

## INNOVATION IN MANAGEMENT OF FOREIGN CURRENCY RESERVES IN THE GLOBALISATION ERA

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### ABSTRACT

Although central banks and fund managers appear to be quite similar in regards to their management of foreign currency portfolios there are some important differences. Whereas fund managers are expected to make investment decisions in such a way as to maximise the value of the assets under their management subject to their client's investment mandate, central banks must manage their reserves portfolios subject to a range of policy-related constraints. Most obviously, central banks hold foreign currency reserves to fund foreign exchange market operations that arise as part of their broader monetary policy functions. Under a fixed exchange rate regime, foreign currency reserves are used to maintain a particular exchange rate. However, even under a floating exchange rate regime, foreign currency reserves are often used to provide liquidity in the event of extreme market movements to maintain investor confidence in markets.

**Key words:** Foreign currency, Investment, reserve portfolio, floating exchange, liquidity.

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## INTRODUCTION

Foreign currency transactions are used by many countries to augment their domestic liquidity operations while other countries use foreign currency reserves to manage the impact of government transactions. Reflecting the nature of these policy objectives, central banks understandably place a relatively high premium on ensuring the liquidity of their foreign currency reserves.

This doesn't mean that income generation and capital preservation are not also important to central banks. Indeed, depending on a central bank's circumstances, income generation and capital preservation may be extremely important. For example, in the case of central banks that borrow their reserves (rather than own them outright), the income generated by their reserve assets ideally should exceed their cost of funding. For other countries, where the income generated by these foreign assets constitutes a significant source of public sector revenue, shortfalls can have significant political ramifications. While it is relatively easy to enunciate the broad objectives of reserves management in respect of their security, liquidity and return characteristics, it is much more difficult to translate those characteristics into a functional investment mandate: a framework that essentially describes the broad parameters of the reserves management process. When defining an investment mandate, the central bank executive needs to articulate the desired level of reserves, the extent to which the reserves are to be managed in separate investment tranches, the instruments that may be invested in and the preferred management style. These aspects of an investment mandate are examined below.

Once an investment mandate has been agreed on, the operational areas of the central bank need to develop systems and processes that define how this mandate is to be efficiently and prudently implemented. Essentially, an 'operational' mandate is a roadmap for how portfolio returns are maximised subject to the prudent management of the risks associated with managing the reserves portfolio. Details of the performance measurement and risk management aspects of the operational mandate are discussed in detail below.

## LEVEL OF RESERVES

One important consideration for all central banks is the need to identify a desired range for the level of reserves within which they feel that they can achieve their nominated objectives. To a large extent, the decision may simply be a function of the policy environment that prevails

at the time. However, when determining the optimal size of a reserves portfolio consideration should be given to a number of factors including the size of the central bank's balance sheet, the opportunity costs of maintaining an unhedged portfolio of foreign assets, the relative depth of the domestic and foreign exchange markets, the size and openness of the domestic economy and the extent to which an economy is reliant on external sources of short-term funding.

## MANAGEMENT STYLES

Although there is a great deal of commonality between their respective reserves management objectives, central banks often adopt quite different approaches, or investment styles, when managing reserves. Investment styles are generally defined in respect of two extreme styles:

- ❖ Passive management provides very little discretion to portfolio managers. One example of a passive strategy involves buying foreign currency assets and holding them to maturity
- ❖ An active management framework gives portfolio managers scope to change positions in the expectation of market developments.

There are differing views on the relative merits of each investment style. One of the challenges for a central bank is to decide which of these styles best suits its objectives and risk tolerances.

## CURRENCY COMPOSITION

When selecting the currency composition of the foreign currency portfolio, consideration needs to be given to the ultimate objective of holding the reserves. If reserves are being held for intervention purposes then the portfolio may need to be relatively overweight the intervention currency of choice. Finally, if foreign currency reserves are used to fund imports or cover current account deficits, consideration should be given to a currency composition that reflects the numeraire of trade flows.

## FINANCIAL VS ACCOUNTING RETURNS

Best practice suggests that foreign currency portfolios should be marked-to-market each day using publicly available bid prices (i.e. the prices that would be achieved in the event that the reserve assets were liquidated). Importantly, performance data should reflect the interest earned

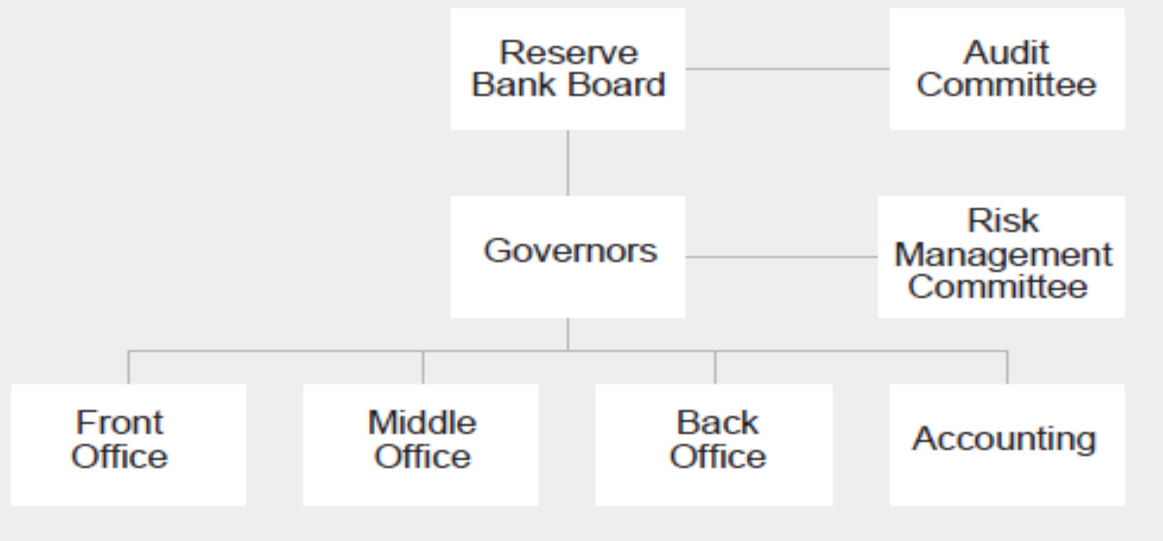
as well as all realised and unrealised capital gains and losses on all financial exposures. Depending on a country's accounting standards, this measure of portfolio performance may, however, differ from returns published in the Annual Report. This may especially be the case where the accounting standards do not recognise income on off-balance sheet and contracted exposures or which exclude unrealised capital gains and losses.

## **RISK MANAGEMENT FRAMEWORK**

It is generally well accepted that a central bank should adopt the most rigorous risk management practices in respect of all aspects of its reserves management processes. At the most general level, this is reflected in the need for the complete separation of functions between the Front, Middle and Back Offices, the Audit Department, the Accounting Department and the Risk Management Unit. Separation of these functions is designed to ensure that exposures are within established limits and to minimise the opportunities for fraudulent behavior. While there is not a unique 'blueprint' for this framework, a number of basic elements should be considered:

- At the very highest level, the decision-making hierarchy for the investment of reserves should be clearly defined
- To reduce the risk of fraud, the separation of functions must be transparent and enforceable. Most importantly, there should be complete separation of those who initiate transactions (Front Office) and those who arrange the settlement of transactions (Back Office)
- The separation of functions extends beyond the separation of the transaction and settlement functions.

**Figure 1 : Risk Management Structure**



Procedures also need to be established for how changes can be made to the investment mandate such as a proposal for the introduction of a new instrument or a change in the composition of the benchmark.

## CONCLUSION

Central banks have had to grapple with a variety of resource constraints. These issues are obviously most relevant to countries managing relatively small foreign currency reserve portfolios but can even be an issue for countries that are rapidly accumulating foreign currency reserves. The most important of these resource constraints relates to staffing, both in terms of the number of staff as well as their experience with financial market products. The effectiveness of the reserves management operation, and the ability to control operational risks, also depends on the adequacy and efficacy of the central bank's technology infrastructure. A comprehensive reserves management platform needs to provide for the capture, confirmation and approval of transactions.

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