

# Developments in Banks' Funding Costs and Lending Rates

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## Abstract

Banks' funding costs rose over 2022, driven by increases in the cash rate and in expectations for the future path of the cash rate. In turn, lending rates have increased considerably for the first time in over a decade. The increases in the average rate charged on all outstanding loans was limited by the large share of fixed-rate housing loans and ongoing competition in housing lending. This article updates previous research published by the Reserve Bank on developments in banks' funding costs and lending rates.

## Introduction

Banks fund themselves via a range of sources, including deposits, wholesale debt and equity. The cost of banks' funding is a key determinant of the rates they offer on loans to households and businesses (RBA 2023a).<sup>[1]</sup> The Reserve Bank's monetary policy affects banks' funding costs – and, in turn, lending rates – primarily through its influence on a range of interest rates in the economy. Indeed, this is an important channel through which monetary policy is transmitted (RBA 2023c; Brassil, Cheshire and Muscatello 2018). This article updates previous analysis,<sup>[2]</sup> focusing on

developments in the major banks' funding costs and lending rates over 2022.

### Funding costs and lending rates increased substantially over 2022

During 2022, the Reserve Bank withdrew some of the extraordinary monetary policy support put in place during the COVID-19 pandemic (RBA 2023b). The Bank raised the cash rate target by 300 basis points, to 3.1 per cent by the end of the year – one of the largest and most rapid increases in the cash rate on record. The cash rate is a key determinant of banks' funding costs through its influence on the broader interest rate structure in the Australian

financial system. Much of banks' wholesale debt and deposit funding is linked to bank bill swap (BBSW) rates either directly or via banks' hedging practices.<sup>[3]</sup> These rates are heavily influenced by the cash rate (and expectations about the path of the cash rate) and so rose substantially over 2022 (Graph 1).

Tighter monetary policy drove up costs across banks' funding base over 2022, though the overall increase in major banks' non-equity funding costs was smaller than the increase in the cash rate by the end of the year (Graph 2) (discussed further below). Lending rates also increased considerably for the first time in over a decade, as banks passed on higher funding costs to borrowers. The increase in outstanding lending rates was limited over 2022 by the large share of fixed-rate housing credit that was taken out around historically low interest rates during the pandemic, and ongoing price competition to attract and retain housing borrowers.

### Composition of bank funding

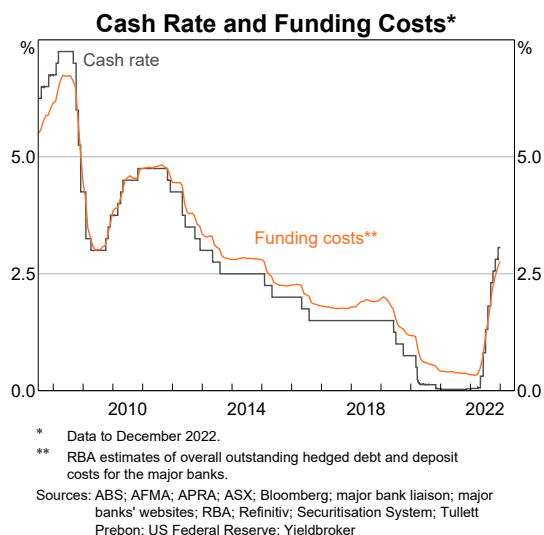
Banks obtain funding from retail deposits, wholesale deposits, wholesale debt (including securitisation) and equity. In recent years, banks also sourced low-cost funding from the Reserve Bank's Term Funding Facility (TFF), which was introduced at the outset of the pandemic as part of a monetary policy package to support the Australian economy at that time (Black, Jackman and Schwartz 2021). The

composition of the major banks' funding in terms of these broad categories was little changed over 2022 (Graph 3).<sup>[4]</sup>

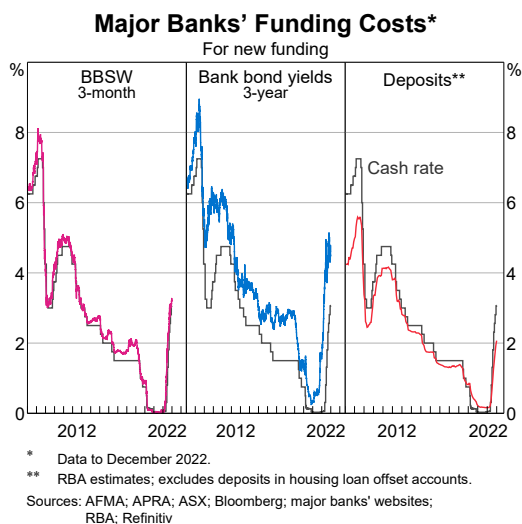
### Deposits are the largest source of bank funding

In aggregate, deposits account for around two-thirds of major banks' non-equity funding. This share has been relatively stable over the past two years, following a large increase in both the stock and share of deposit funding after the onset of the pandemic in 2020. The increase in deposits during the pandemic reflected a number of factors, including the effect of increased lending by the banking sector, government bond purchases by the Reserve Bank and the decline in the stock of banks'

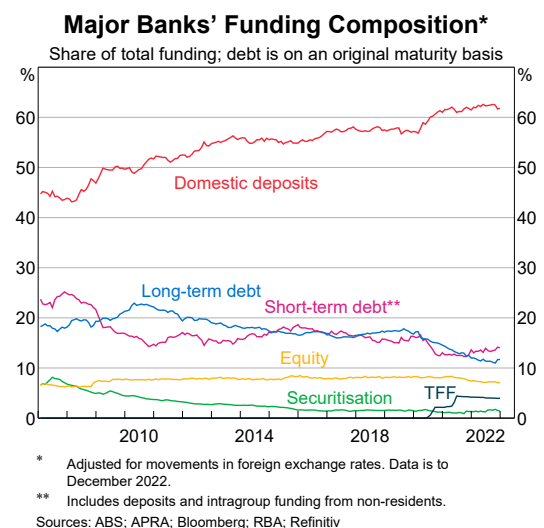
**Graph 2**



**Graph 1**



**Graph 3**



outstanding wholesale debt (RBA 2020). More lending creates deposits as the funds made available to a borrower find their way into a deposit somewhere in the banking system, either as a deposit in the borrower's account or in another account when the borrower uses those funds to make a purchase (Kent 2018). Net redemptions of bank debt and purchases of government bonds by the Reserve Bank may increase deposit growth when asset holdings of non-bank investors are replaced with deposits, but these factors were not material drivers of deposit growth over 2022.

The stock of major banks' deposits increased further over 2022, with the stock of term deposits held by households and businesses rising notably (Graph 4). At-call balances ended the year little changed, with an early increase later unwound as some depositors switched from at-call deposits to term deposits as the spread between interest rates on these products widened (discussed further below). Nonetheless, term deposits remain a slightly smaller share of major banks' deposit base compared with the period shortly before the pandemic. The composition of aggregate deposits by depositor type was little changed.

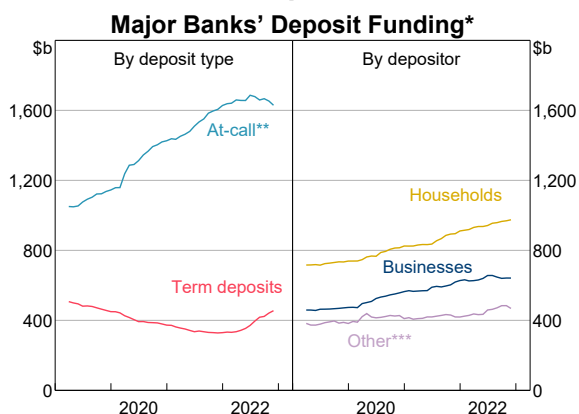
### Major banks' wholesale debt issuance picked up

Major banks' issuance of wholesale debt increased considerably over 2022, but the total share of funding sourced from wholesale debt markets was little changed. In the case of long-term debt, the

value of issuance was the highest since 2017 (Graph 5), with increased activity both onshore and offshore. In an environment of higher yields and increased volatility over 2022, banks shifted more of their issuance to shorter tenors compared with 2021 (e.g. three year and five year, instead of seven year) and issued more secured debt such as covered bonds, which have a lower risk profile. After accounting for maturing debt, the stock of outstanding long-term debt grew at a similar pace to other funding sources. This compares with subdued bank bond issuance and an overall decline in wholesale debt funding during the pandemic, when the major banks were able to access alternative term funding via the TFF at very low rates (Johnson 2022).

Stronger issuance over 2022 partly reflected the fact that the TFF closed to new drawdowns in June 2021. Banks also started preparing for TFF repayments coming due over 2023 and 2024 (Graph 6). In addition, the Committed Liquidity Facility allowances were reduced to zero over 2022 and some debt issuance was to fund the purchase of government securities to continue satisfying High Quality Liquid Asset (HQLA) requirements (APRA 2023). The Reserve Bank's assessment is that the funding task related to the refinancing of the TFF is sizeable but manageable; public statements made by some banks have supported this assessment (Black, Jackman and Schwartz 2021; NAB 2021; ANZ 2022). Banks' decisions about how to repay TFF drawings will

**Graph 4**



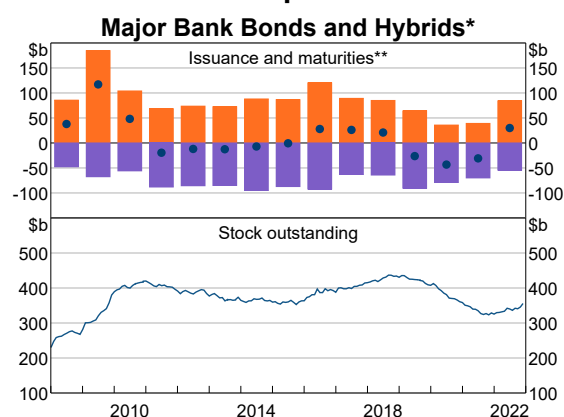
\* Data to December 2022.

\*\* Includes deposits in housing loan offset accounts and non-interest bearing deposits.

\*\*\* Includes deposits from the government and financial institutions, including superannuation funds.

Sources: APRA; RBA

**Graph 5**



\* Data to December 2022.

\*\* Dots represent net annual issuance.

Sources: Bloomberg; Private Placement Monitor; RBA

depend on a number of factors, such as their asset growth and the price and availability of the full range of funding sources, including deposits.

### The major banks' equity share of total funding was little changed

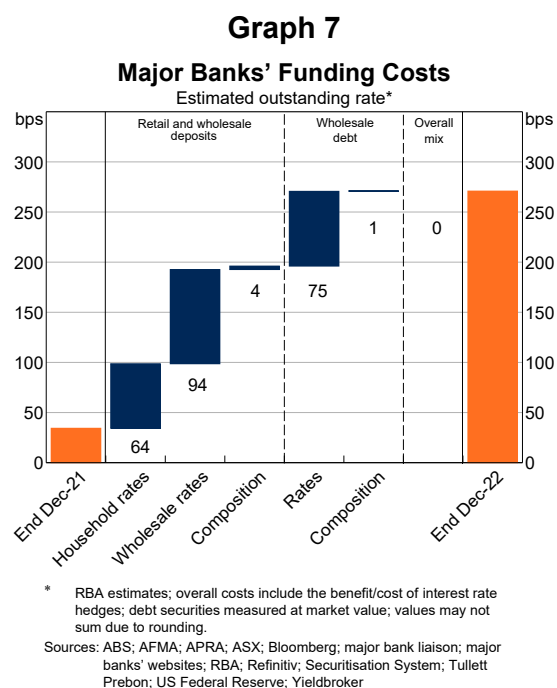
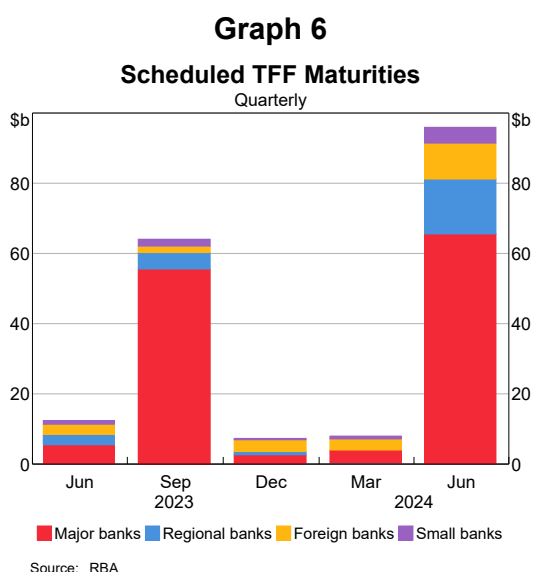
The amount of banks' equity funding (or 'equity capital') rose over 2022 in line with an expansion in banks' balance sheets, leaving the equity share of funding little changed. The major banks maintained capital buffers well above their regulatory requirements over the year, despite several of the banks returning some capital to shareholders through share buybacks and dividends. Overall, banks were well positioned to meet APRA's 'unquestionably strong' capital framework that came into effect in January 2023 (RBA 2022).

### Major banks' cost of funding

As noted above, the major banks' funding costs rose sharply over 2022, driven by a tightening in monetary policy (Graph 1; Graph 2). The overall rise in their outstanding non-equity funding costs was smaller than the increase in the cash rate (Graph 7). The factors contributing to this gap included limited pass-through of increases in interest rates in other markets to some of the rates paid on the banks' deposit base (particularly household and at-call products) and lags in the effect of higher BBSW rates on wholesale funding costs. Most of the impact of a change in BBSW rates flows through to

wholesale funding costs in three to six months, with the time frame varying according to the maturity profiles of banks' short-term debt, wholesale deposits and interest rate hedging instruments.

The estimated level of major bank funding costs also includes adjustments to account for how banks may hedge their interest rate risk. The estimates presented here assume that to the extent fixed-rate funding liabilities are not naturally hedged by offsetting fixed-rate assets, interest rate swaps are used to transform fixed-rate payments into floating-rate payments (Berkelmans and Duong 2014). It is possible that major banks have hedged differently to the simple adjustment made in these estimates. This may have caused funding costs to increase by more than presented here due to the rise in floating rates over 2022. For example, banks may have chosen to swap fixed-rate funding drawn from the TFF (rather than relying on a fixed-rate asset, such as lending, as a natural hedge). In this instance, the effective cost of TFF funding will have increased alongside the increase in floating rates, rather than remaining at the low rate on TFF drawings.<sup>[5]</sup> Similarly, major banks' effective earnings from their fixed-rate loan book may have increased with the rise in floating interest rates if fixed-rate lending was hedged using interest rate swaps.



### In aggregate, deposit rates rose but by less than the cash rate

The divergence between overall deposit costs and the cash rate was underpinned by limited pass-through to transaction and at-call savings accounts (Graph 8). At-call deposits accounted for around 80 per cent of major banks' deposit base on average in 2022. Average rates on new term deposits increased by more than the cash rate, in line with the larger movements in BBSW and longer term swap rates, which are the key benchmarks used to price these products. Compared with earlier periods of monetary policy tightening, total deposits comprised a larger share of major banks' funding in 2022, amplifying the effect of changes in deposit rates on major banks' total funding costs.

By depositor type, banks have increased rates on wholesale deposits by more than on household deposits (Graph 9). This different treatment is likely, in part, to reflect wholesale depositors having a wider range of market-based alternatives in which to place cash. For households, increases in at-call deposit rates have been larger for savings products that require depositors to adhere to certain conditions to earn interest (e.g. the balance must increase in the month) than for online savings products without conditions. Some of the largest increases in advertised deposit rates have been offered by non-major banks.

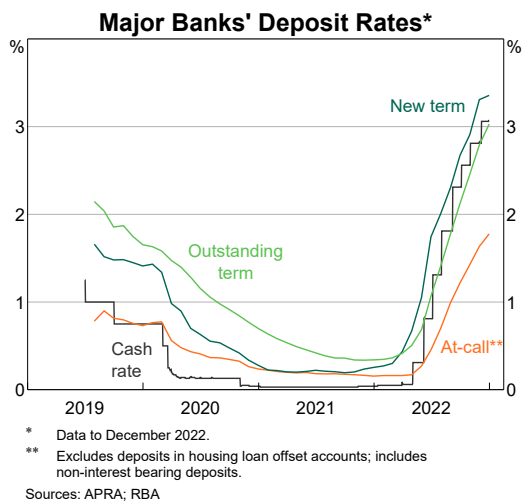
### The cost of new wholesale funding rose alongside benchmark rates

The cost of issuing short-term and long-term wholesale debt rose over 2022, following the increase in benchmark market rates. Domestic yields on major banks' three-year bonds ended the year around 5 per cent – the highest level since 2012 (Graph 10). Bank bond yields also increased by more than the increase in comparable swap rates (which are reference rates for the pricing of fixed-income securities). This difference reflected stronger demand for bank funding and a broader increase in risk premia. The spread to the swap rate ended the year a little above its three-year average over the period preceding the pandemic. A wider spread suggests it became more costly for banks to swap fixed-rate liabilities into floating-rate liabilities. The cost of swapping foreign currency debt back into Australian dollars also rose from the historical lows seen during the pandemic. If yields and spreads remain around these levels, then as maturing debt is rolled over, the cost of banks' outstanding debt will also increase a little further, putting upwards pressure on funding costs.

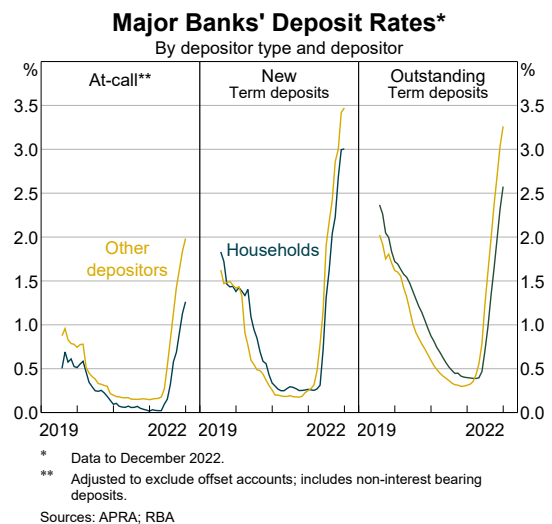
### Lending rates

Major banks responded to higher funding costs and increases to the cash rate by increasing lending rates. From April to December, compared with a rise in the cash rate target of 300 basis points, the average outstanding housing lending rate

**Graph 8**



**Graph 9**

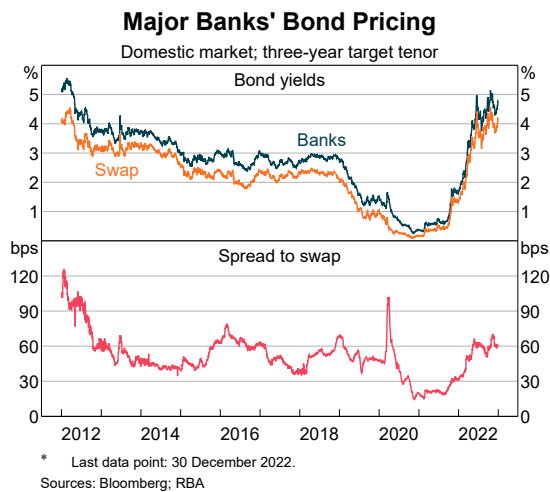


increased by around 190 basis points and the average outstanding business rate increased by just over 260 basis points. The average new lending rates for housing and business purposes rose by a little more than the average rates charged to existing borrowers, but by less than the cash rate. The average rate charged on outstanding personal debt also increased slightly.

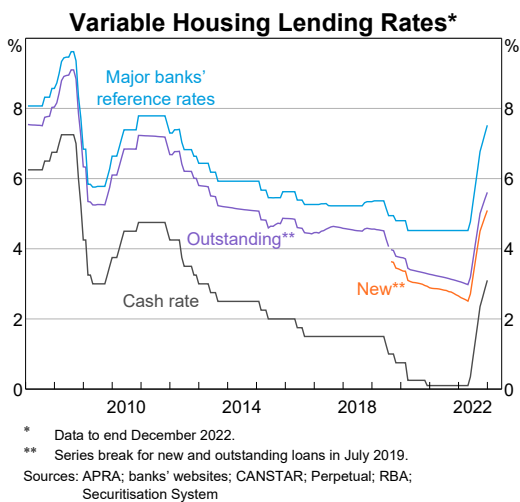
### Housing lending rates

The increase in the average rate charged to existing housing borrowers was mainly driven by increases in variable rates. Over 2022, the average outstanding variable rate returned to levels not seen since 2013, the last time the cash rate was above 3 per cent (Graph 11).

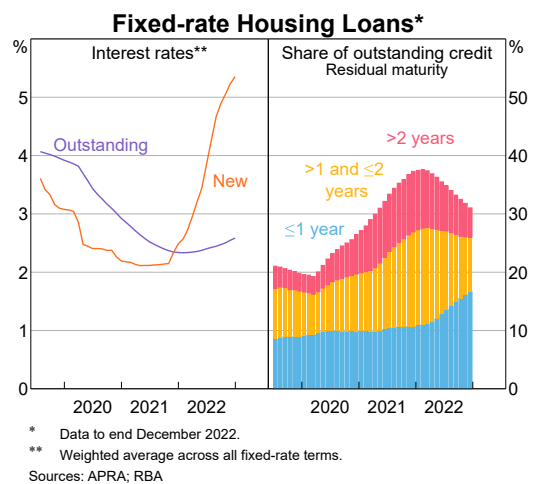
**Graph 10**



**Graph 11**



**Graph 12**



Although lenders passed on cash rate increases in full to variable reference rates, very few borrowers pay rates as high as these. Instead, borrowers are offered, or negotiate, a discount relative to these reference rates (RBA 2019). During 2022, banks competed strongly for new and externally refinancing borrowers, particularly those of higher credit quality, in addition to adjusting discounts to retain existing borrowers. Liaison suggests that around 30 per cent of variable-rate borrowers have renegotiated a lower rate on their housing loan with their existing lender since May. Many borrowers have also refinanced with a new lender, with major banks extending cashback offers to customers of around two to four thousand dollars.

The large share of fixed-rate lending taken out during the pandemic also weighed on pass-through to the average rate charged to all housing borrowers (Graph 12). While around one-quarter of fixed-rate loans outstanding in early 2022 rolled to a new (and in most cases higher) interest rate over the year, the remainder were unaffected by the rise in lending rates. As these borrowers' fixed-rate periods expire in the period ahead, the total average outstanding housing rate is likely to increase further (Lovicu *et al* 2023).

### Business lending rates

Interest rates on variable-rate loans to businesses of all sizes have increased alongside the cash rate and three-month BBSW (which is the benchmark for most loans to medium- and large-sized businesses)

(Graph 13).<sup>[6]</sup> Loans to medium and large businesses account for just under 90 per cent of total business credit and the majority are on a variable rate.<sup>[7]</sup> Reflecting the dominance of variable-rate lending, the average outstanding rate on business loans has moved considerably more than the average outstanding housing rate.

### Implied lending spread

A bank's implied lending spread is the difference between the average lending rate it charges to borrowers and its overall funding cost. We estimate that the implied lending spread for the major banks narrowed further over 2022 (Graph 14).

Underpinning this, the aggregate lending rate increased by around 30 basis points less than funding costs. Key factors weighing on the aggregate lending rate included the high share of fixed-rate housing loans that did not reprice, and the effect of ongoing competition in housing lending on interest rates for new and outstanding variable-rate loans.

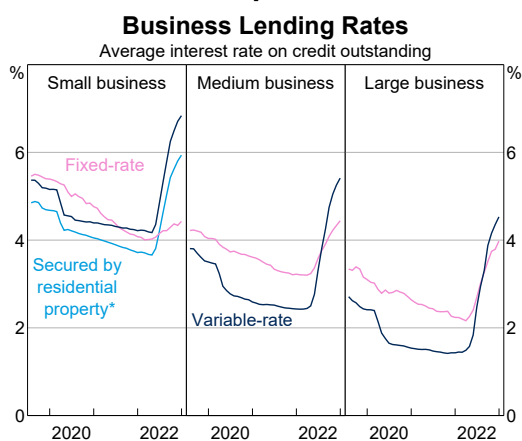
The lending spread shown above differs from reported measures of bank profitability like net interest margin (NIM). Reported NIMs for the major

banks generally started to increase during 2022. Among the differences between these measures, the lending spread excludes the effects of non-loan interest-earning assets, such as cash and other HQLA, which are captured in banks' NIMs. Yields on some of these assets have risen – for instance, the rate paid on Exchange Settlement balances held at the Reserve Bank increased from zero to 3 per cent over 2022. The lending spread estimate also likely only partially accounts for hedging practices, whereas reported NIMs will fully reflect hedging cash flows.

### Conclusion

The effects of tighter monetary policy over 2022 have driven a substantial increase in banks' funding costs. In turn, banks have started charging higher interest rates on loans to households and businesses over this period. As such, the cost of borrowing for many households and businesses has increased considerably for the first time in over a decade, leading to a significant tightening in financial conditions for these borrowers. ✖

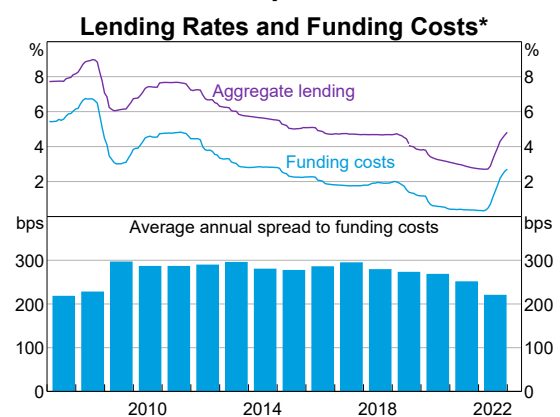
**Graph 13**



\* Small business loans secured by residential property can have fixed or variable interest rate terms and are included in the fixed-rate and variable-rate lines.

Sources: APRA; RBA

**Graph 14**



\* Major banks; data from the EFS collection from July 2019.

Sources: ABS; AFMA; APRA; ASX; Bloomberg; CANSTAR; major bank liaison; major banks' websites; RBA; Refinitiv; Securitisation System; Tullett Prebon; US Federal Reserve; Yieldbroker

### Endnotes

- [\*] The authors are from Domestic Markets Department. The authors are grateful for the assistance provided by others in the department, in particular David Wakeling.
- [1] Banks also take into account the risks inherent in lending, such as the credit risk associated with loans and the

liquidity risk involved in funding long-term assets with short-term liabilities. Banks' growth strategies, competition in the financial sector and their desired return to equity holders also affect their lending rates.

- [2] See Fitzpatrick, Shaw and Suthakar (2022).

- [3] For a more detailed discussion on how BBSW rates influence banks' funding costs, see Black and Titkov (2019). For an update on the banking sector's hedging of foreign currency liabilities, see Atkin and Harris (2023).
- [4] All measures in this article (unless otherwise noted) use banks' 'domestic books' as the basis of measurement, rather than their global balance sheet (APRA 2017).
- [5] One implication of banks opting to swap fixed-rate TFF drawings into floating rate exposures is that, as banks begin to replace TFF funding, the overall increase in funding costs might be smaller than would be estimated by the Reserve Bank's methodology as hedging will have already brought forward much of the cost increase.
- [6] Variable-rate loans to business include loans on variable and floating interest rates.
- [7] Generally, businesses with a turnover greater than or equal to \$50 million are classified as large businesses in banks' reporting. For businesses with turnover of less than \$50 million, the business is generally classified as medium when the reporting institution has an exposure of more than \$1 million.

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