

Risk Management

Objectives and Governance Structure

As a result of carrying out its central banking responsibilities, the Reserve Bank faces a broad range of both operational and financial risks. The most significant risks are those associated with the financial assets held by the Bank to underpin its operations in financial markets. However, the Bank is also exposed to significant operational risks through its banking and settlement transactions 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 accomplishing its public policy and other responsibilities to the expected standard would be undermined if the risks it faces were managed inadequately since this could result in significant financial losses and/or damage to the Bank's reputation. That said, the Bank recognises that it cannot eliminate the risks involved in its activities completely.

The underlying principle of the Reserve Bank's risk management framework is that the prime responsibility for controlling and mitigating risks on a day-to-day basis lies with management of each operational area. Under this approach, line managers play a key role in identifying and assessing the risks associated with their business, including the development and monitoring of mitigating controls. Management also promotes an active risk management culture, which emphasises careful analysis and control of risk as a vital part of all business processes in the Bank.

Oversight of the Reserve Bank's arrangements for risk management is undertaken by the Risk Management Committee. This is a committee of senior executives responsible for ensuring that all the risks facing the organisation, with the exception of those arising directly out of the Bank's monetary, financial stability and payments policy functions, are properly evaluated and managed. It 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. The Committee meets every three months, or more frequently if required, and informs the Bank's Executive Committee and the Board's Audit Committee of its activities. The Risk Management Committee is supported in its responsibilities by the Risk Management Unit (RMU). The RMU's main role is to help groups and departments manage their risk environment in a manner which is broadly consistent across the Bank. The RMU also monitors performance and risk associated with the Bank's activities in the financial markets.

The Audit Department co-ordinates closely with – but remains separate from – the RMU. Audit provides an independent assurance that the Bank's risk management framework is effective and applied across the 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 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 Securrency 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. The risks inherent in the ownership of the companies are managed by the Bank.

Portfolio Risks

The vast majority of the Reserve Bank’s assets comprise domestic and foreign currency-denominated financial instruments that are used to help meet its policy objectives. These assets expose the balance sheet to a number of financial risks, of which the most important are exchange rate, interest rate and credit risks. The responsibility for managing these risks rests with the Financial Markets Group. However, the RMU is responsible for monitoring these risks and ensuring compliance with the control framework.

The Bank cannot eliminate its portfolio risks as this would interfere with its ability to implement its policy objectives. The risks are instead managed to a level consistent with the Reserve Bank’s objectives through a number of controls, which are discussed below. In addition, the Assistant Governor (Financial Markets), the Head of Risk Management and other senior staff are provided with 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. This exposes the Bank’s balance sheet to fluctuations in exchange rates, commonly referred to as exchange rate risk.

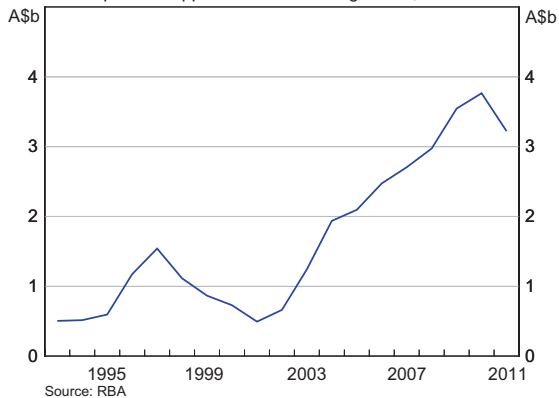
Given its policy role, the Reserve Bank cannot eliminate this exposure. Rather, the Bank mitigates its exchange rate risk by diversifying its foreign-currency assets across four highly liquid currencies. The allocation was changed over the course of 2010/11 to include assets denominated in Canadian dollars, taking the portfolio

composition to 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 allocation to Canadian dollars was effected gradually to avoid disrupting markets. The portfolio is rebalanced daily taking into account changes in market rates or transactions.

The exchange rate risk on the portfolio declined over the year as the value of the foreign currency reserves portfolio fell, in Australian dollar terms, owing to the appreciation in the Australian dollar exchange rate. The portfolio was unchanged when measured in foreign currency terms. At the current level of reserves, the potential loss from a 10 per cent appreciation in the Australian dollar would result in valuation losses of around \$3.2 billion.

Exchange Rate Risk on RBA Foreign Currency Portfolio

For a 10 per cent appreciation of exchange rates, as at 30 June



Interest rate risk

The Reserve Bank’s financial assets largely comprise domestic and foreign fixed-income securities. The value of these assets is affected by movements in interest rates as the payment stream of these securities is fixed. In general, longer-dated securities are more sensitive to movements in interest rates than shorter maturity instruments.

A little less than half of the Bank's financial assets are invested in highly rated domestic securities, which are held for policy-related purposes. At the end of June 2011, total holdings of domestic securities were \$32 billion, around \$5 billion lower than a year earlier with a fall in holdings of securities held under repurchase agreements (repos) more than offsetting an increase in securities held outright. This generated only a modest rise in interest rate risk on the domestic portfolio as outright holdings comprise a relatively small portion of total domestic assets and the purchases were concentrated in securities of very short duration. The majority of domestic securities is invested under repos with short terms to maturity. While already quite short, the average term to maturity of the Bank's domestic repo book declined from 24 days at the end of June 2010 to around 14 days at end June 2011 (See chapter on 'Operations in Financial Markets').

The Reserve Bank's balance sheet liabilities are unique and carry little overall interest rate risk. Banknotes on issue make up around two-thirds of total liabilities and carry no price risk. The other significant obligations 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, and the interest paid reflects domestic short-term interest rates. This means the level of interest rate risk on the Bank's liabilities is low and is mainly offset by the exposure on its domestic assets.

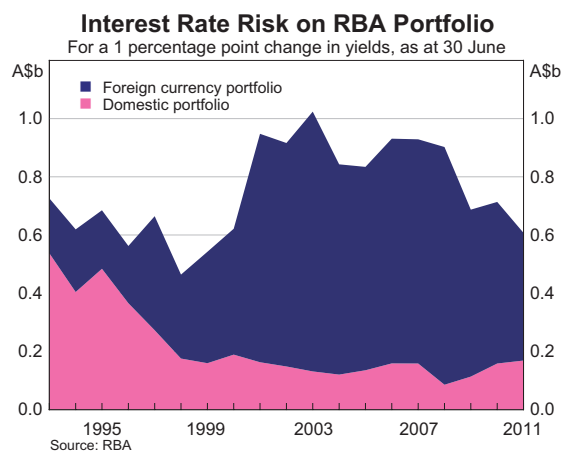
Unlike the domestic portfolio, the Bank's foreign currency assets are managed relative to a benchmark. The benchmark is specified in terms of a target duration that reflects the Bank's long-term risk and return preferences. The different approaches to the domestic and foreign portfolios reflect different objectives. The domestic portfolio is held solely for domestic policy purposes, while the foreign portfolio is held to provide capacity for foreign exchange intervention. To ensure the foreign portfolio is able to meet this objective, it is invested in highly liquid marketable securities of the highest credit quality. The benchmark duration remained at 18 months for the US and European portfolios, but was reduced to 12 months for the Japanese portfolio. When fully implemented, the benchmark duration for the Canadian portfolio will be 18 months.

Looking at the portfolios together, the overall level of interest rate risk on the Bank's financial assets declined over the year. The Bank would expect to incur a valuation loss of a little over \$600 million if interest rates in Australia and overseas rose uniformly by 1 percentage point across the yield curve. This is around \$100 million less than the same time last year, mainly reflecting the valuation effects on the foreign portfolio when measured in Australian dollar terms.

Credit risk

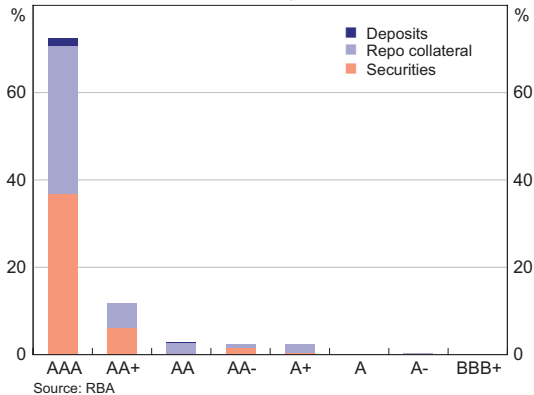
The Reserve Bank applies a strict set of criteria to its investments to manage its credit exposure to a very low level. These mainly involve investing only in highly rated assets and dealing with highly rated counterparties. In addition, where possible, the Bank's transactions are executed in terms of internationally recognised legal agreements.

The Reserve Bank minimises its credit exposure on its outright holdings in the domestic portfolio by investing only in securities issued by the Australian Government or by state and territory government borrowing



Credit Exposure

Per cent of balance sheet, as at 30 June 2011



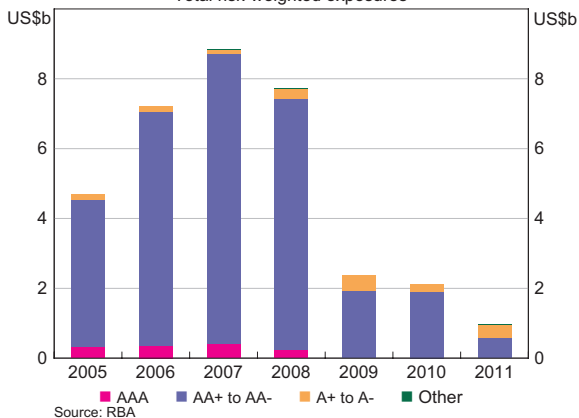
10 per cent for some long-dated privately issued securities. The amount of over-collateralisation is monitored daily by the RMU and advice is given to the Bank's dealers when a margin call is required to maintain the degree of over-cover. The composition of domestic securities held under repo changed slightly during 2010/11 (see chapter on 'Operations in Financial Markets'). For example, 'private securities' as a proportion of total domestic repo collateral declined from around 40 per cent at the start of the financial year to around 25 per cent in June 2011. These financial assets were largely replaced by highly rated government, semi-government and supranational securities.

Given that the Reserve Bank's market operations are conducted for policy reasons, all members of the Reserve Bank Information and Transfer System (RITS) are eligible repo counterparties. As noted previously, credit risk inherent in these transactions is controlled largely through contracts on eligible collateral. All counterparties must also be co-signatories to legal documentation underpinning repos and must be able to ensure efficient and timely settlement of transactions within the Austraclear system.

Like the domestic portfolio, the Bank's investments in the foreign portfolio are mainly confined to highly rated securities. The majority of the Reserve Bank's outright holdings are limited to highly liquid securities issued by the national governments of the United States, Germany, France, the Netherlands, Japan and Canada. The foreign asset portfolio also comprises securities issued by select highly rated supranational institutions, US agencies and foreign government-guaranteed securities.

Foreign Currency Credit Exposures

Total risk-weighted exposures



authorities. As discussed above, a large portion of the Bank's domestic assets are held under repo. The credit risk on repos is inherently limited and ultimately reflects the quality and market value of the collateral provided. The residual exposure is low – the Bank faces a potential loss only if the counterparty fails to repurchase securities sold under repo *and* the market value of the securities provided as collateral is less than the initial cash consideration. The Bank manages this exposure by applying an appropriate margin ('haircut') to the collateral and requiring that repo collateral is of high quality.

The degree of over-collateralisation is generally set at 2 per cent for government-backed securities or other securities regarded as 'general collateral', but up to

The Reserve Bank holds a portion of its foreign portfolio in short-term repos, which is the main instrument used for day-to-day portfolio cash management. As mentioned above, a small amount of residual credit risk is inherent in repos. The Bank manages this risk in a similar way to the domestic portfolio by requiring 2 per cent over-collateralisation. The credit risk on foreign repos is limited further by dealing only with counterparties rated at least BBB+. The Reserve Bank also 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-.

As a result of the decision to reduce significantly the Bank's exposure to unsecured commercial bank deposits, risk-adjusted counterparty exposures declined to around US\$1.0 billion over the course of 2010/11. Funds previously invested in commercial bank deposits were largely switched into secured repo instruments, resulting in a modest increase in risk-adjusted exposures to counterparties rated A+ to A- as the minimum credit rating on repo counterparties is lower than the minimum rating for deposit counterparties. This shift was acceptable because the risk profile of these secured instruments is lower than for deposits with commercial banks. The underlying credit quality of the Bank's financial assets remained very high, with around 90 per cent rated at AA- or higher.

Operational Risk

The Reserve Bank faces operational risks that can arise from inadequate or failed internal processes and systems or from external events. These risks are similar to those faced by other financial institutions. They range from the possibility that access to key financial infrastructure might be lost to the possibility that services might not be delivered to the required standard.

While all parts of the Reserve Bank are exposed to operational risks of varying degrees, the most significant are those associated with the financial transactions undertaken by the Bank for its own business and that of its clients. Over the course of 2010/11, the Bank's Financial Markets Group executed around 66 000 transactions, generating an average daily settlement value of around \$24 billion, to achieve its policy objectives. Although the number of transactions was slightly higher than in 2009/10, it remains well below the levels seen in previous years because of the lower levels of repos in both the foreign and domestic portfolios.

In addition to these activities, the Reserve Bank is the main banker for a number of government agencies – including the Australian Taxation Office, Medicare Australia and Centrelink – 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 operational risks associated with the complexity of the Reserve Bank's computerised systems are controlled by extensive monitoring, reconciliation and reporting systems. There are comprehensive procedures in place that cover any changes to system infrastructure or applications, with staff on-call to ensure that any system problems are quickly assessed and remedial action put into place where required. Technology enhancements to improve data security and information management processes are routinely evaluated and implemented to ensure that Bank practices in these areas remain current and secure. The Bank has an ongoing program of development work for its main systems to ensure that they reflect best practice and remain robust. This work is typically carried out under standard guidelines for project management, with all new hardware and newly developed software, and their links to existing management systems, thoroughly tested before entering the production environment.

Appropriate staff resourcing, tight controls over information technology processes, security over information management and robust business contingency planning are all actively addressed in the Bank's ongoing planning and monitoring processes.

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. Extensive back-up plans and capacity have been put in place to ensure that its critical business services can continue efficiently and reliably if access to Head Office facilities and IT systems is

lost. The centrepiece of these arrangements is the Bank's Business Resumption Site located in the north-west of the Sydney metropolitan area. 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. Business areas within the Bank regularly test their back-up arrangements to cover a range of contingency scenarios. The results of the tests are monitored by the Risk Management Committee.

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 a number of controls in place to mitigate this risk. 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.

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.

The Reserve Bank's employee Code of Conduct outlines the high standard of integrity and propriety which 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 the framework, which endeavours to keep staff aware of their responsibilities in this area.

Government Guarantee Scheme

On behalf of the Government, the Reserve Bank manages 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 will continue to have responsibility for collecting fees on existing liabilities for a few more years. A total of \$1.2 billion in fees was collected on behalf of the Government in 2010/11.