CASH RATE PASS-THROUGH TO OUTSTANDING MORTGAGE RATES

Cash rate pass-through to the average outstanding mortgage rate has been slower over the current tightening episode than in two prior tightening episodes in 2006 and 2009. This has been due to the elevated share of outstanding fixed-rate loans, as well as the effect of mortgage lending competition which has moderated the increase in outstanding variable rates. The average outstanding mortgage rate will increase further as the remaining share of low-rate fixed-rate loans expire and reprice at higher prevailing interest rates. By end-2024, overall pass-through to the average outstanding mortgage rate is expected to be comparable to earlier tightening episodes.

Introduction

An important mechanism of monetary policy transmission is the cash flow effect on households arising from the cost of debt servicing.[1] This channel is particularly evident through its impact on mortgage borrowers due to the high share of mortgage debt in Australia, and especially since most mortgagors have variable-rate loans that are responsive to changes in policy rates (Kent 2023).

As one of the main channels for monetary policy transmission, assessing the strength of the cash flow channel is important for understanding how monetary policy is transmitting to the broader economy. This paper explores two developments over the current tightening episode that have slowed pass-through to the average outstanding mortgage rate: a high share of outstanding fixed-rate loans and the effects of mortgage lending competition on outstanding variable rates. These factors have contributed to slower pass-through to the average outstanding mortgage rate compared with earlier tightening episodes in 2006 and 2009.

Cash rate pass-through to outstanding mortgage rates over the current tightening episode has been slower than previous tightening episodes.

Since May 2022, the Reserve Bank of Australia has raised the cash rate target by 425 basis points.[2] The average outstanding mortgage rate increased by around 315 basis points between May 2022 and November 2023, 110 basis points less than the cumulative increase in the cash rate over this period. This means that around 75 per cent of the increase in the cash rate has passed through to the average outstanding mortgage rate to date, which is considerably lower than the share of pass-through during earlier tightening episodes in 2006 and 2009 (Table 1; Graph 1). When compared to earlier tightening episodes, pass-through to outstanding mortgage rates has been slower over the current tightening phase.

The average outstanding mortgage rate is projected to increase further as more fixed-rate loans expire and reprice at much higher interest rates. As this plays out, cash rate pass-through to the outstanding mortgage rate is expected to reach a similar proportion to that seen in previous tightening episodes.

Table 1: Cash Rate Pass-through to Outstanding Mortgage Rates

Tightening Episodes	Increase in Cash Rate	Increase in Outstanding Mortgage Rates	Proportion of Pass Through
	bps	bps	per cent
May 2006 – Mar 2008	175	153	87
Oct 2009 – Nov 2010	175	153	87
May 2022 – Nov 2023[(a)]	425	316	74

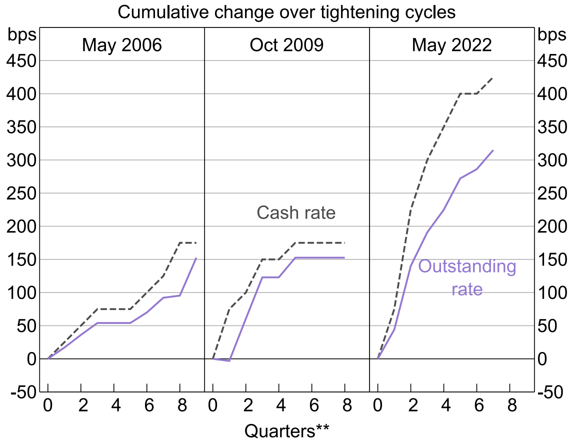
(a) Latest available data as of November 2023.
Sources: APRA; Perpetual; RBA.

1 Higher interest rates have lowered households' net interest income as aggregate household debt is much larger than household sector holdings of interest-earning assets (Kent 2023); the cash flow channel for households is best thought of as the net effect of changes on debt servicing costs for indebted households and interest income for lender households.

2 Data figures referenced in this paper are up to November 2023.

Graph 1

Changes in Outstanding Mortgage Rates*



* Perpetual mortgage rates data used for May-2006 and Oct-2009 tightening cycles; APRA EFS data used for May-2022 cycle.

** Quarters since first cash rate increase.

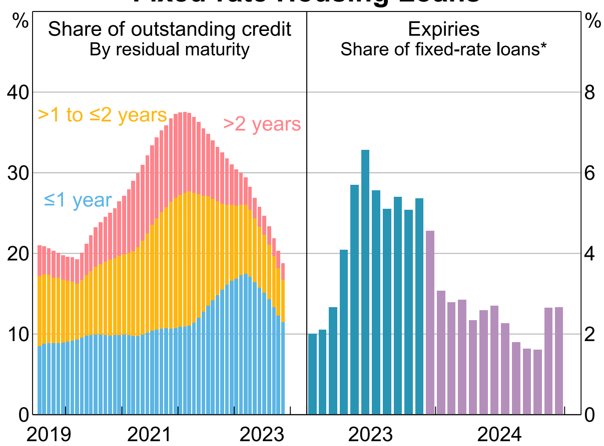
Sources: APRA; Perpetual; RBA.

The high share of outstanding fixed-rate loans taken out at low rates during the pandemic has slowed pass-through to the average outstanding mortgage rate.

Many borrowers took advantage of the low fixed rates on offer during the pandemic to lock in their mortgage repayments for some time. Lenders offered very low fixed rates at the time, reflecting their access to attractive term funding options and an expectation that interest rates would not increase in the near term. Unconventional policies implemented by the Reserve Bank, such as the Term Funding Facility (TFF) and the yield target on the three-year Australian Government bond, supported lenders in obtaining low-cost term funding (RBA 2023a). These factors enabled lenders to price their fixed rates below the variable rates that were advertised to new borrowers (RBA 2023b). The share of fixed-rate housing loans increased substantially, from around 20 per cent of outstanding housing credit in early 2020 to a peak of almost 40 per cent in early 2022 (Graph 2). This share has since declined to around 19 per cent as of November 2023, reflecting that a significant proportion of fixed-rate loans have since expired and very few fixed-rate loans have been taken out by new borrowers.

Graph 2

Fixed-rate Housing Loans



* Share of fixed-rate housing loans outstanding for the major banks as at December 2022. Loans expiring beyond 2024 not available monthly. Blue-coloured bars represent months that have already occurred.

Sources: APRA; Major banks; RBA.

A little more than half of loans taken out at low fixed rates during the pandemic expired in 2023.[3] The pace of fixed-rate expiries was particularly elevated over the second half of 2023; fixed-rate loan expiries over the September and December quarters of 2023 each accounted for around 15 per cent of fixed-rate loans outstanding as of December 2022. The vast majority of borrowers who have rolled off fixed rates have

3 As a share of fixed-rate loans outstanding as of December 2022.

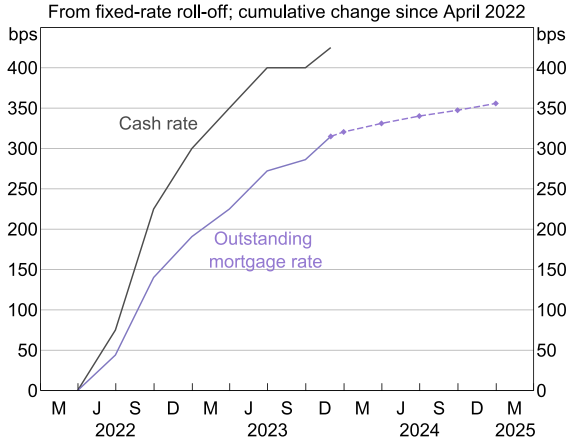
managed the transition to higher interest rates well (RBA 2023c). Most of these borrowers took out loans at low fixed rates of around 2½ per cent during the pandemic. These fixed-rate loans have, on average, rolled-off onto interest rates close to the outstanding variable rate (Lovicu et al 2023). Based on prevailing mortgage rates as of November 2023, expiring fixed-rate loans have repriced to an average mortgage rate of around 6½ per cent.

While the pace of fixed-rate loans expiries has slowed, there remains a substantial share of low-rate fixed-rate loans (around 35 per cent of outstanding fixed-rate loans as of December 2022) that will expire in 2024. This will contribute to a further increase in the average outstanding mortgage rate as these fixed-rate borrowers transition to much higher prevailing interest rates than they are currently paying. Under the assumption that these fixed-rate loans reprice to the current outstanding variable rate, the average outstanding mortgage rate is projected to increase by an additional 40 basis points by the end of 2024 (Graph 3). Slightly more of this increase would occur over the first half of 2024 as the pace of fixed-rate loan expiries remains somewhat elevated over this period before easing off over the rest of the year. Such an outcome would ultimately result in a similar degree of overall pass-through to outstanding mortgage rates as observed in the previous two tightening episodes in 2006 and 2009, albeit over a longer period beyond the tightening phase.

Graph 3

Projected Change in Mortgage Rates*

From fixed-rate roll-off; cumulative change since April 2022



* Actual data to November 2023. Projections (dashed line) are derived based on the profile of expiring fixed-rate loan rolling-off to the average outstanding variable rate as at November 2023 (6.5%).

Sources: APRA; RBA.

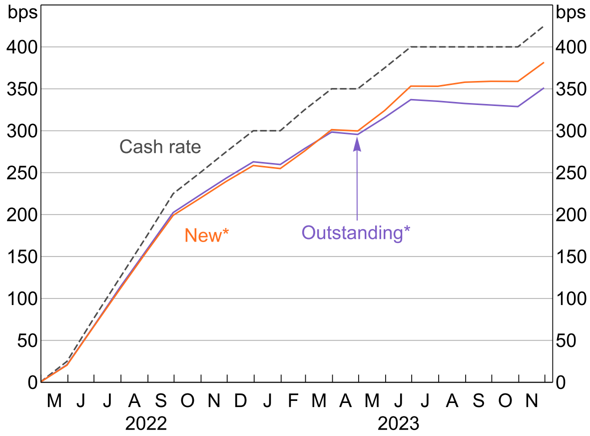
Mortgage lending competition has limited pass-through to the average interest rate on *outstanding variable-rate loans*.

The recent period of heightened mortgage lending competition – particularly over the second half of 2022 and early 2023 – has contributed to the average mortgage rate paid by outstanding variable-rate borrowers increasing by around 75 basis points less than the cash rate since May 2022 (Graph 4). Elevated lending competition has prompted lenders to offer mortgage rates at lower spreads to the cash rate to attract and retain borrowers. Since the start of cash rate tightening, many borrowers have sought out lower mortgage rates by negotiating with their existing lender or by refinancing with another lender. At the same time, lenders have been more willing to accommodate requests to lower existing mortgage rates, particularly to retain good quality borrowers.

Graph 4

Changes in Variable Housing Loan Rates

Cumulative changes since April 2022



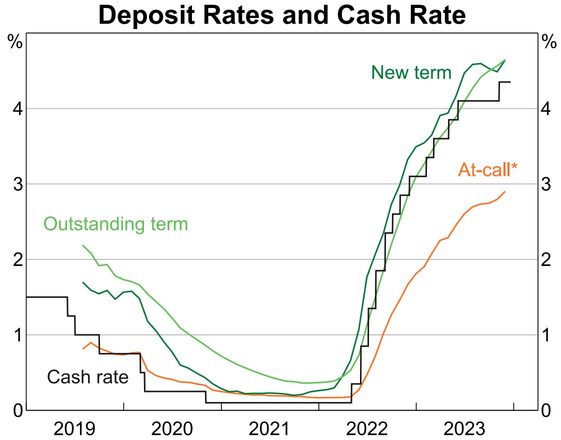
* Actual interest rates paid on all outstanding and newly funded variable-rate housing loans.

Sources: APRA; RBA.

Lending competition for variable-rate mortgages increased over the second half of 2022 as a sustained willingness by banks to compete for mortgage loans coincided with a slowing in housing credit growth. The willingness of banks to compete for mortgages was partly due to their access to cheap and abundant funding, including deposits, particularly as compared to funding costs for non-bank lenders. Deposit funding from households and businesses grew strongly during the pandemic, which has contributed to a more subdued increase in banks' overall funding costs than would have otherwise been the case (ACCC 2023). The interest rate paid on at-call deposits, which makes up around 65 per cent of all deposits, has increased by around 160 basis points less than the cash rate since the start of the current tightening episode (Graph 5). At the same time, higher interest rates have reduced the borrowing capacity of prospective borrowers and may have deterred some borrowers from entering the housing market, which has contributed to weaker growth in housing credit. This contributed to more intense lending competition as lenders competed over a smaller pool of new mortgages.

Graph 5

Deposit Rates and Cash Rate



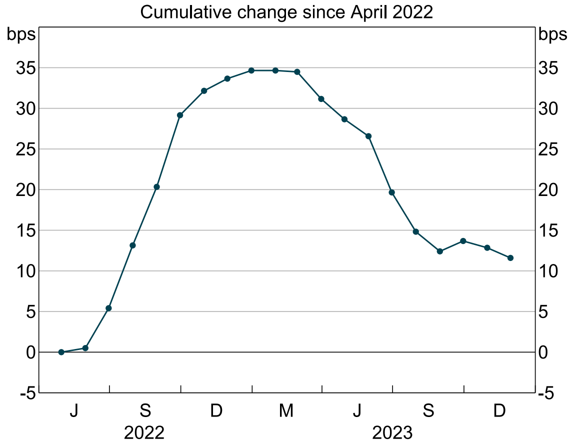
* Excludes deposits in housing loan offset accounts; includes non-interest bearing deposits.

Sources: APRA; RBA.

Heightened lending competition was evident as lenders increased the discounts offered on their advertised variable lending rates (relative to benchmark standard variable rates) and offered cashback deals to attract both new and refinancing borrowers. The average discount on these advertised rates increased by around 35 basis points (Graph 6), while many lenders also offered cashback deals of between $2,000 to $5,000 to attract new and refinancing borrowers. These measures provided an incentive for many existing borrowers to seek out a lower mortgage rate by negotiating with their existing lender or by refinancing externally.

Graph 6

Average Discount on Advertised Variable Rates*



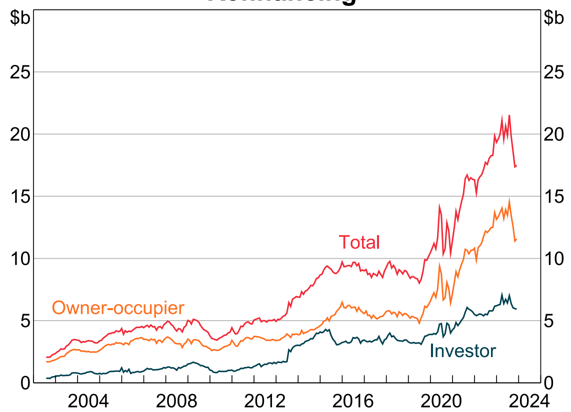
* Discounts to benchmark standard variable rates. Advertised rates are for basic principal-and-interest products offered for LVR <80% borrowers at large housing lenders.

Sources: Banks' websites; CANSTAR; RBA.

Signs of easing competition have emerged since the start of 2023. Most lenders withdrew their cashback offers in the first half of 2023 and reduced the discounts offered on their advertised variable lending rates. While this saw the average variable rate on new loans increase by slightly more than the cash rate in some months between June and September, the cumulative increase in the average new variable rate has still been around 40 basis points less than the cash rate since the start of the current tightening phase (RBA 2023b). Despite some signs of easing competition, many lenders have generally remained willing to negotiate discounts to retain existing borrowers. The average outstanding variable rate decreased between June and October as a result, despite no change in the cash rate over this period. External refinancing activity has also remained at elevated levels after increasing sharply over the second half of 2022 (Graph 7).

Graph 7

Housing Loan Commitments for External Refinancing*



* Seasonally adjusted and break-adjusted.

Sources: ABS; RBA.

Looking ahead, borrowers may have less scope to seek out lower mortgage rates as lenders have reduced discounts on advertised lending rates over the past year. Recent data suggest that this period of easing lending competition has seen some easing in refinancing activity and more complete pass-through to the average outstanding variable rate.

Distinct features in each tightening episode have contributed to differences in the timing of pass-through to the average outstanding mortgage rate, and pass-through over the current tightening episode is eventually expected to reach similar proportions as the previous tightening episodes in 2006 and 2009.

While fixed-rate loans have slowed the pass-through from the cash rate to the outstanding mortgage rates across each tightening episode, the magnitude and timing of this effect has differed in each episode. This is due to differences in the outstanding share of fixed-rate loans at the time of tightening, the extent to which new loans were fixed during the tightening phase, as well as the relative movement in fixed and variable rates over the course of each tightening episode.

Pass-through was slower over the current tightening episode, largely due to the higher share of fixed-rate loans that were outstanding at the start of the current tightening episode. This share was almost double the share of outstanding fixed-rate loans at the start of the previous tightening episodes (Graph 8). In earlier tightening episodes, a higher share of outstanding mortgages were variable rates. These variable-rate mortgages experienced a rapid increase in lending rates over the tightening phase and resulted in a faster transmission of a change in the cash rate to the average outstanding mortgage rate.

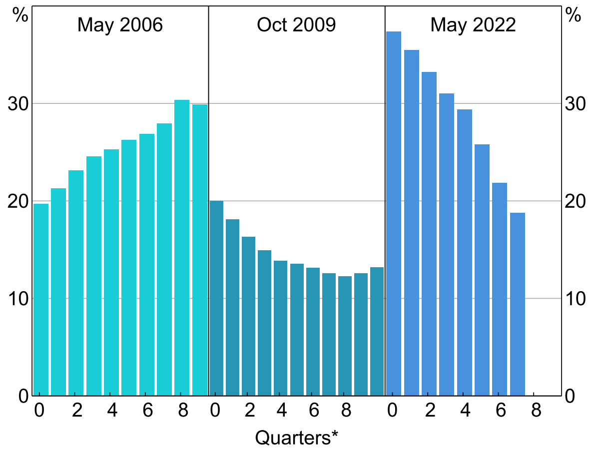
The slower pass-through over the current tightening episode from this effect will gradually unwind as fixed-rate loans expire, since these fixed-rate borrowers will transition to much higher prevailing interest rates. By contrast, the effect of fixed-rate loan expiries was different over the 2009 tightening episode, and instead *limited* the pass-through to outstanding mortgage rates. Most borrowers that took out fixed-rate loans prior to the 2009 tightening episode had fixed rates that were higher than the prevailing interest rates at the time when these fixed-rate loans expired.[4] These fixed-rate borrowers transitioned from higher fixed rates to lower prevailing rates, which meant that these expiries contributed to a lower, rather than a higher, average outstanding mortgage rate.

The extent of new fixed-rate lending during each tightening phase also influenced the extent of pass-through to the average outstanding mortgage rate. While few borrowers have taken out fixed rates over the current tightening episode, fixed-rate loans accounted for a much larger share of new lending over the 2006 tightening episode. The outstanding share of fixed-rate loans increased from around 20 per cent in May 2006 to around 30 per cent by the middle of 2008. Fixed rates also tracked variable rates more closely over the course of the 2006 tightening phase relative to other episodes. Borrowers that took out fixed-rate loans during the tightening phase therefore experienced a smaller increase in their mortgage rates, as they did not incur the full increase in mortgage rates over the tightening period. This in turn limited the extent of pass-through to the total outstanding mortgage rate over the 2006 tightening episode.

Graph 8

Fixed-rate Housing Loans

Share of outstanding credit; by tightening cycles



* Quarters since first cash rate increase.

Sources: APRA; RBA.

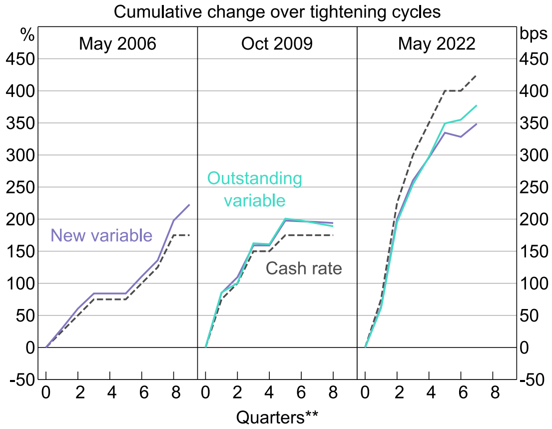
Differences in banks' broader funding conditions have also affected the extent to which the cash rate has passed through to outstanding mortgage rates. Tighter funding conditions emerged during these earlier episodes, due to increased volatility in financial markets and a structural shift in demand for more stable funding sources such as deposits and long-term wholesale funding. The latter was partly motivated by changes to regulatory requirements which incentivised banks to secure more stable and longer-term funding (Senate 2012). Higher funding costs were subsequently passed through to existing borrowers and resulted in

4 Most fixed-rate loans were taken out in early 2008, with the fixed-rate share peaking around 30 per cent in the March quarter. The fixed rates taken out during this period were significantly higher than the new lending rates that prevailed over the course of the 2009 tightening episode, consistent with the higher interest rate environment prior to the global financial crisis.

the average mortgage rate on outstanding variable-rate loans increasing by more than the cash rate during these earlier tightening episodes (Graph 9). Lenders passed through these costs to their variable-rate borrowers, either through implementing out-of-cycle increases or by increasing variable rates by more than the change in the policy rate on multiple occasions. As a result, variable rates increased by more than the cash rate in the latter stages of the tightening phases in 2006 and 2009 and led to more pass-through to the overall outstanding mortgage rate.

Graph 9

Pass-through to Variable Lending Rates*



* Perpetual data used for May 2006 and Oct 2009 tightening cycles; EFS data used for May 2022 cycle. Outstanding variable rates data are not available for the May 2006 tightening episode.

** Quarters since first cash rate increase.

Sources: APRA; Perpetual; RBA.

The effect of a higher cash rate on housing mortgage rates is an important transmission channel for monetary policy.

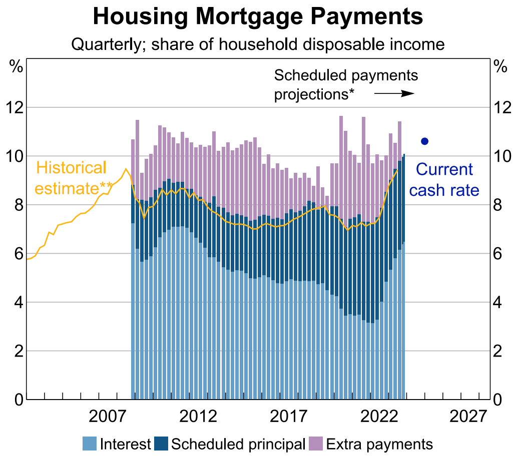
Despite slower pass-through to outstanding mortgage rates over the current tightening episode, the flow through of a higher cash rate to housing mortgage rates has still been an effective transmission channel for monetary policy in Australia. The relatively high share of variable-rate mortgages in Australia has meant that the average outstanding mortgages rate has increased by more than in other developed peer economies such as the United States, New Zealand and Canada, despite a smaller increase in policy rates in Australia (Kent 2023).[5] This has seen housing mortgage payments increase considerably as a share of household disposable income, even though slower pass-through to mortgage rates than previous cycles has meant that the aggregate repayment burden faced by mortgagors has – so far – increased by less than otherwise.[6]

Total scheduled household mortgage payments (comprising both interest and scheduled principal payments) have increased to around 10 per cent of household disposable income as of November 2023, exceeding the estimated historical peak in 2008 (Graph 10). These scheduled mortgage payments are expected to increase further to reach 10½ per cent of household disposable income by end-2024 as more fixed-rate loans expire and reprice at higher interest rates. While this suggests a significant increase in household mortgage payments over the current tightening phase, this paper does not consider the effect of a higher interest rate on other forms of household debt such as personal or small business loans. These forms of household debt also affect households cash flows, although they account for a much lower share of household income compared to a decade prior (Kohler 2020).

5 A higher share of variable-rate mortgages suggest that the cash flow channel is stronger in Australia, although other channels of monetary policy transmission are likely to be stronger in other peer economies.

6 Higher mortgage rates have also transmitted through other channels, including by influencing the decisions of new prospective borrowers around whether and how much to borrow. See Kent (2023).

Graph 10



* Projections incorporate fixed-rate roll off to variable rates and the observed gap between cash rate increases and increases to variable loan rates. The current cash rate is 4.35 per cent.

** Estimated scheduled payments using credit foncier model.

Sources: ABS; APRA; RBA.

Conclusion

The increase in the average outstanding mortgage rate relative to the cash rate has been slower over the current tightening episode than in some previous tightening phases. This has been due to the high share of fixed-rate loans taken out during the pandemic and the effect of elevated mortgage lending competition on variable-rate mortgages. The average outstanding mortgage rate relative to the cash rate is expected to increase further as more fixed-rate loans expire and is expected to reach a broadly similar degree of pass-through as previous tightening episodes by the end of 2024.

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