3. The Australian Financial System

The Australian financial system remains robust, and is well placed to continue supporting the economic expansion. Australian banks have strong capital positions. The strong economic recovery from the impact of the COVID-19 pandemic has contributed to healthy profits, which have enabled banks to unwind around half of the provisions they made at the start of the pandemic and return capital to shareholders. Banks' liquidity positions also remain strong. The upcoming wind-down of the Committed Liquidity Facility (CLF) and the refinancing of funds borrowed from the Term Funding Facility (TFF) over the next two years are not expected to pose a challenge for the banking sector. Market participants expect large increases in short-term interest rates, with market pricing implying an increase of some 300 basis points over the next couple of years. Banks - and financial institutions more broadly - face little direct risk to their balance sheets from rising interest rates but exposures will still need to be managed, including those that are indirect through their customers and policyholders.

Other financial institutions are also in a strong position and have benefited from the economic recovery. Insurer's capital levels remain well above regulatory minimums, supported by the increase in profits over 2021, leaving them well placed to address claims following the recent floods in New South Wales and Queensland. The value of superannuation funds' assets has increased steadily, while the composition of their investments has shifted back towards riskier asset classes on account of the economic recovery and rising asset prices. Non-bank lending for housing continues to grow rapidly. However, given the small size of the sector, this increase would only pose risks to financial stability if non-bank housing lending standards were to materially ease and spill over to the banking sector.

The Australian financial system faces a number of important challenges. Cyber risks – which have grown over recent years, and are currently elevated - are a substantial threat to financial institutions and the financial system. Reflecting this, financial institutions, regulators and governments are taking actions to bolster the resilience of the financial system to cyber threats (see 'Box C: Building Resilience to Cyber Risks'). Likewise, risks to the financial system from climate change, if not managed, will also grow over time: authorities and financial institutions are making some progress towards understanding and managing these risks. Finally, improvements have been made to address governance shortcomings in the financial system over the past few years, but this continues be an area of focus.

Banks have strong capital positions ...

Australian banks' capital ratios were little changed over 2021 from their already high levels (Graph 3.1). The four major banks' Common Equity Tier 1 (CET1) capital ratios are currently 1 percentage point above pre-pandemic levels. The positive impact on banks' capital ratios from strong earnings in 2021 was offset by banks returning capital to shareholders – through share buybacks and dividends – as well as higher risk-weighted assets from strong loan growth. Given banks' capital levels are well above regulatory capital requirements, some banks are expected to buy back additional shares this year.

The Australian Prudential Regulation Authority (APRA) has finalised its 'unquestionably strong' capital framework, which includes larger capital conservation buffers for major banks and a nonzero countercyclical capital buffer for all banks that can be drawn down in periods of stress.^[1] This framework - which is consistent with the 'unquestionably strong' benchmarks set by APRA previously and is effective from January 2023 - increases the CET1 ratio requirement by 2.25 percentage points to 10.25 per cent for the major banks and 9.25 per cent for other advanced banks, and by 1 percentage point to 8 per cent for standardised banks (Graph 3.2). Banks are expected to have their own capital targets above APRA's minimum requirement. Risk weights will be adjusted to improve the allocation of capital to risk and reinforce incentives for sound lending practices. In particular, risk weights for some loans made to small and medium-sized enterprises will be reduced, while risk weights for higher-risk mortgages (investor, interest-only and highly leveraged loans) will be increased. The decline in the average risk weight will result in capital

Graph 3.1 **Banks' Capital Ratios*** Consolidated global operations, per cent of risk-weighted assets Tota 16 16 12 12 CFT Tier 1 Tier 2 1992 1998 2004 2010 2016 2022 Breaks in 2008 and 2013 due to the introduction of Basel II and III for most banks. CET1 is ordinary share capital and retained earnings; Tier 1 CET1 and perpetual subordinated debt; Tier 2 is dated subordinated debt Source: APRA

ratios increasing for the banking system, but the change will vary by bank due to differences in risk profiles. Since banks' capital ratios are already well above regulatory requirements, banks will not be required to raise additional capital to meet the new CET1 requirements.

APRA has also finalised its requirement for the four major banks to increase their total lossabsorbing capacity. Such loss-absorbing capacity can come in the form of Additional Tier 1 and Tier 2 capital instruments that could be used to recapitalise a distressed bank, supporting an orderly resolution and limiting the effects on the financial system. The implementation will see minimum Total Capital requirements for major banks increase by 4.5 percentage points to 18.25 per cent of riskweighted assets from 2026, replacing APRA's interim requirement of a 3 percentage point increase by 2024.

... supported by healthy profits, despite some pressure on interest rate margins

Overall, banks' profits remain healthy, supported by strong credit growth and low funding costs. However, of late, profits have decreased as net interest margins (NIMs) have narrowed (Graph 3.3). The banking sector has seen a



** Adjusted for changes to risk-weighted assets under the new framework. Sources: APRA; RBA period of increased competition, which has contributed to strong growth in housing credit. Until recently, banks were offering lower interest rates on fixed-rate loans, which - along with borrower preference and loan refinancing resulted in a shift towards fixed-rate mortgage products that have lower margins. Banks also increased their holdings of liquid assets over the second half of 2021, in part to meet the upcoming changes to the CLF (discussed below), which further compressed NIMs. Over the coming period, market analysts expect increased interest rates to support NIMs and profitability. While higher lending rates support profits, competition for funding will push the cost of these funds higher. The overall effect on NIMs will depend on the extent of competition in lending and funding markets (discussed further below).

Better-than-expected economic conditions have contributed to declines in the share of loans that are non-performing and resulted in banks releasing further provisions, which has in turn supported headline profits. The share of nonperforming loans has declined to 0.7 per cent, the lowest level in recent years (Graph 3.4). This has been mostly driven by fewer nonperforming housing loans; the share of nonperforming business loans has declined from its recent peak but remains slightly above its pre-



pandemic level. The number of COVID-19 loan repayment deferrals picked up slightly in the second half of 2021 due to lockdowns in parts of the country, but was much lower than earlier in the pandemic. Lenders have offered hardship assistance to borrowers affected by the recent floods in New South Wales and Queensland (see 'Chapter 2: Household and Business Finances in Australia'). However, banks' exposures to the most affected regions are limited and, consistent with this, they have not been offered regulatory relief for these loans.

Banks have now unwound most of the increase in provisions that were built up to cover anticipated losses from the impact of the pandemic (Graph 3.5). Provisions are currently around 10 per cent above pre-pandemic levels. This is due to uncertainty around the economic outlook, including the ongoing effects of the pandemic on some parts of the economy and as fiscal policy support continues to be unwound.

Robust liquidity positions also support system resilience ...

Banks' holdings of high-quality liquid assets (HQLA) remained at high levels. The increase in holdings since 2020 reflected an initial desire by banks to increase their liquidity as a precaution, as well as increased deposits relative to lending.



Graph 3.4 Banks' Non-performing Loans

It also reflected policy measures implemented by the Reserve Bank that increased Exchange Settlement (ES) balances at the Bank. Consistent with this, banks' Liquidity Coverage Ratios (LCRs) – which measure holdings of liquid assets relative to the potential outflows that could occur in a short-lived but severe stress scenario – have remained comfortably above regulatory requirements (Graph 3.6).

APRA and the Reserve Bank consider there is now sufficient HQLA (such as government debt and ES balances) available for banks to meet liquidity requirements without the need for the Reserve Bank's CLF. The amount of both



Graph 3.6



Australian Government Securities (AGS) and securities issued by state and territory governments ('semis') has increased over recent years as a result of pandemic-related fiscal stimulus spending. Total allocations under the CLF have already been reduced by more than half since the start of the pandemic, and are to be reduced incrementally to zero by the end of 2022 unless financial market conditions materially deteriorate. Banks are expected to be able to comfortably manage the remaining reduction in CLF allocations. For instance, this could be achieved through additional purchases of HQLA (such as AGS and semis); liaison suggests that banks have already started to do this. Banks could also shift to more stable or longer-term sources of funding (such as term deposits, more stable retail deposits and wholesale debt), which would result in lower net cash outflows, helping banks meet their LCR targets without raising additional funding to purchase HQLA.

... and the upcoming TFF refinancing task is not expected to pose a challenge for the banking sector

Over the next two years, banks will need to repay the \$188 billion that they borrowed under the Reserve Bank's TFF. Together with other bonds maturing, the refinancing task for banks in the six months around each of the two TFF maturity dates will be approximately \$130 billion – equivalent to around 3 per cent of banks' total liabilities (Graph 3.7).

The TFF refinancing task, while sizeable, is not expected to pose a challenge for the banking sector, absent a dislocation in funding markets. Liaison suggests that banks plan to repay these funds mostly by issuing wholesale debt, but there are other options. Their final funding decision will depend on a number of factors, including growth of their assets and deposits and the relative cost of funds. Since the TFF closed to new drawdowns in mid-2021, banks' issuance of wholesale debt has increased, and some of this has been at longer tenors than typical in recent years. The lead time before the TFF funds need to be repaid allows banks to spread issuance over a longer period, adjusting their funding plans as appropriate.^[2]

Non-bank lending to households is growing rapidly, but there is no evidence that risks to financial stability are increasing

Non-bank lending to households has continued to grow rapidly, and is close to a decade high of around 20 per cent on a six-month-ended annualised basis. However, this increase has contributed less than a percentage point to the 8 per cent growth in total housing credit on the same basis. This is because, while non-bank lenders' share of housing credit has increased, its share of total lending is still small at less than 5 per cent (Graph 3.8).

In a period of high lending growth it is important that lending standards are maintained so that credit quality does not deteriorate. Data from the Reserve Bank's Securitisation dataset show that there has been some increase in high loan-to-income (LTI) loans securitised by non-banks over recent years, but a similar trend is evident in bank lending and coincides with a period of low interest rates and



Graph 3.7 Banks' Refinancing Task

rapidly rising housing prices (see 'Box B: How Risky is High-DTI and High-LVR Lending?') (Graph 3.9). Over the same time period, nonbank loan-to-valuation ratios (LVRs) have increased slightly but the proportion of lending with a LVR above 90 per cent has been steady. Liaison with non-bank lenders suggests that lending standards have been maintained through this period, and that some lenders are taking measures to limit the share of new loans that have a high LVR.

In October 2021, APRA increased the interest rate serviceability buffer for banks, which - for a small proportion of borrowers – will constrain their maximum loan size, making them more resilient to income or expense shocks (see





Graph 3.9

'Chapter 2: Household and Business Finances in Australia'). This increase in buffer can flow through to the lending measures of non-bank lenders. This is because non-banks typically fund their lending initially by using warehouse facilities provided by banks and subsequently by selling residential mortgage-backed securities (RMBS). As banks have regulatory requirements to hold capital against warehouse facilities, banks tend to require loans in these facilities to be of high quality, and therefore many want warehoused loans to be broadly consistent with APRA's macroprudential policies. Further, most investors in RMBS expect loans to broadly conform to APRA standards. Finally, if non-bank lenders were to pose a risk to financial stability, APRA could use its reserve powers to regulate the sector.

Insurers remain well capitalised and profits have recovered further

General insurers' profits increased over 2021, from the very low levels experienced in 2020 (Graph 3.10). The rise in general insurers' profits mostly reflected a decline in the amount of claims and higher premiums, partly offset by lower investment income. The number of claims has risen more recently due to the flooding in New South Wales and Queensland, but insurers do not expect this to materially change their outlook for natural disaster costs. Insurers continue to maintain their reinsurance cover, which will provide significant protection from natural disaster claims. General insurers have maintained a strong capital position, equivalent to 1.7 times APRA's prescribed capital amount (PCA), leaving them well placed to absorb the impact of an unexpected increase in claims or investment losses.

Lenders mortgage insurers' (LMIs) profits have increased to be around pre-pandemic levels. Profits have been supported by fewer claims (in part reflecting Australian Government stimulus payments to households), rapid housing price growth and the release of provisions for COVID-19-related claims. The strength of housing market activity during the pandemic has seen greater demand for mortgage insurance from owner-occupiers, in particular first home buyers. LMIs have a strong capital position, and their internal stress tests suggest they could withstand a substantial rise in insurance payouts in the event of large falls in house prices or increases in unemployment.

Life insurers' profits increased significantly over the past year, resulting in a positive return on equity for the first time since 2018 (Graph 3.11). Profitability has improved across most products, but particularly for individual disability income insurance (DII). Longstanding issues with DII have weighed on profits in recent years due to chronic under-pricing, loose product definitions and higher-than-expected claims. However, life insurers have significantly improved their risk management, design and pricing of DII products, reflecting APRA's intervention to improve the sustainability of the sector. DII capital charges imposed by APRA have incentivised insurers to make capital injections, lifting the industry-prescribed capital coverage ratio to 1.95 times the PCA (up from 1.77 times in 2020). However, given the long-term nature of DII contracts, exposure to historical contracts



Graph 3.10 General Insurers' Profitability and Capital

and competitive pressures in the industry, these issues are expected to persist for some time.

Superannuation and managed funds have strong balance sheets and have displayed robust liquidity management strategies

Superannuation funds' holdings of financial assets have steadily increased over the past year and now sit well above pre-pandemic levels. The composition of funds' assets has also changed, as favourable market conditions have encouraged a return to investing in riskier assets such as equities and away from cash (Graph 3.12). APRA's regulation and supervision of the industry continue to evolve in an effort to increase its resilience and improve outcomes for members. This has included improving liquidity management practices, the adequacy of liquid asset holdings and trustees' maintenance of financial resilience. These improvements are designed to ensure individual funds are well positioned to meet future liquidity challenges.

One way in which superannuation funds manage liquidity flows from member contributions, withdrawals and portfolio rebalancing is through the use of derivatives. An example of this is the use of total return swaps



Graph 3.11

to temporarily gain exposure to asset classes (with minimal cash outlay), rather than purchasing the assets outright and incurring additional transaction costs. Another important use of derivatives is to hedge risks that arise from their holdings of foreign-currency denominated assets (such as investments in foreign equity and securities). Australianregulated superannuation funds invest around one-third of members' funds offshore and survey data indicate that about half of these are hedged.^[3] Hedging these exposures reduces the risks to members that arise from large changes in the value of these assets due to movements in the Australian dollar exchange rate.

Self-managed superannuation funds (SMSFs) continue to use risky leveraged property loans – known as 'limited recourse borrowing arrangements' (LRBA) – which allow an SMSF trustee to borrow for investment purposes (Graph 3.13). If the trustee defaults on the loan, the lender's rights are limited to the specific asset bought with the loan and there is no recourse to other assets held in the SMSF. The Australian Taxation Office and other agencies are monitoring ongoing concerns around this product because the additional direct leverage exposes SMSF members to greater financial risks. However, the take-up of SMSF borrowing



Graph 3.12

* Shares and other equity issued by non-money market financial investment funds plus net equity of pension funds in life office reserves Sources: ABS; RBA

arrangements has remained steady in recent years and major banks and other main lenders have ceased lending to the sector (although this gap has been filled somewhat by non-bank lenders).

Australian financial institutions are well positioned to manage rising interest rates

Market pricing implies that participants expect large increases in short-term interest rates in Australia over the next couple of years, of around 300 basis points. In many economies, financial institutions' profits are seen to move with interest rates.^[4] However, Australian financial institutions are generally less sensitive to the direct effects of changes in interest rates due to the composition of their balance sheets and regulatory incentives to hedge remaining interest rate risk. Most of the interest rate risk is borne by customers and policyholders. As a result, financial institutions face indirect exposure through channels such as loan impairments and demand for financial services (see 'Chapter 2: Household and Business Finances in Australia').^[5]

Banks face interest rate risk due to the nature of their activities, whereby they fund longer-term assets (loans) with shorter-term liabilities (such as deposits and wholesale debt). This maturity



mismatch can cause NIMs to expand or narrow when short- and long-term interest rates move by different amounts. However, there are two key features of Australian banks' balance sheets that help them to mitigate this interest rate risk:

- Banks typically have more liabilities due within one month than assets that will mature in that time (Graph 3.14, lower panel), but the assets on Australian banks' balance sheets can generally be repriced more quickly than their liabilities. This is because a large share of banks' assets are variable-rate loans, notwithstanding the sharp rise in fixed-rate loans in 2020.
- Banks further hedge their interest rate risk by engaging in derivative trades that make their repricing maturity schedule more balanced (Graph 3.14, upper panel). While a large share of banks' liabilities are fixed-rate bonds and deposits, these are typically hedged to reprice in line with short-term interest rates, and more closely match the repricing of their assets

Another way banks are exposed to interest rate risk is through their holdings of fixed-income securities in their trading book. However, Australian banks' holdings of such assets are small, comprising about 3 per cent of their total assets.



Graph 3.13 Total Value of LRBA Assets and Borrowings

Australia's major banks report to APRA their level of interest rate risk from a 200 basis point increase in interest rates, and these scenarios suggest that such an increase would have very little impact on major banks' capital levels. Only 2 per cent of major banks' CET1 capital (28 basis points of CET1 capital ratios) would be needed to absorb expected losses (Graph 3.15). The effect on capital would be smaller still if such an increase in interest rates was spread over a longer period of time, enabling banks to respond.

Estimates of interest rate risk that general and life insurers report to APRA suggest that the impact of higher interest rates on capital is small (Graph 3.15). Insurers in Australia typically invest in assets that have a similar duration to their liabilities, thereby offsetting impacts on their balance sheets. For example, an increase in nominal interest rates is likely to reduce the value of both assets and liabilities, although the net effect on their capital can depend on what caused interest rates to increase. Higher nominal interest rates typically reduce the discounted value of insurers' liabilities. However, if interest rates increased because future inflation was expected to be higher, insurers might adjust



Sources: APRA; RBA

their assumption for future policy payouts since many policies link payouts to future prices or wages, leaving the discounted value of insurers' liabilities little changed. Insurers can also offset impacts on their balance sheets by passing some of the impact on to policyholders, such as when a life insurance policy offers a variable payout that is linked to the return on underlying assets.

Superannuation funds in Australia are resilient to rising interest rates because of their benefit structure and asset composition. The majority of superannuation and other managed funds are 'defined contribution' funds – that is, there is no guaranteed fixed return and members bear all the interest rate (or investment) risk. In the case where superannuation funds guarantee a fixed return to members ('defined benefit' funds), only a small share of funds' assets are directly affected by rising interest rates, such as fixed income securities (7 per cent of assets) (Graph 3.12). Nevertheless, other assets held by superannuation funds can be indirectly affected through higher debt servicing costs.

Financial market infrastructures continue to focus on improving resilience

Financial market infrastructures (FMIs) – such as central counterparties, securities settlement facilities and high-value payment systems – enable financial system participants to manage credit and liquidity risks. The Reserve Bank's 2021 assessments of Australian FMIs concluded that, on balance, all had conducted their affairs in a way that helped to promote overall stability in the Australian financial system. However, it also found that FMIs must respond effectively to previous incidents and emerging risks to enhance their resilience.

In November 2021, the Australian Securities and Investments Commission (ASIC) concluded an investigation into an outage affecting the Australian Securities Exchange (ASX) market in late 2020. As a result of the investigation, ASIC imposed additional conditions on the licences of the entities that operate ASX systems for trading, clearing and settlement of equities and equity options. The conditions require the ASX to remediate underlying issues with its operations that led to the 2020 market outage, and to appoint an independent expert to assess whether the ASX's assurance program for the replacement of its CHESS clearing and settlement system is fit for purpose. The ASX plans to replace the aging CHESS system, which supports clearing and settlement of nearly all listed Australian equities, in 2023.

The ASX's futures market (ASX24) also experienced an incident on 17 March 2022, resulting in a four-hour trading halt. The outage was due to a hardware fault rather than the software issues that caused the 2020 ASX Trade outage. ASIC and the Reserve Bank view outages of this nature with significant concern and are engaging with the ASX on its review of the incident.

The Reserve Bank Information and Transfer System (RITS) settles high-value payments between Australian banks, FMIs and other payment service providers. Given this critical role in the broader payments system, it is important that members of RITS are themselves resilient and secure. In December 2021, RITS issued revised Business Continuity and Security Standards, which include new cybersecurity standards for members. These strengthened standards are consistent with the Committee on Payments and Market Infrastructures' strategy to reduce the risk of wholesale payments fraud related to endpoint security.

Agencies continue to work with financial institutions to address longer-term challenges

The threat from cyber incidents on financial institutions and the broader financial system has grown over time. While the impact of incidents

in Australia has been limited to date, a significant cyber event is inevitable and could have systemic implications. Consequently, financial institutions and authorities in Australia and abroad are investing considerable resources to make the financial system more resilient to cyber incidents (see 'Box C: Building Resilience to Cyber Risks').

Another ongoing challenge for the financial system is climate change (see 'Box A: International Banks' Response to Climate Risk'). The Australian financial system is directly affected through the physical risks to assets, as well as through the transition risks that arise from policies and technologies implemented to address climate change and assist in the transition to a lower emissions economy. Australian financial institutions are vulnerable to these growing risks and, if not adequately managed, there could be implications for financial stability. As a result, agencies within the Council of Financial Regulators (CFR) are working with Australian financial institutions and corporations to better understand and manage the associated financial risks. The major banks have commenced a range of climate risk management strategies, including aligning their lending portfolios to net zero emissions by 2050, improving their climate-related disclosures and working with their customers to decarbonise and build climate-related resilience. APRA released its final prudential practice guide on climate change financial risks in November 2021 to assist entities in managing their climaterelated risks.

APRA and the Reserve Bank – together with other CFR agencies – have been conducting analysis and research on climate-related issues, including by leveraging the experiences of other central banks and prudential regulators.^[6] APRA is leading a bottom-up supervisory Climate Vulnerability Assessment (CVA), which will provide estimates of the impact from two potential climate scenarios on Australia's five largest banks. The Reserve Bank has published a preliminary top-down analysis to assess the climate risk to the Australian banking system that complements the CVA.^[7] Additionally, the Bank is conducting analysis to further develop its understanding of the financial risks of climate change.

Issues relating to culture and governance also remain an area of longer-term focus. If left unaddressed, these issues can lead to the erosion of trust in financial institutions - trust that is essential to the effective operation of the financial system. In the past, issues relating to culture and governance have led to large remediation costs, as well as penalties and operating restrictions imposed by regulators. ASIC recently commenced legal proceedings against three large banks: ANZ, for alleged breaches of the Credit Act related to its 'introducer program'; Westpac, for alleged widespread compliance failures across multiple lines of business; and Macquarie Bank for alleged failures to properly monitor and control thirdparty transactions on customers' accounts. In addition, the Reserve Bank of New Zealand (RBNZ) instructed the New Zealand subsidiary of Westpac (Westpac NZ) to commission an independent report into risk governance, which

found material risks to effective risk governance and underinvestment in risk management capabilities. While the RBNZ noted that Westpac NZ had made some progress towards addressing these concerns, it expects them to continue prioritising the findings of the report.

To better monitor risk culture, APRA is conducting a risk culture survey across a range of 60 banking, insurance and superannuation entities. APRA expects that entities will be able to complement their own internal risk metrics using insights from the survey to build a more comprehensive picture of risk culture. In 2021, APRA finalised its guidance on its prudential standard for remuneration, which will strengthen incentives to prudently manage risk; APRA will also be increasing its supervisory oversight over remuneration practices ahead of the implementation of the standard in January 2023. Finally, the Australian Government, APRA and ASIC are working together to extend the Banking Executive Accountability Regime to include insurance and superannuation institutions under the Financial Accountability Regime.

Endnotes

- [1] Buffers include: the capital conservation buffer, which provides a layer of capital on top of the prudential minimum to be drawn down when losses are incurred; the countercyclical capital buffer, which helps to protect the banking sector from periods of excess credit growth; and the domestic systemically important bank (D-SIB) buffer to increase the major banks' ability to absorb losses on a going-concern basis. For further details, see BIS (2019), 'The Capital Buffers in Basel III', November; APRA (2013), 'Information Paper: Domestic Systemically Important Banks in Australia', December.
- [2] See Fitzpatrick R, C Shaw and A Suthakar (2022), 'Developments in Banks' Funding Costs and Lending Rates', RBA *Bulletin*, March.

- [3] See RBA (2021), 'Box C: What Did 2020 Reveal About Liquidity Challenges Facing Superannuation Funds?', *Financial Stability Review*, April.
- [4] See Hack M and S Nicholls (2021), 'Low Interest Rates and Bank Profitability – The International Experience So Far', RBA *Bulletin*, June
- [5] RBA (2018), 'Box C: Interest Rate Risk in the Australian Financial System', *Financial Stability Review*, April.
- [6] APRA and RBA (2021), 'Network for Greening the Financial System Pledge', Joint Statement, 3 November.
- [7] See Bellrose K, D Norman and M Royters (2021), 'Climate Risks to Australian Banks', RBA *Bulletin*, September.