Risk Management

Objectives and Governance Structure

The Reserve Bank is exposed to a broad range of risks in carrying out its responsibilities. The most significant risks are those associated with the financial assets held by the Bank to support its operations in financial markets. However the Bank also faces operational risks through its banking, settlement and note issue functions and from the administration of the organisation itself. As with most central banks, the Reserve Bank seeks to manage its risk profile carefully. This reflects the view that the fulfilment of its policy objectives and other functions would be jeopardised if the risks it faces were not managed to the appropriate standard. That said, the Bank recognises that it cannot entirely eliminate the risks involved in its activities and seeks to manage those risks to a level consistent with its risk appetite.

Under the Reserve Bank's risk management framework, prime responsibility for the identification and control of risks on a day-to-day basis rests with the management function of each operational area. This is based on the recognition that line managers are best placed within the organisation to evaluate their risk environment and develop and monitor the effectiveness of the controls which are put place to mitigate these risks. The Bank's management also promotes an active risk management culture, which emphasises that careful analysis and control of risk is vital to achieving all business and policy objectives successfully.

Oversight of the Reserve Bank's arrangements for risk management is undertaken by the Risk Management Committee. This Committee is chaired by the Deputy Governor and comprises the Assistant Governors for Banking and Payments, Corporate Services, Currency and Financial Markets; the Chief Financial Officer; the Heads of Audit, Human Resources and Risk Management; and the General Counsel and Deputy Secretary. It is responsible for ensuring that all the risks facing the Bank – with the exception of those arising directly out of the Bank's monetary, financial stability and payments policy functions – are effectively evaluated and managed. The Committee meets every three months, or more frequently if required, and informs the Executive Committee and the Reserve Bank Board's Audit Committee of its activities.

The Risk Management Committee is assisted in its responsibilities by the Risk Management Unit (RMU). The Unit's main role is to help departments identify, evaluate and mitigate their risk environment within a broadly consistent framework across the Reserve Bank. It also monitors performance and risk associated with the Bank's activities in financial markets and provides support to the business areas in the implementation of fraud control systems. The RMU reports directly to the Deputy Governor.

The Audit Department coordinates closely with – but remains separate from – the RMU. Audit provides an independent assurance that the risk management framework is effective and applied across the Reserve Bank. The Audit Department also has a separate brief to test the adequacy of procedures and controls at all levels of the Bank. The RMU itself is subject to audit review. The Audit Department reports to the Board's Audit Committee, which meets quarterly or more frequently if required.

As noted, the Reserve Bank's risk management policy covers financial, market, credit, operational and other risks inherent in carrying out its central banking activities, but not the risks associated with the Bank's core monetary, financial stability and payments policy functions. These remain the responsibility of the Governor and the Reserve Bank and Payments System Boards. Governance of the business risks in Note Printing Australia

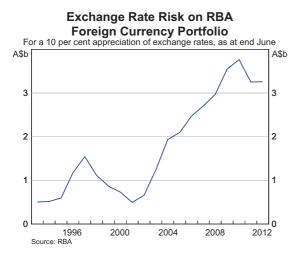
Limited and Securency International Pty Ltd – companies that are respectively fully owned and partly owned by the Reserve Bank – is the responsibility of the boards of the companies. Over the past year, the reporting arrangements for these boards to the Reserve Bank Board were strengthened.

Portfolio Risks

The Reserve Bank holds domestic and foreign currency-denominated financial instruments to support its operations in financial markets in pursuit of its policy objectives. These instruments comprise the bulk of the Bank's assets and expose the balance sheet to financial risks, the largest of which are exchange rate risk, interest rate risk and credit risk. The Bank aims to minimise risk where appropriate. It does not entirely eliminate these portfolio risks as this would interfere with its ability to implement its policy objectives. Instead, the risks are managed to an acceptable level through a number of controls, which are discussed below. The primary responsibility for managing these risks rests with the Financial Markets Group. The role of the RMU is to monitor these risks and ensure ongoing compliance with the control framework. In that regard, the Assistant Governor (Financial Markets), the Head of Risk Management and other senior staff are provided with real-time and daily reports on limits compliance, portfolio risks and performance.

Exchange rate risk

The Reserve Bank invests in foreign currency-denominated assets as holder of Australia's official foreign currency reserves. These holdings expose the Bank's balance sheet to fluctuations in exchange rates. Given its policy role, the Reserve Bank does not seek to eliminate this exposure but rather mitigates the risk by diversifying its foreign currency assets across four currencies. The weights of these four currencies are specified in terms of a benchmark that reflects the Bank's long-term risk and return preferences given its need for high liquidity and



security. The portfolio is rebalanced daily taking into account changes in market rates or transactions. There was no change in the currency composition of the foreign portfolio over the past year. The allocations are 45 per cent in US dollars, 45 per cent in euros, 5 per cent in Japanese yen and 5 per cent in Canadian dollars (see chapter on 'Operations in Financial Markets').

The exchange rate risk on the portfolio is similar to that of a year earlier, as the value of the foreign currency reserves portfolio was broadly unchanged in Australian dollar terms. At the current level of reserves, a 10 per cent appreciation in the Australian dollar would result in valuation losses of around \$3.3 billion.

Interest rate risk

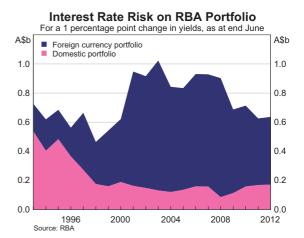
The value of the Reserve Bank's financial assets is also exposed to movements in market interest rates as the bulk of the portfolio is made up of domestic and foreign fixed-income securities. As the cashflow on these securities is fixed, changes in market yields affect the present value of this income stream. In general, a rise in market yields will cause a fall in the value of these securities while a fall in yields will increase their value. Other things being equal, securities that have a longer maturity contain a greater degree of interest rate risk, as their cashflows extend further into the future and will be more sensitive in present value terms to discounting than near-term cashflows.

The Reserve Bank holds domestic securities for policy-related purposes. At the end of June 2012, total holdings of domestic securities were \$33 billion, around \$1 billion higher than a year earlier owing to an increase in holdings of securities held under repurchase agreements (repos). The sensitivity of the domestic portfolio to movements in market yields was little changed, as the bulk of domestic securities are held under repos with short terms to maturity. The average term of the Bank's domestic repo book at the end of June was around three weeks.

The Reserve Bank is exposed to very little interest rate risk on its balance sheet liabilities. Banknotes on issue comprise around two-thirds of total liabilities and carry no interest cost to the Bank. The most significant of the other liabilities are deposits held by the Australian Government and government agencies, and settlement balances held by authorised deposit-taking institutions (ADIs). These deposits have short maturities that broadly match the Bank's domestic assets held under repo. Interest paid on these deposits reflects domestic short-term interest rates, effectively hedging part of the interest rate exposure of the domestic asset portfolio.

In contrast to the domestic portfolio, the Reserve Bank's foreign currency assets are managed relative to a benchmark that reflects the Bank's long-term appetite for risk and return and is specified in terms of a target portfolio duration. The benchmark duration remained at 18 months for the US, European and Canadian portfolios and 12 months for the Japanese portfolio.

The overall level of interest rate risk on the Reserve Bank's domestic and foreign financial assets rose marginally over the year. The Bank would incur a valuation loss of about \$640 million if interest rates in Australia and overseas rose uniformly by 1 percentage point across the yield curve.



Credit risk

Credit risk is the potential for financial loss arising from the default of a debtor or issuer. The Reserve Bank manages its credit exposure by applying a strict set of criteria to its investments, confining its dealings to highly creditworthy counterparties and holding only highly rated securities. In addition, the Bank's transactions are executed under internationally recognised legal agreements.

The Reserve Bank is exposed to very little credit risk on its outright holdings in the domestic portfolio as it invests only in securities issued by the Australian Government or by state and territory government borrowing authorities. Given that a large portion of the Bank's domestic assets are held under repo, the Bank is exposed to some counterparty credit risk. However, the credit risk on repos is inherently limited and ultimately reflects the quality and market value of the securities provided. The residual exposure is low – the Bank faces a loss only if the counterparty fails to repurchase securities sold under repo and the market value of the securities falls below the agreed repurchase amount.

The Reserve Bank manages this exposure by applying an appropriate margin ('haircut') to the securities and requiring that these securities be of high quality. In February, the Bank implemented a new initial margin framework and reviewed the range of securities it is willing to accept under repo in its domestic market operations. The degree of over-cover required now ranges from 1 to 23 per cent, and increases with the risk profile of the security. Given its policy role, the Bank does not apply specific credit criteria on the counterparties with which it is willing to deal in its domestic market operations. Rather, to be eligible to participate in the Reserve Bank's open market operations, counterparties must be members of the Reserve Bank Information

and Transfer System (RITS) and be able to ensure efficient and timely settlement of transactions with membership of the Austraclear system.

The Reserve Bank's investments in the foreign portfolio are also typically confined to highly rated securities. The majority of the Bank's outright holdings are highly liquid securities issued by the national governments of the United States, Germany, France, the Netherlands, Japan and Canada, and securities issued by select highly rated supranational institutions. The Bank also holds a portion of its foreign portfolio in short-term repos. This exposes the Bank to the small amount of residual credit risk that is inherent in repos, as noted above. The Bank manages this risk by requiring 2 per cent over-collateralisation and accepting only high-quality and liquid securities as collateral. Credit exposure on foreign repurchase agreements is further managed by imposing limits on individual counterparty exposures. The credit risk framework applies market-based credit measures to manage risk exposures.

The Reserve Bank uses foreign exchange swaps as part of its policy operations. Credit risk on these instruments is managed to a low level by executing foreign exchange transactions under internationally recognised legal agreements only with counterparties rated at least A-. The Bank has sought to reduce risk associated with foreign exchange swaps further by adding an additional level of legal protection. Internationally recognised two-way credit support annexes (CSAs) are being implemented by the Bank to collateralise its foreign exchange swap transactions. This will involve the Bank receiving and sending collateral to cover exposures on foreign exchange swaps generated by movements in exchange rates away from the contracted rate.

Operational Risks

As part of its day-to-day activities, the Reserve Bank faces risks that can affect the operation of its systems or prevent its internal processes from functioning effectively. These operational risks are similar to those faced by other financial institutions, and are monitored carefully to ensure that the services delivered by the Bank are maintained at the highest possible standard.

While all parts of the Reserve Bank face operational risks of varying degrees, the most significant are those associated with the financial transactions undertaken by the Bank either to support its own activities or on behalf of its clients. Over the course of 2011/12, the Bank's Financial Markets Group executed around 73 000 transactions, generating an average daily settlement value of around \$27 billion. This is broadly in line with recent years.

In addition to these activities, the Reserve Bank is the main banker for a number of government agencies – including the Australian Taxation Office and the Department of Human Services – and maintains the infrastructure to facilitate real-time interbank payment and settlement services through RITS. Given the pivotal nature of these activities, any operational failure could have widespread consequences for the financial system. As such, the Bank's risk management framework supports a continuing focus on controlling the main operational risks associated with these functions.

The information technology (IT) systems that underpin the Reserve Bank's policy and business operations are highly complex and require ongoing maintenance and support. The framework in place to manage the risks associated with these systems is controlled by extensive monitoring, reconciliation and reporting functions. In addition to this, Bank staff are constantly evaluating IT industry developments to ensure its systems reflect current technology and remain robust. The Bank has an ongoing program, conducted under standard guidelines for project management, to manage any enhancements to infrastructure or applications. This includes a comprehensive testing regime before any change is upgraded to a production environment, with staff on-call to ensure any system problems are quickly assessed and remedial action put in place where required. Assessment of appropriate staff resourcing, the adequacy of controls over IT processes and the level of security over information management are all incorporated into the Bank's ongoing risk management processes.

Given the nature of its activities, the loss of Head Office facilities or IT systems caused by a natural disaster or other disruptive event represents a key risk to the Reserve Bank. As such, extensive back-up plans and capacity have been put in place to ensure continuity of critical business services if access to Head Office facilities and IT systems is lost. The Bank's Business Resumption Site (BRS), located north-west of the Sydney metropolitan area, is central to these arrangements. Some staff are based permanently at the site to ensure that a number of critical services can be maintained if Head Office is unexpectedly inaccessible. In addition, all business areas regularly test their back-up arrangements to cover a range of contingency scenarios, including working from the BRS or an alternative location. The results of the tests are monitored by the Risk Management Committee. During the year in review, three Bank-wide tests were conducted at the BRS, including tests covering a total loss of both facilities and systems at Head Office.

A significant operational risk facing any financial institution is that its staff may engage in fraud or undertake unauthorised transactions, exposing the institution to significant financial loss or reputational damage. The Reserve Bank has an ongoing program to evaluate fraud risks and enhance its fraud control structures. These include having a clear decision-making hierarchy, with all staff involved in financial dealing having well-defined limits to their authority to take risks or otherwise commit the Bank, and controls over computer access at both the user and administrator levels. These arrangements are further enhanced by independent front-, back- and middle-office functions, where staff who initiate trades, those who settle them, and those who monitor and report on exposures and compliance with trading and investment guidelines, are physically separate and have separate reporting lines within the organisation. Regular staff training in fraud awareness is also conducted and monitored to ensure that all staff are actively engaged in fraud prevention.

The Reserve Bank's employee Code of Conduct outlines the high standard of integrity and propriety that is expected of staff in carrying out their duties. The Fraud Control Policy and arrangements by which suspicious behaviour can be reported anonymously are part of this framework, which endeavours to keep staff aware of their responsibilities in this area.

Despite strong controls and a good risk management culture, operational failures occur from time to time, which can adversely affect the Reserve Bank's reputation or lead to other costs. These failures are reported in a timely way to the Risk Management Committee and monitored to identify areas where new controls may be needed or where existing controls should be strengthened.

Government Guarantee Scheme

The Reserve Bank manages on behalf of the Government the Guarantee Scheme for Large Deposits and Wholesale Funding and the Guarantee for State and Territory Borrowing. Applications for new guaranteed liabilities under both schemes have closed, but the Bank continues to have responsibility for collecting fees on existing liabilities. A total of \$0.9 billion in fees was collected on behalf of the Government in 2011/12.