

## Box A

# Mortgage Interest Payments in Advanced Economies – One Channel of Monetary Policy

Changes in monetary policy affect the economy through several channels, including by: changing the incentives for saving and investment; influencing the exchange rate, other asset prices and wealth; and altering household cash flows.<sup>[1]</sup> The strength and speed of each channel depends on a range of factors that differ across economies. One such factor is the structure of the mortgage market, which affects the pass-through of policy rate changes to the interest rates faced by indebted households. This part of the cash flow channel is faster in Australia compared with most other advanced economies. Despite this, there is no evidence that the overall potency of monetary policy is any stronger in Australia than elsewhere.

### Key differences in international mortgage markets

The share of fixed-rate mortgage lending and the term of these loans both influence the *speed and size* of the pass-through of policy rate increases to the interest rates faced by households with existing debt. All else equal, the proportion of outstanding mortgage holders who will face a change in their interest repayments soon after a change in the central bank policy rate will be higher in economies with a higher share of variable-rate loans. For economies with a larger fixed-rate lending share, the speed of the pass-through to households with existing debt will be determined by typical loan terms and the extent to which changes in central policy rates affect longer term interest rates in the

economy. Interest rates on loans with very long fixed-rate terms tend to be less sensitive to changes in the short-term interest rates targeted by central banks than loans with shorter fixed-rate terms. Other aspects of mortgage lending, including the size of outstanding household debt and the income, wealth and cash buffers of borrowers influence the *overall strength* of transmission of increases in central bank policy rates to households with a mortgage and the economy more generally.

The share of outstanding mortgages with variable rates is notably higher in Australia than in many comparable advanced economies (Graph A.1). Furthermore, Australian mortgages with fixed rates generally have shorter fixed-rate periods of around two years; this compares with five years in the United Kingdom and Canada, and 30 years in the United States (Graph A.2). However, during the COVID-19 pandemic, the share of mortgages with fixed interest rates roughly doubled in Australia (peaking at almost 40 per cent in early 2022) as the pricing of fixed-rate loans became more favourable relative to variable rates.<sup>[2]</sup> The share of new housing lending taken out at fixed-rate terms of more than two years also increased briefly during the pandemic, but this trend was reversed by early 2022.

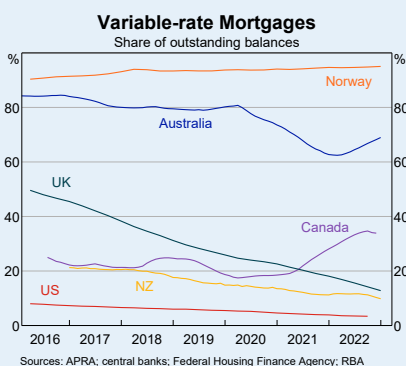
## Monetary policy pass-through to outstanding mortgage rates is quicker in Australia compared with most other advanced economies

The pass-through of recent policy rate increases to mortgage interest rates has been faster and larger in economies with a higher share of variable-rate housing loans. Since the start of the most recent monetary policy tightening phase, Australia's policy rate has increased by 325 basis points. The policy rate in most advanced economies selected for comparison has increased by more than Australia over this period (Graph A.3).<sup>[3]</sup> Despite this, the average interest rate on

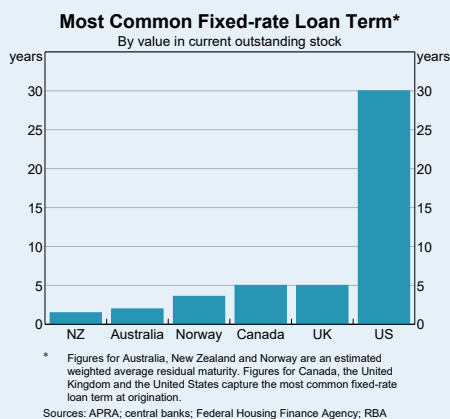
outstanding mortgages in Australia has increased by more than in comparable economies with a lower share of variable-rate loans (Graph A.4). This is also the case in Norway, which has an even higher share of variable-rate lending than Australia.

The transmission of monetary policy to outstanding mortgage rates also depends on the average term of outstanding fixed-rate loans. In countries like Australia and New Zealand, most fixed-rate mortgages will reprice at new market rates within two years. By contrast, new mortgages in the United

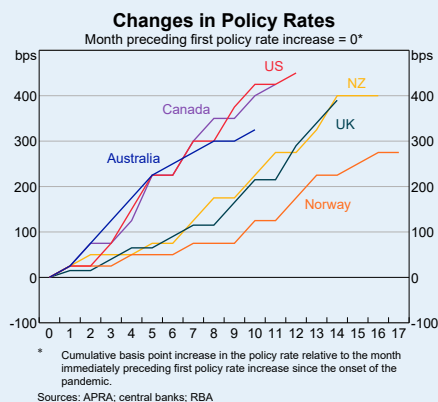
**Graph A.1**



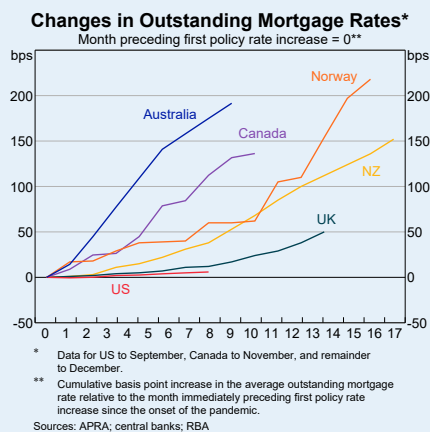
**Graph A.2**



**Graph A.3**



**Graph A.4**



States are typically taken out for fixed terms of 30 years, by which time households are likely to have fully repaid their debt or refinanced it on more favourable terms.

The relatively quick and large increase in outstanding mortgage rates in Australia compared with other advanced economies does not imply that the overall potency of monetary policy is stronger in Australia than elsewhere.<sup>[4]</sup> This is because there are other important channels for the transmission of monetary policy beyond the cash-flow channel and the strength of these is likely to vary across economies.

Cross-country analysis of the overall strength of monetary policy that includes Australia is limited, but the available evidence suggests that the effect of Australian monetary policy on activity and inflation is similar to that in other comparable advanced economies. For example, Georgiadis estimates that a tightening of Australian monetary policy has a similar effect on output and prices as that in other countries.<sup>[5]</sup> Estimates from the major central banks' macroeconomic models are also broadly similar to those of the RBA's MARTIN and dynamic stochastic general equilibrium (DSGE) models.<sup>[6]</sup> ↗

## Endnotes

[1] See RBA (2023), 'The Transmission of Monetary Policy', Explainer. Available at <<https://www.rba.gov.au/education/resources/explainers/the-transmission-of-monetary-policy.html>>

[2] This contrasts with the experience in Canada where variable rates decreased relative to fixed rates and the share of variable-rate mortgage lending increased.

[3] The chosen sample includes major advanced economies with comparable national mortgage markets that experienced a significant increase in policy rates during the post-pandemic tightening cycle.

[4] While Graph A.3 shows a swift move in Australian mortgage rates, households on variable interest rates do not typically face actual increases in their payments for two to three months given notice periods and the time taken for lenders to adjust rates following a change in the policy rate.

[5] Georgiadis G (2014), 'Towards an Explanation of Cross-country Asymmetries in Monetary Transmission', *Journal of Macroeconomics*, 39, pp 66–84.

[6] MARTIN is the Reserve Bank's main macroeconomic model of the Australian economy. The Bank also uses a more heavily structured DSGE model in its analysis. See

Ballantyne A, T Cusbert, R Evans, R Guttmann, J Hambur, A Hamilton, E Kendall, R McCririck, G Nodari and D Rees (2019), 'MARTIN Has Its Place: A Macroeconometric Model of the Australian Economy', RBA Research Discussion Paper No 2019-07. Similar estimates to those from Bank models are contained in: Angelini E, N Bokan, K Christoffel, M Ciccarelli and S Zimic (2019), 'Introducing ECB-BASE: The Blueprint of the New ECB Semi-structural Model for the Euro Area', ECB Working Paper No 2315; Brayton F, T Laubach and D Reifschneider (2014), 'The FRB/US Model: A Tool for Macroeconomic Policy Analysis', FEDS Notes, April; Corbo V and I Strid (2020), 'MAJA: A Two-country DSGE Model for Sweden and Its Main Trading Partners', Sveriges Riksbank Working Paper Series No 391; Corrigan P, H Desgagnes, J Dorich, V Lepetyuk, W Miyamoto and Y Zhang (2021), 'TOTEM III: The Bank of Canada's Main DSGE Model for Projection and Policy Analysis', Bank of Canada Technical Report No 119; del Negro M (2018), 'The NY Fed DSGE', Presentation to the Seventh BIS Research Network Meeting on 'Pushing the Frontier of Central Banks' Macro-modelling', Basel, 8 March; Gervais O and M-A Gosselin (2014), 'Analyzing and Forecasting the Canadian Economy through the LENS Model', Bank of Canada Technical Report No 102; Iversen J (2018), 'Ramses II – The Core Macro Model at Sveriges Riksbank', Presentation to the Seventh

BIS Research Network Meeting on 'Pushing the Frontier of Central Banks' Macro-modelling', Basel, 8 March; Monti F (2018), 'The Bank of England's Forecasting Platform', Presentation to the Seventh

BIS Research Network Meeting on 'Pushing the Frontier of Central Banks' Macro-modelling', Basel, 8 March. Available at <<https://www.rba.gov.au/publications/rdp/2019/2019-07/full.html>>