

Financial Stability and the Financial Health of Australian Mortgagors



RESERVE BANK OF AUSTRALIA

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Introduction

Good afternoon and thank you for inviting me to speak at this conference. The topic – Banking and Financial Stability – is an area of great interest to the Reserve Bank of Australia (RBA), given our longstanding mandate to contribute to financial stability. So thank you all for your interest and work in this important area, and for contributing to our collective understanding of the issues.

Today I will be talking about financial stability and the financial health of Australian households with a mortgage. There has understandably been a lot of focus on this issue of late, with many households facing substantial financial pressures from high inflation and higher interest rates. Some of the households feeling these pressures most acutely are those with lower incomes, including many renters. Fitting with the topic of this conference, though, my focus today will be on households with mortgages and how their financial health relates to financial stability.

So today I will be talking about two things.

The first is why financial stability is important and how the financial health of indebted households can affect it.

And second, I will talk about how the RBA assesses and monitors the financial health of Australians with mortgages and what we find.

There has been a lot said and written about the issue of household financial stress in recent times, using a multitude of data sources and reporting on many different individual experiences. Wednesday's national accounts showed how inflation, tax and interest rates have weighed on real household disposable income. And as RBA Governor Michele Bullock said when discussing the challenge of inflation following the RBA Board meeting this week:

High inflation makes life difficult for everyone and damages the functioning of the economy. It erodes the value of savings, hurts household budgets, makes it harder for businesses to plan and invest, and worsens income inequality. The Governor emphasised that the effect of all of this is that many households are experiencing a painful squeeze on their finances.

Today I'm going to provide an overall picture of the situation, drawing on the RBA's extensive work in this area, which is published in detail in our regular *Financial Stability Review*. Based on our analysis of a wide range of information we find that:

- While budget pressures are being widely felt across indebted households, most of these households have managed to adjust to these pressures.
- While there has been an increase in the number of borrowers who are under severe financial stress, the vast majority of borrowers remain able to cover basic expenses and service their loans.

This resilience of indebted households is supporting the stability of the Australian financial system. Let me begin by explaining why that is so important.

The RBA's mandate for financial stability and the role of household debt

The RBA has long had a mandate to contribute to financial stability. Over the past quarter century, this has included working closely with the Australian Prudential Regulation Authority (APRA) and other members of the Council of Financial Regulators to promote stability in the financial system. The proposed revisions to the *Reserve Bank Act 1959* following the independent Review of the RBA will formalise this role in contributing to financial stability by enshrining it in legislation.

Financial stability is important because a stable financial system facilitates the smooth flow of funds between savers and investors and thereby helps to promote growth in economic activity. A stable financial system can perform this key economic function even in the face of shocks or stress. The RBA's financial stability objective is therefore intrinsically linked and generally complementary to its objectives for inflation and employment.^[1]

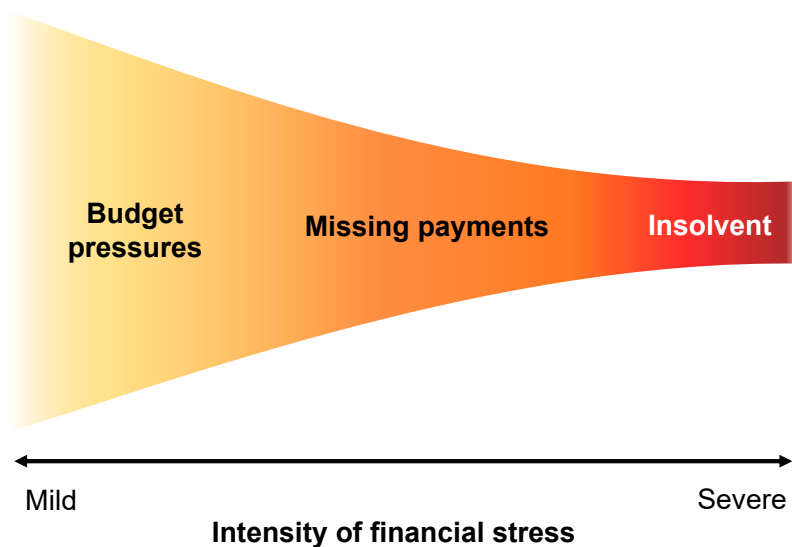
Financial stress among indebted households has the potential to have a direct impact on financial stability with all the adverse consequences that financial *instability* can have on the broader economy and thus households. Housing loans make up nearly half of Australian banks' exposures.^[2] Therefore, if a sufficiently large number of mortgagors were to default on their loans, lenders could face widespread losses as a result. If these losses were large enough, this could lead to lenders sharply restricting the supply of credit to even very sound borrowers. This could disrupt economic activity and result in rising unemployment. Unemployment, in turn, would further increase financial stress among households and businesses, leading to further loan defaults, bank losses and pull-back in the supply of credit. And if households and businesses become concerned that their deposits at banks might not be safe, financial system stability and economic activity will be disrupted further still. It is clear that this feedback between financial stress of indebted households and financial instability – where disruptions to the functioning of the financial system affect the functioning of the economy – would come at high costs for all.

I want to be clear, though, that financial stress among households does not automatically imply financial instability. Indeed, there appears to be a low risk that financial pressures currently being experienced by Australian borrowers will translate into financial stability issues. I will now step through how we come to that assessment.

How we assess and monitor the financial health of Australian households

We spend a lot of time carefully monitoring the financial health of Australian households so that we understand the overall extent of financial stress and how this is likely to evolve. But there is no single definition of financial stress. Rather, financial stress can best be thought of as existing across a spectrum (Figure 1).

Figure 1
Spectrum of Household Financial Stress



At the milder end, budget pressures can force households to cut back on discretionary spending, reduce their rate of saving or draw down on their stock of savings. While unwelcome, most borrowers therefore usually have several means to adjust to budget pressures to avoid or at least delay entering financial stress.

Moving along the spectrum as budget pressures rise or households' savings buffers deplete, households worried about being able to pay their bills may find themselves having to look to cut back expenditure even further and/or resort to finding more work.

At the extreme end, households in severe financial stress are then unable to service their debts or pay their essential bills out of their income and savings. First and foremost, this has a significant negative impact on their lives and wellbeing. But as I described earlier, this tail end of financial stress can also have implications for financial stability.

Households' experiences with this spectrum can be very different. There are usually many more households at the milder end than at the extreme end of the spectrum, and this is also the case today. Of the households that do enter severe financial stress, most do so suddenly as a result of a disruptive event, such as illness or job loss.^[3] However, in other cases, financial stress arises more gradually. As some households exhaust their options to adjust to a build-up of budget pressures, they move through different phases of the spectrum towards the extreme end. Most households do not move through the entire spectrum, though. Many are able to take action to avert becoming insolvent. This may be through finding extra work or reducing their discretionary spending. Indebted households may also resolve the situation by seeking temporary hardship assistance from their lender or – often as a last resort and at high personal costs – by reducing or repaying their debt through selling assets, including their family home. These difficult decisions first and foremost help households adjust to financial pressures. But in doing so, they also help support stability of the financial system and the economy.

To assess how financial stress is building along the spectrum, the RBA closely monitors a broad range of indicators. This recognises that no single metric can capture the full picture, as well as that data quality varies substantially both across different household groups and along the spectrum of financial stress. Loan arrears and insolvencies allow us to monitor late stages of severe financial stress for indebted households with relative precision and in a timely manner. This includes households owning and operating small businesses.

By contrast, there is no universally accepted measure of budget pressures, with many available surveys measuring a range of different concepts. One set of data we use is loan-level data from the RBA’s Securitisation System to provide a good guide to the financial position of individual households with mortgages. These data cover one-third of all Australian mortgages – that’s almost 2 million loans. Using this dataset allows us to estimate the financial positions of indebted households and assess how their financial positions could evolve under different scenarios.^[4]

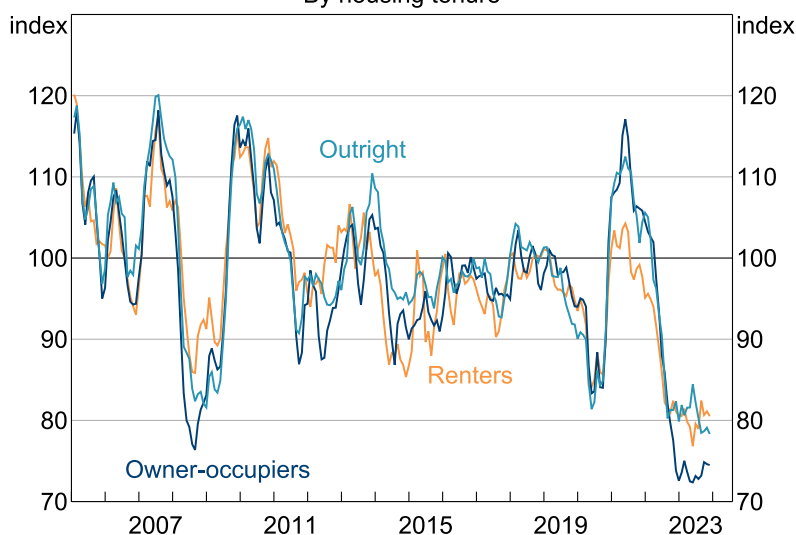
Our current assessment of Australian households’ financial health

So what does all this information tell us about the current financial health of Australian households and for those with mortgages in particular?

One message it tells is that budget pressures are being felt very broadly across households. We know many have curtailed their consumption and made other adjustments in response. But incidences of severe financial stress – where people are struggling to meet even the most basic expenses – is currently limited to a much smaller group.

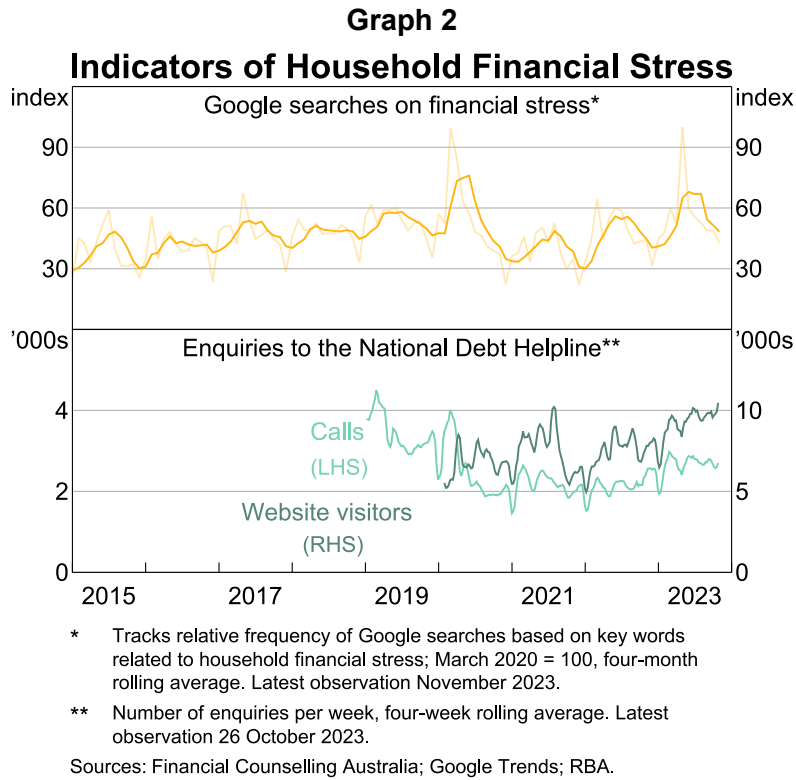
Starting with the aggregate picture, we know that high inflation and higher interest rates have reduced households’ spare income. A range of surveys and indicators are consistent with widespread financial pressures and suggest that financial stress is building in its early stages. Households’ assessments of their family finances fell sharply in early 2022 with the rise in inflation and interest rates and has remained near record lows since (Graph 1). As you can see from the graph, the fall has been greatest for those with mortgages on their home. Google searches of terms related to household financial stress have also trended up and financial counselling services such as the National Debt Helpline and other community organisations have seen increased demand for their services over the same period (Graph 2).

Graph 1
Consumer Sentiment*
By housing tenure

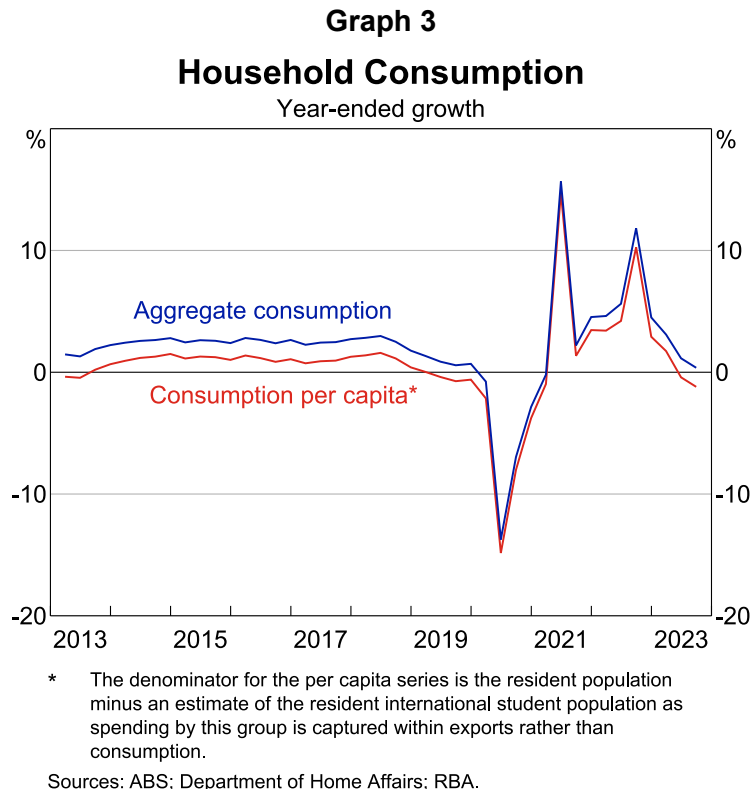


* Average since 1996 = 100, three-month moving average. Latest observation November 2023.

Sources: RBA; Westpac-Melbourne Institute.

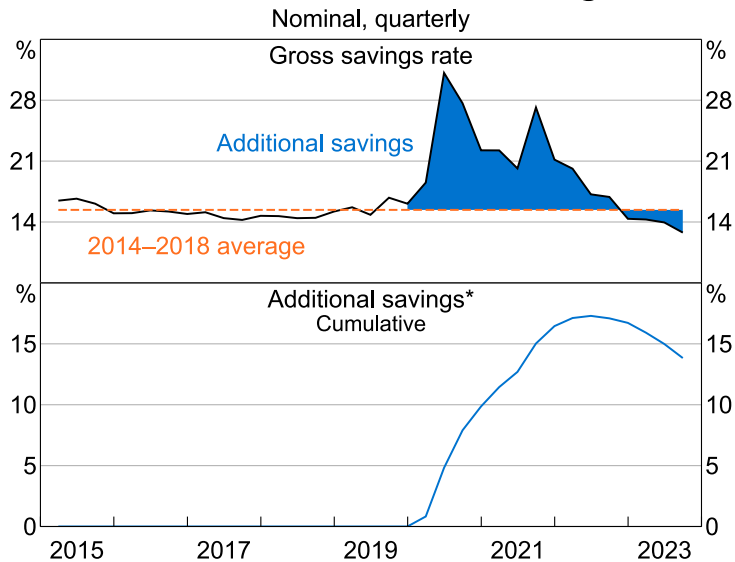


While financial pressures have increased, to date most households have managed to adjust to these pressures. They have done so in a number of ways. Some households have managed to increase their hours of work or switch to a higher paying job, supported by the strong labour market. So even though most workers have seen a decline in their base wages in real terms, their overall employment incomes have generally held up better. Many households have also had to make adjustments to their consumption and, as a result, consumption growth has been subdued, particularly in per capita terms (Graph 3).



Finally, households have also adjusted their savings. After saving much more than usual during the pandemic, households are now saving less than they did on average in the years before it (Graph 4). Indeed, and as we set out in the October 2023 *Financial Stability Review* in more detail, the share of borrowers who are persistently drawing down on their stock of savings has increased from previous years.

Graph 4
Additional Household Savings

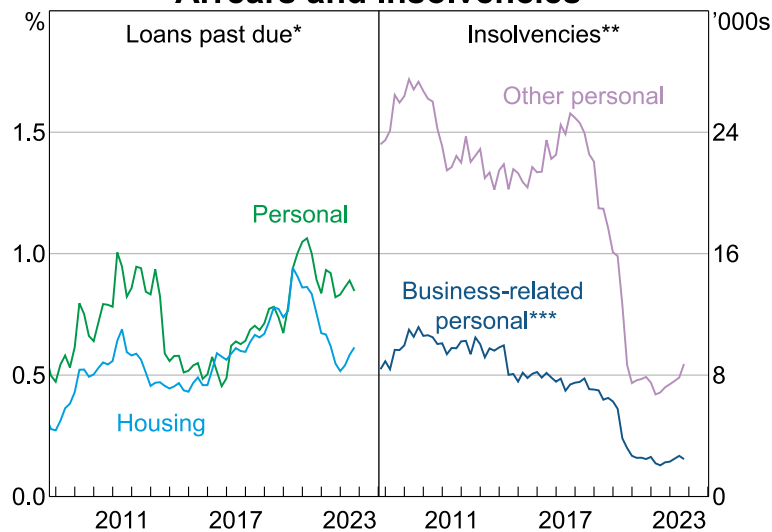


* Additional savings are relative to a pre-pandemic trend and as a proportion of household disposable income.

Sources: ABS; RBA.

These adjustments have meant that, to date, the substantial pressure on households' budgets has not translated into a sharp increase in late-stage financial stress. Both loan arrears and personal insolvencies (business-related and other) have increased from their low levels during the pandemic, but most households continue to be able to service their debts (Graph 5).^[5] Indeed, close to 99 per cent of loans remain on, or ahead of, schedule.

Graph 5
Arrears and Insolvencies



* Share of loans by type 90+ days past due. Structural break occurs in March 2022. Latest observation September 2023.

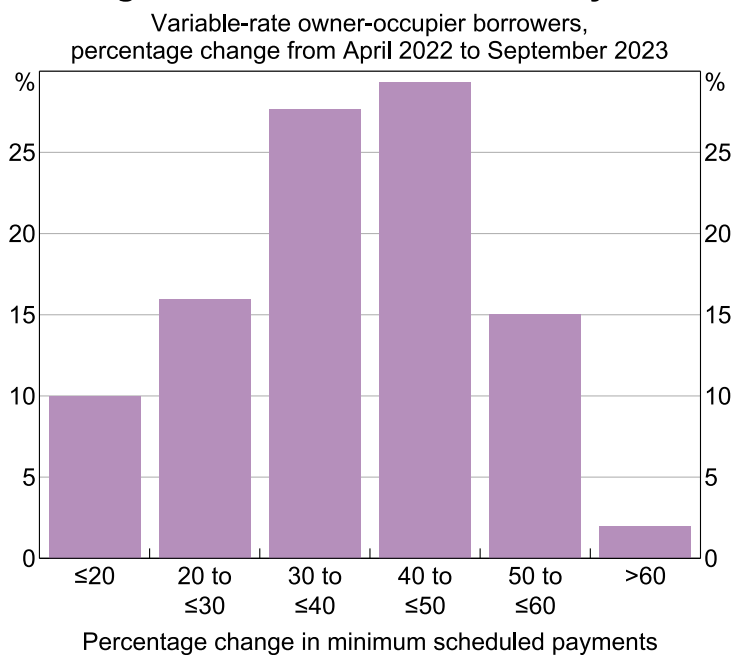
** Seasonally adjusted, annualised. Latest observation September 2023.

*** New personal insolvencies of business owners/operators (e.g. sole traders or directors of proprietary companies).

Sources: AFSA; APRA; RBA.

However, we know that budget pressures and incidences of financial stress vary widely across households. This is especially true at the current juncture, where the need for monetary policy to respond to high inflation has caused a sharp increase in interest rates, which has substantially increased mortgage costs; the majority of mortgagors – except those still on low fixed rates – have seen their minimum scheduled payments increase between 30 and 50 per cent since the first increase in the cash rate in May 2022 (Graph 6).^[6] These borrowers are more likely to have experienced a sharper increase in budget pressures than the overall population. Even within the group of mortgagors, there are some who are experiencing budget pressures more acutely.

Graph 6
Change in Minimum Scheduled Payments



* Minimum scheduled payments have been projected to include November cash rate increase to 4.35 per cent.

Sources: ABS; RBA; Securitisation System.

To understand the extent of budget pressures across mortgagors, we use the loan level data from the RBA's Securitisation System. These data provide very timely information about households' mortgages – what they currently owe, their required payments and how much they have saved in their offset and redraw accounts – as well as their reported income at the point the loan was originated. We conservatively assume borrowers' incomes have grown in line with the Wage Price Index (WPI) over time.^[7] These data give the most complete picture for *variable-rate owner-occupier* borrowers because these borrowers – compared with fixed-rate or investor borrowers – are most likely to hold their savings in their mortgage accounts.^[8] Accordingly, the following analysis relates specifically to variable-rate owner-occupier borrowers, who make up around half of all mortgagors and one-fifth of all households.

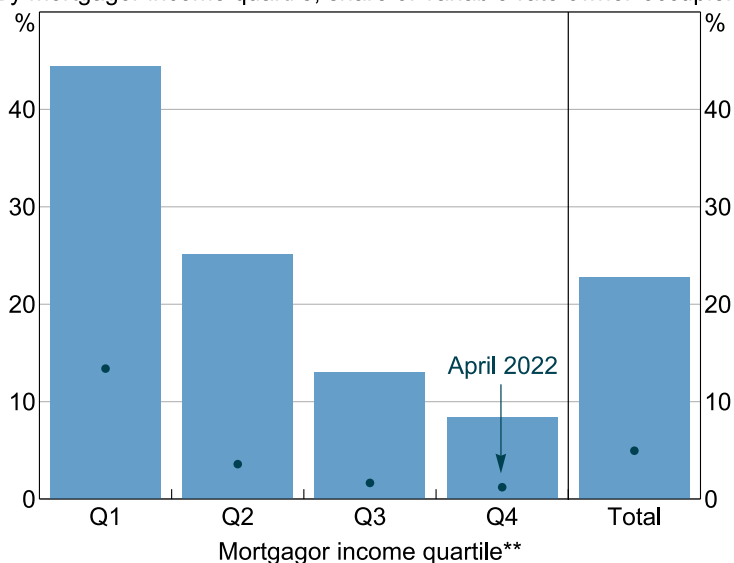
Financial stress among variable-rate owner-occupier borrowers

Estimates from the securitisation data show that many borrowers are now devoting a considerably larger share of their income to servicing their debts than in early 2022 when interest rates were at their lowest. Just over 20 per cent of variable-rate owner-occupier borrowers are now estimated to devote more than 30 per cent of their income to mortgage payments (Graph 7).

Graph 7

Borrowers with High Loan-servicing-ratio*

By mortgagor income quartile, share of variable-rate owner-occupiers



* Borrowers with loan-servicing-ratio exceeding 30 per cent. Data as at September 2023. Minimum scheduled payments have been projected to include November cash rate increase to 4.35 per cent

** Based on the distribution of variable-rate owner-occupier borrower incomes. Income quartile upper bounds for April 2022 are: \$101,000 for Q1; \$148,000 for Q2; and \$212,000 for Q3. Income quartile upper bounds for September 2023 are: \$105,000 for Q1; \$157,000 for Q2; and \$227,000 for Q3.

Sources: ABS; RBA; Securitisation System.

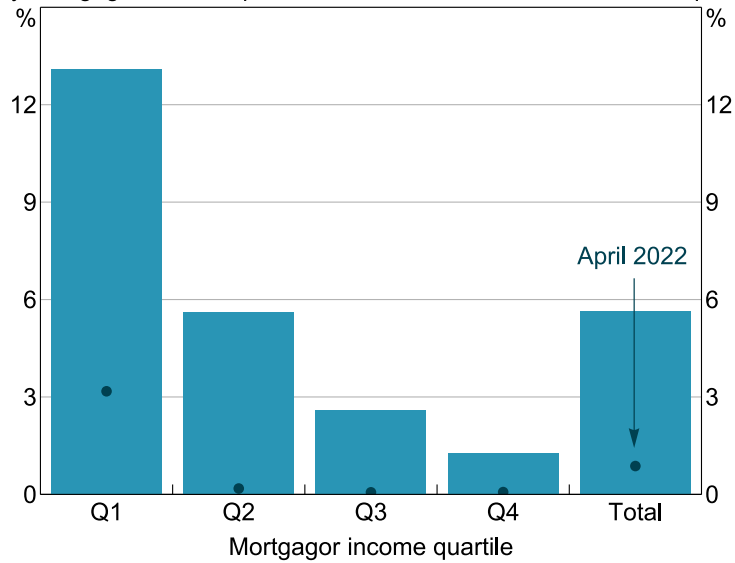
As the graph shows, households with lower incomes are more likely than other borrowers to devote a larger share of their income to servicing their mortgage.^[9] In addition, essential expenses also make up a larger share of income for these borrowers. By comparison, households with higher incomes devote a smaller share of their income to essential expenses, so they are typically able to service larger mortgage payments relative to their incomes without encountering financial stress. So while this metric is often reported as a measure of mortgage stress, it is important to note that it does not provide a complete picture.

To better understand the financial pressure a household is facing, we can estimate borrowers' cash flows using the securitisation data, along with the Melbourne Institute's Household Expenditure Measure (HEM) that provides an estimate of essential expenses given their income and family composition. Based on these data, we estimate that around 95 per cent of variable-rate owner-occupier borrowers still have spare income after meeting their mortgage payments and essential expenses. So while just over 20 per cent of borrowers are estimated to spend more than 30 per cent of their income on mortgage payments, a much lower share – at around 5 per cent – is estimated to find their income insufficient to cover their mortgage payments and essential expenses (Graph 8).^[10] As you can see from the graph, lower income households are more likely to have an income shortfall than borrowers on higher incomes.

Graph 8

Estimates of Borrowers with Cost of Living Exceeding Income*

By mortgagor income quartile, share of variable-rate owner-occupiers



* Projection of borrowers with mortgage payments and essential expenses (HEM) exceeding their income as at December 2023. Projection is based on borrowers in the Securitisation System as at September 2023 and assumes a cash rate of 4.35 per cent and wages growth and inflation up to December 2023 as forecast in the November 2023 Statement on Monetary Policy.

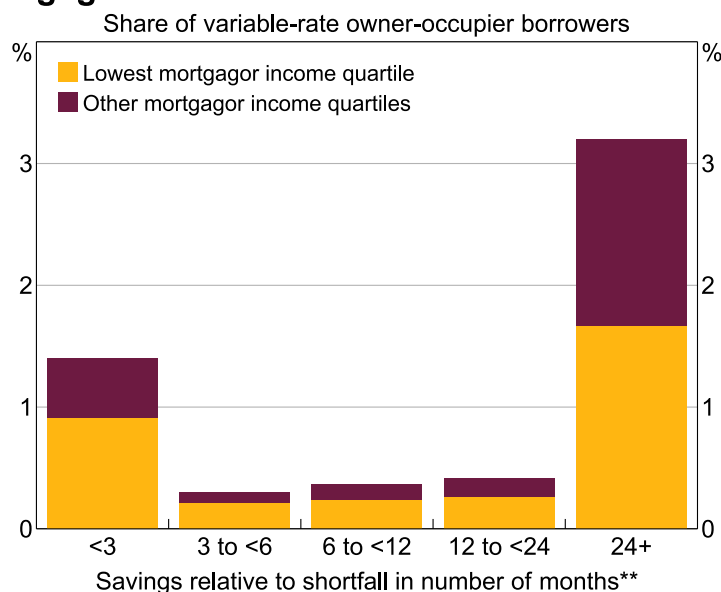
Sources: ABS; Melbourne Institute; RBA; Securitisation System.

But we know from the securitisation data that most of the 5 per cent of variable-rate owner-occupier borrowers who we estimate to have an income shortfall have substantial savings buffers. That is, they have sufficient savings in their mortgage offset and redraw accounts to finance their income shortfalls for some time. This gives them time to explore their options.

This then leaves less than 2 per cent of all variable-rate owner-occupier borrowers – as shown in the two left-hand columns of the graph – who have both an income shortfall *and* low savings buffers, and so could fall into severe financial stress within six months (assuming interest rates remain around current levels) (Graph 9). Lower income borrowers are again over-represented in this group (as shown by the yellow portion of the bar), as are borrowers with higher leverage.^[11]

Graph 9

Mortgage Buffers Relative to Cash Flow Shortfall*



* Buffers relative to shortfall for borrowers projected to have mortgage payments and essential expenses (baseline HEM) exceeding income as at December 2023. Projection is based on borrowers in the Securitisation System as at September 2023 and assumes a cash rate of 4.35 per cent and wages growth and inflation up to December 2023 as forecast in the November 2023 Statement on Monetary Policy.

** Number of months that mortgage prepayments (offset and redraw balances) can cover cash flow shortfalls.

Sources: ABS; Melbourne Institute; RBA; Securitisation System.

These results have all pertained to variable-rate owner-occupier borrowers. While we don't have as complete data for fixed-rate borrowers, we can use a range of surveys to build a fairly good picture. And this picture is one of similar resilience. Borrowers rolling off fixed-rate loans are likely to see similarly sized increases in their mortgage costs as those experienced by variable-rate borrowers. But fixed-rate borrowers have also avoided higher loan payments for longer. This has allowed them to build substantial savings on par with those of comparable variable-rate borrowers. Consistent with this, loan arrears rates are lower for current fixed-rate borrowers, when compared with those of variable-rate owner-occupier borrowers.^[12] And borrowers who have recently rolled off fixed rates have similar arrears rates to other variable-rate borrowers.

Indebted households and financial stability

Turning now to what all this means for financial stability.

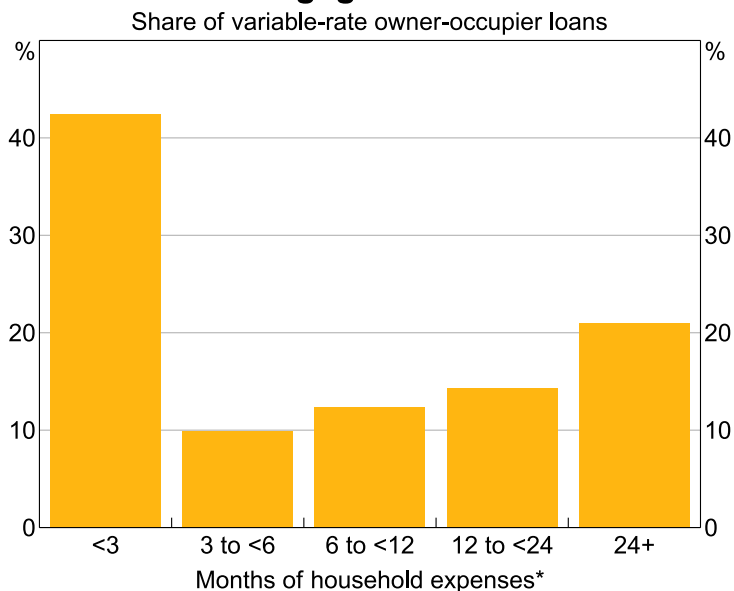
While budget pressures are widespread, most borrowers appear well placed to service their debt and cover essential costs. Indeed, we estimate that less than 2 per cent of variable-rate owner-occupier borrowers are currently at real risk of not being able to cover their basic expenses and mortgage payments out of their current income and don't have significant savings buffers to fall back on.

In scenarios where the unemployment rate rises or interest rates increase further, the share of households in severe financial stress would rise. However, given the solid financial position of the bulk of borrowers, most are also expected to be resilient in those circumstances.

The data shows us that, even in the event of job loss where a household loses all their income, around one-half of all variable-rate owner-occupier borrowers would have enough buffers in their offset or redraw accounts to sustain their scheduled mortgage payments and essential expenditures for at least six months (Graph 10). But this scenario is quite unlikely for many mortgagors. More than half of households with mortgages have multiple incomes, making it less likely they will lose their entire household income.

Graph 10

Household Cost-of-living-adjusted Mortgage Buffers*



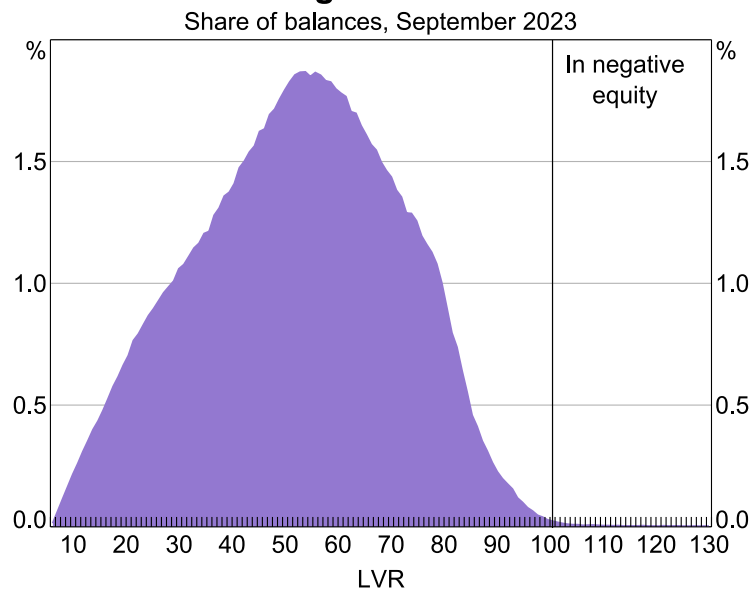
* Number of months that mortgage prepayments (offset and redraw balances) can cover minimum scheduled payments and HEM expenses for variable-rate owner-occupier borrowers if they were to lose their entire household income as at September 2023. Minimum scheduled payments have been projected to include November cash rate increase to 4.35 per cent.

Sources: ABS; Melbourne Institute; RBA; Securitisation System.

The broader financial stability risks from the household sector appear contained. Even if the unemployment rate were to increase by 2 percentage points (around three to four times as sharply as projected in the November 2023 *Statement on Monetary Policy*), the share of borrowers at risk of running out of savings buffers over the next year or so would likely remain at low single-digit levels.

Finally, another important layer supporting households and financial stability is the fact that most households have substantial equity in their homes. Reflecting prudent lending standards under APRA’s regulatory framework and the general increase in housing prices over a number of years, much less than 1 per cent of loans are estimated to currently be in negative equity (Graph 11). In the event a household becomes unable to continue servicing their loan, this gives them the option of selling their home and repaying their loan. While very disruptive and with real life costs for affected households, this protects both them and their lender against default.

Graph 11 Outstanding LVR Distribution*



* Loan balances adjusted for redraw and offset account balances; property prices estimated using GCCSA price indices.

Sources: ABS; CoreLogic; RBA; Securitisation System.

There could still be risks to the real economy from high household debt and rising financial pressures on Australian borrowers. But even in a downside economic scenario, high starting levels of borrower resilience together with high starting levels of equity in housing loans mean that losses incurred by lenders are likely to remain manageable. Furthermore, APRA's strong prudential framework and supervision means that banks hold high levels of capital and liquidity. This means banks are well placed to withstand such losses while continuing to lend to households and businesses, and thus supporting economic activity even in very challenging economic conditions.^[13]

Conclusion

In conclusion, budgetary pressures are being widely felt and many households have had to make often difficult adjustments to navigate the challenging economic environment. The number of borrowers in severe financial stress has risen. However, most borrowers have been resilient and even in the case of an economic downturn, this is likely to remain the case. This, along with the strong position of our financial institutions, helps support the stability of the Australian financial system and the economy.

Thank you and I look forward to answering your questions.

Endnotes

- [*] I would like to thank Ben Beckers for excellent assistance with this speech.
- [1] See Bullock M (2023), 'Monetary Policy in Australia: Complementarities and Trade-offs', Speech at the 2023 Commonwealth Bank Global Markets Conference, Sydney, 24 October.
- [2] 50 per cent of gross exposures and 40 per cent of credit risk weighted exposures for all Australian authorised deposit-taking institutions. Lenders are also exposed to businesses that would experience declines in revenue should households significantly curtail their spending.
- [3] See Bergmann M (2020), 'The Determinants of Mortgage Defaults in Australia – Evidence for the Double-trigger Hypothesis', RBA Research Discussion Paper No 2020-03.

- [4] This dataset contains the near-universe of securitised Australian mortgages (around 1.8 million or one-third of all housing loans in Australia by value). In addition to allowing us to track the performance of residential mortgage-backed securities (RMBS) that are eligible for use in the RBA's market operations, the dataset also provides information on a monthly frequency on outstanding loan balances, interest rates on outstanding loans, borrowers' prepayments into offset and redraw accounts, as well as borrower or loan characteristics at origination (such as borrowers incomes, loan size relative to value of the property) that we can grow forward to obtain estimates of their current values. For more detail, see Fernandes K and D Jones (2018), The Reserve Bank's Securitisation Dataset, *RBA Bulletin*, December.
- [5] The upward trend in arrears rates up until 2019 likely reflects a combination of weak income growth, housing price falls and rising unemployment in some parts of Australia, interacting with earlier weaker lending standards, and a later tightening in lending standards. See Kearns J (2019), Understanding Rising Housing Loan Arrears, Speech at 2019 Property Leaders' Summit, Canberra, 18 June.
- [6] Because many (variable-rate) mortgagors had made substantial voluntary prepayments into their mortgage accounts (via offset or redraw), for many, their actual total payments (repayments plus prepayments) have increased by much less. However, the increase in their required minimum payments has meant that their rate of savings via prepayments has reduced.
- [7] We know that some households are likely to have under-reported their income at the point of loan origination, as borrowers tend to only report as much income as required to support their desired loan amount in their application. By using the WPI, we also effectively assume the borrower has not advanced to a different role or been offered additional hours of work since they took out their loan. For a complete discussion of the underlying assumptions and limitations, see the Technical Appendix in RBA (2023), Box B: Scenario Analysis on Indebted Households' Spare Cash Flows and Prepayment Buffers, *Financial Stability Review*, April.
- [8] By comparison, fixed-rate borrowers and those with investor loans are more likely to hold their savings in other deposits or assets owing to restrictions on prepayments into offset or redraw facilities and tax incentives, respectively. Private survey data suggests that once accounting for savings in other accounts or other assets, fixed-rate borrowers have similar total savings to variable-rate borrowers. See RBA (2023), 5.2 Focus Topic: An Update on Fixed-rate Borrowers, *Financial Stability Review*, October.
- [9] It is worth noting here that lower income mortgagors tend to have higher incomes than lower income households more broadly, with the lowest income quartile of variable-rate owner-occupier borrowers having a household income of up to \$105,000 and the lowest income quartile of all households extending to around \$50,000 (based on data from Wave 21 of the HILDA Survey, grown forward by WPI growth).
- [10] These estimates are sensitive to assumptions for borrowers' income growth and their essential expenses. Using a broader measure of essential expenses, for example, around 13 per cent of all variable-rate owner-occupier borrowers and about 19 per cent of low-income borrowers are estimated to be in cash flow deficit. See RBA (2023), Chapter 2: Resilience of Australian Households and Businesses, *Financial Stability Review*, October for details.
- [11] See n 8.
- [12] See RBA, n 8 for details.
- [13] APRA's latest authorised deposit-taking institution (ADI) stress test (to be released early next year) found that no banks breached their prudential requirements on capital, all retained sufficient liquidity and banks continued to provide credit to households and businesses under a severe but plausible downturn featuring high inflation, unemployment rising to 10 per cent and house prices falling by more than a third. See Lonsdale J (2023), Aftershock: Lessons from a Real-life Banking Stress Test, Speech at the Citi Australia and New Zealand Investment Conference, Sydney, 12 October.