Risk Management

Effective risk management is an integral element in the Reserve Bank achieving its strategic objectives and meeting its policy responsibilities. Accordingly, a risk management and control framework underpins effective decision-making in the Bank, while allowing enterprise-wide and emerging risks to be identified and managed in a way that is consistent with the Bank's risk appetite. This framework is overseen by the Risk Management Committee.

Objectives and governance structure

The Reserve Bank, like any organisation, cannot achieve its objectives without taking on risk. Management of these risks is the responsibility of all staff. In particular, the Bank has implemented the 'three lines model'. Departments – the 'first line' – are responsible for evaluating their risk environment, putting in place appropriate controls and ensuring that these controls are implemented effectively. This is supported by a 'second line' of staff who provide additional expertise, monitoring and challenge (particularly in areas where the inherent risks are more severe). Audit Department provides a 'third line' of independent assurance and advice.

The 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. These risks are managed to a level that is consistent with the Bank's risk appetite that is articulated by the Bank's management. The Bank supports and promotes 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.

Oversight of the Reserve Bank's arrangements for risk management is undertaken by the Risk Management Committee. The committee is chaired by the Deputy Governor and comprises: the Assistant Governors for Business Services, Corporate Services and Financial Markets groups; the Chief Financial Officer; the Chief Information Officer; the Heads of the Audit, Human Resources, Information, and Risk and Compliance departments; and the General Counsel. The Risk Management Committee meets at least six times each year and informs the Executive Committee and the Reserve Bank Board Audit Committee of its activities.

The Risk Management Committee is responsible for ensuring the proper assessment and effective management of all the risks the Reserve Bank faces, with the exception of those arising directly from its monetary and financial stability policies 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) are overseen by the Reserve Bank Board, while the risks of operating NPA are overseen by the NPA Board and management.

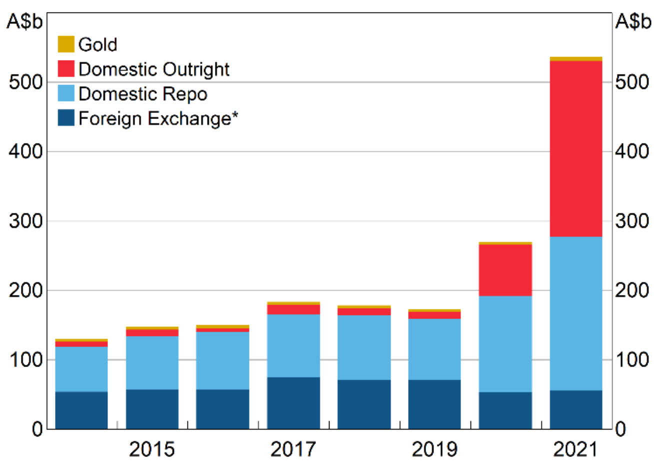
The Risk Management Committee is assisted in its responsibilities by Risk and Compliance Department. The department assists individual business areas manage their risk and compliance environment effectively within a framework that is consistent across the Bank. It monitors risk and performance associated with the Reserve Bank's activities in financial markets. It also supports the business areas by implementing Bank-wide control frameworks covering fraud, bribery and corruption, business continuity and compliance-related risks. The Head of Risk and Compliance Department reports directly to the Deputy Governor and the Chair of the Audit Committee.

Audit Department undertakes a risk-based audit program to provide independent assurance that risks are identified and key controls to mitigate these risks are well designed, implemented and working effectively. The Head of Audit Department reports to the Deputy Governor and the Chair of the Audit Committee. Audit Department's work is governed by the Audit Department Charter, which is approved by the Audit Committee.

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 primary responsibility for managing these risks rests with the Financial Markets Group. Risk and Compliance Department monitors these risks and assesses compliance with the approved risk framework. Within this framework, compliance with financial management guidelines and developments in portfolio risks are reported to the Risk Management Committee.

RBA Portfolio Composition

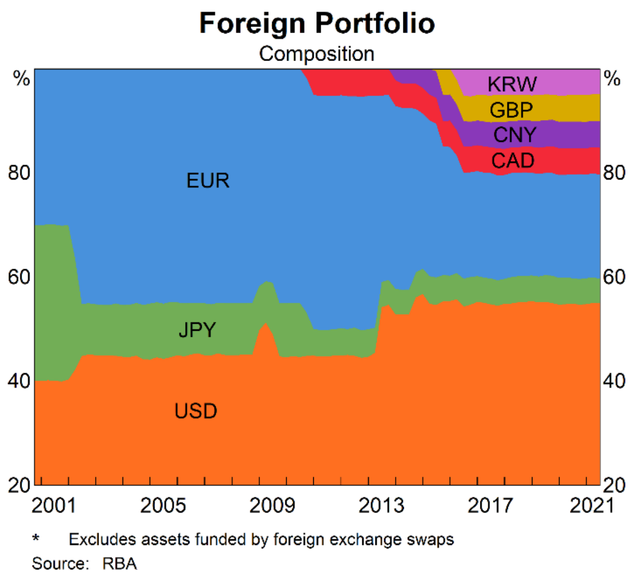


* Includes outright foreign exchange holdings, foreign exchange swaps, Special Drawing Rights and Asian Bond Fund holdings

Source: RBA

Exchange rate risk

The Reserve Bank is exposed to exchange rate risk as some of the Bank's assets are denominated in foreign currency, while most of the Bank's liabilities are denominated in Australian dollars. Foreign currency assets consist of outright foreign exchange holdings, assets funded by foreign exchange swaps, Special Drawing Rights (an international reserve asset created by the International Monetary Fund) and units in the Asian Bond Fund (an investment that is managed externally by the Bank for International Settlements). Outright foreign exchange holdings are the largest component of foreign currency assets. As these assets are held for policy purposes, the Bank does not seek to eliminate or hedge the associated foreign exchange exposure. However, the Bank mitigates some of this risk by diversifying these assets across various currencies. The foreign portfolio has target shares of 55 per cent in US dollars, 20 per cent in euros and 5 per cent each in Japanese yen, Canadian dollars, UK pound sterling, Chinese renminbi and South Korean won. These shares have been unchanged since 2016. The portfolio composition reflects the Bank's risk appetite and desired liquidity. Some limited deviation from target currency shares is permitted to simplify management and minimise transaction costs.

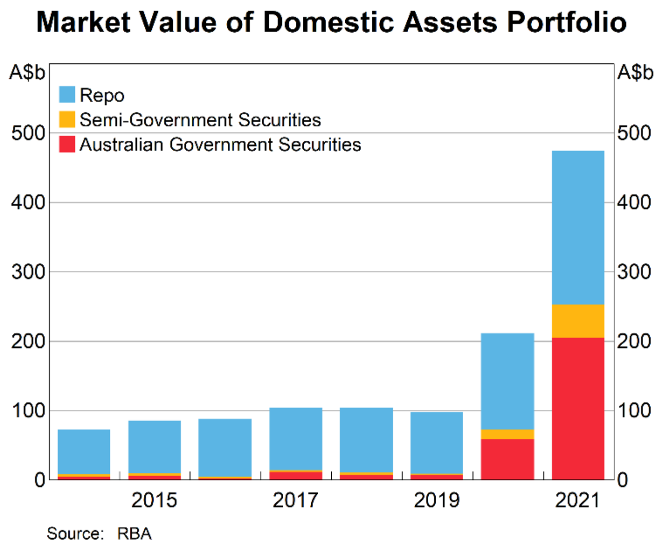


The Australian dollar value of the Reserve Bank's foreign portfolio decreased over 2020/21 owing to the broad-based appreciation of the Australian dollar, while being little changed in foreign currency terms. Based on the size of the foreign portfolio as at 30 June 2021, a 10 per cent appreciation of the Australian dollar would result in a mark-to-market loss of $5.2 billion.

Interest rate risk

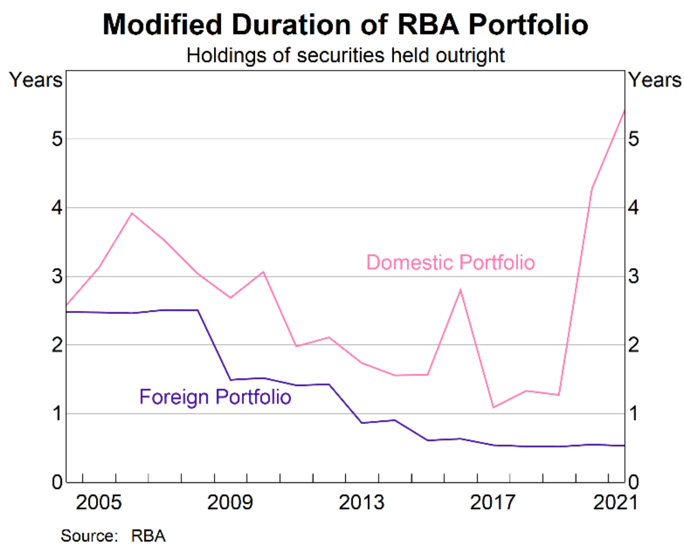
The value of the Reserve Bank's financial assets is also exposed to movements in market interest rates. Interest rate risk on the Reserve Bank's portfolio rose to a historically high level over 2020/21, reflecting the increase in the size and interest rate sensitivity of the domestic portfolio.

Total holdings of domestic securities increased by $263 billion over 2020/21 to $475 billion. Domestic securities held outright increased by $180 billion to $253 billion, while those held on a temporary basis under repurchase agreements (repos) increased by $83 billion to $221 billion.

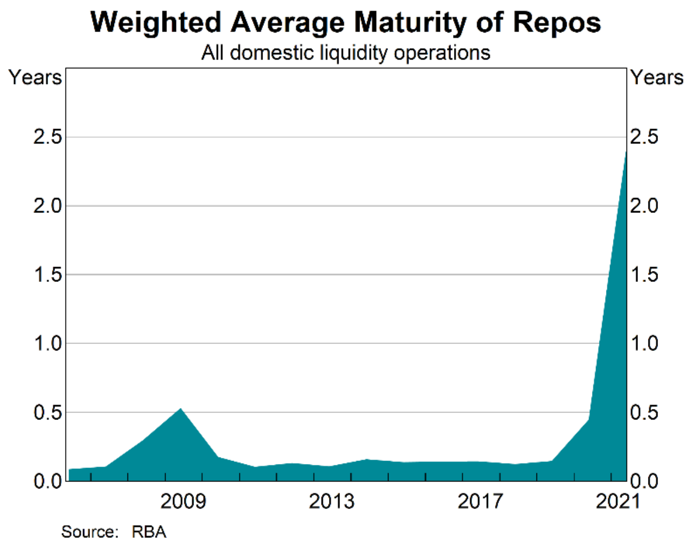


The expansion in securities held outright was a result of the Reserve Bank's policy actions to support the Australian economy since the onset of COVID-19 – in particular, purchases of Australian Government Securities (AGS) and semi-government securities (semis) in the secondary market to support the three-year yield target, as part of the bond purchase program, which focused on the 5 - to 10-year segment of the yield curve, and to address dysfunction in the government bond market.

The interest rate sensitivity of outright holdings in the domestic portfolio, as measured by modified duration, increased from 4¼ years to 5½ years over 2020/21. However, the Bank intends to hold these bonds to maturity. This means the return the Bank will earn on these bonds will be determined by the yield on each bond at the time of purchase and will not change with valuation gains or losses that result from fluctuations in yields (see chapter on 'Earnings, Distribution and Capital').



The increase in repos was mainly due to the Bank providing additional liquidity to the financial system under the Term Funding Facility (TFF), which closed to new drawdowns on 30 June 2021. Under the TFF, the Bank offered three-year funding to authorised deposit-taking institutions (ADIs) under repurchase transactions (see chapter on 'Operations in Financial Markets'). Reflecting an increased share of repos with three-year terms, the average term of all outstanding repos increased over the year from around 5½ months to 2½ years.



The Reserve Bank's foreign portfolio is comprised of assets denominated in the seven reserve currencies. Each asset portfolio is managed relative to a benchmark portfolio, with a duration target that reflects the Bank's long-term appetite for interest rate risk and return. These targets are reviewed periodically. During 2020/21, duration targets were unchanged in all seven asset benchmark portfolios. The duration targets are: 18 months for the Chinese and South Korean portfolios; six months for the European, Canadian and US portfolios; three months for the UK portfolio; and less than three months for the Japanese portfolio. Some limited variation in actual portfolio duration from these duration targets is permitted to reduce transaction costs and provide scope to staff to enhance portfolio returns. The weighted-average benchmark duration target for the Bank's total foreign portfolio was little changed over 2020/21 at around 6¾ months. This is low by historical standards, reflecting the generally low level of interest rates, which offer little compensation for the risk of capital losses should longer-term bond yields increase significantly.

The Reserve Bank is also exposed to an increase in interest rate risk on its balance sheet liabilities owing to a maturity mismatch between assets and liabilities since the introduction of the TFF and asset purchase program. Liabilities include Exchange Settlement (ES) account balances held by ADIs, deposits held by the Australian Government and its agencies, and banknotes on issue. ES account balances have increased significantly since the onset of the pandemic (see chapter on 'Operations in Financial Markets'). Interest paid on ES account balances, as well as deposits held by the Australian Government and its agencies, reflects the Bank's monetary policy settings. Historically, this interest cost has been broadly offset by earnings on the domestic asset portfolio. However, TFF repo rates are fixed for three years and government bond holdings attract a fixed yield if held to maturity, while the remuneration rate on ES balances can change with the Bank's monetary policy settings (see chapter on 'Earnings, Distribution and Capital'). Banknotes on issue have declined as a share of liabilities over the year from 32 per cent to 18 per cent and carry no interest cost to the Bank.

Credit risk

Credit risk is the potential for financial loss arising from the default of a debtor or issuer, or from a decline in asset values following a deterioration in credit quality. The Reserve Bank manages its credit exposure by applying a strict set of eligibility criteria to its holdings of financial assets and to counterparties with which it is willing to transact.

The Bank is exposed to very little issuer 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 on domestic assets that are held under repo. The Bank would face a loss only if a counterparty failed to repurchase securities sold to the Bank under repo *and* the market value of the securities fell below the agreed repurchase amount. The Bank manages this exposure by requiring that these securities meet certain eligibility criteria and by applying an appropriate margin to the securities, which reduces the risk profile the Bank faces. The required margin is maintained throughout the term of the repo through daily two-way margining.

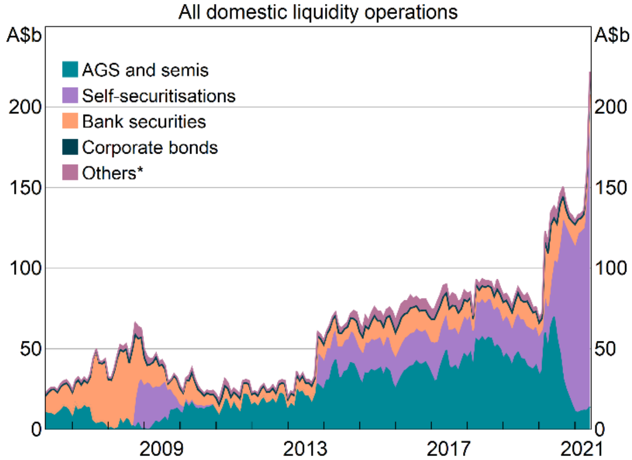
Alongside the establishment of the TFF in March 2020, the Reserve Bank relaxed constraints on certain ADIs posting eligible self-securitised asset-backed securities (ABS) (also called self-securitisations) as collateral.[1] Previously, only ADIs with access to the Committed Liquidity Facility (CLF) were allowed to post self-securitisations as collateral under the Bank's standing facilities. Any eligible self-securitisation can be presented as collateral under the TFF. This adjustment in the policy has been associated with a significant increase in usage of self-securitisations as collateral as the majority of collateral presented under the TFF has been self-securitisations. These securities are related to the counterparty presenting them as collateral in a repo, implying that a default by the counterparty may be associated with a decline in the value of the securities held as collateral. However, this risk is mitigated because the issuing trust is bankruptcy remote,[2] the securities must be rated AAA and they attract a relatively high margin. Unlike other types of securities accepted as collateral in the Bank's operations, these securities are not typically traded in the market as they are held by ADIs solely for the purpose of accessing central bank liquidity. Risk and Compliance Department values these securities based on a pricing model that references prices in the public ABS market. When the TFF was established, the Reserve Bank froze prices of eligible self-securitisations until early 2023 for the purpose of valuing collateral accepted under repo. This was to ensure that modelled prices are not unduly affected by potential volatility in public ABS arising from the COVID-19 pandemic.

1 ABS are debt securities issued by a trust that are backed by a pool of assets such as residential mortgages. Investors that purchase the securities receive income funded by the principal-and-interest payments from the pool of assets. Self-securitisations are a type of ABS. A distinguishing feature of self-securitisations is that notes issued from the trust are typically not sold to the public; rather, they are held by the ADI that issued them to use as collateral to access central bank liquidity. The Bank accepts securities issued by eligible self-securitisations as collateral.

2 That is, the assets sold into the trust are not at risk if the counterparty that sold those assets into the trust becomes bankrupt.

Collateral Held Under Repo

All domestic liquidity operations

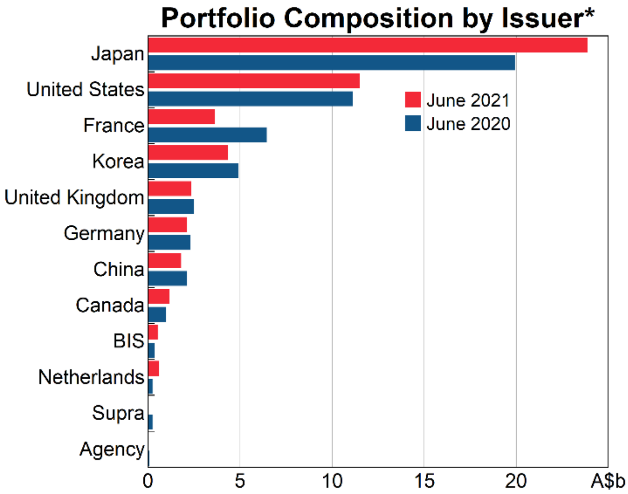


* Others include RMBS, ABS, supranational and corporate debt, securities with government guarantee and other AAA securities

Source: RBA

The counterparties of the Reserve Bank dealing in policy operations in the domestic market must be members of the Reserve Bank Information and Transfer System (RITS), subject to an appropriate level of regulation and able to settle transactions within the Austraclear system. Certain counterparties must also demonstrate a material connection to the bond and/or repo markets and be creditworthy to be eligible. Repo transactions with the Bank are governed by a Global Master Repurchase Agreement.

Investments in the Reserve Bank's foreign currency portfolio are typically confined to highly rated and liquid securities, as well as deposits with foreign central banks. 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, China and South Korea, with modest holdings of securities issued by highly rated supranational institutions and government agencies. Gross holdings of Japanese yen-denominated assets increased by $4.3 billion over 2020/21, and remained the largest share of the Bank's foreign currency issuer exposures. The majority of these assets are funded under short-term foreign exchange swaps between Japanese yen and other currencies in the Reserve Bank's portfolio. When the cost of hedging currency risk under short-term foreign exchange swaps is taken into account, yields on short-dated Japanese investments have generally been higher than those available in the other currencies in the Reserve Bank's portfolio (see chapter on 'Operations in Financial Markets'). A limit on the size of exposures to individual currencies based on the Bank's capital mitigates concentration risk.



* Includes assets held outright, funded by foreign exchange swaps, and held under repurchase agreements

Source: RBA

The Reserve Bank 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, which is maintained through two-way margining in the local currency; 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 and requiring execution of a Global Master Repurchase Agreement (or Master Repurchase Agreement where appropriate) with each counterparty.

The Reserve Bank undertakes foreign exchange and gold swaps as part of its policy operations and as a means of enhancing returns on the foreign currency portfolio. The Bank commenced transacting in long-term foreign exchange swaps during the year to manage existing and future foreign currency commitments to the International Monetary Fund (IMF). This involves swapping Australian dollars into US dollars for terms of up to two to three years. IMF commitments were previously funded from net foreign currency reserves. Credit risk on foreign exchange and gold swaps is managed by transacting only with counterparties that meet strict eligibility criteria, including the requirement to have executed with the Bank an International Swaps and Derivatives Association (ISDA) agreement with a credit support annex. Exposures generated by movements in market exchange and interest rates and gold prices are managed through daily two-way margining in Australian dollars.

In addition to gold swaps, the Bank undertakes some limited lending of its gold holdings. The lending is either fully collateralised or the borrower has government support. As at 30 June 2021, 6.0 tonnes of gold, valued at $0.5 billion, was on loan.

Operational risk

The Reserve Bank faces a diverse range of operational risks reflecting its responsibilities as a central bank. These risks range from those related to the health and wellbeing of its staff during the COVID-19 pandemic, availability of technology and facilities services, and the unintentional disclosure of confidential and sensitive information. In order to achieve its strategic objectives effectively, the Bank's appetite for these types of risk is generally low, although it recognises that it is neither possible nor necessarily desirable to eliminate some risks inherent in its activities. The Bank also accepts some risk in order to promote innovation in its core activities.

The most significant operational risks the Bank is exposed to are:

- transacting in financial markets to implement monetary policy
- maintaining the infrastructure to facilitate real-time interbank payment and settlement services through RITS and the FSS
- providing banking facilities for a number of government entities, including the Australian Taxation Office, Medicare and Centrelink
- the provision of safe, secure and reliable Australian banknotes.

Managing risk and innovation presents the Bank with opportunities, while also reducing possible operational failure in critical activities that can have widespread consequences. The Bank's Financial Markets Group, for example, executed around 32,000 transactions in 2020/21, generating an average daily settlement value of around $21.3 billion, while RITS settles around $196 billion every day on average. The risk management framework supports the identification, analysis and management of risks that could adversely affect these operations, and also promotes greater efficiencies and agility. These include mechanisms by which emerging risks are identified, processes and systems by which subject matter experts consider these risks, and channels that facilitate these risks being raised with executives. Various metrics are used to highlight to executives how risks are being managed and whether risks are consistent with the Bank's risk appetite. These metrics range, for example, from payment settlements systems availability targets to whether business resilience tests are performed regularly.

Considering these risks in more detail, the Reserve Bank's activities are highly dependent on information technology (IT) systems. The risk management and control framework supports an ongoing focus on managing the risks associated with complex IT systems. The IT Department collaborates with relevant business areas to facilitate the monitoring, assessment and management of IT-related risks and ensures IT-related initiatives are consistent with the Bank's Strategic Plan. This work is supported by the continuous evaluation of industry developments in order to ensure that the Bank's systems and procedures remain robust and conform to current IT standards. Assessment of appropriate resourcing, the adequacy of IT process controls and the level of security over information management are all incorporated in the risk management and control framework.

As part of the Bank's management of the risks associated with technology and operational systems, a strong focus is placed on the security of these systems. Cyber resilience is a key operational risk, and managing this risk is supported by staff at all levels of the Bank. The Bank prioritises protecting digital assets from cybersecurity threats, while also providing a high-quality service to all Australians. The Bank remains committed to a mature implementation of the Australian Signals Directorate Information Security Manual and relevant security standards, introducing innovative security technologies, and proactively searching for emerging threats in order to continually meet the Bank's strategic cyber resilience objectives. The Bank continues to work with peer central banks, the Australian Government and industry participants to increase the cyber resilience of national and international financial systems.

The Reserve Bank invests in significant security controls and risk assurance functions, which are supported by a regular assessment regime. The Bank receives regular independent assurance of its compliance with security strategies endorsed by the Australian Signals Directorate, and maintains independent certification for the ISO 27001 global standard for Information Security Management.

During the past year, the Bank continued to direct substantial resources towards the delivery or completion of a number of large and complex multi-year projects. These include the Next Generation Banknotes project with the final denomination ($100 note) issued in October 2020, and the completion of a refresh of core payments settlement infrastructure that delivers increased system resilience and processing throughput. Successfully completing and embedding these projects will ensure high-quality services are maintained for the Bank's clients and the Australian public. Project risks are carefully managed so that adequate resources are available, nominated project deadlines are met and change management is effective. Project steering committees play an important role in overseeing the management of these risks.

The Reserve Bank manages risks related to the handling of confidential and sensitive information and, in particular, ensuring that there are no unintended disclosures. While the primary focus is on ensuring that sufficient controls exist to prevent a breach occurring, the risk and control framework also seeks to ensure that the Bank would respond appropriately if one were to occur. The Bank has completed the implementation of the Australian Government's 'Digital Continuity 2020 Policy'. The National Archives of Australia has released a new policy – 'Building Trust in the Public Record' – which seeks to ensure that agencies manage their information assets with appropriate governance, fit-for-purpose processes and systems, and reduced risk.

The Bank does not tolerate dishonest or fraudulent behaviour and is committed to deterring and preventing such behaviour. It takes a very serious approach to cases, or suspected cases, of fraud. 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 the separation of front-, back- and middle-office functions, where staff involved in trading, settlement and reconciliation activity remain physically apart and have separate reporting lines. For non-trading activities, several layers of fraud control are in place. A clear decision-making hierarchy, separation of duties and physical controls over systems and information have been established and are subject to regular review. Ongoing training and awareness programs are also conducted; the Bank requires all staff to undertake fraud awareness training. The Bank has arrangements in place for staff and members of the public to report concerns anonymously. All concerns are fully investigated. During 2020/21, there were no reported instances of fraud by employees.

The Reserve Bank remains strongly committed to maintaining and strengthening a workplace culture in which employees uphold the highest standards of behaviour. The Code of Conduct sets out requirements of the Bank's employees and others who are involved in its activities. The Bank has arrangements in place for staff to report concerns about breaches of the Code of Conduct, including channels by which concerns can be reported anonymously. Arrangements are in place to ensure staff are comfortable reporting concerns across a range of issues.

The effective management of compliance risk is central to the Bank's activities. Supporting this, staff complete regular training on areas such as privacy and workplace health and safety. Risk and Compliance Department also collaborates with all business areas to ensure compliance risks are being managed effectively and keeps the Risk Management Committee informed regarding the level of compliance in key areas. In particular, one key area of work completed was the preparation of a joint NPA and Reserve Bank Modern Slavery statement. The statement was published on Australian Border Force's Online Register for Modern Slavery Statements.

Notwithstanding these measures, events can occur from time to time that may lead to service disruption, or to financial or other costs. Timely reports on incidents and 'near misses' are provided to the Risk Management Committee. These reports outline the circumstances, including impact and cause, as well as identify areas where new controls may be needed, where existing controls should be strengthened or where more significant innovation efforts might be well placed.

The Reserve Bank continues to act as the administrator of the Guarantee of State and Territory Borrowing. Applications for new guaranteed liabilities under this scheme closed in 2010, although existing liabilities will continue to be guaranteed until maturity, at the latest in 2023. To date, a total of $428 million in fees has been collected for state and territory borrowing since the scheme commenced in 2009, with $2 million collected in 2020/21.

Business resilience

The resilience of critical business functions is a key focus area for the Reserve Bank. The Bank's policy is to maintain resilient arrangements when responding to any incident that has the potential to adversely affect its people, operations, assets or reputation, or compromise its physical security.

Since the onset of the COVID-19 pandemic, the Bank has focused on maintaining the health and wellbeing of its staff and has continued to maintain business critical functions. The Bank activated its Pandemic Response Plan and Incident Assessment Team to respond to operational risks and issues arising from the pandemic and its effects on the Bank's people and operations across Australia and in our foreign offices.

Another major consideration will be maintaining business resilience during a major project of building works at the Bank's Head Office at 65 Martin Place, Sydney between 2022 and 2024. Planning is well under way to develop contingency responses and exercises to ensure staff are well briefed on their roles during the project, including effective communication arrangements. The Risk Management Committee is regularly overseeing this project to ensure operational risks are managed effectively.