Operations in Financial Markets

The Reserve Bank operates in domestic and international financial markets to achieve its policy objectives. These operations include implementing the monetary policy decisions of the Reserve Bank Board, facilitating the smooth functioning of the payments system, managing the nation's foreign exchange reserve assets and providing banking services to clients (mainly the Australian Government, as well as foreign central banks).

During 2021/22, in response to the strong recovery of the Australian economy, the Reserve Bank took a number of steps to taper and then begin to withdraw the extraordinary monetary support that was put in place to support the Australian economy during the COVID-19 pandemic. This included discontinuing a number of unconventional monetary policy measures adopted in the wake of the pandemic, as well as increases in the cash rate target.

In November 2021, the yield target on the April 2024 government bond was discontinued, as was the time-based element of the Bank's communication that, in the central scenario, policy interest rates were unlikely to be increased until 2024. The rate of bond purchases under the bond purchase program was reduced from September 2021, and new purchases ceased in February 2022. In May 2022, the Reserve Bank Board stated that it would allow the Bank's bond portfolio to gradually roll off as those bonds matured; it also noted that it was currently not planning on selling those bond holdings. This meant that the contribution of the Bank's bond holdings to lower bond yields would slowly diminish over time as the bonds mature. These actions over 2021/22 followed the closure of the Term Funding Facility (TFF) to new drawdowns at the end of June 2021.

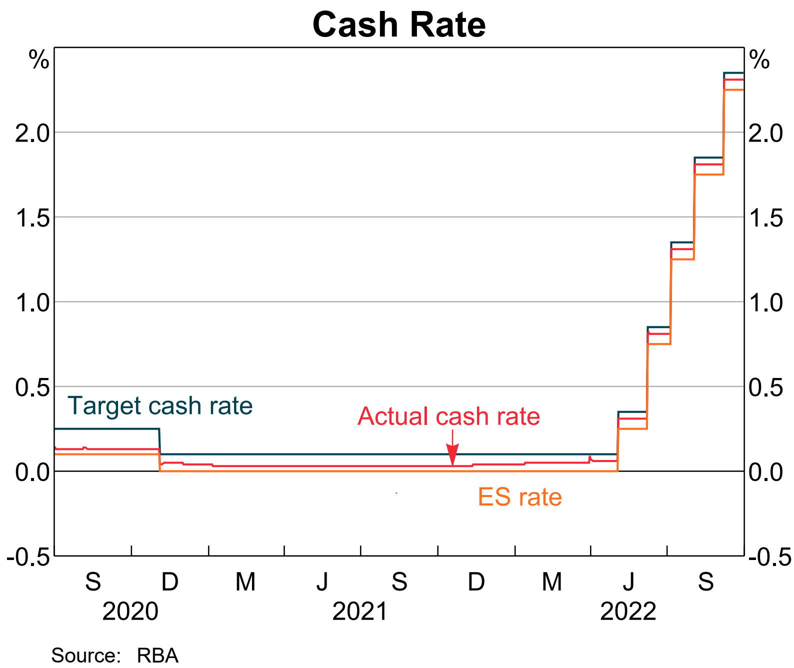
In response to rising inflationary pressures in the economy, in May 2022 the Board began withdrawing monetary policy stimulus by increasing the cash rate target and the interest rate paid on Exchange Settlement (ES) balances. It increased these policy rates by 25 basis points at its May meeting and by 50 basis points at each of its June, July, August and September meetings.

As expected, financial conditions have become less expansionary alongside expected and actual increases in the cash rate. Banks' funding costs have risen from historical lows, as have housing and business interest rates. The Reserve Bank's balance sheet remains much larger than historically as a result of the various unconventional policy measures, although it is expected to decline significantly over the following couple of years as funding provided to banks under the TFF matures and as government bonds held by the Bank gradually mature.

Monetary policy implementation

As a result of steps taken to reduce the stimulus being provided from the unconventional monetary policy measures over time, the Reserve Bank's balance sheet will decline in a predictable way over coming years. The higher system liquidity that has resulted from these monetary policy measures will also decline.

While these changes will contribute to the gradual withdrawal of monetary policy stimulus, the Reserve Bank Board's main operational target for adjusting monetary policy is the cash rate. This is the rate at which banks borrow and lend to each other on an overnight, unsecured basis. The Board increased the cash rate target at every meeting between May and September 2022, taking it from 0.10 per cent to 2.35 per cent, alongside corresponding increases in the rate paid to banks on ES balances, from zero per cent to 2.25 per cent.



The substantial increase in the amount of liquidity in the banking system arising from the package of policy measures introduced during the pandemic has continued to affect money markets as expected. In particular, activity in the cash market remains lower than in the period preceding the pandemic because most banks have ample liquidity to settle their payments and little need to borrow more in the overnight market. Also, the cash rate continues to trade below the cash rate target but above the interest rate paid on ES balances, with the spread between the cash rate and the interest rate on ES balances reflecting a small credit premium and transaction costs. The Board has kept the spread between the cash rate target and the interest rate on ES balances at 10 basis points, such that the actual cash rate remains close to the cash rate target. In comparison, the interest rate on ES balances was 25 basis points below the cash rate target before the pandemic.

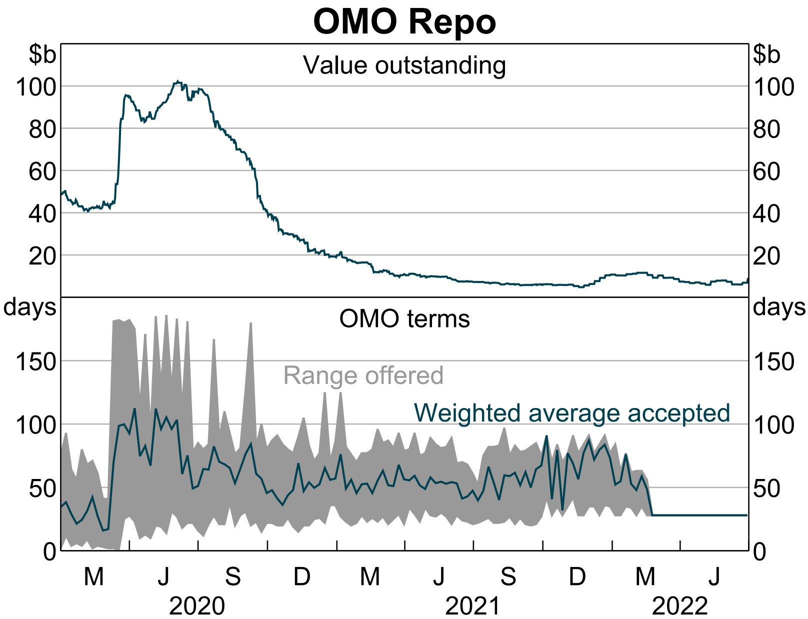
The funds traded in the cash market are the balances held by financial institutions in their Exchange Settlement Accounts (ESAs) at the Reserve Bank. These accounts are held by around 100 financial institutions and are used to settle payment obligations between these institutions. The aggregate level of

ES balances changes as a result of payments made or received by customers of the Bank (principally the Australian Government) and ESA holders, and as a result of transactions undertaken by the Bank on its own behalf. These include undertaking repurchase agreements (repos) collateralised with eligible securities, buying or selling government securities on an outright basis, or using foreign exchange (FX) swaps involving Australian dollars.

Open Market Operations

The Reserve Bank undertakes transactions in domestic financial markets to implement the policy decisions of the Reserve Bank Board and facilitate the smooth functioning of the payments system. Historically, this has principally involved the Reserve Bank transacting in domestic financial markets in its open market operations (OMO) to keep the cash rate consistent with the cash rate target set by the Board. A key class of transaction that the Bank has historically used to achieve this has been repos contracted as part of its regular morning OMO. Repos involve the purchase of high-quality collateral securities where the Bank acquires the securities for a period of time in exchange for cash (i.e. funds deposited into an ESA). The Bank also requires the value of the securities to exceed the cash lent by a specific margin (see below). As a result, there is very little risk of the Bank incurring financial loss from these transactions. The securities accepted by the Bank include securities issued by the Australian Government (AGS), the Australian states and territories (semis), and certain approved international sovereign and supranational issuers. Securities issued by banks, asset-backed securities and corporate bonds that meet certain criteria are also eligible for repo in the Reserve Bank's OMO. FX swaps are another type of transaction that the Bank has used in the past to manage system liquidity; swapping Australian dollars for foreign currencies increases the supply of ES balances in the same way as a repo transaction.

As discussed above, the large increase in surplus ES balances has meant that the cash rate has traded between the cash rate target and the interest rate on ES balances. The ample system liquidity meant that the Reserve Bank no longer targeted a specific level of ES balances every day, as it had done previously in order for the cash rate to trade as close as possible to the cash rate target. Moreover, the demand for OMO funding decreased as banks had less need to obtain short-term funds and a much greater capacity and willingness to lend funds for short terms to other banks. As a result, the role of OMO has changed, but they remain an important part of the Bank's policy framework. In particular, OMO can help to relieve pressures in short-term money markets in the event of an unforeseen tightening in liquidity conditions. Reflecting these benefits, the Bank continued to conduct OMO during 2021/22. On average, around $7½ billion in OMO repos was outstanding during 2021/22, significantly below the 2020/21 average of around $30 billion and the pre-pandemic average of around $50 billion. In this environment, FX swaps were not needed for liquidity management purposes.



Source: RBA

However, consistent with the changing role of OMO, the Reserve Bank changed its operations in a number of ways. Reflecting the decline in demand for OMO over the past two years, in October 2021 the frequency of scheduled OMO was reduced from daily to weekly. In March 2022, the maximum typical term for OMO repos was shortened from around three months to four weeks. The Bank may conduct additional unscheduled OMO dealing rounds and/or offer OMO repo terms longer than four weeks if warranted by market conditions; however, since the operational changes made to OMO, this was not required in 2021/22.

Because the Reserve Bank no longer sets the supply of ES balances to keep the cash rate close to the target, OMO no longer targets a fixed quantity to deal. Instead, the Bank sets a repo rate (or hurdle rate) at which banks can obtain funds via OMO, and any reasonable bids received at or above this rate are allocated in full. For most of 2021/22, the hurdle rate was the cash rate target. However, such an arrangement would not have been appropriate when markets expect the cash rate to rise. In that case, other short-term money market rates would be above the cash rate target. Accordingly, in March 2022 the hurdle rate was changed to be based on term-matched overnight indexed swap rates plus a spread. This spread has been around 5 basis points, but the Bank can change this depending on market conditions. At the same time, the Bank also announced plans to change the interest rate on OMO repos to a floating rate based on the cash rate target prevailing over the term of the repo. The Bank is in the process of gathering feedback from market participants and will allow for an appropriate transition period before adopting OMO repos with a floating rate.

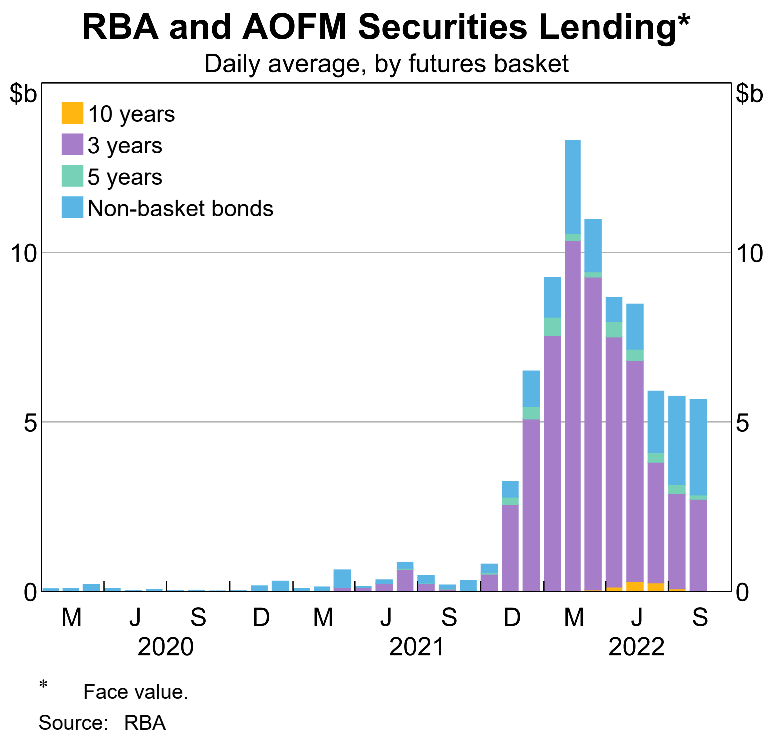
As noted above, the Reserve Bank was targeting the yield on the April 2024 AGS until November 2021. The Bank was prepared to buy AGS when necessary to support the yield target. In 2021/22, the Bank conducted one operation to support the yield target, purchasing $1 billion of the April 2024 AGS in October 2021. Since adopting the yield target in March 2020, the Reserve Bank had purchased a total of $36 billion of AGS to support the yield target. The April 2024 Australian Government bond yield was consistent with the target at the close of each business day until late October 2021, when it rose sharply as the outlook for inflation and future policy rates increased in Australia and globally. The yield target was discontinued at the Board meeting on 2 November 2021 as it had become inconsistent with the economic outlook and less effective as a result. In June 2022, the Reserve Bank published a review of the yield target as part of a broader set of reviews the Board is undertaking of the monetary policy measures it adopted in response to the pandemic.[1] A high level summary of conclusions from this review are provided in the 'Annual Performance Statement'.

The Reserve Bank made purchases under the bond purchase program until it ended on 10 February 2022. The pace of purchases was $5 billion per week until early September 2021, and then $4 billion per week until the program ended. Purchases were conducted via competitive auction, with the Bank purchasing AGS on Mondays and Thursdays, and semis on Wednesdays. Purchases were of bonds of around five to 10 years' residual maturity. During 2021/22, the Bank purchased a total of $127 billion of government bonds under the bond purchase program, with AGS comprising 80 per cent of purchases and semis the remaining 20 per cent. The distribution of semis purchased across states and territories was broadly in line with the distribution of debt outstanding. In total, the Bank purchased $281 billion under the bond purchase program. As discussed above, the Board determined that the proceeds of maturing bond holdings will not be reinvested. The Board also stated that it did not currently plan to sell bonds from its portfolio.

Over recent months, the Bank has undertaken a review of the bond purchase program, with the review to be published on the Bank's website. A high level summary of conclusions from this review are provided in the 'Annual Performance Statement'. As the recovery gathered pace, yields rose, and the Bank recorded significant valuation losses on its bond holdings. This is discussed under 'Balance Sheet' below and in the 'Earnings, Distribution and Capital' chapter.

To aid market functioning, the Reserve Bank is prepared to lend government securities that it owns in response to enquiries from eligible counterparties. The Bank also operates a Securities Lending Facility on behalf of the Australian Office of Financial Management. Between July and October 2021, securities lending activity was broadly similar to the 2020/21 financial year, with an average of around $400 million outstanding. However, activity rose significantly between November 2021 and February 2022, with the daily average of securities lending outstanding reaching $13 billion in February 2022. Since then, securities lending activity has decreased somewhat, but remains high by historical standards.

[1] RBA (2022), 'Review of the Yield Target'.



The Reserve Bank is also prepared to consider proposals from eligible counterparties to sell semi government bonds that it holds outright in exchange for offsetting (duration-neutral) purchases of other semi government bonds. In 2021/22, the Bank conducted around $12 billion of these switch transactions.

Term Funding Facility

The Reserve Bank had announced the Term Funding Facility (TFF) in March 2020 as part of the policy package to support the Australian economy in the wake of COVID-19. Although closed to new drawdowns since 30 June 2021, the TFF continues to provide funding to banks until the funds drawn down mature or the banks terminate the funding.

During 2021/22, five banks terminated TFF funding totalling $90 million (less than 1 per cent of total drawdowns). In addition to processing terminations, the Reserve Bank managed collateral substitutions and margin calls, and undertook administration related to bank mergers and consolidations. At 30 June 2022, 88 banks had $188 billion of funding outstanding through the facility. TFF funding is scheduled to begin maturing in April 2023, with the largest amounts scheduled to mature in the September quarter 2023 and the June quarter 2024.[2]

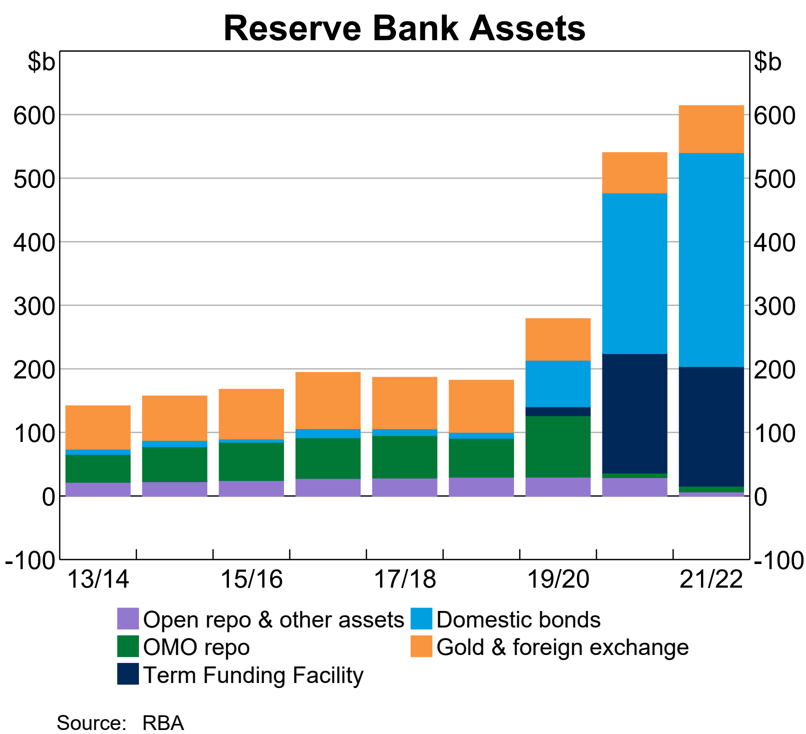
[2] See RBA (2021), 'Box C: Use of the Reserve Bank's Term Funding Facility', Statement on Monetary Policy, August.

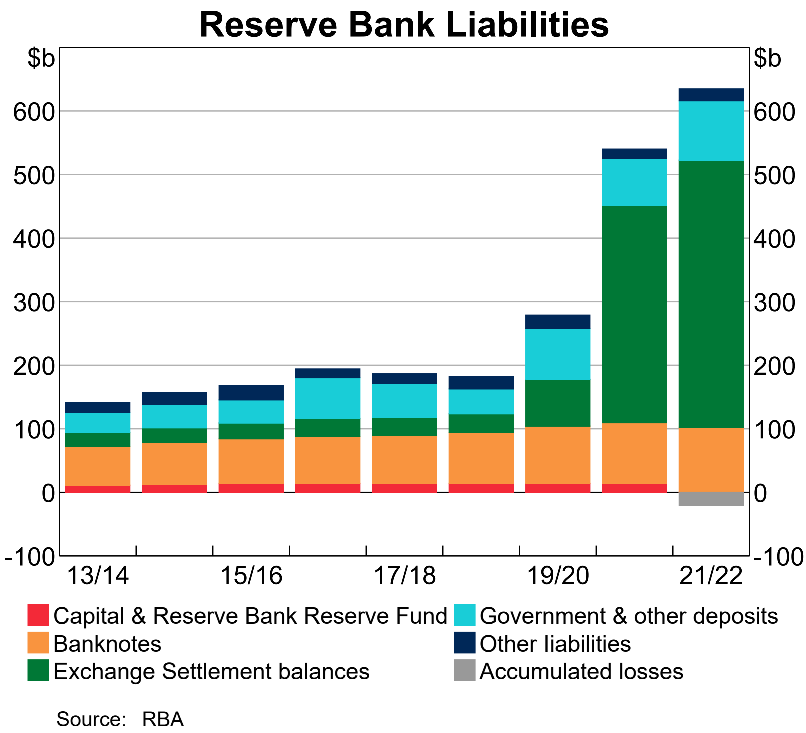
Balance sheet

The Reserve Bank's balance sheet more than tripled in size between March 2020 and February 2022 as a result of the extraordinary monetary policy measures that were used to support the Australian economy during the pandemic.

Over the 2021/22 financial year, the balance sheet increased by $74 billion to $614 billion. Growth in assets reflected an increase in the Reserve Bank's government bond holdings, purchased under the bond purchase program. A noticeable decline in open repos reduced the growth of the balance sheet over 2021/22. This occurred because the Reserve Bank removed the requirement for some financial institutions to contract open repos to create liquidity buffers (discussed under 'Standing facilities' below). Growth in liabilities was primarily due to a large increase in ES balances, which resulted from the Bank's bond purchases. Government deposits also increased, as stronger tax revenue and the proceeds from net issuance of AGS exceeded government spending over the period.

The size of the Bank's balance sheet peaked at around $650 billion shortly after the bond purchase program ended in February 2022, but subsequently declined owing to large mark-to-market losses on these bond holdings as bond yields rose. These accounting losses were absorbed by underlying earnings, the unrealised profits reserve and the Reserve Bank Reserve Fund, with the remainder recorded as 'accumulated losses' on the Bank's balance sheet. The 'Earnings, Distribution and Capital' chapter discusses these issues in detail.





RBA Balance Sheet

$ billion, 30 June

	2021	2022
Assets	540	614
Foreign	63	73
Domestic	477	541
– Outright bond holdings	253	337
– Term Funding Facility	188	188
– OMO repo	7	9
– Open repo & others	29	7
Liabilities	**540**	**614**
Deposits	416	514
– ES balances	342	420
– Government & other	74	94
Banknotes	95	102
Accumulated losses	0	–21
Other	15	18
Capital and Reserve Bank Reserve Fund	14	0

Source: RBA

Standing facilities

Separate from its OMO, the Reserve Bank also provides liquidity via repo through its standing facilities, where eligible counterparties temporarily exchange high-quality collateral for cash with the Reserve Bank. These facilities are designed to support the smooth functioning of the payments system. The most frequently used standing facilities are those for the provision of intraday liquidity to ESA holders, which carry no interest charge. In 2021/22, the Reserve Bank undertook an average of $2 billion per day of intraday repos, compared with an average of $3 billion per day in 2020/21. Occasionally, the Reserve Bank also enters overnight repos where an ESA holder faces a shortage in ES balances that cannot be borrowed from another financial institution; such funding is extended at an interest rate of 25 basis points above the cash rate target. During 2021/22, this facility was used on two occasions.

Open repos are used to provide ESA holders with liquidity to facilitate their payments, particularly those made outside of normal business hours. ESA holders with after-hours payment obligations – such as 'direct-entry' payments and transactions through the New Payments Platform (see chapter on 'Banking and Payment Services') – must hold sufficient ES balances at the close of each business day to settle these payments. Previously, the Reserve Bank required that these minimum ES balances were sourced via open repos. However, in September 2021 the Bank removed this requirement, because many ESA holders had sufficient ES balances from other sources in the current high-liquidity environment. Accordingly, over the 2021/22 financial year open repo positions with the Bank declined from $27 billion to $3 billion.

Committed Liquidity Facility

Banks subject to the Liquidity Coverage Ratio (LCR) under Basel III prudential standards are required to hold sufficient high-quality liquid assets (HQLA) (which, in the Australian context, consist of AGS, semis and ES balances) to meet outflows during a period of stress of 30 days. Historically, the relatively low levels of government debt outstanding in Australia have limited the amount of HQLA securities that banks could reasonably hold. To address this, since 2015 the Reserve Bank has provided some institutions with a contractual commitment to provide repo funding – the Committed Liquidity Facility (CLF) – subject to certain conditions. These conditions include a fee that financial institutions pay on the committed amount. In addition, any bank seeking to use the CLF must have positive net worth. The full terms and conditions of the facility are available on the Bank's website.[3]

The Reserve Bank administers the CLF, while the Australian Prudential Regulation Authority (APRA) determines which banks have access and the amount available (in aggregate and to each bank). Fourteen banks were provided with access to the CLF from July 2021 to January 2022; 13 banks had access in February 2022; and 12 banks had access from March 2022 to June 2022. The available CLF amounts for each of these banks is counted towards their LCR requirements. The aggregate size of the CLF is the difference between APRA's assessment of banks' overall LCR requirements and the Bank's assessment of the amount of HQLA securities that could reasonably be held by the banking system without unduly affecting market functioning. APRA also incorporates its projections of banks' holdings of banknotes and ES balances.

In determining the amount of HQLA securities that LCR banks on aggregate can reasonably be expected to hold, the Reserve Bank takes into account factors such as the total stock of HQLA securities, ES balances,

[3] See RBA (2019), 'Committed Liquidity Facility – Terms and Conditions'; RBA (2019), 'CLF Operational Notes'.

holdings of other market participants and the effect of LCR banks' holdings on the liquidity of HQLA securities in secondary markets. Since early 2020, the stock of AGS and semis outstanding has increased substantially as the federal, state and territory governments have issued bonds to finance the fiscal response to the COVID-19 pandemic. In addition, ES balances have increased owing to the Bank's policy response to the pandemic.

Reflecting the increased availability of HQLA (due to the large bond issuance and the growth in ES balances), the total size of the CLF was reduced to $66 billion by June 2022, down from $139 billion in June 2021. APRA has announced that, subject to financial market conditions, the CLF will be further reduced to zero by the end of 2022.[4]

Eligible securities

The Reserve Bank accepts a range of eligible Australian dollar collateral for its daily market operations, including: securities issued by the Australian Government and the states and territories; securities issued by ADIs and non-bank corporations with an investment-grade credit rating; and asset-backed and other securities with an average credit rating of AAA (for long-term securities) and A-1 (for short-term paper). To protect against a decline in the value of the collateral securities should the Bank's counterparty not meet its repurchase obligations, the Bank requires the value of the securities to exceed the cash-leg of the repo by a specific margin. These margins, which are listed on the Bank's website, are considerably higher for securities that are not issued by governments.[5]

In 2021/22, the Reserve Bank's repo collateral holdings decreased by around $28 billion owing to a large decline in outstanding open repo positions. As discussed above, in September 2021 the Bank relaxed the requirement for some ES account holders to maintain open repo positions. In response, most ES account holders with outstanding open repos decided to significantly reduce their positions or fully unwind them.

Participants in the Reserve Bank's market operations tend to be the fixed-income trading desks of banks and securities firms, as well as bank treasuries. Reflecting this, around half of the securities held by the Bank under repo (excluding those under open repo and the TFF) are government-related obligations.

The Reserve Bank's holdings of domestic securities are held in an account that the Bank maintains in Austraclear, the central securities depository operated by the Australian Securities Exchange (ASX). Securities transactions conducted between the Bank and its counterparties are settled in the Austraclear system, mostly on a bilateral basis. The Bank also settles repo transactions contracted in its OMO within ASX Collateral, a collateral management service. During 2021/22, 55 per cent of the value of securities the Bank held under repo in OMO was settled within ASX Collateral, up from around 50 per cent in 2020/21. The use of this system reduces the manual processing that would otherwise be required to manage this collateral, including marking it to market and maintaining margins.

Asset-backed securities form a significant share of the securities the Reserve Bank holds as repo collateral under the TFF. Around 90 per cent of the outstanding value of TFF repos is backed by self-securitised RMBS. (Self-securitised RMBS are not eligible as collateral for OMO repos.)

Asset-backed securities – particularly self-securitised RMBS – are also the major asset held as collateral by banks for the CLF (see above). APRA has provided guidance that it would be prudent for banks under the

[4] See APRA (2021), 'APRA Phases Out Reliance on Committed Liquidity Facility', Media Release, 10 September.

[5] See RBA (2020), 'Margin Ratios'.

LCR framework to continue to hold self-securitised RMBS, even after the CLF is reduced to zero, as a contingency for periods of stress. Given the importance of asset-backed securities to the Reserve Bank's operations, the Bank has mandatory reporting requirements for securitisations to remain eligible for repo. In 2021/22, the Bank received around 5,000 data submissions monthly on around 370 asset-backed securities from issuers or their appointed information providers. For eligible RMBS, this covers around 2.5 million underlying individual housing loans with a combined balance of around $730 billion, which is around one-third of the total value of housing loans in Australia. The required data include key information on the structure of the RMBS and the relationships among counterparties within the RMBS structure; the required data also include anonymised information on each of the residential mortgage loans and the underlying collateral backing the RMBS structures.

Australian Dollar Securities Held under Repurchase Agreements[a]

30 June

	2018		2019		2020		2021		2022	
	$ billion	per cent of total	$ billion	per cent of total	$ billion	per cent of total	$ billion	per cent of total	$ billion	per cent of total
AGS	49.9	48	36.5	37	47.4	31	5.6	2	2.8	1
Semis	8.7	8	12.7	13	25.2	16	8.1	3	6.5	3
Supranational	3.6	3	2.8	3	3.4	2	0.7	0	0.9	0
ADI issued	8.1	8	12.9	13	27.8	18	11.2	4	15.9	6
Corporate issued	0.0	0	0.0	0	0.3	0	0.5	0	0.9	0
Asset-backed securities	32.7	32	33.5	34	50.0	32	260.2	91	231.3	89
– Of which: for open repo	32.3	31	32.4	33	32.4	21	31.5	11	0.7	0
– Of which: for TFF	0.0	0	0.0	0	14.7	9	227.8	80	229.1	89
Other	0.6	1	0.4	0	1.1	1	0.2	0	0.1	0
Total	103.7	100	98.8	100	155.2	100	286.3	100	258.4	100
– Of which: for open repo	34.2	33	34.5	35	35.3	23	34.3	12	3.1	1
– Of which: for TFF	0.0	0	0.0	0	17.7	11	244.6	85	246.1	95
– Of which: for OMO	69.5	67	64.3	65	102.2	66	7.4	3	9.2	4

(a) Market value of securities before the application of margins; includes securities held under triparty repurchase agreements.

Source: RBA

Reflecting the Reserve Bank's interest in promoting transparency for investors in asset-backed securities, issuers are also required to make securitisation information available to investors and other permitted users. The data provided to these users are broadly similar to the data provided to the Bank; however, issuers may redact particular fields where the information poses a potential risk to privacy obligations and provide aggregated data instead. The mandatory reporting requirements allow the Bank (and other investors in RMBS) to analyse in detail the underlying risks in asset-backed securities and to price and manage risk for such securities accurately.

The cash rate

The Reserve Bank is the administrator of the cash rate, which is a significant financial benchmark referenced in overnight indexed swaps and the ASX's 30-day interbank cash rate futures contracts, as well as in securities and transactions requiring a (near) risk-free reference rate (RFR). The cash rate is also known as AONIA ('AUD Overnight Index Average'). As the RFR for the Australian dollar, it forms the basis of the fallback to BBSW (calculated as AONIA plus a spread) under International Swaps and Derivatives Association (ISDA) definitions published in 2020.[6] These definitions were developed in the context of global benchmark reforms, which have included identifying alternatives to credit-based rates for use in securities and transactions.[7] The 'Cash Rate Procedures Manual' sets out the Bank's arrangements for administering the cash rate and the procedures for handling errors and complaints.[8]

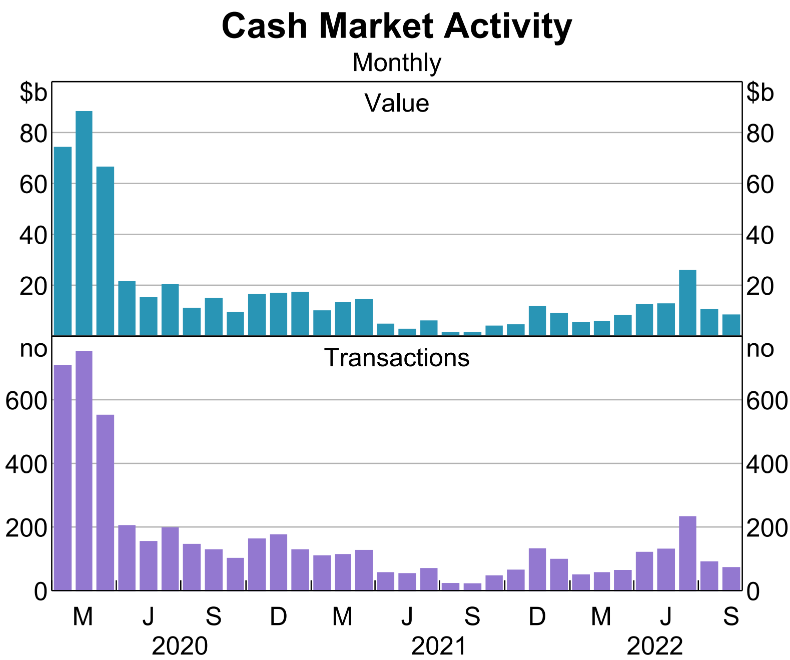
As discussed above, activity in the cash market over 2021/22 remained lower than prior to the pandemic owing to the high level of ES balances. Consequently, on around 70 per cent of days activity was below the thresholds required to calculate the cash rate based on market transactions. In accordance with the published fallback procedures, the published cash rate on these days was the last cash rate published based on sufficient transactions (173 occasions), or another rate that reflected the interest rate relevant to unsecured overnight funds for cash market participants as determined by the cash rate administrator, in its expert judgement and based on market conditions (one occasion). Activity in the cash market increased in the June quarter of 2022, such that fallback procedures were required only around 25 per cent of the time.

The cash rate remained between the cash rate target and the interest rate on ES balances during 2021/22. Until mid-November 2021, the cash rate was 3 basis points compared with a target of 10 basis points. The cash rate gradually increased in subsequent months to 6 basis points, despite no change in the cash rate target or interest rate on ES balances. Between May and September 2022, the cash rate increased in line with the increases in the cash rate target and the interest rate on ES balances, such that the cash rate generally remained around 6 basis points above the interest rate on ES balances and 4 basis points below the cash rate target. The cash rate trading between the target and the interest rate on ES balances was an expected consequence of large ES balances. This is consistent with the experience of other central banks that have pursued programs that significantly increased cash reserves in the banking system.

[6] See ISDA (2020), 'Amendments to the 2006 ISDA Definitions to Include New IBOR Fallbacks', 23 October.

[7] See chapter on 'International Financial Cooperation' for details of the Financial Stability Board's work on reforming interest rate benchmarks globally.

[8] See RBA (2022), 'Cash Rate Procedures Manual'.



Source: RBA

Foreign exchange operations

The Reserve Bank transacts in the foreign exchange market on almost every business day. The majority of these transactions are associated with providing foreign exchange services to the Bank's clients, the most significant of which is the Australian Government.

The Reserve Bank typically purchases the necessary foreign currency in the spot market. During 2021/22, the Bank bought A$15 billion in the spot market to facilitate its customer business. However, the Bank retains the option – especially during periods of market stress – to use its existing stock of foreign currency reserves to fund its customer business, subsequently replenishing those reserves when market conditions have stabilised. Using foreign currency reserves in this manner has not been considered necessary since 2008, at which time global financial market functioning was significantly impaired. Similarly, the Bank has not intervened in the foreign exchange market since 2008. The Bank nevertheless retains the discretion to intervene in the foreign exchange market to address any dysfunction and/or a significant misalignment in the value of the Australian dollar. At the time each Annual Report is published, intervention data for the year under review are published on the Bank's website.[9] During 2021/22, the Bank's assessment was that trading conditions in the market were sufficiently orderly that it was not necessary to support liquidity in the market through its own transactions.

The Reserve Bank also transacts in the foreign exchange market when managing its foreign currency reserves. As discussed below, the relative weightings of foreign currencies in the Bank's portfolio are tightly managed against a benchmark. To maintain the portfolio at these benchmark weights, or to accommodate discrete changes in the weights, the Bank transacts in spot foreign exchange markets. The

[9] See RBA, 'Statistical Table A5: Daily Foreign Exchange Market Intervention Transactions'.

final settlement of these rebalancing flows may be deferred for a short period of time through the use of foreign exchange swaps, whereby one currency is exchanged for another with a commitment to unwind the exchange at a subsequent date at an agreed (forward) rate. Swaps can also be an efficient way to manage the shorter term investments within the reserves portfolio. During 2021/22, the Bank generally maintained around A$25 billion in swaps for these purposes.

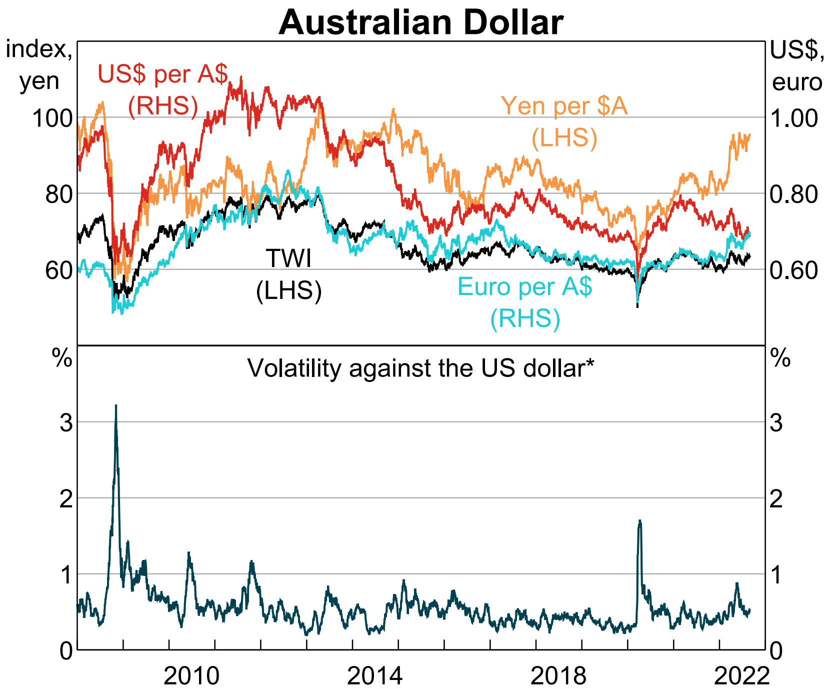
The Bank also executes long-term foreign exchange swaps against Australian dollars for terms of up to five years. As discussed below, these longer term transactions are used to obtain foreign currency to meet Australia's commitments as a member of the International Monetary Fund (IMF), such as providing foreign currency to the IMF to support its lending activities.[10] These swaps do not affect the exchange rate. The Bank had A$8.6 billion in long-term swaps outstanding at the end of June 2022.

The Bank's forward foreign exchange positions with each of its counterparties are marked to market daily and collateral is held against net exposures. The terms under which collateral is exchanged are defined in two-way credit support annexes to the ISDA Master Agreements that the Bank has executed with each of its counterparties (see chapter on 'Risk Management').

The Reserve Bank's activities in the foreign exchange market are conducted in a manner consistent with the principles of the FX Global Code. Following revisions to the Code, a renewed 'Statement of Commitment to the FX Global Code' was signed on behalf of the Bank in December 2021.[11] The Bank only transacts in the foreign exchange market with counterparties that have also signalled their adherence to the updated Code by renewing their Statement of Commitment.

[10] See Kent C (2021), 'FX Markets Around the Turn of the Year', Speech to the Australian Corporate Treasury Association FX Roundtable, Webinar, 17 February.

[11] See RBA (2021), 'Statement of Commitment to the FX Global Code', 8 December.



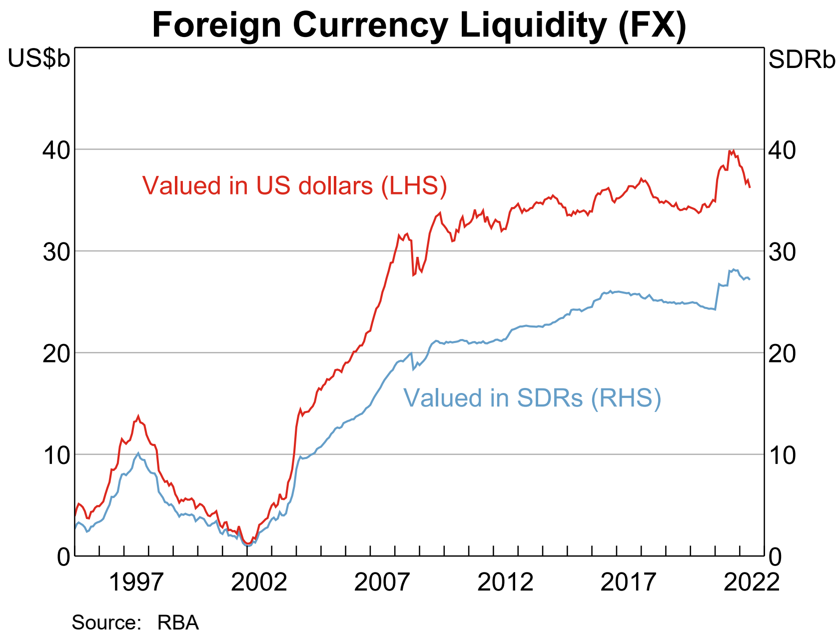
* Daily absolute percentage change, 22-day rolling average.
Sources: RBA; Refinitiv

Reserves management

Australia's official reserve assets include foreign currency assets, gold, Special Drawing Rights (SDRs) (an international reserve asset created by the IMF) and Australia's reserve position in the IMF. At 30 June 2022, these assets totalled A$79.9 billion. Most of these assets are owned and managed by the Reserve Bank. The Australian Government owns Australia's reserve position in the IMF and the bulk of Australia's SDR holdings.

Official reserve assets are held by the Reserve Bank to facilitate various policy operations, including in the foreign exchange market (described above) and to assist the Australian Government in meeting its commitments to the IMF. One gauge of the Bank's capacity to undertake such operations is measured by the Bank's foreign currency assets net of any short-term forward commitments (such as an obligation to deliver foreign currency on the maturity of a swap against Australian dollars). As at 30 June 2022, these assets – referred to as 'foreign currency liquidity (FX)' – were SDR27.2 billion or US$36.2 billion. In US dollar terms, foreign currency liquidity (FX) decreased by US$1.8 billion from 30 June 2021. The reduction reflected valuation effects because the US dollar appreciated against other reserve currencies over this period. This more than offset the small addition to liquidity from further purchases of foreign currency under long-term swaps.

The foreign assets held by the Reserve Bank can expose it to market, liquidity and credit risk, which the Bank seeks to mitigate where possible – for example, by holding a diversified portfolio and investing only in assets of high credit quality and appropriate liquidity (see chapter on 'Risk Management').



Foreign Assets
30 June 2022

	A$m
Official reserve assets	
Foreign currency	50,003
Gold	6,262
SDRs	18,580
Reserve position in the IMF	3,704
Other reserve assets	1,392
Other foreign currency assets	291
Net forward foreign currency commitments: Short-term	
Foreign currency	1,260
Gold loans and swaps	510
Net forward foreign currency commitments: Long-term	–6,351
Memo item:	
Foreign currency liquidity (FX)[(a)]	*52,540*

(a) Foreign currency liquidity (FX) includes foreign currency holdings and other foreign currency assets, net of short-term foreign currency forward commitments (commitments with less than 12 months to maturity).

Source: RBA

Net of forward commitments against the Australian dollar, the composition of the Reserve Bank's foreign currency reserve holdings is managed against an internally constructed benchmark that reflects the Bank's need to maintain effective intervention capacity. Subject to this constraint and the Bank's overall risk tolerance, the benchmark is assessed to be the combination of foreign currencies and foreign currency assets that maximises the Bank's expected returns over the long run.

The structure of the benchmark is reviewed periodically and in response to significant changes in market conditions. The existing structure of the benchmark portfolio was most recently assessed as remaining suitable for the Reserve Bank's needs. Within the portfolio, the largest allocation is to the US dollar (55 per cent), reflecting the significant liquidity in US dollar currency and asset markets.

Given the low level of global interest rates in recent years, duration targets have been set to be relatively short for most of the foreign currency portfolios. This has limited any capital losses associated with increasing global yields during 2021/22.

Investments in the benchmark currencies are limited to deposits at official institutions (such as central banks) and debt instruments issued (or guaranteed) by sovereign entities, central banks and supranational agencies. Debt instruments issued by quasi-sovereign entities can also be accepted as collateral under reverse repos.

Sovereign credit exposures are currently limited to the United States, Germany, France, the Netherlands, Japan, Canada, China, the United Kingdom and South Korea.

Benchmark Foreign Currency Portfolio

30 June 2022

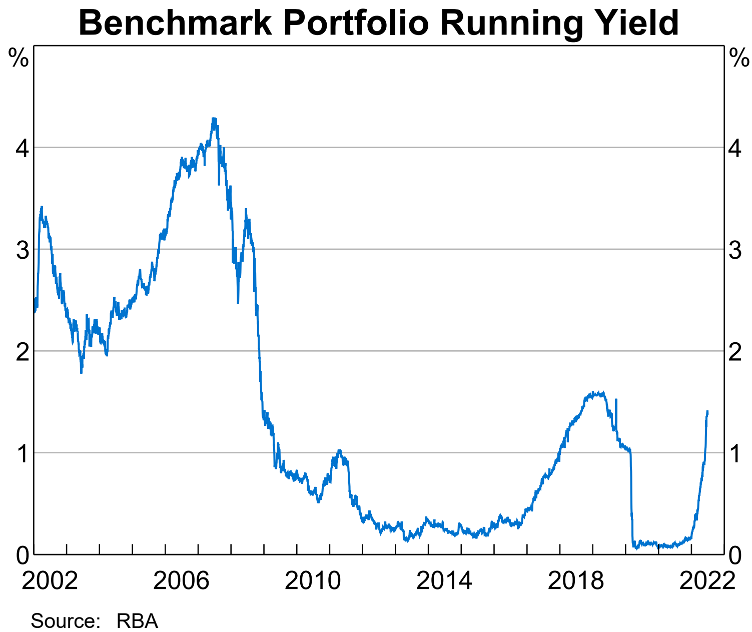
	US dollar	Euro	Japanese yen	Canadian dollar	Chinese renminbi	UK pound sterling	South Korean won
Currency allocation (per cent of total)	55	20	5	5	5	5	5
Duration (months)	6	6	<3	6	18	3	18

Source: RBA

As has been the case for some years, when the cost of hedging currency risk is taken into account, yields on short-dated Japanese and South Korean investments have generally exceeded those available in the other currencies in the Reserve Bank's portfolio. Reflecting this, the Bank has swapped other currencies in its foreign exchange reserves portfolio against the Japanese yen and South Korean won to enhance returns. As a consequence, while the Bank's exposure to changes in the value of the yen and won remains small (allocations in the benchmark to each of these currencies were A$2.3 billion), an additional A$23.8 billion of yen and A$1.1 billion of won was held at the end of June 2022 as a result of swaps against other foreign currencies in the portfolio.

A small component of the Reserve Bank's foreign currency risk is managed outside the benchmark framework. The Bank invests in a number of Asian debt markets through participation in the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) Asian Bond Fund Initiative. This initiative was established following the Asian currency crisis in the late 1990s to assist in the development of bond markets in the region. At the end of June 2022, the total allocation of the Bank's reserves to these funds was A$712 million. In SDR terms, there was a return of –3.5 per cent on these investments over the year to June 2022, reflecting the depreciation of Asian currencies and capital losses on Asian government bonds as yields rose.

Measured in SDRs, the overall return on the Reserve Bank's foreign currency assets over 2021/22 was 1.9 per cent. This was higher than returns observed in 2020/21 and reflected gains due to exchange rate movements that offset capital losses as yields rose on longer term securities. The average running yield on the benchmark portfolio increased from 0.1 per cent to 1.4 per cent over 2021/22, reflecting increases in yields across most individual currency portfolios.



The Reserve Bank's holdings of SDRs at 30 June 2022 amounted to A$6.4 billion – A$0.9 billion higher than the previous year – mainly reflecting net purchases of SDRs over the year. Under voluntary arrangements with the IMF, the Bank is willing to transact in SDRs upon request from other countries or prescribed holders. In these transactions, the Bank will generally either buy or sell SDRs in exchange for foreign currencies (such as euros or US dollars). While such transactions do not alter the level of Australia's reserve assets (only the respective proportions held in SDRs and foreign currency), the Bank will typically replenish foreign currency sold in exchange for SDRs by purchasing foreign currency in long-term swaps against Australian dollars. At 30 June 2022, the Australian Government's holdings of SDRs amounted to A$12.2 billion.

Australia's reserve position in the IMF comprises that part of Australia's quota in the IMF that is paid in foreign currency as well as other credit that Australia has extended to the IMF in support of its lending programs. At 30 June 2022, Australia's reserve position in the IMF was A$3.7 billion – A$0.3 billion larger than a year earlier – reflecting the provision of more foreign currency to the IMF. As noted above, Australia's reserve position in the IMF is not held on the Bank's balance sheet. However, the Bank will sell to (or purchase from) the Australian Treasury the foreign currency the Treasury needs to complete its transactions with the IMF. As with SDR transactions, the Bank will typically replenish the foreign currency sold to the Treasury by purchasing foreign currency in long-term swaps against Australian dollars.

Foreign Currency Assets[(a)]

A$ million, 30 June 2022

Currency	Securities held outright	Securities lent under repurchase agreements	Deposits at official institutions[(b)]	Total (gross)	Forward FX commitments[(c)] Against A$	Forward FX commitments[(c)] Against other currencies	Forward FX commitments[(c)] Other	Total (net)
US dollar	15,633	−2,610	892	13,915	−9,543	17,700	2,828	24,900
Euro	2,625	−1,044	1,271	2,851	−46	5,402	1,044	9,252
Japanese yen	14,719	–	11,291	26,010	–	−23,793	–	2,217
Canadian dollar	1,045	–	4	1,049	−1	1,252	–	2,300
Chinese renminbi	1,618	–	703	2,321	–	–	–	2,321
UK pound sterling	506	–	6	512	−118	1,803	–	2,197
South Korean won	3,331	–	15	3,345	–	−1,062	–	2,283
Total	39,477	−3,654	14,182	50,003	−9,708	1,303	3,872	45,470

(a) Excludes gold, SDRs, the reserve position in the IMF, investments in the Asian Bond Fund, balances with overseas banks, futures margins and non-reserve currency holdings.

(b) Includes deposits at foreign central banks and the Bank for International Settlements.

(c) In accordance with IMF guidelines, 'forward commitments' reflect notional values of unsettled spot and forward transactions, converted to Australian dollars at the prevailing forward exchange rate. Other forward commitments largely reflect cash lent under repurchase agreements. This excludes forward commitments for non-reserve currencies and gold on loan.

Source: RBA

Gold holdings (including gold on loan) at the end of June 2022 were around 80 tonnes, unchanged since 1997. Gold prices increased by 11.9 per cent in Australian dollar terms over 2021/22, increasing the value of the Reserve Bank's holdings of gold by around A$0.7 billion to A$6.8 billion. The Bank also seeks to earn income on its holdings by lending gold. Any gold lending by the Bank has the benefit of a government guarantee on the borrower's payment obligations to the Bank or is structured as a gold swap, such that the loan is fully collateralised by cash (either foreign currency or Australian dollars). Returns from these activities totalled A$0.7 million in 2021/22, lower than the previous financial year. The lower returns were mostly due to decreased activity. As at 30 June 2022, the Bank had outstanding gold loans amounting to 6 tonnes. Gold that has not been lent is held by the Bank in an allocated account at the Bank of England and comprises bars that meet the London Bullion Market Association's 'Good Delivery' standards. The Bank's gold holdings at the Bank of England were verified by a Reserve Bank Audit conducted in April 2022.[12] All gold bars selected were satisfactorily verified with no discrepancies or inconsistencies identified during the weighing checks. The Bank's activities in the gold market are conducted in a manner consistent with the principles of the Global Precious Metals Code, and a 'Statement of Commitment to the Global Precious Metals Code' has been signed on behalf of the Bank.[13]

[12] See RBA (2022), 'Gold Audit Summary Report', June.

[13] See RBA (2019), 'Statement of Commitment to the Global Precious Metals Code', 27 September.

Bilateral currency swaps

The Reserve Bank has bilateral local currency swap agreements with the People's Bank of China, the Bank of Japan, the Bank of Korea and Bank Indonesia. The purpose of these agreements is to allow each central bank to support trade settlement in local currencies, particularly in times of market stress, or to support financial stability. Over the past year, the agreements with the Bank of Japan and Bank Indonesia were both renewed for a further three years.

RBA Bilateral Local Currency Swap Agreements
September 2022

	Expiry	Size (A$ billion)
People's Bank of China	July 2026	41
Bank of Japan	March 2025	20
Bank of Korea	February 2023	12
Bank Indonesia	February 2025	10

Source: RBA