March there will still be very nearly the normal level of discountable bills outstanding.

For the time being, the liquidity hitherto absorbed by sales of Reserve Bank bills will be managed by adjustments to the regular OMOs (more seasonal Treasury bills or fewer repos). As noted in a separate statement from The Treasury's Debt Management Office, the longer-term implications for Crown financing will be dealt with when the 1999/2000 debt programme is drawn up at the time of this year's Budget.

The ability to sell short-dated Reserve Bank bills back to the Bank is one of the terms of the prospectus under which the bills were issued. Reserve Bank bills will remain discountable, on current terms (90 basis points above market rates) until 9am on 17 March. Once the new arrangements are in place, the remaining Reserve Bank bills will be discountable at a penalty of 90 basis points above the Official Cash Rate. In the unlikely event that any further bills are discounted after that, they would not be offered back to the market through the OMO.

All other changes will come into effect from the start of the banking day 17 March. The first Official Cash Rate will be announced with the release of the March *Monetary Policy Statement* at 9am on 17 March.

Consequential revisions to the Reserve Bank's *Operating Rules and Guidelines* will be released to all affected parties around the end of February.

General

A number of judgements and assumptions about market behaviour and responses have guided the choices made in setting the detailed parameters of the system (most notably in determining the width of the band between the overnight deposit and repo rates). The Bank will be monitoring closely the way the system works in practice, assessing, among other things, the validity of these assumptions.