

Does higher housing wealth increase consumer spending?

ON AVERAGE, EVERY \$100,000 INCREASE IN HOUSING WEALTH RESULTS IN AN INCREASE IN CONSUMPTION OF \$1,000 TO \$1,500 PER ANNUM IN AUSTRALIA. INCREASED HOUSING WEALTH HELPS TO RELAX BORROWING CONSTRAINTS ON HOME OWNERS THUS FACILITATING INCREASED CONSUMPTION.

KEY POINTS

- A \$100,000 increase in housing wealth is associated with an increase in consumption expenditure of approximately \$1,000 to \$1,500 per annum in Australia.
- This estimate of the consumption impact is consistent with those from equivalent international studies but is lower than suggested in a recent Australian study.
- It is significant because it confirms that housing booms add to economic growth through increased household consumption. Every 5 per cent increase in the median value of dwellings in Australia represents an increase in total average household consumption of 0.3 to 0.45 per cent, or an increase in Gross Domestic Product (GDP) of 0.2 to 0.3 per cent.
- The estimated consumption response to the increases in housing wealth was greatest for middle-aged home-owners compared with those in other age cohorts.
- This is consistent with the hypothesis that the higher consumption resulting from increases in housing wealth arises from the relaxation of a credit or collateral constraint that enables households to increase their borrowing in order to finance consumption.
- This study will assist macroeconomic policy makers such as the Reserve Bank and the Federal Government in predicting trends in the economy as well as understand the ways governments might be able to moderate the impact of the housing market on the economy.

This bulletin is based on research by Associate Professor Judith Yates and Dr Stephen Whelan of the AHURI Sydney Research Centre. The research examines the impact of higher housing wealth on consumption in Australia and identifies the possible transmission mechanisms through which this effect occurs.

BACKGROUND

Dramatic increases in asset prices in Australia in the mid-1990s to early 2000s contributed to a significant increase in the real value of household wealth. Housing wealth constituted the most important component in that growth (See Figure 1).

As in many other countries, this increase coincided with an increase in aggregate household consumption. These trends stimulated a resurgence of literature on the relationship between household consumption and wealth and there is now extensive international evidence that provides broad support for the basic theoretical claim that an increase in both housing and financial wealth leads to an increase in consumption.

RESEARCH METHOD

This study adapted a methodology used in recent studies that relies on regular household expenditure surveys (Attanasio et al, 2007; Campbell and Cocco, 2007). The advantage of this method is that it allows the researchers to measure statistically the relationship between changes in household wealth and consumption and also to identify the possible transmission mechanisms operating to explain the impact of wealth on household consumption.

To estimate consumption over the life-cycle, the study used data from six Household Expenditure Surveys (or HES surveys) from 1975-76 to 2003-04. The HES collects detailed information about the expenditure, income and household characteristics of a sample of between 7,000 and 10,000 households resident in private dwellings

throughout Australia. Although the HES collects only 'snapshot' data for a sample of households at a given point in time (that is, it does not collect information on the same households at different points in time and so is not truly longitudinal), it can be used to estimate consumption profiles of age-defined cohorts over the course of the six surveys. Differences in consumption between households of different ages will reflect both genuine age (life-cycle) effects and also differences across cohorts. Other factors that may impact on consumption, such as income and household type, are controlled for using regression techniques.

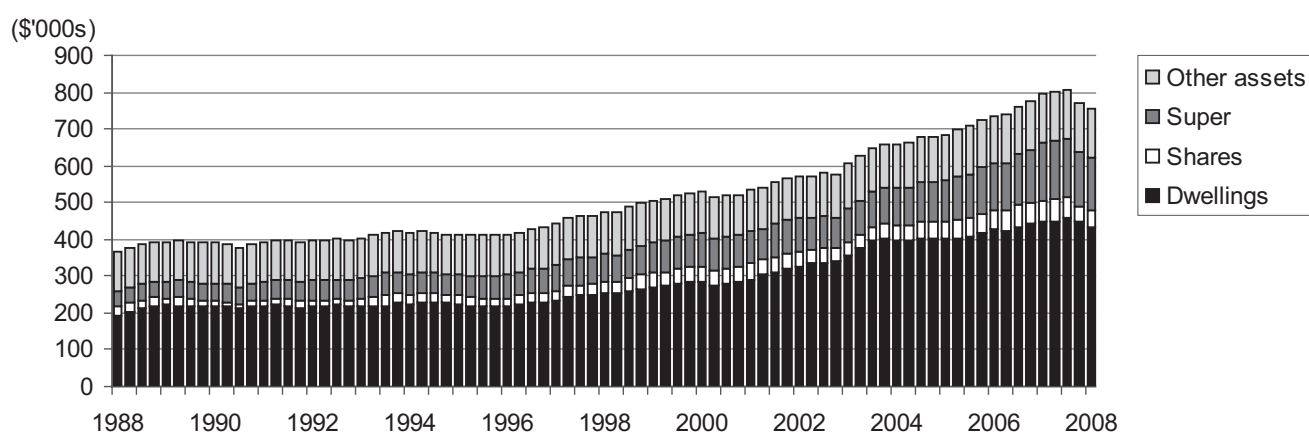
The wealth data available in the 1998-99 and 2003-04 surveys are included in the analysis to examine the impact of unanticipated increases in housing wealth (defined to be a household's level of net housing wealth). The research reported in this study represents the first time that individual wealth data have been used to formally measure wealth effects either in Australia or internationally.

FINDINGS

How large is the impact of housing wealth on consumption?

Overall, these results indicate that a \$100,000 increase in housing wealth is associated with an increase in consumption expenditure of approximately \$1,000 to \$1,500 per annum. This is somewhat lower than most of the estimates derived internationally from aggregate studies and, in particular, is lower than the equivalent \$3,000 estimate generated by a key study for Australia (Dvornak and Kohler, 2007). However, it falls within

FIGURE 1: REAL GROSS WEALTH PER HOUSEHOLD (\$2008): 1988–2008



the range of estimates for other countries reported in other micro-econometric studies.

For an increase of 5 per cent in the median value of dwellings in Australia, this represents an increase in total average household consumption of 0.3 to 0.45 per cent or an increase in GDP of 0.2 to 0.3 per cent.

How does housing wealth impact on consumption?

The study assumes that the life-cycle of the household is critical in determining its spending and savings patterns. This is because households are assumed to 'smooth' their consumption over time with households borrowing when young, saving in middle-age and spending in retirement. This suggests that households might reasonably anticipate increases, then declines in wealth over their life-cycle.

However, in addition to these anticipated changes, there may also be unanticipated changes in household wealth occasioned through asset price movements. There are three potential ways in which unanticipated housing wealth might impact on or be related to consumption:

- A *direct wealth* effect whereby there is a direct causal relationship between an increase in wealth and an increase in consumption.
- An *indirect credit constraint* effect whereby an increase in wealth provides households with increased collateral and increased borrowing capacity to finance consumption.
- A *common cause* effect whereby the increases in household wealth and consumption are stimulated by the same common factor such as an increase in income expectations.

Which of these three *transmission mechanisms* more likely can be tested through considering the relative size of the wealth-consumption effect for

different age cohorts and comparing the outcomes between home purchasers/owners and renters. This is because particular transmission mechanisms are predicted to differentially affect particular cohorts. For example, if the greatest increase in consumption as a result of an unanticipated increase in wealth occurred among:

- Older home-owning households – this would provide support for the direct wealth effect because older households have the least time left to spend the unanticipated increase in their life-time wealth holdings.
- Middle aged home-owning households – this would provide support for the credit constraint effect because they are most likely to be the households who are not income constrained (like the young) and who are not running down their wealth (like the old).
- Younger people (whether they are owners or renters) – this would provide support for the common cause effect because a permanent increase in lifetime income (for example, as a result of a sharp rise in productivity) will have the greatest effect on those with the longest remaining life spans in which to benefit from such an increase.

Across all cohorts, wealth variables are found to be statistically significant and have an impact on consumption outcomes. The figures indicate (see Table 1) that every \$100,000 increase in housing net wealth in 2003-04 is associated with an increase in weekly household expenditure of approximately \$19 per week for a household that belongs to the young cohort (aged under 40), and \$16 per week for the old cohort (aged over 61). However, the highest increase in weekly consumption of \$30 per week was from the middle ('baby boomer') cohort aged 41-60 years of age.

TABLE 1: WEEKLY CONSUMPTION BY COHORT ASSOCIATED WITH AN INCREASE IN \$100,000 IN HOUSING NET WEALTH IN 2003-04

Age cohort	Increased weekly consumption for home owners/purchasers (relative to renters)
Young (<40)	\$19 per week
Middle (41-60)	\$30 per week
Old (61+)	\$16 per week

The results are consistent with the hypothesis that the most important channel by which housing wealth affects consumption is through relaxing credit constraints.

POLICY IMPLICATIONS

These findings will assist macroeconomic policy makers to better understand the ways that the housing market can impact on the wider economy. The findings have potentially important macroeconomic implications, particularly in the context of upswings or declines in the economy and in house prices.

They show that the impact of an unanticipated increase in housing wealth on household consumption is significant, particularly for the cohort that is now middle aged. This raises the concern that any subsequent slow down in house price growth may reduce both the capacity and the willingness of the baby-boomer generation to maintain their current levels of consumption.

If housing wealth effects are symmetric, that is, the size of the impact of a decrease in wealth is the same as that for an increase in wealth, then the finding that wealth effects are most likely transmitted through a credit constraint effect reinforces concerns that perceived or realised housing wealth losses would exacerbate an economic downturn through reduced credit availability. For example, credit may become harder to obtain for households in an economic downturn, which can make the downturn more severe and prolonged.

Further research on the symmetry of wealth effects is needed before such a conclusion can be drawn with certainty. Further research is also needed to determine whether the responses observed by the current mid-age cohort will be replicated by the current young cohort as they age.

FURTHER INFORMATION

Attanasio, O., Blow, L., Hamilton, R. and Leicester, A. (2009), 'Booms and Busts: Consumption, House Prices and Expectations', *Economica*, 76(1): 20-50.

Campbell and Cocco (2007), 'How Do House Prices Affect Consumption? Evidence from Micro Data', *Journal of Monetary Economics*, 54(3): 591-621.

Dvornak and Kohler (2007), 'Housing Wealth, Stock Market Wealth and Consumption: A Panel Analysis for Australia', *Economic Record*, 83(261): 117-130.

This bulletin is based on the findings from the Final Report from AHURI project 60360, *Housing Wealth and Consumer Spending*.

Reports from this project can be found on the AHURI website: www.ahuri.edu.au

The following documents are available:

- Final Report

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