

Developments in Banks' Funding Costs and Lending Rates

Rachael Fitzpatrick, Callum Shaw and Anirudh Suthakar^[*]



Photo: Bob Bosewell – Getty Images

Abstract

This article updates previous Reserve Bank research on the ways in which developments in the composition and pricing of banks' funding sources have affected their overall cost of funds and influenced lending rates. Banks' funding costs declined a little over 2021 – after falling substantially in the previous year – supported by the Reserve Bank's policy measures. In aggregate, lending rates declined by more than funding costs. As a result, the major banks' average interest rate spread narrowed over the year. The decline in the aggregate lending rate primarily reflected strong price competition and ongoing refinancing activity, particularly in housing lending.

Introduction

The cost of banks' funding is a key determinant of the rates that banks offer on loans to households and businesses (RBA 2022a).^[1] Banks can fund themselves from a range of sources, including deposits, wholesale debt or equity. The Reserve Bank's monetary policy – primarily through its influence on a range of key interest rates in the economy – can affect banks' funding costs and, in turn, lending rates. Indeed, this is a key channel through which monetary policy is transmitted through the Australian financial system and affects the real economy (RBA 2022b). This article updates

previous Reserve Bank analysis, focusing on developments in the major banks' funding costs and lending rates over 2021 (Suthakar and Garner 2021).

Funding costs and lending rates were historically low in 2021

In response to the COVID-19 pandemic, the Reserve Bank reduced the cash rate target to historically low levels and implemented other policy measures to lower the cost of funding for banks and to support the supply of credit to households and businesses (RBA 2022c).^[2] Over 2020, banks' outstanding non-

equity funding costs and aggregate lending rates fell by a similar amount to the cash rate (Graph 1). Over 2021, banks' funding costs declined a little further, supported by the Reserve Bank's other policy measures, including the Term Funding Facility (TFF) and the bond purchase program. In aggregate, banks' lending rates declined by more than funding costs over the year. In part, this reflected refinancing and competition in housing lending, as well as a shift in the composition of bank lending to lower-margin products.

The low level of funding costs is consistent with the low level of the cash rate, which is an anchor for other interest rates in the Australian financial system. Much of banks' wholesale debt and deposit funding is linked to bank bill swap rates (BBSW) (either directly or via hedging), and these rates remained very low compared with pre-pandemic levels throughout 2021 (Graph 2). Lower deposit costs and low-cost funding from the TFF also contributed to the decline in banks' overall funding costs over 2021. While the cost to banks of issuing new wholesale debt increased towards the end of the year, this had little immediate impact on outstanding funding costs. Higher issuance costs may impact banks' funding costs over time as banks issue more new debt, to the extent that this issuance is more costly than maturing or existing funding.

The decline in banks' funding costs over the past two years has flowed through to historically low

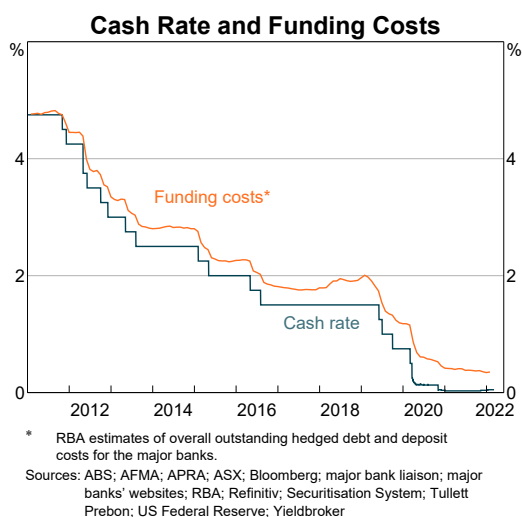
household and business lending rates. We estimate that banks' outstanding funding costs have declined by around 85 basis points, and that outstanding housing and business interest rates paid by borrowers have fallen by around 100 and 115 basis points, respectively, over the same period. Interest rates on outstanding housing loans declined through a number of channels. Lenders lowered their standard variable reference rates on housing loans following the Reserve Bank's initial package of policy measures in 2020, which automatically flowed through to all variable-rate loans. The low level of new lending rates also encouraged new housing borrowing and ongoing refinancing by existing borrowers to lower loan rates over the past two years. Price competition was particularly strong for fixed-rate loans for much of 2021, although rates on new fixed rate loans increased alongside swap rates (the benchmark for fixed-rate lending) towards the end of the year.

Composition of funding

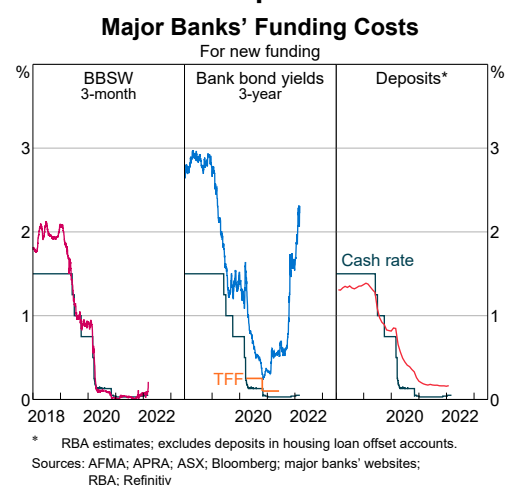
Banks' deposit share of funding remained over 60 per cent

Banks obtain funding from retail and wholesale deposits, wholesale debt (including securitisation) and equity. From April 2020 until June 2021, banks were also able to obtain low-cost funding for three years from the Reserve Bank's TFF. Although the TFF has since closed to new drawdowns, the funding provided will continue to support lower funding

Graph 1



Graph 2



costs until mid-2024 (Black, Jackman and Schwartz 2021).

Over 2021, the share of the major banks' funding obtained from deposits remained higher than it was in the pre-pandemic period. Deposits accounted for a little more than 60 per cent of the major banks' overall funding at the end of December 2021, up from a little more than 55 per cent at the end of 2019 (Graph 3).^[3] This increase was driven by growth in the stock of deposits in the banking system over the past two years (discussed further below). By contrast, the share of the major banks' funding drawn from long-term wholesale debt declined further over 2021, partly reflecting increased use of TFF funding, which displaced new issuance (Kent 2021). Around 5 per cent of the major banks' funding came from the TFF at the end of December 2021, increasing from around 2 per cent at the start of the year. The major banks took up all of their allocated funding allowances under the TFF over 2020 and 2021 (Black, Jackman and Schwartz 2021).

Growth in the stock of deposits has been an important driver of the change in the major banks' funding composition over the past two years. From the end of 2019 to the end of 2021, the stock of deposits at the major banks increased by roughly \$360 billion (or a little more than 20 per cent). Deposit growth is typically driven by new lending by the banking sector (Kent 2018). New lending creates deposits as the funds made available to a

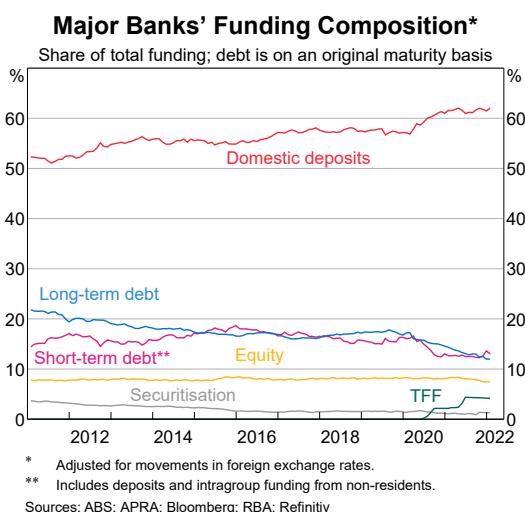
borrower find their way into a deposit somewhere in the banking system, either as a deposit in the borrower's account or in another account when the borrower uses those funds to make a purchase (RBA 2020). While the provision of new credit to the economy has added to deposits over the past two years, it has not been the only driver of the increase. Government bond purchases by the Reserve Bank and the decline in the stock of banks' outstanding wholesale debt also contributed to deposit growth over this period. Both of these channels can add to deposits by converting the original asset (government or bank debt) held by private (non-bank) investors into deposits (RBA 2020).^[4]

Most of the new deposits created over the past two years have flowed into at-call accounts held by households and businesses (Graph 4). By contrast, the volume of term deposits – which place time-based restrictions on the withdrawal of deposited funds, typically compensating the depositor with higher returns than at-call accounts – has decreased over this period. Both deposit growth and the changing composition of deposits contributed to a decline in the cost of deposit funding for the major banks over 2021 (discussed further below).

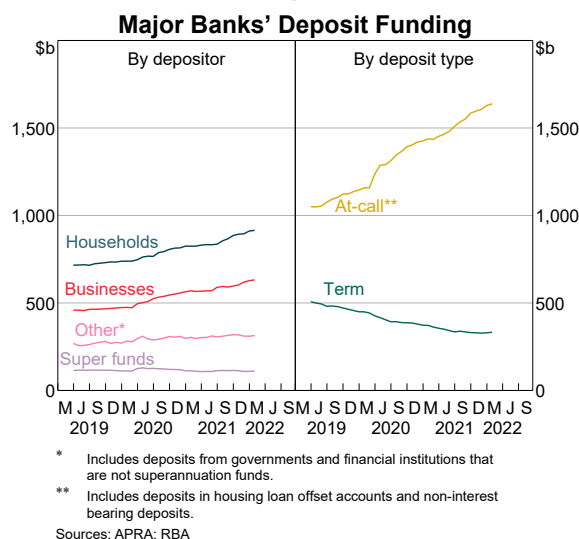
The share of wholesale debt funding declined

The share of funding that banks source from wholesale debt markets declined over 2021 as banks reduced their use of long-term wholesale debt funding. The major banks did not issue new

Graph 3



Graph 4



bonds (which account for the bulk of their long-term wholesale debt funding) in the first quarter of 2021, consistent with the very low levels of issuance seen in 2020. While banks started to issue more bonds in the second half of the year (after the closure of the TFF to new drawdowns), bonds outstanding over the year declined as more debt matured than was newly issued. Even so, the stock of offshore short-term debt funding increased over 2021, supported in part by favourable pricing conditions (Graph 5) (Aziz *et al* 2022).

Banks may issue more wholesale debt in the coming years (in comparison with 2020 and 2021) in order to finance the TFF maturities that will occur in 2023 and 2024 (Graph 6). Banks might also seek to fund purchases of government securities to satisfy High Quality Liquid Asset requirements given the changes to the Committed Liquidity Facility (which is to be reduced to zero over 2022) (APRA 2021a). The Reserve Bank has previously assessed that the funding task related to the refinancing of the TFF is sizeable but manageable; this assessment has been supported by public statements made by some banks (Black, Jackman and Schwartz 2021; NAB 2021; ANZ 2021). Banks' decisions about how to repay TFF funding will 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.

While banks' bond issuance remained low over 2021 when compared with the levels seen prior to the pandemic, banks continued to raise long-term

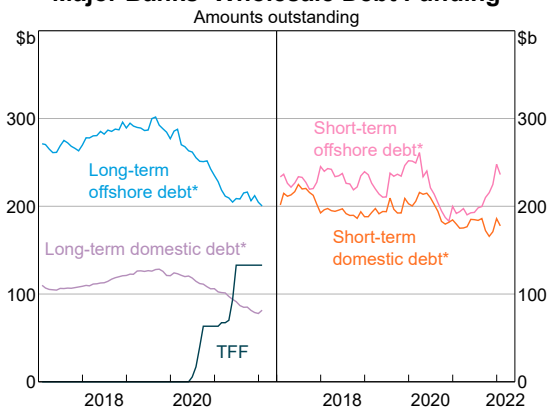
debt funding from Tier 2 hybrid securities over this period (Graph 7). Hybrid securities have both equity- and debt-like features, and can be used to fulfil a part of banks' regulatory capital requirements (RBA 2012). Issuance of hybrids has increased over the past few years as the major banks' prepare for an increase in their regulatory minimum capital requirements.^[5]

Banks' share of equity funding declined slightly

The amount of banks' equity funding (or 'equity capital') was little changed over 2021, though non-equity funding increased, leading to a small decline in the share attributable to equity over the year. Banks returned more capital to shareholders over

Graph 5

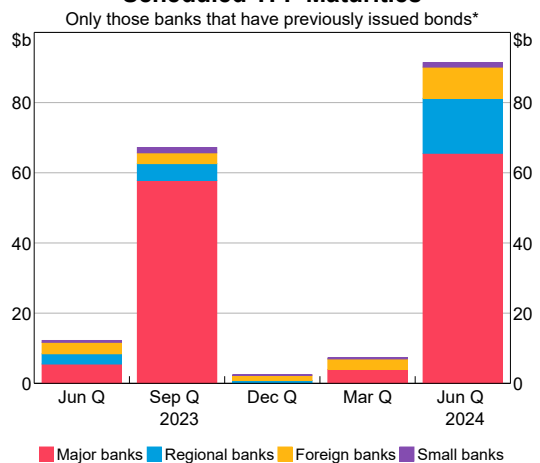
Major Banks' Wholesale Debt Funding



* Excludes hybrids.
Sources: ABS; APRA; Bloomberg; RBA; Refinitiv

Graph 6

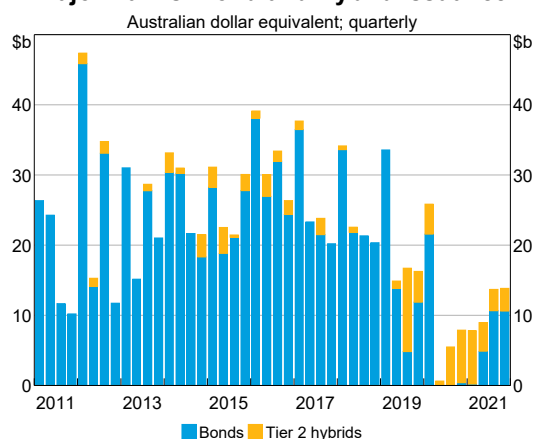
Scheduled TFF Maturities



* These banks account for 96 per cent of TFF drawdowns; maturities on 1 July 2024 included in June 2024 quarter value.
Source: RBA

Graph 7

Major Banks' Bond and Hybrid Issuance



Sources: Bloomberg; KangaNews; Private Placement Monitor; RBA

2021 than in 2020 (through dividend payments and share buybacks), consistent with APRA's removal of restrictions on capital distributions (APRA 2020a). These restrictions were introduced in 2020 in response to the economic uncertainty resulting from the COVID-19 pandemic and were removed around the end of 2020 in recognition of banks' strong capital positions and the improved economic outlook (APRA 2020b). The major banks maintained capital buffers well above their regulatory requirements over 2021, as retained earnings were supported by improved profitability compared with 2020.

Cost of funding

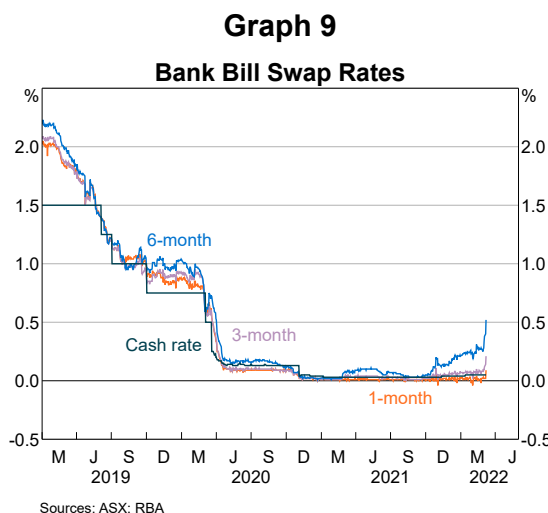
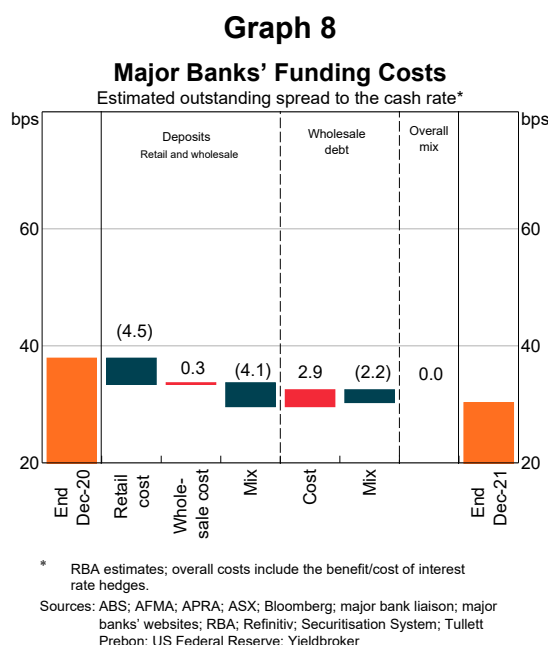
As discussed above, the major banks' outstanding non-equity funding costs declined a little over 2021, reflecting the support provided by the monetary policy measures implemented by the Reserve Bank (Graph 8). Historically, the cash rate has been a key determinant of the overall cost of banks' funding, as it is an anchor for other interest rates in the Australian financial system. In line with this, banks' funding costs were estimated to have declined by a similar amount to the cash rate over 2020. While the cash rate was little changed over 2021, its very low level helped to keep funding costs low over the year. The Reserve Bank's other policy measures, such as the TFF and bond purchase program, also put downward pressure on funding costs. In particular, growth in at-call deposits – supported by the bond purchase program – and the decline in deposit rates helped push funding costs lower over 2021.

Outstanding wholesale funding costs remained low

After falling substantially over 2020, banks' outstanding wholesale funding costs remained low over 2021, primarily reflecting the low level of BBSW rates (although these rates ticked up in late 2021) (Graph 9). This is because much of the major banks' wholesale debt and deposit costs are ultimately linked (either directly or via hedging) to short-term BBSW rates, which are important interest rate benchmarks for the Australian financial system. BBSW rates are heavily influenced by the cash rate, which fell to historically low levels over 2020 as the

Reserve Bank responded to the impacts of the COVID-19 pandemic on the Australian economy (Domestic Markets Department 2019).

Access to the TFF has put downward pressure on banks' wholesale funding costs over the past two years by providing banks with an alternative source of funding that was less expensive than market-based funding options at the same three-year term (Graph 10). Banks therefore replaced more expensive wholesale debt funding with the TFF over 2021 and 2022. A rough estimate is that the *direct* effect of this replacement lowered the major banks' funding costs by around 5 basis points. However, the TFF has also affected funding costs *indirectly* by reducing the need for banks to issue



new wholesale debt. The reduced supply of wholesale debt led to lower yields than otherwise, contributing to the very low issuance costs observed over much of 2021 (Kent 2021). In this way, the TFF benefited both banks and non-banks (which source funding from wholesale debt markets), regardless of their access to the facility.

While the TFF and low bond issuance by the banks helped keep bond yields low for much of 2020 and 2021, banks started to issue more bonds in the second half of the year. In late 2021, swap rates (which are a benchmark for bank bond pricing) rose sharply and spreads between bank bond yields and these rates also rose, albeit more moderately (Graph 11).^[6] These increases meant that the cost of issuing *new* bonds increased for banks. The effect of higher issuance costs on banks' *outstanding* funding costs will reflect the amount of new debt banks issue and how costly it is compared to the funding it might replace. However, to date, higher issuance costs have had little impact on outstanding funding costs.

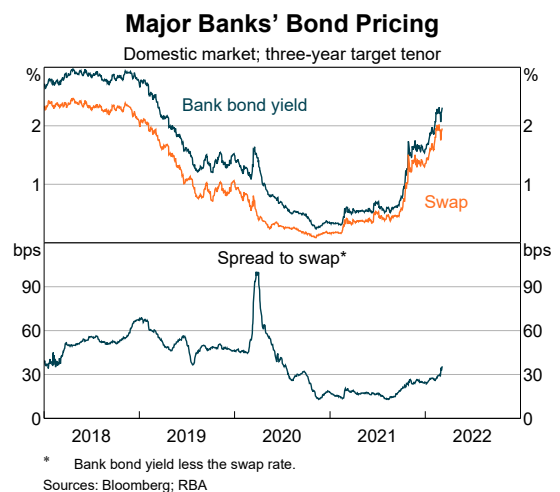
Household deposit rates edged lower

The major banks' household deposit rates decreased over 2021 alongside continued growth in the stock of household deposits. Interest rates for at-call and new term deposits from households declined by 5–10 basis points over the year (Graph 12). The spread between at-call and new term deposits remained low over 2021 after

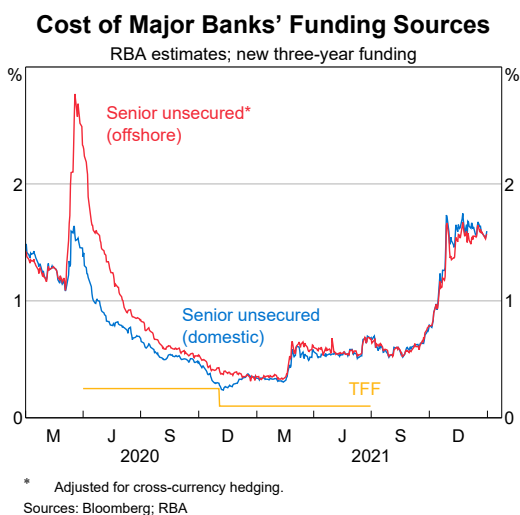
narrowing substantially over 2020, and so more deposits flowed into relatively less expensive at-call deposits.

In contrast to the modest declines in at-call and new term deposit rates over 2021, average rates on outstanding term deposits for households fell quite noticeably, declining by around 50 basis points over the year. This is because the substantial declines in new term deposit rates seen over 2020 have flowed through to outstanding term deposit rates with a lag, as older (more expensive) deposits mature. Most outstanding term deposits have a term to maturity of less than one year, so much of the decline in new term deposit rates has now passed through to outstanding rates.

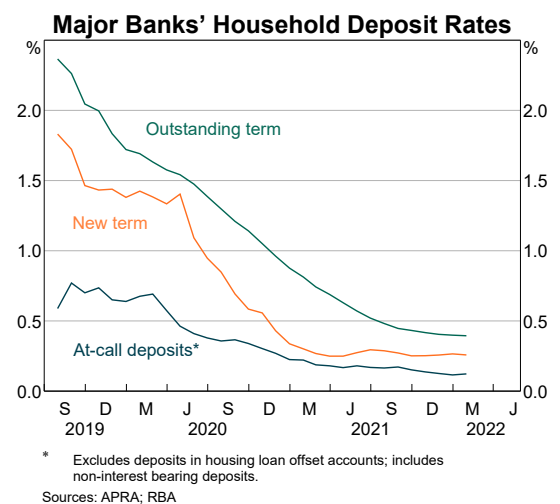
Graph 11



Graph 10



Graph 12



The decline in outstanding term deposit and at-call rates over 2021 translated into an increase in the stock of the major banks' deposits that are paying low rates of interest (between zero and 25 basis points). For the major banks, the share of debt funding from low-rate deposits was nearly 40 per cent in the September quarter of 2021, compared with a little over one-third at the end of February 2021 and around 15 per cent in late 2019 (Graph 13). Despite the bulk of major bank deposits paying relatively low deposit rates, depositors were still able to find some deposit accounts paying 1 per cent or more in interest at non-major banks.

Banks' lending spread

The spread between the average rate on banks' outstanding loans and the average cost of their debt and deposit funding provides some insight into the profitability of that lending. We estimate that this lending spread for the major banks narrowed over 2021, as the average lending rate declined by more than these funding costs (Graph 14). The decline in the average lending rate primarily reflects decreases in the interest rates paid by new and refinancing borrowers (particularly on housing loans). A shift in the composition of banks' outstanding loans away from personal credit (which is on average charged a comparatively higher interest rate) towards housing credit also contributed, as the stock of personal lending declined over the year. By contrast, average lending rates and funding costs fell by roughly the same

amount in 2020, such that the implied lending spread was little changed in that year.

The lending spread shown above differs from some other reported measures of bank profitability, such as the net interest margin (NIM). For instance, the lending spread excludes the effects of non-loan interest-earning assets, such as cash and other high-quality liquid assets, which are captured in banks' NIMs. These assets currently offer relatively low yields – for instance, Exchange Settlement (ES) balances held at the Reserve Bank currently pay an interest rate of zero per cent. In addition, banks are holding more of these assets, partly as a result of the Reserve Banks' TFF and bond purchases, which both added to ES balances in the banking system.

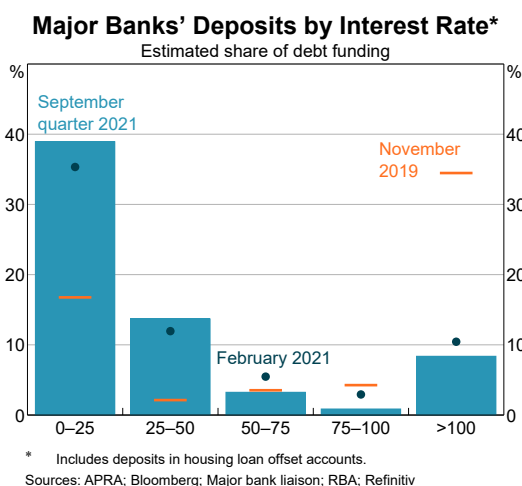
Lending rates

The extent of reductions in interest rates varied across housing and business loans. While outstanding interest rates declined further for business loans than for housing loans over 2020, the reverse occurred over 2021. In total, the decline in outstanding funding costs over the past two years (of around 85 basis points) has flowed through to outstanding housing and business interest rates (which are lower by around 100 and 115 basis points, respectively).

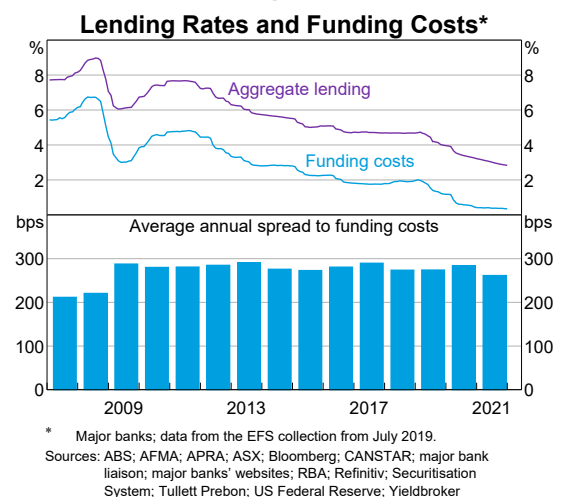
Housing lending rates declined

The fall in outstanding housing interest rates over 2021 (of around 40 basis points) largely reflected the strong uptake of fixed-rate housing loans at low

Graph 13



Graph 14



interest rates by both new and refinancing borrowers. Fixed-rate loans became more popular as interest rates on many of these products declined to be below the interest rates charged on variable-rate loans (Graph 15). The stock of fixed-rate housing loans rose from 20 per cent to around 40 per cent of housing credit outstanding over the past two years. The average outstanding variable rate on housing lending also declined, as banks increased discounts (particularly on basic loans that do not include an offset account) and existing borrowers refinanced to lower rates.^[7]

Although fixed rates on housing loans remain low, rates on new loans increased in the second half of the year, alongside higher swap rates (which are the key benchmarks for fixed-rate lending). The largest increases to date have been for loans with longer fixed terms, while shorter-term fixed rates rose by a smaller amount over 2021 (Graph 16). The effect of these increases on average outstanding housing rates has been limited, as borrowers increased their uptake of low-rate variable loans and pivoted away from longer-term to shorter-term fixed-rate housing loans.

Business lending rates remained steady

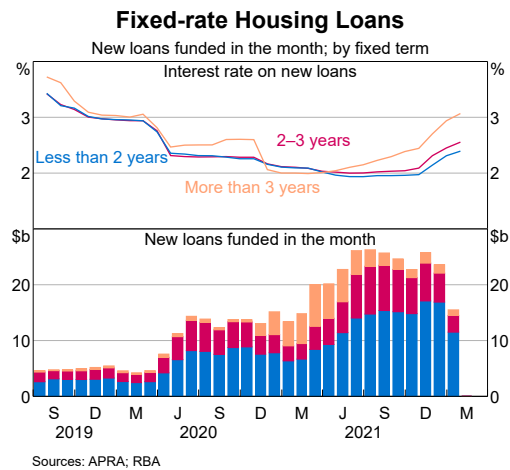
Interest rates on new business loans were little changed over 2021, but the average outstanding interest rate paid declined by around 25 basis points. Levels of refinancing by small and medium-sized businesses were elevated over 2021, which led

to slightly larger declines in the average outstanding interest rate paid by these borrowers compared to large businesses (Graph 17). Average interest rates paid on *new* fixed-rate loans by small business increased in late 2021 as swap rates rose, while those paid on new medium-sized and large business loans were little changed (potentially reflecting longer lags in swap rate pass-through). However, unlike housing lending, fixed-rate lending remains a small share of total business lending so the impact of these increases has been more limited.

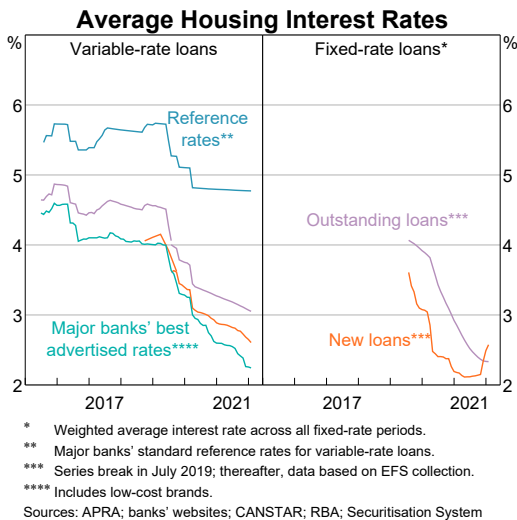
Conclusion

The monetary policy measures implemented by the Reserve Bank during the COVID-19 pandemic have supported very low funding costs for banks, and in

Graph 16

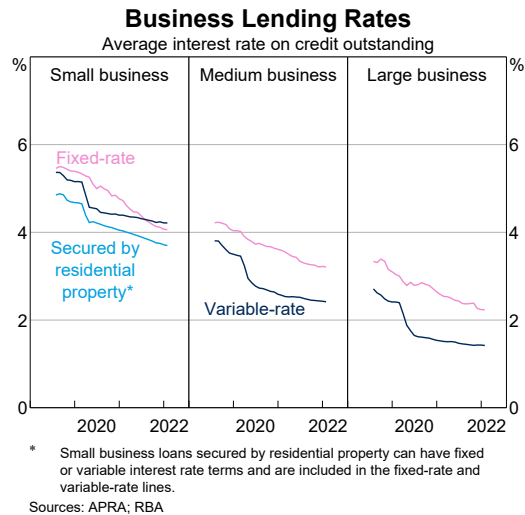


Graph 15



* Weighted average interest rate across all fixed-rate periods.
 ** Major banks' standard reference rates for variable-rate loans.
 *** Series break in July 2019; thereafter, data based on EFS collection.
 **** Includes low-cost brands.
 Sources: APRA; banks' websites; CANSTAR; RBA; Securitisation System

Graph 17



* 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

turn historically low borrowing rates for households and businesses over this period. Average lending rates declined by more than funding costs over 2021, primarily reflecting competition among banks

for borrowers and the associated strong refinancing activity in the housing market. ✖

Endnotes

- [*] The authors are from Domestic Markets Department.
- [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] Additional policy measures implemented by the Reserve Bank in 2020 included the purchase of government bonds, a yield target for three-year government bonds, the Term Funding Facility and providing liquidity to financial markets.
- [3] 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).
- [4] For instance, the Reserve Bank's purchases of government bonds have contributed to deposit growth because payments for bonds purchased from the private (non-bank) sector are ultimately credited to the deposit accounts of the sellers of those bonds.
- [5] In 2019, APRA announced an increase in banks' total loss-absorbing capacity (TLAC) requirements, which was due to come into effect at the beginning of 2024 (APRA 2019). In late 2021, APRA announced that this change would instead be implemented later – in 2026 – but require a larger increase in the banks' TLAC requirements (APRA 2021b).
- [6] The spread to swap is relevant for banks' funding costs since banks tend to enter into interest-rate hedges where they swap fixed-rate payments (e.g. coupons on new bonds issued) into short-term floating-rate payments to better match the bulk of their assets (i.e. variable rate loans). The cost of the hedged funding to the bank is then effectively the spread to swap plus the relevant (short-term) variable rate.
- [7] Banks' standard variable reference rates were little changed over 2021. However, very few borrowers pay rates as high as these. Instead, borrowers are offered, or negotiate, a discount relative to this reference rate (RBA 2019).

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