Box B

Housing Loan Arrears – Insights From Western Australia

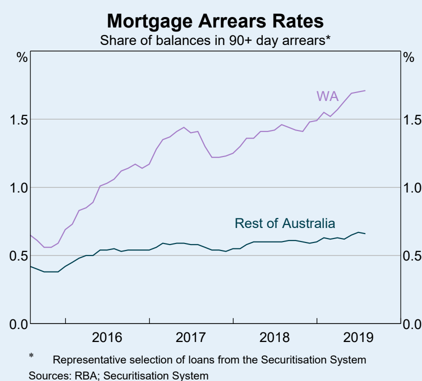
The housing loan arrears rate in Western Australia (WA) has increased in the past four years, from being a little above the rest of the country to more than double the national rate at 1.7 per cent in July 2019 (Graph B.1). Rising arrears rates typically lag a deterioration in economic conditions. The rise in the arrears rate in WA followed the economic downturn in the state after the end of the mining investment boom. The unemployment rate in WA increased by over two percentage points to 6 per cent by mid 2015 and there was little growth in household income. The weak economic conditions saw many workers leave the state and population growth slowed sharply, which, in turn, reduced the demand for housing. Given the difficult economic environment, housing prices in WA have fallen by 20 per cent since their peak in 2014. Investors in housing have also faced falling rental income and for some time the highest vacancy rates in nearly 30 years.

This box examines how different types of home loans have performed given the WA downturn. This episode provides an insight into how housing lending in the rest of the country may perform in an economic downturn. The Bank's securitisation dataset is used for the analysis.[1]

Arrears have increased more for loans with higher debt-servicing ratios and smaller deposits

Loans with larger repayments relative to income at origination (debt-servicing ratios (DSRs)) have had larger increases in arrears rates (Graph B.2; left panel). Debt-servicing capacity is a common indicator of the riskiness of a loan. Borrowers with higher DSRs have less spare cash left after making repayments and so a small loss of income or unexpected increase in expenses (such as medical bills) can constrain their ability to make loan repayments. Notably, the increase in the arrears rate has been much larger for loans with a DSR exceeding 30 per cent at origination than for loans with lower DSRs.[2] The tightening in lending standards since 2014 has improved serviceability requirements to increase a borrowers' ability to repay a loan and so should reduce the share of high DSR loans that experience repayment difficulties in the future.

Loans that were larger relative to the value of the purchased property (higher loan-to-valuation ratios (LVRs) at origination) have also had larger increases in arrears (Graph B.2;



right panel). These loans had smaller equity buffers and so can result in a larger loss-given-default for the lender but, all else being equal, should not necessarily be at a greater risk of going into arrears. However, the larger increase in arrears rates for higher LVR loans suggests that borrowers with high LVRs have other riskier characteristics, including their own risk tolerance. Because they have a smaller equity buffer, loans with a high initial LVR are also more likely to exceed the property value if housing prices fall, that is, go into negative equity. Borrowers who are in negative equity because they had a high initial LVR are then less able to avoid or exit arrears by selling the property. There is a clear delineation in the riskiness of loans with an LVR of 80 per cent or less and those with an LVR exceeding 90 per cent.

Arrears have increased by more for investors and self-employed borrowers

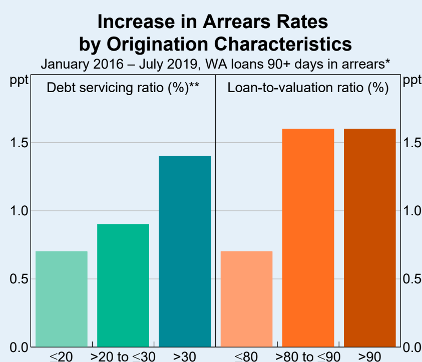
Loans to investors have not performed as well as those to owner-occupiers. For investors, the increase in arrears has been about half a percentage point larger than for loans to owner-occupiers (Graph B.3; left panel). A number of factors could have contributed to investors having greater difficulty making repayments. Investors can be reliant on the rental income from their property, which, given the high vacancy rate and fall in rents in WA, became less reliable. There is also evidence that some investors have riskier borrowing characteristics, for example, higher debt-to-income ratios.

Self-employed borrowers have also been more likely to struggle to make repayments. Loans to self-employed borrowers have experienced larger increases in arrears rates than loans made to borrowers whose main income comes from being an employee (Graph B.3; right panel). Self-employed borrowers are more likely to have variable income and have had greater difficulty making loan repayments through the economic downturn.

Loans originated as interest-only and as principal and interest have performed similarly

The increase in the arrears rate for loans originated on interest-only (IO) terms is around double that for principal and interest

Graph B.2

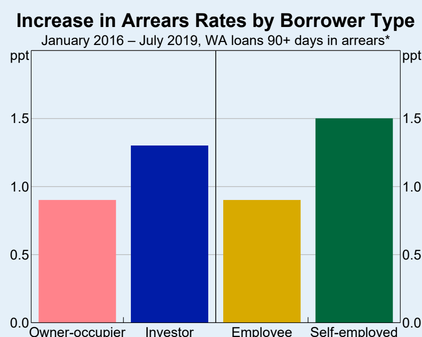


* Representative selection of loans originated since 2011 classified using origination characteristics as first reported to the Securitisation System

** Estimated for principal and interest repayments, using pre-tax income as reported for loan assessment

Sources: RBA; Securitisation System

Graph B.3

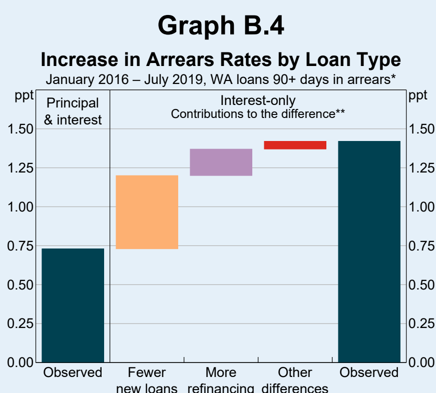


* Representative selection of loans originated since 2011 classified using origination characteristics as first reported to the Securitisation System

Sources: RBA; Securitisation System

(P&I) loans (Graph B.4).[3] However, this difference in arrears rates overstates the difference in repayment performance of IO and P&I loans. Rather, the difference is largely a consequence of a declining stock of IO loans since 2016, as fewer new IO loans have been originated.[4] The fall in IO lending followed regulatory measures introduced in early 2017 that increased the focus on the suitability of loans originated with IO terms and imposed a limit on the flow of new IO lending at banks to 30 per cent of new housing loans. In response, lenders increased interest rates on new and existing IO loans by around 50 basis points.

The increase in IO interest rates resulted in a significant drop in new IO lending which significantly affects the change in the arrears rate. With fewer IO loans originated since 2017, the stock of IO loans in 2019 has a smaller share of new loans than does the stock of P&I loans. Since new loans are less likely to be in arrears, this ageing of the stock of IO loans increases the observed arrears rate. Accounting for this change in the relative age structure of IO and P&I loans accounts for a large part of the difference in the increase in their arrears rates (Graph B.4; yellow bar). Note the analysis here compares loans based on whether they were IO or P&I at origination and so abstracts from repayment terms changing, in particular loans switching from IO to P&I terms (either before or at the end of the IO term).[5]



* Representative selection of loans originated since 2011 classified using origination characteristics as first reported to the Securitisation System

** Effect of fewer new loans estimated by applying aggregate origination year weights to loan type changes in arrears; differences in refinancing estimated using fixed denominators

Sources: RBA; Securitisation System

A second component of the difference between the change in the arrears rates comes from increased refinancing and faster repayments of IO loans. Again, this was driven by the increase in interest rates on IO loans. For example, some IO borrowers will have refinanced to a new P&I loan to reduce interest costs, and so the IO loan is repaid in full and drops out of the securitisation data. Adjusting for this effect accounts for a smaller part of the difference in the increase in IO and P&I arrears rates (Graph B.4; purple bar).[6]

After adjusting for the effects flowing from changed IO lending dynamics, the implied difference between the increase in arrears rates for IO and P&I loans is estimated to be small (Graph B.4; red bar).

Interest-only loans and those in arrears are more likely to generate losses for lenders

While IO loans have similar repayment performance to P&I loans, they still appear to be more risky for the lender as they can lead to larger losses. Since IO borrowers are not required to make principal payments, their outstanding loan balance need not decline over time. This increases the chance the loan ends up in negative equity if housing prices fall, and so exposes the lender to a loss if the borrower cannot make their repayments.

In WA, around half of IO originated loan balances in arrears have negative equity, greater than the 40 per cent of P&I originated loan balances in arrears that have negative

equity. This indicates that IO loans are likely to result in larger losses for lenders than P&I loans. Similarly, investor loans in arrears also have a higher incidence of negative equity than owner-occupier loans. The share of loans in arrears that are also in negative equity is much greater than the share of all loans in WA that are in negative equity of around 18 per cent, highlighting that loans in arrears are also more likely to have negative equity.

Regulatory changes will improve the performance of newer loans but a decline in arrears rates in WA may take some time

The rise in the arrears rate in WA for different types of loans highlights how riskier types of lending perform worse in an economic downturn. Loans with high DSRs or LVRs have seen larger increases in arrears than those with lower DSRs and LVRs, as have loans to investors relative to owner-occupiers, and loans to self-employed borrowers relative to those to employees. However, the repayment performance of IO and P&I loans have been similar. Overall, the rise in arrears in WA has not been especially large given the prolonged economic downturn.

The rise in arrears in WA lagged the deterioration in economic conditions. In part, this reflects that many borrowers had accumulated buffers, either prepayments or other assets, which could cushion any fall in income. Ongoing falls in housing prices and low turnover have reduced borrowers' ability to avoid or exit arrears by selling and repaying their loans. However, the unemployment rate has been little changed since mid 2015 and there are some broader signs of stabilisation in the WA economy. Nevertheless, any decline in arrears is likely to lag an improvement in economic conditions, particularly because of ongoing falls in housing prices. The increase in the arrears rate for higher risk loans in WA demonstrates the potential cost of these loans and so the importance of the tightening in lending standards nationally from 2014, which has resulted in newer loans having lower arrears rate.[7] ✠

Endnotes

[1] For further details on the securitisation dataset, see Kent, C (2018) 'The Limits of Interest-only Lending', Address to the Housing Industry Association Breakfast, Sydney, 24 April. Available at <https://www.rba.gov.au/speeches/2018/sp-ag-2018-04-24.html> and Fernandes, K & Jones, D (2018) 'The Reserve Bank's Securitisation Dataset' RBA *Bulletin*, December, viewed 2 October 2019. Available at https://www.rba.gov.au/publications/bulletin/2018/dec/the-reserve-banks-securitisation-dataset.html. The dataset covers about one-quarter by value of all home loans nationwide, including over 100,000 loans in Western Australia. The level of arrears in the securitisation dataset is a little lower than the population of all outstanding loans reported in APRA data. However, the two data sources show similar trends for arrears.

[2] The analysis in this box compares the repayment performance of different types of loans and splits them by one characteristic. It does not identify the partial effect of characteristics by controlling for the loans' other characteristics. A forthcoming Reserve Bank research paper examines the determinants of default using loan level data controlling for the characteristics of each loan.

[3] A detailed description of the methodology used in Graph B.4 is available on request.

[4] See RBA (Reserve Bank of Australia) (2018) 'Assessing the Effects of Housing Lending Policy Measures', *Financial Stability Review*, October, pp75–88.

[5] Whether a loan was IO or P&I at origination is estimated based on what the loan was when it was first reported in the Securitisation Dataset. This error of this estimation is limited by restricting the sample loans to those originated since 2011.

[6] This second adjustment potentially overstates the effect that differences in refinancing and repayment had on the difference in the change in arrears rates. In effect, it assumes that the IO loans that were refinanced or repaid, but which would not have been had they been P&I loans, did not fall into arrears after this point. In any case, this second adjustment accounts for a much smaller share of the difference between the change in the IO and P&I arrears rates.

[7] See Kearns, J (2019) 'Understanding Rising Housing Loan Arrears', Speech at 2019 Property Leaders' Summit, Canberra, 18 June.