# Risk Management

## **Objectives and Governance Structure**

Risk management is integral to all aspects of the Reserve Bank's activities and is the responsibility of all employees. Managers have a particular responsibility to evaluate their risk environment, to put in place appropriate controls and monitor the effectiveness of these controls. The Reserve Bank identifies, assesses and manages risk at both an enterprise ('top-down') and business ('bottom-up') level, a process that is subject to ongoing review. Controls put in place to manage the Bank's risk environment are carefully assessed to ensure they are well developed and implemented effectively. This process is supported through the development and maintenance of an active risk management culture, which acknowledges the need for careful analysis and management of risk in all business processes.

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 the Banking and Payments, Corporate Services, Currency and Financial Markets Groups; the Chief Financial Officer; the Chief Information Officer; the Heads of the Audit, Human Resources and Risk and Compliance Departments; and the Deputy Secretary and General Counsel. The Risk Management Committee is responsible for ensuring that all the risks the organisation faces, with the exception of those arising directly from the Bank's monetary policy, financial stability and payments policy functions, are properly assessed and effectively managed. The Committee meets six times a year, or more frequently if required, and informs the Executive Committee and Reserve Bank Board Audit Committee of its activities.

The Risk Management Committee is assisted in its responsibilities by the Risk and Compliance Department (RM). The Department's main role is to assist individual business areas to manage their risk environment effectively within a broadly consistent framework. RM also monitors risk and performance associated with the Reserve Bank's activities in financial markets and provides support to the business areas in the implementation of fraud control and business continuity systems, and the management of compliance-related risks. The Head of RM reports directly to the Deputy Governor.

The Audit Department also supports the framework for managing risk, complementing but remaining separate from the work of RM. In addition to providing assurance that the Reserve Bank's risk management policies are effective, the Audit Department has a separate, independent brief to test the adequacy of procedures and controls at all levels of the Bank. RM itself is subject to audit review. The Head of Audit Department reports to the Deputy Governor and the Reserve Bank Board Audit Committee, which meets at least four times a year.

As noted above, the Reserve Bank's risk management framework covers a broad range of financial and operational risks, but not those inherent to the Bank's core monetary policy, financial stability and payments policy functions. These risks remain the responsibility of the Governor, the Reserve Bank Board and the Payments System Board. The risks associated with the Bank's ownership of Note Printing Australia Limited (NPA) – the Bank's wholly owned subsidiary – are also covered by the risk framework, though the responsibility for the day-to-day activities of NPA rests with its management and the NPA Board.

#### 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 a number of financial risks, of which the largest is exchange rate risk. These 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 RM is to monitor these risks and report on compliance with approved authorities and limits. In that regard, the Assistant Governor (Financial Markets), the Head of RM and other senior staff are provided with real-time and daily reports on limits compliance, portfolio risks and performance.

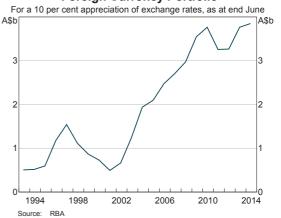
### Exchange rate risk

The Reserve Bank invests in foreign currency-denominated assets as the holder of Australia's official foreign currency reserves. These holdings expose the Bank's balance sheet to fluctuations in exchange rates as the Bank's financial statements are reported in Australian dollars. Given its policy role, the Bank mitigates this risk by diversifying its foreign currency assets across five currencies. The diversification of the Bank's foreign currency investments was increased in 2013/14 to include assets denominated in Chinese renminbi, taking the portfolio composition to 52 per cent in US dollars, 35 per cent in euros, 5 per cent in Japanese yen, 5 per cent in Canadian dollars and 3 per cent in Chinese renminbi (see the chapter on 'Operations in Financial

Markets'). The weights of 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 and transactions. The Bank's holdings of gold, Special Drawing Rights and the Asian Bond Funds are not managed relative to a benchmark.

The Australian dollar value of the Reserve Bank's portfolio rose slightly over the year. As exchange rate risk is primarily a function of portfolio size, the yardstick measure of exchange rate risk increased over the year. At the current level of reserves, a 10 per cent appreciation of the Australian dollar would result in mark-to-market losses of around \$3.8 billion.

# Exchange Rate Risk on RBA Foreign Currency Portfolio



#### Interest rate risk

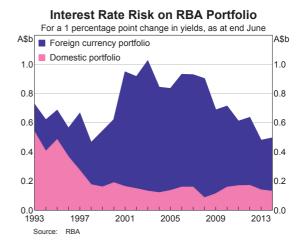
The value of the Reserve Bank's financial assets is also exposed to movements in market interest rates as the bulk of the portfolio is made up of domestic and foreign fixed-income securities. For securities with fixed cashflows, changes in market yields affect the present value of this income stream.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

The Reserve Bank holds domestic securities for policy-related purposes. Total holdings of domestic securities rose in response to an increase in the Bank's liabilities (see chapter on 'Operations in Financial Markets'). Part of the increase was reflected in holdings of securities held under reverse repurchase agreements (repos) following the commencement of RBA repos on an 'open' basis in November 2013. Because these open repo positions reference the overnight cash rate and have a short maturity (they can be closed by either party at any time), they carry little interest rate risk. The average term of the Bank's domestic repo book at the end of June was around three weeks, slightly lower than a year earlier. For domestic securities held outright, the sensitivity to movements in market yields fell marginally over the course of 2013/14 owing to a decrease in the average duration.

The Reserve Bank is exposed to little interest rate risk on its balance sheet liabilities. Banknotes on issue account for about 40 per cent of total liabilities and carry no interest cost to the Bank. The other sizeable obligations include deposits held by the Australian Government and its agencies, and exchange settlement account balances held by authorised deposit-taking institutions. 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 (some foreign currency assets, such as gold, are excluded from the benchmark). The benchmark duration remained at six months for the US, Canadian and Japanese portfolios, and at 18 months for the European portfolio. The benchmark duration of the Chinese portfolio is 18 months.

The overall level of interest rate risk on the Reserve Bank's domestic and foreign financial assets was little changed over 2013/14. The Bank would incur a valuation loss of about \$500 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, as well as declines in asset values arising from deterioration in credit quality. 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. The Bank's transactions are also 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. The Bank is exposed to a small amount of counterparty credit risk as a large portion of the Bank's domestic assets are held under repo. However, the credit risk on repos is inherently limited and ultimately reflects the quality and market value of the securities provided as collateral. The Bank would face a loss only if the counterparty fails to repurchase securities sold under repo and the market value of the securities falls to be less than the agreed repurchase amount. The Bank manages this exposure by applying an appropriate margin

('haircut') to the securities and requiring that these securities meet certain eligibility criteria. The degree of over-collateralisation increases with the risk profile of the security and currently ranges from 1 to 27 per cent.

The Bank also mitigates credit risk by not purchasing securities from counterparties deemed to be materially related to the credit quality of the security in its market operations. However, for repos contracted under its liquidity facilities, the Bank may agree to relax its restriction on purchasing asset-backed securities from parties that sponsor the issuing trust, have originated assets held by the trust and/or service assets held by the trust. These arrangements help facilitate the same-day settlement of direct entry transactions (see the chapter on 'Operations in Financial Markets'). To date, a small number of institutions have been granted related-party exemptions, enabling them to post specific self-securitised residential mortgage-backed securities (RMBS) as collateral. The credit risk is inherently limited as the securities are issued by bankruptcy-remote vehicles. Any residual risk is managed to a low level by discounting the value of the securities by a margin of 19 to 27 per cent, depending on the degree of credit support provided to the transaction by the sponsor.

Given its policy role, the Reserve Bank does not apply specific credit criteria to the counterparties with which it is willing to deal in its domestic market operations. Rather, to be eligible to participate in the Bank's open market operations, counterparties must be subject to an appropriate level of regulation and be able to ensure efficient and timely settlement of transactions within the Austraclear system.

The Reserve Bank's investments in the foreign portfolio are also confined to highly rated and liquid securities. The bulk of the Bank's outright holdings are securities issued by the national governments of the United States, Germany, France, the Netherlands, Japan, Canada and China. The Bank also holds a portion of its foreign portfolio under 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 is overseen by a credit committee, chaired by the Assistant Governor (Financial Markets), which takes into account a number of factors to manage risk exposures, including market-based credit measures.

The Reserve Bank uses foreign exchange swaps and spot transactions 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 that meet strict eligibility criteria and have been approved by the credit committee. These counterparties are generally highly rated; however, factors other than credit ratings are also considered. The Bank has sought to reduce credit risk associated with foreign exchange swaps through margining under two-way credit support annexes. This involves the Bank receiving and sending collateral to cover exposures on foreign exchange swaps generated by movements in exchange rates away from the contracted rate. Because the exchange of one currency for another is not simultaneous, foreign exchange transactions expose the Reserve Bank to settlement risk.

# **Operational Risk**

As part of its day-to-day activities, the Reserve Bank faces risks to the operation of its systems and the effective functioning of its internal processes. These operational risks are similar to those faced by other financial institutions. They range from the possibility that access to key financial infrastructure might be lost through to the possibility that services might not be delivered to the required standard. The Bank generally has a low appetite for operational risk. This reflects the Bank's view that satisfactory fulfilment of its important public policy responsibilities could be seriously undermined if its risk profile is poorly managed. That said, the Bank recognises it cannot eliminate risk from its operations completely.

While all parts of the Reserve Bank are exposed to operational risk of varying degrees, the most significant risks are those associated with financial transactions undertaken by the Bank for its own activities and that of its clients. During 2013/14, Financial Markets Group executed around 89 000 transactions, generating an average daily settlement value of around \$34 billion.

In addition to these activities, the Reserve Bank is the primary banker for a number of government entities – 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 the Reserve Bank Information and Transfer System. Given the pivotal nature of these activities, any operational failure could have widespread consequences for the financial system. To ensure the control environment remains suitably robust, ongoing assessments of the operating risks associated with these functions are undertaken.

The provision of the Reserve Bank's policy and business operations is highly dependent on complex information technology (IT) systems and the associated control framework is under continual review. A Technology Committee has been established to strengthen this framework further. This Committee is chaired by the Assistant Governor (Corporate Services) and includes the Chief Information Officer and the Heads of the Banking, Domestic Markets and Note Issue Departments. In collaboration with the Risk Management Committee and the relevant business areas, the Technology Committee facilitates the assessment, monitoring and management of IT risks, and ensures any IT-related initiatives are consistent with the Bank's overall technology strategy. This work is supported by the ongoing evaluation of industry developments to ensure the Bank's systems reflect current technology and remain robust. Assessments of appropriate staff resourcing, the adequacy of controls over IT processes and the level of security over information management are all incorporated in the Bank's ongoing risk management practices.

In addition to maintaining existing IT systems, the Reserve Bank is currently engaged in a number of large and complex projects, including the renovation of its banking applications and systems, the development of infrastructure to facilitate real-time retail payments and the upgrade of Australia's banknotes, as described elsewhere in this annual report. The successful delivery of these initiatives will ensure high-quality services are maintained for the Bank's clients and the Australian public. To further support the processes required to undertake this work, an Enterprise Portfolio Management Office (EPMO) was established early in 2014. The objective of the EPMO is to enhance the management of risk across the Bank's portfolio of projects by supporting the implementation of a consistent project management framework with controls and checks throughout the project lifecycle, including the change management and testing phases.

A key risk to the Reserve Bank is the loss of facilities, IT systems and/or staff as a result of a natural disaster or other disruptive event. In order to ensure the continuity of critical business services in such an event, the Bank has put in place extensive backup plans and operates a Business Resumption Site (BRS) in north-west Sydney. Permanent staff from some of the Bank's most critical operational areas are located at the BRS to enable virtual continuity of operations if a disruption to Head Office were to occur. All departments regularly test backup arrangements to cover a range of contingency scenarios, including working from the BRS or an alternative location. The Risk Management Committee monitors the results of these tests.

The effective management of compliance risk is central to the Reserve Bank's activities. The facilitation of compliance with relevant legislation, regulations, industry codes, standards and selected internal policies has been advanced over recent months with the creation of a small central compliance unit within RM. The compliance unit collaborates with all business areas to develop a broadly consistent approach to managing this risk and provides ongoing assurance to the Executive Committee regarding the level of compliance within the organisation. This work has included coordinating the Bank-wide implementation of recent amendments to the *Privacy Act 1988* and the appointment of the head of RM's compliance unit as the Bank's Privacy Officer.

In common with other organisations, the Reserve Bank faces the risk that its staff may engage in fraud or undertake unauthorised transactions, exposing the organisation to significant financial loss and/or reputational damage. To mitigate this risk, the Bank has several layers of controls in place. These include having a clear decision-making hierarchy, separation of duties, and controls over computer access at both the user and administrator levels. All staff involved in financial dealings have well-defined limits to their authority to take risks or otherwise commit the Bank. These arrangements are further enhanced by independent front-, backand 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 quidelines are physically separate and have separate reporting lines.

The Reserve Bank is strongly committed to establishing and maintaining a culture that encourages and supports the highest standards of behaviour. The Code of Conduct for employees articulates the values that the Bank expects its staff to demonstrate when pursuing its objectives, including promotion of the public interest, integrity, excellence, intelligent inquiry and respect (see the chapter on 'Management of the Reserve Bank'). Arrangements by which fraud and unethical behaviour can be reported anonymously, an important part of this framework, were modified during the year to reflect the requirements of the Public Interest Disclosure Act 2013. These changes supplemented the Bank's existing processes for dealing with reports of illegal or unethical behaviour by giving legislative effect to protections that the Bank was providing to its staff voluntarily. A number of further initiatives aimed at enhancing the existing fraud control framework were undertaken during 2013/14, including face-to-face fraud awareness training for all Bank staff and the enhancement of employee screening processes.

Operational failures can occur notwithstanding a strong risk management framework. These failures can adversely affect the Reserve Bank's reputation or lead to other costs. The Risk Management Committee receives timely reports on any disruptions. The reports document and review the relevant circumstances and identify areas where new controls may be needed or where existing controls should be strengthened.

# Anti-Money Laundering and Counter-Terrorism Financing Program

As a provider of designated services, the Reserve Bank is a 'reporting entity' under the Anti-Money Laundering and Counter-Terrorism Financing Act 2006 (AML/CTF Act) and, as such, is required to have and comply with an anti-money laundering and counter-terrorism financing program (AML/CTF program). The AML/CTF Act mandates that an AML/CTF program be divided into Part A and Part B. The primary purpose of Part A is to identify and mitigate the money laundering or terrorism financing risks faced by the Bank, while Part B sets out its customer identification procedures. In accordance with the AML/CTF Rules, Part A was approved by the Executive Committee and the Reserve Bank Board in mid 2013. At its August 2014 meeting, the Reserve Bank Board received a report, prepared by RM, on the operation of the Bank's AML/CTF program during 2013/14.

## Government Guarantee Scheme

On behalf of the Australian Government, the Reserve Bank manages the Guarantee Scheme for Large Deposits and Wholesale Funding (the Guarantee Scheme) and the Guarantee of State and Territory Borrowing. Applications for new guaranteed liabilities under both schemes closed in 2010 and the final outstanding liabilities under the Guarantee Scheme will expire in October 2015. The Bank will continue to have responsibility for collecting fees on existing liabilities under the state and territory borrowing guarantee for some years. Around \$280 million in fees was collected on behalf of the Australian Government in 2013/14.