Compared with the income ratio method, the residual income method provides better insights into housing market dynamics and income adequacy for different household types. For example, the model reveals that, due to high expenditure, Australian households with children are more likely to face situations where rents or mortgages exceed residual income.

**KEY POINTS**

- The residual income method calculates how much income is left over to cover housing costs after other typical household expenditures, estimated using a budget standard, have been taken into account. If there is insufficient residual income left for housing costs, then a household is considered to have an affordability problem.

- This method differs from the most widely used measure of housing affordability stress, the income ratio method, because it takes into account information about taxation and household expenditures (in addition to income and housing costs).

- Compared with the income ratio method, the residual income method suggests higher rates of affordability stress among those on lower incomes, but lower rates of stress among higher income earners. The method confirms the particular problems of affordability among renters, and reveals that family households are more likely to face housing affordability problems because of their higher expenditure patterns.
• The method provides a better understanding of housing market dynamics. For example, it shows that low income families (i.e. those below income of $40 000) in Melbourne and Adelaide are now completely out of the first home purchase market, and moderate income families ($40 000 to $80 000) can only purchase in very spatially constrained markets, such as the outer suburbs.

• Because it takes into account typical household expenditures, the residual income method can consider issues of income adequacy for different household types. For example, using the method reveals that there is a degree of housing affordability stress among public housing residents (when the income ratio method indicates that all public housing residents live in affordable housing). It is also found to be useful for testing the adequacy of income eligibility rules for programs such as the National Rental Affordability Scheme.

CONTEXT

Policy-makers typically seek to measure housing affordability as a way to evaluate the effectiveness of their housing assistance policies. However, housing affordability outcomes are also linked to policies that affect household incomes (e.g. income support and taxation) and other household expenditures (e.g. policies that provide concessions on major expenditures such as electricity).

This study seeks to understand the likely policy implications of using an alternative measure of housing affordability called the residual income method, which takes into account other (non-housing) expenditure and taxation as part of calculating housing affordability outcomes.

RESEARCH METHOD

Like more conventional measures of housing affordability, the residual income measure uses income and housing data from the ABS Survey of Income and Housing (SIH). But it was necessary to supplement this data with estimates of expenditures for typical households based on indicative budget standards developed by the Social Policy Research Centre at the University of New South Wales. These established a low cost budget standard (LCBS) and a modest cost budget standard (MCBS). The former might be seen as a minimum level of consumption, while the latter allows for a comfortable but far from luxurious lifestyle. These standards were constructed for nine major household types (accounting for almost 75% of all Australian households). The indicative budget standards, which were created for 1998, were updated using price and income inflators to 2007–08 so that they could be compared with SIH data of that year.

This study sought to ensure that residual income measures could be compared with the more commonly used income ratio measure (which measures housing costs as a proportion of gross incomes and compares this ratio to an affordability benchmark of 30%). To broadly compare measures of housing affordability, it is appropriate to focus only on the lowest 40 per cent of households by equivalised incomes (consistent with the 30/40 rule).

KEY FINDINGS

How does the residual method compare with the conventional ratio method in measuring affordability?

• The incidence of households with an affordability problem is estimated to be higher (33.6%) when using the residual income method (and using the low cost budget standard) than when using the income ratio method (23.9%). This is partly because the residual income method picks up some public housing residents and home owners who are not considered to have an affordability problem under the income ratio method using the 30/40 rule.

• However, there is no uniform pattern in these comparisons. For example, while the residual method confirms that renters are more likely to have a housing affordability problem (47.7%), this is significantly lower than that suggested by the income ratio method (61.7%).
Which groups have an affordability problem?

- The affordability problem as measured by the residual income method is most intense in the bottom two income deciles when using the LCBS; these account for 75 per cent of all households with an affordability problem. Further, 73 per cent of households below the LCBS (mostly in these two bottom deciles) had government pensions or benefits as their main source of income, which suggests the housing affordability problem is as much an income support problem as a housing cost one.

- In terms of various compositional effects, the data shows that among the lowest 40 per cent of households, renters have the most severe affordability problem. In particular, 65 per cent of public renters, with aged renters the worst off, 84.3 per cent of singles and 62.2 per cent of couples were below the LCBS. Affordability for families was also problematic, particularly those with younger children. Among households with children, 34.3 per cent were below the LCBS, and if the children were under five this proportion rose to 68 per cent.

Lessons for housing market dynamics

- Modeling of the residual income method shows that above a certain household income point, there is much greater capacity to purchase or rent than the 30 per cent rule would indicate. For example: a couple with two children can afford more in housing purchase costs when they earn over $45,000 (based on the LCBS) or over $90,000 (for the MCBS) (See Figure 1). This provides a better understanding of housing market dynamics, including why people can still purchase or rent despite high housing prices.

- It is also possible to identify how accessible certain housing markets were to particular household groups, by comparing household residual incomes with indicative housing prices in different areas. Applying the modeled household residual incomes to the Melbourne and Adelaide residential property markets in 2010 found that, for both markets, families with incomes of less than $40,000 were out of the market. For those families with incomes between $40,000 and $80,000, the only option was outer suburban areas. Not until household income exceeded $100,000 was there much ability for families to purchase in the inner city and middle ring. On the other hand, singles and couples without children and with incomes above $60,000 had much wider housing choice and could effectively consider inner urban purchase, particularly in Melbourne where, unlike families with children, they could choose one and two-bedroom apartments.

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**FIGURE 1: MAXIMUM AFFORDABLE MORTGAGE REPAYMENTS USING TWO TYPES OF BUDGET STANDARD AND TWO MEASURES OF HOUSING AFFORDABILITY, COUPLE WITH TWO CHILDREN, 2010**

![Graph showing maximum affordable mortgage repayments using two types of budget standard and two measures of housing affordability.](image-url)
Lessons for public housing

- The residual income method shows that 65 per cent of all public tenants have affordability problems. This is despite the fact that they pay a so-called affordable rent (25% of income). The findings of the residual income model add to the evidence that current rent-setting mechanisms create affordability difficulties for tenants, and suggest the need for funding and rent-setting reform.

Lessons for National Rental Affordability Scheme targeting

- The residual income model was used to test income eligibility for the National Rental Affordability Scheme with its discounted market rent scheme. The model found income eligibility benchmarks were well targeted, because the residual incomes of households using a moderate cost budget standard (which would exclude Commonwealth Rent Assistance) were found to be close to the market rents less 25 per cent in most capital cities for a range of household types.

POLICY IMPLICATIONS

Findings reveal that a key problem for Australian housing affordability is that income and support payments (i.e. pensions and benefits) are simply too low for many households in receipt of them to afford private housing market rents and prices. The same could be said of the household rents charged in social housing. This reflects a history of modest increases in welfare benefits, and limited, targeted eligibility for other payments such as the extension of supplementary payments for age pensioners to more recipients through it becoming Commonwealth Rent Assistance (CRA).

The residual income method reveals how household affordability differentials appear to be shaping a new urban and social form, with families and detached housing on the fringe and non-family households in inner city and middle ring locations clustered in growing numbers of one and two-bedroom apartments. Current policies of keeping social housing to a residual sector are now unable to effectively address the form and scale of the affordability challenges that Australia faces. Other housing related policies such as negative gearing are as much a cause of, as a solution to, the affordability problem.

Even in their exploratory form, these findings do suggest areas for policy attention. These include the need for greater support for aged renters (e.g. CRA top-up), assistance for larger families to become home purchasers (e.g. First Home Owner Grant targeting), and better planning infrastructure and taxation programs to address what looks like an emergent polarisation of Australian cities.

FURTHER INFORMATION

This bulletin is based on AHURI project 50597, Residual incomes in Australia: analysis and implications. Reports from this project can be found on the AHURI website: www.ahuri.edu.au or by contacting AHURI Limited on +61 3 9660 2300.