

The Reserve Bank of New Zealand's new foreign exchange intervention policy

Kelly Eckhold and Chris Hunt

1. Introduction and background

Last year the Reserve Bank concluded a review of its foreign exchange intervention policy. In March 2004, the Government approved a Reserve Bank proposal that gives the Bank the financial capacity to use foreign exchange intervention in order to influence the level of the exchange rate. This new approach allows for intervention at the extremes of the exchange rate cycle, directed at leaning against trends in the exchange rate which the Bank assesses to be unjustified by economic fundamentals.

The new policy is in addition to the Bank's usual foreign exchange (FX) intervention objectives. Since the exchange rate was floated in 1985, the Reserve Bank's policy has been to use intervention only in times of "extreme market disorder". The focus of existing policy is on preserving the functioning of the foreign exchange market in a crisis, rather than preserving any given level of the exchange rate *per se*.¹ This crisis management policy is for those very rare occasions when the foreign exchange market itself breaks down, transactions are unable to be completed, and where as a result the stability of the wider financial and economic system is threatened. Thankfully, in the 20 years since the New Zealand dollar was floated the Reserve Bank has not needed to intervene to forestall such a crisis.

The new policy provides the Bank with another monetary policy tool - in addition to the Official Cash Rate (OCR). The Policy Targets Agreement (PTA) between the Governor and the Minister of Finance requires the Bank to maintain price stability whilst avoiding unnecessary volatility in output, interest rates, and the exchange rate. This new tool is designed to help trim those peaks and troughs of the exchange rate cycle that make the task of achieving price stability while minimising unnecessary volatility difficult. Usually the Bank will use the OCR to implement monetary policy, but sometimes (probably rarely) intervention may assist the Bank to achieve its PTA obligations.

The Bank will implement its new intervention policy independently of the Government, in the same way it sets the OCR. Intervention will only be used at times when it is most likely to be effective and when intervention is consistent with the PTA. The Bank has developed criteria to help judge when it is most appropriate to use intervention. These criteria have been publicly disclosed and agreed with the Minister of Finance, consistent with the Bank's generally transparent approach to the formulation of monetary policy. If intervention occurs, it will be transparently communicated to the public after the fact, allowing stakeholders to hold the Bank accountable for its actions.

Underpinning the new intervention policy are adequate financial resources which ensure the Bank's ability to implement its strategy independently of the Government, while maintaining its credibility with markets and the public.

This paper lays out the framework for the new policy. Section 2 summarises the broad objectives and strategy of the new policy. This is followed in section 3 by a discussion on the criteria the Bank will use to assess the merits of intervention in any given circumstance. In section 4 the implications of the new policy for the Reserve Bank's balance sheet are highlighted. The final section describes how intervention will be implemented, and how the intervention policy will be communicated to markets, the public and the Government.

¹ As part of its ongoing legal commitment to advise the Minister of Finance on exchange rate matters, the Reserve Bank is also increasing the level of reserves it holds for crisis management or "insurance" purposes. For a discussion of the Bank's foreign exchange market crisis management policy, see Gordon (2005).

2. Intervention objectives and strategy

What is FX intervention?

In our terminology, foreign exchange intervention is the purchase or sale by the Reserve Bank of New Zealand dollars in exchange for foreign currencies in the foreign exchange market, with the objective of influencing the level of the exchange rate. This is distinct from merely transacting in the FX market to manage normal foreign exchange requirements as such transactions are done with the aim of minimising any impact on the exchange rate.²

Objectives of the new policy

The new intervention policy is aimed specifically at trimming the peaks and troughs of medium-term fluctuations in the New Zealand dollar (NZD) exchange rate, where there is a misalignment between the exchange rate and the value associated with its “fundamental” macroeconomic determinants.

In terms of macroeconomic fundamentals, the value of the exchange rate over the medium to long run is determined by, among other things, relative inflation and interest rate differentials, the stage in the business cycle in relation to its trading partners, movements in the terms of trade, and productivity differentials.³ These relationships mean that the exchange rate can act as a significant buffer for the economy. When the New Zealand economy is weak, for example, profitability and asset returns tend to be low, reducing demand for New Zealand dollar denominated assets. This, in turn, is likely to lead to a depreciation of the exchange rate, helping to promote a return to stronger activity, while encouraging the efficient allocation of productive resources.

But there may be times when exchange rate fluctuations do not fully reflect fundamentals. Examples might include instances where the short-run value of the exchange rate over- or under-shoots its fundamentally-determined or “fair” value because of non-fundamental factors such as the trend-following behaviour implied by some technical trading rules followed by foreign exchange dealers, or other short-term speculative behaviour.

Non-fundamental drivers may at times push the exchange rate to extreme levels, putting undue pressure on some parts of the economy, such as the export sector, and leading to an inefficient allocation of resources. Firms adversely affected may refrain from investing or expanding their operations in such a climate, some may go out of business altogether, while others beneficially-affected might be induced to make ultimately unsound investments.⁴

Instances where there is a significant misalignment between the exchange rate and its fundamental value are probably few and far between. Further, it can be hard to identify exchange rate misalignments. Consequently, it is likely that we will intervene relatively rarely to influence the level of the exchange rate.

Basic strategy

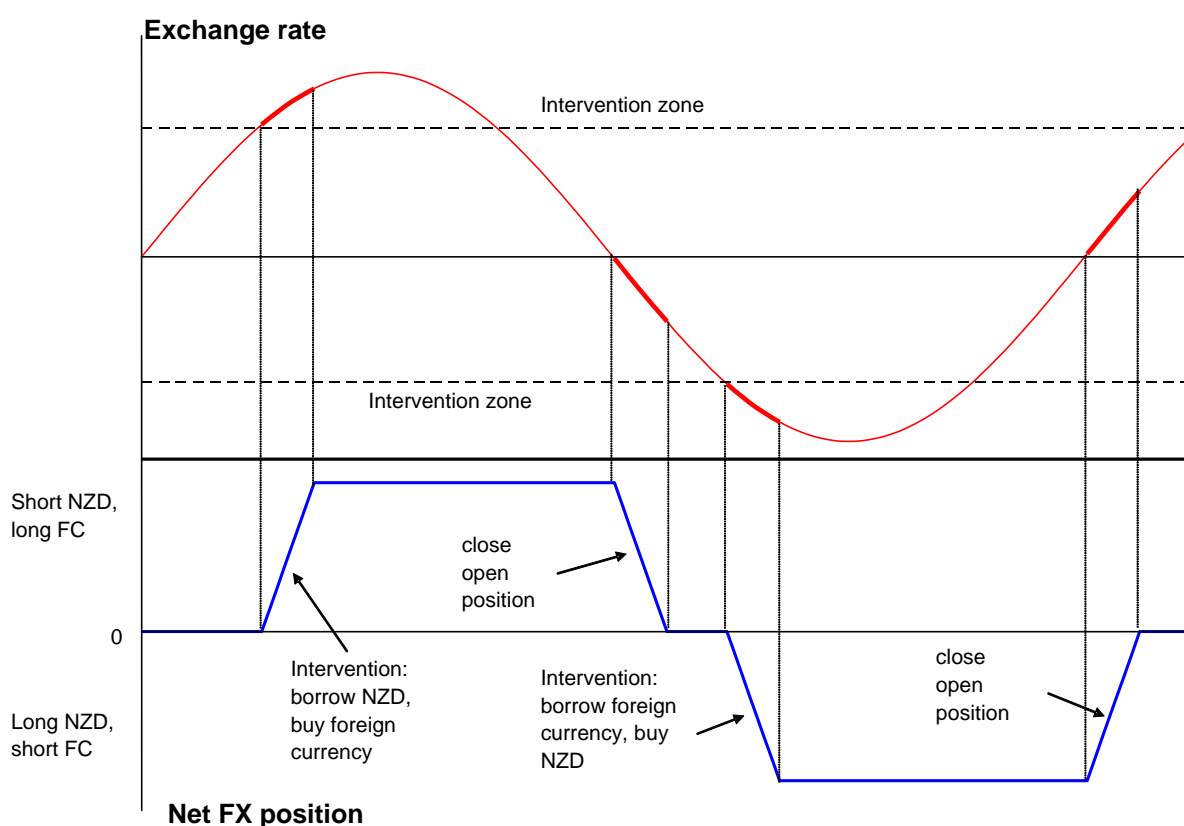
Figure 1 presents a stylised picture of the basic strategy. When the New Zealand dollar is too high (in terms of the benchmark criteria explained in section 3), the Reserve Bank will sell New Zealand dollars and buy foreign currency in the foreign exchange market. Conversely, when the currency is too low, the Reserve Bank will buy New Zealand dollars and sell foreign exchange.

² Some examples of standard FX transactions include those associated with the payment of bills denominated in foreign currencies or transactions to help manage the Bank’s exposure to exchange rate risk.

³ For a discussion of some of these factors, see Munro (2004).

⁴ Such developments raise the possibility of “hysteresis” effects, whereby the growth of firms during low exchange periods is not sufficient to offset declining numbers in high periods. In turn, the overall result could be slower growth of the export or tradables sector than might otherwise be the case.

Figure 1
Illustrative intervention scenario



Intervention near the peaks of the exchange rate cycle will leave the Bank with an open (unhedged) net “long” foreign currency position, while intervention at troughs will result in an open net “short” foreign currency position.⁵ Open foreign currency positions will be closed when the exchange rate nears the middle of the normal cyclical range - that is, when the exchange rate is near its long term equilibrium value. For example, if the Bank had a net long foreign currency position, it would look to buy back New Zealand dollars at that point.

How intervention works

Intervention is thought to work best in situations where it provides a signal to markets about future monetary policy settings or the level of the equilibrium exchange rate. The signal might relate to information the central bank has but market participants do not. The act of intervention may convey a message about monetary policy settings or the exchange rate that gives market participants greater confidence to trade in ways that will encourage the exchange rate to revert towards more justified levels.⁶

⁵ The Reserve Bank’s neutral net foreign exchange position is zero, whereby foreign currency reserve assets held for “insurance” purposes are fully hedged by foreign currency liabilities. Consequently, intervention would involve a net “long” or “short” foreign currency position being established.

⁶ For a discussion of the relevant literature see Sarno and Taylor (2001).

Another reason why intervention might have an impact on the exchange rate in some cases is the idea that exchange rates are partly determined by the underlying structure of the financial markets.⁷ For example, simple technical trading rules that try to take advantage of the continuation of short term trends in financial prices are used widely in the markets.⁸ If exchange rates are at times partially determined by trend-following behaviour not related to macroeconomic fundamentals, then it is possible intervention could have an impact on exchange rates if intervention disrupts the signals that trend followers look for. A relatively modest transaction by the central bank at the right time may be sufficient to slow or even prevent further movements of the exchange rate away from equilibrium. It might also be the case that intervention could encourage short term traders to jump in behind the Bank, reinforcing the efficacy of the initial intervention.

However, all of these mechanisms are subtle drivers of markets. We do not expect that intervention will be effective enough to offset the impact of macroeconomic fundamentals. This view is consistent with the experience of other central banks who have tried to intervene against fundamental trends and have been unsuccessful.

3. Criteria for assessing the appropriateness of intervention

The previous section briefly discussed how the new intervention policy would work, with the goal of trimming the peaks and troughs of extreme medium term movements in the exchange rate.

To successfully implement foreign exchange intervention the Bank has developed a framework and criteria to guide decision making on when to intervene. This will help to ensure that the Bank implements intervention in line with its stated objectives, and that any financial and reputational risks of intervention are managed in a prudent fashion.

Specifically, before intervening the Bank will need to be satisfied that all of the following criteria are met:

- the exchange rate must be exceptionally high or low;
- the exchange rate must be unjustified by economic fundamentals;
- intervention must be consistent with the PTA; and
- conditions in markets must be opportune, allowing intervention a reasonable chance of success.

When is the exchange rate exceptionally high or low?

Since the float of the New Zealand dollar in 1985, the nominal trade weighted index (TWI) has fluctuated in a wide range around a fairly stable long-run average (see Figure 2).⁹

Assessing when the exchange rate is exceptionally high or low is largely a statistical exercise. The current level of the exchange rate would be compared with historical deviations from its long-run average, to identify situations when the deviations are unusually large. This criterion probably involves the least amount of judgement in comparison to the others.

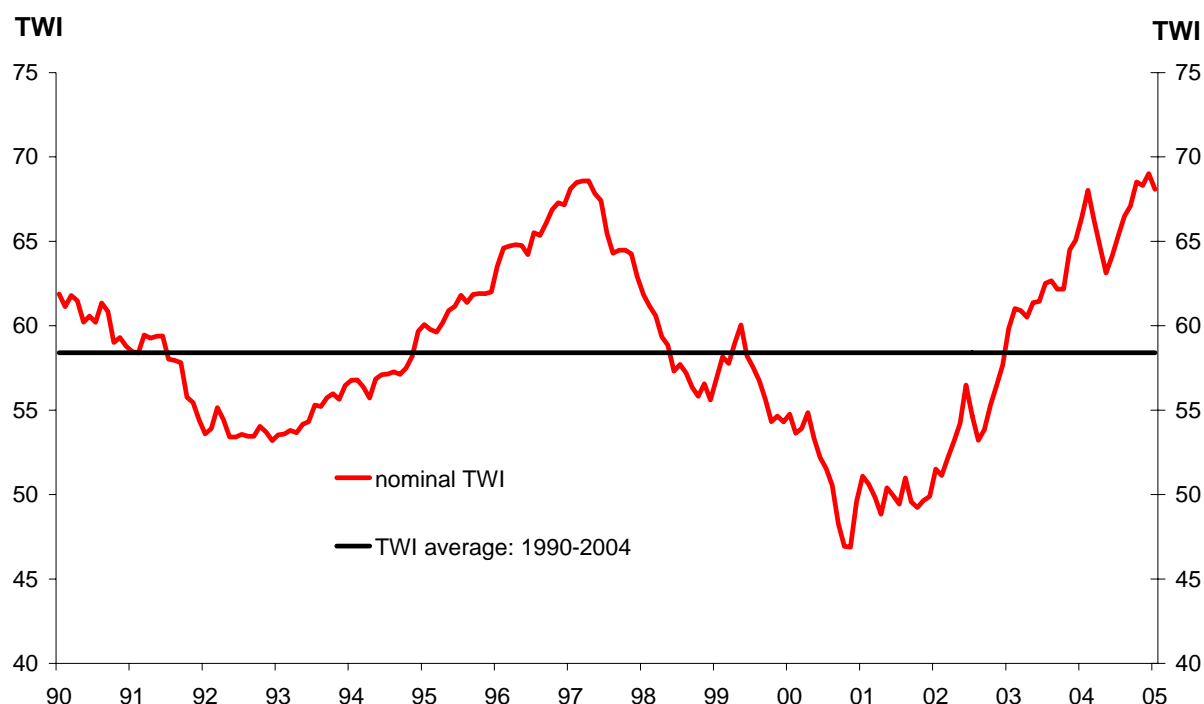
The main focus is on the “effective” exchange rate or TWI, as this best represents a measure of the exchange rate relevant for the whole economy on average. However, individual exchange rates would also be examined as a cross-check to see whether the broad measure is being unduly driven by factors specific to particular currencies.

⁷ Sarno and Taylor (2001) provide a light overview while Evans and Lyons (2002) provide a more in depth examination.

⁸ See Cheung and Chinn (2001) for a survey of the practices of market participants.

⁹ The TWI comprises the currencies of Australia, the Euro zone, Japan, the US and UK, weighted according to each currency's share of New Zealand's merchandise trade and their share of the 5-country aggregate GDP.

Figure 2
Nominal TWI



When is an exchange rate unjustified by fundamentals?

Although the first requirement for intervention might be satisfied - the exchange rate could be *exceptional* by historical standards - it does not automatically follow that the level is unjustified.

In reaching a judgement as to whether the exchange rate might be unjustified, the Bank will look for evidence of a disjuncture between the value of the exchange rate and the cyclical position of the economy and other fundamental factors underpinning medium-term trend movements in the exchange rate.

Any assessment of whether a given exchange rate is *unjustified* requires a judgement of where the currency should be relative to where it actually is, based on particular information on the direction of economic fundamentals. This judgement involves bringing together information from a number of sources. This information set includes, among other things:

The *cyclical* position of the economy relative to trading partners. The exchange rate should depreciate if New Zealand's expected relative growth rate slows. Specific factors include indicators relating to domestic consumption, net migration, the housing market, and relative output gaps. Relative cyclical positions are also often reflected in interest rate differentials, especially given that most TWI partner countries target low inflation. For example, a softer economy implies lower New Zealand interest rates, and hence lower interest rate differentials with trading partners.

The *terms of trade*. An increase in the terms of trade indicates that the real purchasing power of exports has increased, which tends to be associated with a strengthening of the New Zealand dollar.

The *current account position*. The current account is a broad indicator of both external and internal balances which are relevant to the question of whether the exchange rate is justified. For example, an unusually large current account deficit in New Zealand might suggest that the exchange rate is overvalued and that a downward correction in the New Zealand dollar is warranted to bring about external balance.

Other evidence about the general condition of the *tradables sector* of the economy. For example, indicators of significant and unusual levels of activity or profitability within the export sector could provide corroborative evidence that a particular level of the exchange rate was unjustified.

These indicators are not intended to provide a fixed checklist relevant for all situations. An all encompassing set of indicators suitable for deciding whether the exchange rate in every situation is unjustified does not exist. Nor is there an economic model of the exchange rate that reliably integrates all this information into a form that indicates degrees of disjuncture or disequilibrium. The economic relationships alluded to in the foregoing discussion are not fully understood, precisely identified, or static. Nonetheless the focus of intervention policy and this criterion in particular is on significant degrees of disjuncture, in a medium-term context, where the economic relationships remain relevant and precision is much less of an issue. Thus in applying this criterion the Bank cannot and should not take a mechanistic approach to deciding whether intervention is warranted. Each potential intervention will be assessed on a case by case basis using information that seems most appropriate to the situation at hand.

Intervention consistent with the PTA

The third criterion that must be satisfied before intervention is considered is that intervention must not conflict with the PTA. The PTA states that the Bank must aim for inflation outcomes between 1-3% over the medium term, while avoiding unnecessary instability in output, interest rates, and the exchange rate.

At one level, the new intervention policy can help contribute directly to avoiding unnecessary instability in the exchange rate if intervention helps offset a misalignment of the exchange rate from economic fundamentals.

But intervention must not compromise the overriding objective of price stability. In other words, the Reserve Bank will need to be comfortable that any inflationary or disinflationary impact from intervention will not push inflation outside the target range over the medium term.¹⁰ For example, intervention to dampen an upward exchange rate cycle implies less exchange rate restraint on inflation pressures, all else being equal. Hence the Bank will also have to be confident that undesirable future interest rate increases will not be necessary to compensate for a successful foreign exchange intervention.

An implication of the PTA consistency criterion is that intervention should be timed to roughly coincide with the broad thrust of interest rate settings. For example, it makes little sense to intervene to try and push the exchange rate lower when the Bank believes that higher interest rates may be required in the near future to control inflation pressures. In this situation, a successful intervention would inappropriately loosen monetary conditions. Normally, the Bank would look to adjust its main policy lever - the OCR - when overall monetary conditions seem too tight or easy. However, there might be occasions when the Bank is reluctant to move the OCR. For example, the Bank might conclude that further interest rate tightening to offset domestic inflation pressures is inappropriate, but that it is too soon to begin actually cutting interest rates. The Bank could intervene in response to an overvalued exchange rate that is extreme and unjustified, thereby effectively loosening monetary conditions without prematurely beginning an interest rate easing cycle.

Intervention must be opportune

Even if intervention is warranted from a policy standpoint (ie, intervention satisfies the first three criteria), conditions in the foreign exchange markets must be conducive to having a meaningful impact on the exchange rate. It would be pointless, and potentially costly, to intervene in circumstances where there was little chance of affecting prevailing market trends. At the extreme, speculators could be encouraged to trade against the Bank in the foreign exchange market, thereby exaggerating exchange rate mis-alignment.

Intervention is more likely to be opportune and thus effective when most of the following apply:

- there is a relative absence of capital flows that might offset intervention;

¹⁰ A depreciating exchange rate makes imports of consumer goods and inputs more expensive in New Zealand dollar terms and so adds to inflation pressure. Conversely, an appreciating currency constrains inflation pressure by reducing the cost of imports in New Zealand dollar terms.

- market participants are becoming less sure that the exchange rate will remain significantly above or below fair value;
- market participants are becoming less confident that recent trends in the exchange rate that have taken the exchange rate further away from fair value will persist;
- the balance of capital flows is shifting towards pushing the exchange rate back towards equilibrium, and there is some prospect that capital flows in the future will bias the exchange rate to move in a similar direction to that implied by intervention; and
- market participants are positioned in such a way that they are vulnerable to a sudden movement in the exchange rate towards fair value - so that should such a movement occur, they would need to transact to reduce their exposures, with such transactions supporting the direction of intervention.

The Bank is a regular participant in the foreign exchange market and maintains an extensive array of contacts from whom information can be gleaned to assist in making judgements on whether the above considerations are satisfied, and thus whether intervention is opportune.

Taken together, the four criteria provide a robust framework for assessing when to intervene. If the exchange rate is exceptionally and unjustifiably high, and it is opportune to intervene, then it is most likely that intervention will be effective in trimming the peaks and troughs of the exchange rate cycle. It is also more likely that the financial and reputational risks associated with intervention will be minimised as much as possible. Reputational risks are managed because the criteria minimise the chance that intervention will conflict with monetary policy. Financial risks are managed as the criteria reduce the chance of the Bank running down its capital. And both reputational and financial standing are supported by criteria that rule out attempts to defend a particular level of the exchange rate, and that reduce the prospect of intervention against fundamentally determined trends in the exchange rate.

4. Financial implications for the Bank

This section describes the implications that intervention would have on the Reserve Bank's annual net income and on the structure of the balance sheet.

The impact of intervention on the Bank's profitability and capital requirements

Intervention would add significant volatility to the Bank's earnings. This volatility mainly reflects the nature of a floating currency and thus the exchange rate risk inherent in net open foreign positions accumulated through intervention.

Corporations hold capital partly to see them through the times when the company is less profitable than average. The Reserve Bank is no different in this respect. The Bank holds capital in the form of investments in New Zealand government securities that can be liquidated to cover losses incurred while conducting normal business activities.

As intervention implies a higher level of financial risk compared to the Reserve Bank's other activities, the Bank needed additional capital to cover the potential for losses associated with intervention.

The Bank estimated the amount of capital required to be NZ\$ one billion, given the strategy it wished to implement and a conservative view of the peak losses that might stem from the strategy. The Bank's request for a capital injection from the Government, to give it the financial capability to implement intervention independently of the Government, was one of the key recommendations the Bank made to the Minister of Finance early in 2004. The Minister of Finance and Cabinet endorsed the Bank's request for additional capital and that capital was delivered to the Bank in June 2004.

The following two sections describe in more detail the nature of the factors that give rise to the financial risks associated with FX intervention: specifically exchange rate and interest rate risks.

The impact of exchange rate changes

The criteria used to decide when to intervene can mitigate but not entirely eliminate exchange rate risk. Losses from net open intervention positions could accrue for a while. However, these are likely to be temporary or “unrealised” losses, as in the end, unrealised losses will disappear, provided the exchange rate reverts back to its long run average i.e. to at least the level at which the intervention took place.

A more serious situation is one where the Bank might not identify a change in the equilibrium exchange rate and intervenes inappropriately in terms of its criteria. In this case losses could well become “realised”, or appear permanently on the Bank’s balance sheet. However, the appropriate application of the intervention criteria will help minimise the potential for permanent realised exchange rate losses being incurred. This is because the criteria limit intervention to cases of extreme departure of the exchange rate from its long-run average, thereby requiring an extreme change in the long-run average to negate the basic strategy of buying low and selling high. Such a strategy should thus prove profitable in terms of realised exchange rate gains over the medium term for the Bank’s balance sheet.

The impact of interest rates

Intervention results in the Bank investing and borrowing in different currencies at potentially quite different interest rates from normal, making the average carrying cost of holding reserves more variable and perhaps larger.

New Zealand interest rates tend to be higher than those in the countries where the Bank invests reserves (currently the US and Europe). This means that when the Bank intervenes to lean against a high exchange rate - and accordingly when it borrows New Zealand dollars to invest offshore - the average carrying cost of holding reserves would rise.¹¹

At the other end of the exchange rate cycle the opposite would occur. The Bank would earn extra income by borrowing at relatively low foreign interest rates and investing at higher New Zealand rates.

Over the entire exchange rate cycle, the periods when the Bank’s carrying cost of holding reserves is higher than usual should be broadly balanced by periods when the reserves carrying cost is lower. However, it is probably the case that interest rate differentials will be a bit higher on average at the top of the exchange rate cycle than when the exchange rate is relatively low. Hence on average it is quite likely that intervention will add a modest amount to the average carrying cost of holding reserves. These higher average carrying costs should be balanced by the potential for realised gains on the exchange rate described earlier, implying that intervention overall should not prove costly over the medium term, and may prove to be profitable.

The impact of intervention on the level of foreign reserves

Foreign exchange intervention requires the Bank to take on an exchange rate exposure to try to influence the exchange rate. Intervention at the top of the exchange rate cycle will result in an increase in the Bank’s foreign currency reserves, unless the change in exchange rate exposure is achieved by changing the currency denomination of the foreign currency loans the Bank already has (by using derivatives, or by repaying existing loans early and replacing them with New Zealand dollar denominated loans).

Intervention at the bottom of the exchange rate cycle could hypothetically result in the Bank running its foreign reserves down to the point where it had insufficient reserves to adequately deal with market dysfunction in a crisis. In practice this will not occur, as the Minister of Finance has instructed the Bank to ensure that in conducting intervention the Bank maintain a stock of foreign currency investments of

¹¹ Sterilisation of the domestic monetary effect of intervention is automatic in New Zealand, as daily liquidity management operations aim at maintaining a given amount of settlement cash, with standing facilities bounding the overnight interest rate within 25 basis points of the OCR target. The net effect of these arrangements is that the New Zealand dollars borrowed to finance acquisition of US dollars in the intervention are effectively borrowed at market interest rates in the daily open market operations.

at least SDR 2.45b (currently around NZD 5.1b). This means that the Bank will have to borrow in foreign currencies to finance intervention at the bottom of the exchange rate cycle.

Because the Bank's neutral position involves no net foreign currency exposure, intervention at the bottom of the exchange rate cycle thus implies that the Bank's foreign currency denominated liabilities would exceed its assets. Whilst this means that the Bank will have negative net foreign reserves in aggregate, its crisis intervention capacity will not be significantly impaired as it ensures that no more than 20 per cent of its foreign currency loans come due in any year. The foreign currency loans used to finance intervention would also be medium term, leaving the Bank's short-term crisis management capacity intact.

Intervention at the bottom of the exchange rate cycle can also be financed with FX swaps. As long as the swaps are of a medium-term maturity then the Bank's crisis intervention capability will not be substantively affected by intervention.

5. How will intervention be implemented?

Institutional framework

The Bank conducts its crisis management intervention policy in cases of extreme foreign exchange market disorder as an agent of the Minister of Finance. Under section 17 of the Reserve Bank Act, the Minister can instruct the Bank to deal in the foreign exchange markets on the Government's behalf. This means that, while the Bank advises the Minister on crisis intervention, and would implement intervention for crisis management, the actual decision on whether to intervene and the financial implications of that intervention rest with the Minister and the government's account respectively.

The new monetary policy related intervention role is set up differently. Foreign exchange intervention in support of the PTA has been organised to give the Bank full operational independence from the Minister and the Government, in the same way the Bank has independence to formulate and implement monetary policy. This operational independence for FX intervention is provided for in section 16 of the Reserve Bank Act. The implication of this greater independence is that the Governor and the Bank accept the full financial implications of intervention - profits and losses accrue to the Bank and impact on the Bank's balance sheet.

The reason why FX intervention for monetary policy purposes has been set up differently from crisis intervention reflects an effort to manage some of the related risks. In particular, foreign exchange market intervention has the potential to conflict with monetary policy. Because the Bank has control of intervention decisions, it is able to manage conflicts between intervention policy and monetary policy objectives such that the single price stability objective in the Reserve Bank Act is not undermined. In addition, as the Bank has sole responsibility for the timing of intervention and the subsequent squaring out of intervention positions, there is little scope for the Bank to be forced to abandon its strategy early under pressure from the Government. This would help to manage some of the financial risks inherent in intervening at cyclical extremes, as it gives the Bank the ability to hold positions for the time that will generally be required to exit at a profit (once the exchange rate reverts to more average levels).

Transactions

Intervention will usually be conducted in the New Zealand dollar/US dollar currency pair. This is because market participants quote this currency pair the most actively and most other currency pairs are derived with reference to the NZD/USD exchange rate.¹² Using this currency pair allows the Bank to conduct its intervention in the quickest and most efficient manner, maximising the impact on the New Zealand dollar exchange rate against all other currencies.

¹² For example, a market quote in the NZD/JPY would normally be calculated as the product of the NZD/USD and USD/JPY exchange rates - both of which are individually and actively quoted.

The Bank intends to be flexible in its implementation style and will not adopt any fixed method of implementation. However, transactions will generally be with wholesale market participants, and would typically be of a size similar to the standard market parcel (NZD 10 million) or larger. To maximise the strength of the intervention signal the Bank is likely to transact with a number of market makers simultaneously. The Bank will not transact directly with corporates or individual exporters or importers.

The style of intervention is key to the effectiveness of intervention. Normally, market participants (including the Reserve Bank) try to conduct FX transactions in a manner that will minimise the impact of the transaction on the exchange rate. This is usually optimal, as to do otherwise results in higher transaction costs. The execution approach in intervention situations will be quite the opposite, as the aim of the operation would be to maximise the exchange rate impact. This implies that the Bank would look to intervene at times when there is relatively little interest by other market participants to trade against it. Also the style of execution will be relatively aggressive - the Bank will ask market participants to quote it a price and would deal on those prices, thereby forcing transactions into the market. This approach is more likely to result in the Bank's counterparties quickly acting to pass on the Bank's deals to others, creating ongoing transaction activity in the direction the Bank desires, maximising the impact on the exchange rate. The intervention execution approach stands in contrast to the Bank's normal approach of easing transactions into the market with the aim of having no impact on the exchange rate.

Generally, intervention will be quite open and will involve as many market makers as possible, to maximise the signalling impact of intervention. On occasion, though, it may be the case that intervention is covert, involving only one or two market makers, if it seems that this is more likely to lead to a greater chance of success.

The Bank's open foreign exchange position will be closed once the exchange rate returns to near its long-term average value. The associated transactions will be performed in a manner consistent with minimising the impact on the exchange rate. For example, the Bank will pick times when there are a number of other investors interested in trading in the opposite direction, and its execution style will be very passive. Such transactions have quite a different character to intervention, reflecting their quite different objectives.

Communications

The Reserve Bank adopts a very transparent approach to communicating its policies and operations in general. This will also apply to its approach to foreign exchange intervention.

Often, intervention will be very open and public. In these cases the Bank will issue a press release shortly after having intervened, noting it has intervened and the rationale for the intervention. Sometimes, though, the Bank may wish to intervene covertly, which will mean that there will be no comment from the Bank at the time of intervention. The policy regarding commentary is that the Bank will comment on intervention if it thinks such commentary is useful in enhancing the effectiveness of the operation. Otherwise it will not make on-the-record comments to anyone in response to questions regarding intervention.

Regardless of whether intervention is open or covert, intervention will be apparent after the fact. Each month the Bank and the Crown publish data on the status of the Bank's balance sheet and the foreign exchange transactions the Bank has made with the markets. This information will clearly indicate when intervention has occurred within a month or two of its occurrence.

Finally, the Bank's Monetary Policy Statements, testimony to Parliament's Finance and Expenditure Committee, and the Bank's Annual Report will all contain commentary describing the Bank's intervention activities, their rationale, and their impact on the Bank's balance sheet. All of these communication media are important in ensuring that the Bank is accountable for any intervention activities.

6. Summary

This article has provided an elaboration on the Reserve Bank's new foreign exchange intervention policy. The new policy adds another instrument to the monetary policy toolkit, one specifically designed to trim only those peaks and troughs of the exchange rate cycle that are viewed as exceptional and unjustified by economic fundamentals.

The Bank has full operational independence to conduct intervention, but any decision to intervene must be consistent with the Bank's primary objective of price stability laid out in both the Reserve Bank Act and the PTA.

The conditions attached to intervention manage financial and reputational risks the Bank may face when intervening. This prudent approach to intervention is further reinforced by both the NZD one billion of capital reserves added to the Reserve Bank's balance sheet, and the transparency attached to the intervention regime as a whole.

The degree of judgement required to undertake intervention, and the management of risks associated with any actual intervention, present an on-going challenge for the Bank to develop and maintain an appropriate level of operational capability. This capability involves ensuring that the Bank's monitoring and forecasting of economic data is of a high standard, and that there exists a level of technical expertise (and relationship management) to carry out intervention in the foreign exchange market.

As with any other facet of monetary policy, the performance of the Governor of the Reserve Bank in carrying out any intervention decisions would be subject to specific accountability arrangements. These include monitoring by the Bank's Board, the Finance and Expenditure Committee, and the Minister of Finance, together with the general scrutiny provided by market participants and the public at large.

The Bank does not envisage that intervention will be used frequently, as by and large its view is that New Zealand's floating exchange rate does a good job of buffering the economy from external shocks. The new policy gives the Bank the capability to consider intervention in those rare instances when it is appropriate and useful. The new policy will not be a panacea for the large swings in the value of the New Zealand dollar that are a fact of life for a floating exchange rate. At best, intervention offers a mild palliative, and the bulk of exchange rate risk management will continue to sit with firms and individuals within New Zealand.

References

Cheung, Y and M D Chinn (2001): "Currency traders and exchange rate dynamics: a survey of the US market". *Journal of International Money and Finance*, 20, pp 439-471.

Evans, M D D and R K Lyons (2002): "Order flow and exchange rate dynamics", *Journal of Political Economy*, 110 (1), pp 170-180.

Gordon, Michael (2005): "Foreign reserves for crisis management". *Reserve Bank of New Zealand Bulletin*, 68(1).

Munro, Anella (2004): "What drives the New Zealand dollar?" *Reserve Bank of New Zealand Bulletin*, 67(2), pp 21-35.

Sarno, L and M P Taylor (2001): "Official intervention in the foreign exchange market: is it effective and, if so, how does it work?", *Journal of Economic Literature*, 39(3), pp 839-68.