

# Risk Management

The Reserve Bank seeks to carefully manage all the risks related to its role and responsibilities. The Risk Management Committee oversees the Bank's risk management processes and framework.

## Objectives and Governance Structure

Risk management is integral to all aspects of the Reserve Bank's activities and is the responsibility of all staff. Managers have a particular responsibility to evaluate their risk environment, put in place appropriate controls and ensure that these controls are well developed and implemented effectively. The Bank identifies, assesses and manages risk at both an enterprise ('top-down') and business ('bottom-up') level, a process that is subject to regular review.

These risks are managed to a level that is consistent with the Bank's risk appetite through processes that emphasise the importance of integrity, intelligent inquiry, maintaining high-quality staff and public accountability. The development and maintenance of an active risk management culture that acknowledges the need for careful analysis and management of risk in all business processes is an important element of this framework.

Oversight of the Reserve Bank's arrangements for risk management is undertaken by the Risk Management Committee (RMC). The RMC is responsible for ensuring the proper assessment and effective management of all the risks the Bank faces, with the exception of those arising directly from its monetary and banking 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

shareholding in Note Printing Australia Limited (NPA) are not the responsibility of the RMC. Instead, these risks are overseen by the Reserve Bank Board and covered by the NPA Charter, though responsibility for the day-to-day activities of NPA rests with the NPA Board and management. The Reserve Bank's risk management framework covers the relationships that the Bank has with NPA other than its shareholding – for example, joint participation in projects and the relationships of supplier, customer, landlord and tenant.

The RMC is chaired by the Deputy Governor and comprises the Assistant Governors for the Banking and Payments, Corporate Services, Currency and Financial Markets Groups; Chief Financial Officer; Chief Information Officer; Heads of the Audit, Human Resources, Information and Risk and Compliance Departments; and the General Counsel. The RMC meets six times a year, or more frequently if required, and keeps the Executive Committee and Reserve Bank Board Audit Committee informed about its activities.

Risk management process is both 'top-down' and 'bottom-up'



The Risk Management Committee at work

The RMC is assisted in its responsibilities by the Risk and Compliance Department (RM), whose 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 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 undertakes a risk-based audit program to provide assurance that risks are identified and key controls to mitigate these risks are well designed and working effectively. This includes reviewing the Reserve Bank's risk management framework and testing controls on a sample basis. The Head of Audit Department reports to the Deputy Governor and Chair of the Audit Committee, which meets at least every three months.

## Portfolio Risks

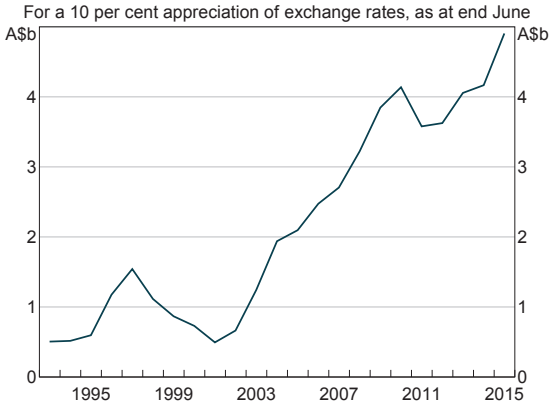
The Reserve Bank holds domestic and foreign currency-denominated financial instruments to support its operations in financial markets in pursuit of its policy objectives. These instruments account for the majority of the Bank's assets and expose its

balance sheet to a number of financial risks, the largest of which is exchange rate risk. 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), Head of RM and other senior staff are provided with timely reports on limits compliance, portfolio risks and performance.

## Exchange rate risk

Holdings of foreign currency-denominated assets expose the Reserve Bank's balance sheet to fluctuations in exchange rates as the Bank's financial statements are reported in Australian dollars. Given the policy function of these assets, the Bank does not seek to eliminate this exposure. Rather, the Bank mitigates the risk by diversifying foreign currency assets across several currencies. The diversification of foreign currency investments was expanded in 2014/15 to include assets denominated in pound sterling. The allocation to the Chinese renminbi was also increased. These changes shifted the benchmark portfolio composition to 55 per cent in US dollars, 25 per cent in euros, 5 per cent in Japanese yen, 5 per cent in Canadian dollars, 5 per cent in pound sterling and 5 per cent in Chinese renminbi (see the chapter on 'Operations in Financial Markets' for details). This

### Exchange Rate Risk on RBA Foreign Currency Portfolio



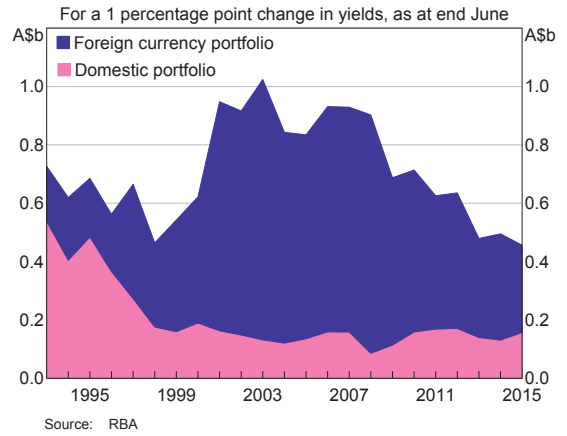
benchmark portfolio composition reflects the Bank's long-term risk and return preferences subject to requirements for liquidity and security. The portfolio is rebalanced to these benchmark shares daily, taking into account changes in market rates and transactions. The Bank's holdings of gold and Special Drawing Rights and its investments in the Asian bond funds are not managed relative to an internal benchmark.

The Australian dollar value of the Reserve Bank's portfolio rose over 2014/15, resulting in an increase in exchange rate risk. Based on the current level of reserves, a 10 per cent appreciation of the Australian dollar would result in mark-to-market losses of \$4.92 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 domestic and foreign portfolios comprise fixed-income securities. The value of these securities is affected by movements in market yields because the payment stream on these securities is fixed from the date of purchase. 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 contain a greater degree of interest

### Interest Rate Risk on RBA Portfolio



rate risk as their fixed cash flows extend further into the future. In contrast, securities with floating cash flows carry very little interest rate risk.

The Reserve Bank holds domestic securities for policy-related purposes. Total holdings of domestic securities increased by \$13.4 billion over 2014/15 to around \$86 billion. The average term of the Bank's domestic repo book at the end of June 2015 was around three weeks, little changed from the previous year. For domestic securities held outright, the sensitivity to movements in market yields increased over 2014/15 because of an increase in both the holdings and duration of semi-government securities and Australian Government Securities.

The Reserve Bank is exposed to very little interest rate risk on its balance sheet liabilities. Banknotes on issue account for about 42 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 government agencies, and exchange settlement account balances held by 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 duration target that reflects the Bank's long-term appetite for risk and return. During 2014/15, the benchmark duration target was reduced for the European portfolio from 18 months to 6 months, increased for the Chinese portfolio from 18 months to 30 months and left unchanged at 6 months for the US, Canadian and Japanese portfolios. The benchmark duration target for the new UK portfolio is 3 months.

The overall level of interest rate risk on the Reserve Bank's domestic and foreign financial assets declined over 2014/15, owing to a fall in the modified duration of the foreign currency portfolio, which mainly reflected the reduced duration target for the European portfolio and the low duration target for the UK portfolio. The Bank would incur a valuation loss of around \$456 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 following 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. 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. The Bank is exposed to a small amount of counterparty credit risk as a large portion of its domestic assets are held under repo. However, the credit risk on repos is inherently limited and ultimately reflects changes in the market value of the securities provided as collateral. The Bank would face a loss only if a counterparty fails to

repurchase securities sold under repo and the market value of the securities fell below 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 (see the chapter on 'Operations in Financial Markets' for details).

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. However, 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 currency portfolio are also typically confined to highly rated and liquid securities. The majority of the Bank's outright holdings are securities issued by the national governments of the United States, Germany, France, the Netherlands, Japan, Canada, the United Kingdom and China, with modest holdings of securities issued by select highly rated supranational institutions and government agencies.

The Reserve Bank also holds a portion of its foreign currency 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 repos is further managed by imposing limits on individual counterparty exposures. The credit risk framework utilises credit ratings and market-based credit measures to manage risk exposures.

The Reserve Bank uses foreign exchange swaps as part of its policy operations and as a means to enhance returns on the foreign currency portfolio. Credit risk on these instruments is managed to a low level by executing foreign exchange transactions with counterparties that meet strict eligibility criteria

and are subject to internationally recognised legal agreements. The Bank further limits risk associated with foreign exchange swaps through margining under two-way credit support annexes. This involves the Bank receiving and remitting collateral to cover exposures on foreign exchange swaps generated by movements in exchange rates away from the contracted rate.

## Operational Risk

The Reserve Bank faces a broad range of operational risks associated with its day-to-day activities. These risks range from the potential for loss of access to its key IT infrastructure to the possibility that services might not be delivered to the required standard. The appetite for this type of risk is generally low, reflecting 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 that it cannot completely eliminate risk from its operations.


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 2014/15, Financial Markets Group executed around 94 000 transactions, generating an average daily settlement value of around \$38 billion. The Bank is also the primary banker for a number of government agencies, including the Australian Taxation Office and Department of Human Services, and it maintains the infrastructure to facilitate

real-time interbank payment and settlement services through the Reserve Bank Information and Transfer System (RITS). Given the pivotal nature of these activities, any operational failures could have widespread consequences for the financial system. To ensure that the control environment remains suitably robust, the Bank has a range of processes in place to facilitate ongoing and effective management of its operational risks.

The provision of the Reserve Bank's policy and business operations is highly dependent on complex IT systems. Therefore, the Bank's risk management framework supports ongoing focus on controlling the risks associated with these systems. A key element of this framework is the Technology Committee, which is chaired by the Assistant Governor (Corporate Services) and collaborates with the RMC and relevant business areas to facilitate the assessment, monitoring and management of IT-related risks and ensure that IT-related initiatives are consistent with the Bank's IT strategy. This work is supported by the continual evaluation of industry developments to confirm that the Bank's systems conform to current IT standards and remain robust. Assessment 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 risk management framework.

Resources continue to be directed towards the delivery of a number of large and complex multi-year projects. These include the renovation of the Reserve Bank's banking applications and systems, the development of infrastructure to facilitate real-time retail payments and the upgrade of Australia's banknotes. Successful completion of these projects will ensure high-quality services are maintained for the Bank's clients and the Australian public. The risks associated with project work are carefully managed so that adequate resources are available, nominated project deadlines are met and change management is effectively implemented.

Average daily transactions value of around \$38 billion





The Reserve Bank's policy and business operations are highly dependent on complex IT systems

The continuity of critical business services during a disruptive event such as a natural disaster or terrorist attack is a key area of focus for the Reserve Bank. As such, considerable resilience has been developed for its operations, including the use of a dedicated Business Resumption Site (BRS) in outer 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. Each department is required regularly to test back-up plans to gauge their readiness for a range of contingencies, including those experienced during the Lindt Café siege in December 2014 (see below). The Bank also participates in contingency event exercises with external organisations to ensure that its staff are well briefed in their roles during these types of events and that effective internal and external communication arrangements are in place. The RMC is briefed on the results of these exercises.

The effective management of compliance risk is central to the Reserve Bank's activities. A small, central compliance unit within RM collaborates with business areas to develop a broadly consistent approach to managing this risk and keeps the RMC informed regarding the level of compliance in key areas within the Bank.

Another type of operational risk is that the Reserve Bank's staff may engage in fraud or other unethical behaviour. 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 dealing have well-defined limits to their authority to take risks or otherwise commit the Bank. 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 remain physically separate and have separate reporting lines.

The Reserve Bank remains 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 (see the chapter on 'Our Charter, Core Functions and Values' for details). The Bank has arrangements in place to enable fraud or unethical behaviour to be reported anonymously, either by a member of staff or the public, and fully investigated. Ongoing training and awareness programs are also conducted, covering appropriate standards for staff behaviour and awareness of specific risk areas such as fraud and foreign bribery.

Notwithstanding these measures, operational failures can occur, which could adversely affect the Reserve Bank's reputation or lead to financial or other costs. The RMC receives timely reports on any disruptions, which 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, manage 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 2015 meeting, the Reserve Bank Board received a report, prepared by RM, on the operation of the Bank's AML/CTF program during 2014/15.

## Government Guarantee Scheme

On behalf of the Australian Government, the Reserve Bank manages the Guarantee Scheme for Large Deposits and Wholesale Funding and the Guarantee of State and Territory Borrowing. Applications for new guaranteed liabilities under both schemes closed in 2010. The Guarantee Scheme for Large Deposits and Wholesale Funding has entered its first stage of closure, with the last wholesale funding securities that were guaranteed under the scheme maturing in March 2015. The guaranteed deposit accounts remain covered by the scheme and will retain this guarantee until October 2015. As administrator for the Guarantee of State and Territory Borrowing, the Bank will continue to be responsible for collecting fees on existing liabilities under the scheme for some years. Around \$45 million in fees was collected on behalf of the Australian Government in 2014/15.

## Contingency Plans Enacted

The Reserve Bank's location on Martin Place and Phillip Street in Sydney meant that its Head Office building and staff were significantly affected by the siege and tragic loss of life at the Lindt Café in December 2014.

Well-rehearsed contingency plans were enacted, including putting the Head Office building into lockdown. The Reserve Bank's executives prioritised accounting for staff and cooperating with the police, who occupied the lower floors of the building. No Bank staff were among the 17 hostages.

Safeguarding all critical operational functions of the Reserve Bank was also a priority. Staff in Banking Department relocated from their ground floor premises to other levels and continued operational

# Around \$45 million in fees for guarantees, collected on behalf of the Government

functions until off-site personnel were able to move to the BRS. Payments Settlements Department also followed their normal contingency arrangements on the day of the siege and the services they provide to the financial system were unaffected. Communication with contacts in the payments industry was established to reassure them that operations were unchanged by the unfolding incident. RITS and other core systems were already operating from the BRS at the time of the siege as the Bank has a practice of rotating these critical systems between Head Office and the BRS.

As it became evident that the events in the Lindt Café were not going to be resolved quickly, arrangements were made for key Information Technology Department staff to leave Head Office for the BRS, where they helped ensure that critical operational systems and other business systems continued to run smoothly. An orderly and safe evacuation of the Head Office building was assisted by police in the mid afternoon on 15 December. Critical staff continued to conduct the essential business of the Bank from the BRS on 16 December, including liquidity management and foreign exchange operations. Most business activities resumed at Head Office from 17 December.

Throughout the event, there were regular communications to all staff through a variety of channels (email, voice messages and web messages), so that key instructions and status updates were accessible to staff regardless of their location. There was additional communication with managers to assist them in implementing their business continuity plans, which is a key element of the Reserve Bank's risk management framework.



Information Department staff at the Reserve Bank's Business Resumption Site on Tuesday, 16 December 2014, the day after the Lindt Café siege, (from left) Jacqui Dwyer (Head of Information Department), Rhiannon Hornsey, Renée Mitchell, Jens Korff and Raj Kannori