POLICY EVIDENCE SUMMARY May 2023

The impacts of interest rates and borrowing conditions changes on first home buyers

Based on AHURI Final Report No. 398: Financing first home ownership: modelling policy impacts at market and individual levels

What this research is about

This research models and evaluates the implications of economic policy settings and two housing finance assistance schemes for Australians purchasing their first home.

The context of this research

Although at the time of writing Australia is experiencing increasing interest rates, this research examines the impact of falling interest rates (as occurred between 1994 and 2017) on the ability of first home buyers to enter the property market. The research finds that over that time period, falling real interest rates reduced the cost of servicing a mortgage, however house prices rose, exacerbating the deposit gap problem for first home buyers. As a consequence, growing numbers were forced to delay buying their first home or took out large debts to purchase their first home.

The key findings

Housing market model parameters

This research conducted modelling experiments to examine the relationship between different housing finance conditions and people's ability to buy a first home. The first simulated the housing market's response to decreases in interest rates, while the second simulated the market's response to variations in borrowing standards, such as changes in prudential financial regulations or allowing households to borrow more or less against the value of their homes. The model is designed to capture the changes in housing affordability and mortgage costs over the 25 years from the mid-1990s, and relies on the most current, reliable datasets.

The baseline model is calibrated to 1994, when the interest rate on savings accounts was 4.48 per cent and the interest rate on mortgage loans was 6.81 per cent. The model follows the changes in the interest rates to those observed in 2017: 0.29 per cent for savings accounts and 1.89 per cent for mortgage loans.

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The impact of falls in interest rates

Real interest rates fell by more than five percentage points over the three decades to 2017 while real house prices more than doubled. The home ownership rate also fell from over 70 per cent to 66 per cent in the same period.

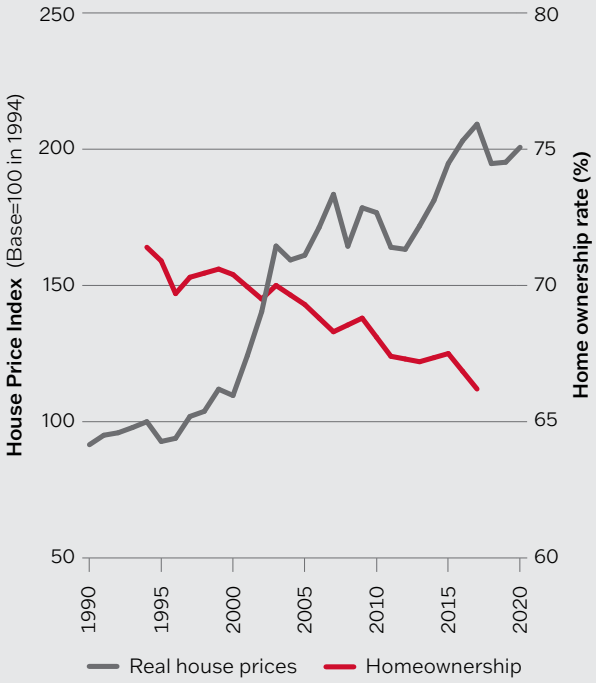
When interest rates decline, the cost of financing housing declines. The opportunity cost of investing in housing also declines due to the reduction in interest that can be earned in savings accounts. Thus, the demand for housing increases, which tends to lead to increases in house prices.

Outcomes of the housing market modelling

The research model predicts that house prices rise by 33 per cent when interest rates decline by the magnitude observed between 1994 and 2017. The actual rise in house prices was 109 per cent, suggesting that the decline in interest rates is associated with approximately one-third of the rise in house prices over the 25 years up to 2017. The discrepancy in the increase in house prices predicted by the model, and those observed in the real data, reflect all the other factors not incorporated into the model, including changes in the supply of housing, income and population, amongst other factors.

The model also indicates that the home ownership rate would fall by 15.3 per cent, compared to just 5.2 per cent in real life. One reason for this discrepancy is that the model assumes that all households have been a part of the low interest rate environment for their entire lives. In reality however, many older households in 2017 had made the decision to enter home ownership in the 1990s when interest rates were significantly higher but house prices were much lower. One interpretation of the results of the model is that this 15.3 per cent fall in the home ownership rate is what might be expected if interest rates were to remain at record lows until today's young households enter old age.

When interest rates were falling: house prices rose, home ownership dropped



Note: Between 1994 and 2017, the average interest rate on owner occupier mortgages fell by almost 5 per cent.

Source: AHURI Final Report No. 398

Interpreting the housing market modelling results

The results also reflect the fact that much of the increase in housing demand (caused by a decline in interest rates) is due to greater housing demand among people who would be homeowners anyway, rather than due to increases in the home ownership rate for the general population. Despite the decrease in the cost of financing a mortgage when interest rates are low, young households still find it difficult to save for a deposit to enter home ownership due to high house prices. As a result, households do not enter home ownership much earlier than they would have in the high interest rate and low house price environment. This highlights the fact that the major barrier to home ownership for most households is the difficulty of raising the funds for a downpayment on a house.

In general, as interest rates fall, the desirability of home ownership rises significantly given the cost of mortgage financing falls. However, as interest rates decline, house prices increase; so that the net benefit of home purchase with declining interest rates will vary across household age groups.

Modelling into a higher interest rate future

It is worth noting that the very low interest rate environment Australia has experienced in recent decades may not persist into the future. As a result of rising inflation pressures, nominal interest rates in Australia and other countries have been rising rapidly. While it is too early to tell whether these changes signal an end to historically low interest rates, there are indications Australian house prices have seen reductions in response to tighter mortgage financing conditions. If a persistent rise in interest rates led to a decline in house prices, Australia may yet see the return of young households to the housing market.

Constraints faced by would-be first home buyers

Despite the fact that the majority of renters would prefer to be homeowners, most are unable to attain home ownership. When the first home buyer's liquid wealth is insufficient to meet the required upfront deposit, the home buyer faces a downpayment constraint. When a homeowner's income is insufficient to meet mortgage repayment commitments, the home owner faces a repayment constraint. Potential first home buyers may be constrained by one or both of these requirements.

Among rental tenants who prefer ownership and are aspiring first home buyers, only 11 per cent do not face borrowing constraints. 84 per cent face constraints on saving for a deposit and 71 per cent face repayment constraints.

Modelling first home buyer assistance programs: mortgage guarantee and shared equity schemes

The research modelling simulated two first home buyer assistance programs: the first is a mortgage guarantee scheme designed to alleviate the constraints first home buyers have on saving for a deposit but not the constraint on being able to repay the mortgage; the second is a shared equity scheme that addresses both forms of constraints. Both schemes are subject to the same property caps, but the shared equity scheme applies stricter income limits than the mortgage guarantee scheme.

The research models the mortgage guarantee scheme after the Federal government's Home Guarantee scheme for first home buyers, which allows eligible borrowers to have a home loan from mainstream mortgage lenders with just a five per cent deposit. The National Housing Finance and Investment Corporation (NHFIC) acts as guarantor on up to an additional 15 per cent of the mortgage value. This encourages mortgage lenders to offer high Loan-To-Value (LTV) finance to otherwise credit-worthy customers, who might otherwise be deemed as too risky. The scheme targets first home buyers with low savings but moderate incomes, up to $125,000 for singles, and $200,000 for couples.

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Shared equity schemes are a range of ownership models in which the value of a dwelling is divided between more than one legal entity. The research models the shared equity scheme after the Australian Government's 'Help to Buy' shared equity scheme, eligible to those on incomes up to $90,000 for singles and $120,000 for couples. Under the Help to Buy scheme, the Australian Government will contribute up to 30 per cent (for an existing property) or 40 per cent (for a new property) to the purchase price of the dwelling for eligible households. This allows the eligible home buyer to purchase with a deposit that is as low as a 2 per cent on the full price of the property, and service a mortgage on 60 to 70 per cent of the purchase price.

First home buyer assistance program model parameters

In the model the shared equity scheme is accessible by those who have deposit savings of at least 2 per cent, while the mortgage guarantee scheme is accessible by those who have deposit savings of at least 5 per cent but not more than 20 per cent. While the actual government programs are capped at a limited number of places each year, the research models the programs assuming no caps are placed on the number of applicants who can apply, as long as the applicants meet income and property price eligibility thresholds.

The research model uses the 2018 HILDA data to consider the eligibility of households for different first home buyer assistance programs. Of the 1.6 million income units (which could be individuals or couple households) who are renting in Australia that are aspiring first home buyers, 266,500 income units or 16 per cent are classified as eligible under the mortgage guarantee scheme, while 496,800 or 31 per cent are classified as eligible for the shared equity scheme. Thus, the shared equity scheme is accessible potentially by a larger segment of the population than the mortgage guarantee scheme.

Who benefits under each modelled scheme?

The microsimulation model suggests 22 per cent of eligible aspiring first home buyers would be assisted into home ownership by the mortgage guarantee scheme, and 41 per cent would be assisted by the shared equity scheme.

On average, those who are eligible for either scheme are younger and healthier than those who are ineligible, averaging 30 years of age and a six per cent incidence of a long-term health condition or disability.

Some differences exist between those eligible for each scheme. Couples make up over half of eligible income units under the mortgage guarantee scheme, compared to 28 per cent of eligible income units under the shared equity scheme. Nearly two-thirds of income units eligible for the shared equity scheme are single, never married compared to 45 per cent of the income units that are eligible for the mortgage guarantee scheme.

Importantly, the distribution of eligible income units under each scheme is more skewed towards low socio-economic status (SES) areas. One-quarter of eligible income units under both schemes reside in the bottom 20 per cent of Socio-economic status areas. This trend parallels the distribution of ineligible income units which is more skewed towards high SES areas.

What this research means for policy makers

The simulation findings present some important implications for policy development. Firstly, the shared equity scheme is accessible by a larger segment of the population than the mortgage guarantee scheme. While the mortgage guarantee scheme is highly effective in overcoming the deposit hurdle, it is not designed to address the repayment hurdle. Therefore, first home buyer assistance schemes are more effective in assisting transitions into home ownership if they alter housing finance conditions for the home buyer through both the downpayment and repayment routes.

Secondly, the shared equity scheme is more accessible to income units on lower incomes who have lower levels of education and labour force participation than the mortgage guarantee scheme. It would therefore appear that the design of a scheme that is subject to tight income caps is more effective in providing 'additionality' than a mortgage guarantee scheme. To explain, just because a first home buyer policy is successful in improving access or affordability, it may not provide 'additionality' (i.e. it may be ineffective at making ownership possible for first home buyers who would otherwise be excluded from the market).

Third, both schemes are more accessible by first home buyers residing in lower SES areas than in higher SES areas. Both schemes will therefore likely boost demand for housing in entry markets. This demand has to be matched by an adequate supply of new housing to offset upward price pressures generated by the additional demand in these markets.

Finally, the HILDA data used to model both schemes suggests eligible home buyers report a higher chance of losing their job in the next 12 months than those who are not eligible for the schemes. This raises some potential concerns regarding their exposure to repayment risks after accessing home ownership, especially in an era of rising interest rates. Given that a goal of the shared equity scheme is arguably to improve the welfare of low-income individuals through home ownership, this exposure to repayment risk requires serious consideration in decisions regarding the continuity of the scheme as interest rates rise rapidly. If this risk is not adequately addressed, unintended consequences via future mortgage foreclosures may be highly detrimental to the wellbeing of low-income households.

Policy makers need to guard against unintended consequences, such as mortgage distress and mortgage default, when implementing policies that boost demand among low-income aspiring first home buyers. In addition, there needs to be an increase in the supply of housing affordable to households on a low income.

Methodology

This research models simulations at both 'macro' (or market) level and the 'micro' (or income unit) level using nationally representative datasets from the Australian Bureau of Statistics (ABS) Surveys of Income and Housing, Reserve Bank of Australia (RBA) interest rates and inflation rates, CoreLogic house price index and the 2018 Household, Income and Labour Dynamics in Australia (HILDA) Survey.

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To cite the AHURI research, please refer to:

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