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Life Cycle Patterns and Boom-Bust Dynamics in U.S. Housing Prices

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ur understanding of macroeconomic fluctuations can be improved by studying the behavior of household balance sheets and financial decisions during expansions and recessions. Recent work by Glover et al. (2011) studies how changes in wages and asset prices during the latest recession affected households of various ages. They show that, while the drop in wages had a negative effect on all households, the decline in asset prices hurt older households but benefited many younger households looking for good opportunities to buy these lower-priced assets.

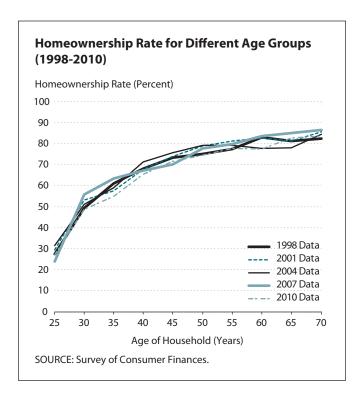
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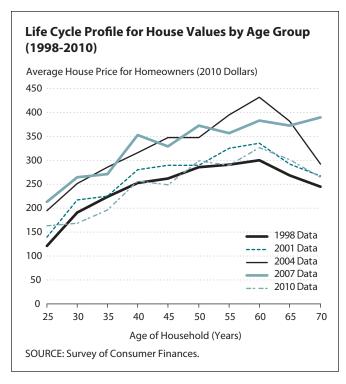
There are clear life cycle patterns in homeownership. The first chart shows the homeownership rates for different age groups every 3 years from 1998 to 2010. Recall that during this period house prices increased very rapidly until 2006 and then declined abruptly. Despite changes in housing affordability, there was no clear change in the homeownership profile over these years: The homeownership rate increased from about 30 percent for households of age 25, to about 65 percent for households of age 40, to about 80 percent for older households.

In addition to having higher homeownership rates, older households also tend to have houses of higher value. The second chart shows the life cycle profile for house values: The average value of houses doubled between 1998

and 2010 for households between the ages of 25 years and 60 years. Perhaps more remarkable is the fact that these profiles varied significantly over time. Adjusted for inflation, house prices were similar in 1998 and 2001, increased significantly until 2004, remained at similar values until 2007, and then declined abruptly from 2007 to 2010. Actually, in real terms, average house prices for households of various ages in the 1998-2001 period were similar to the prices in 2010.

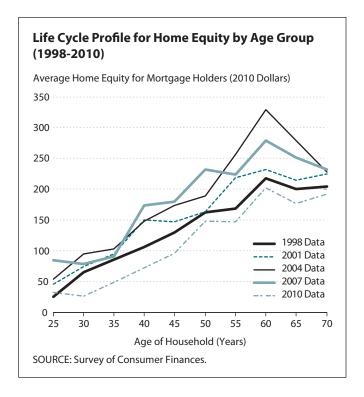
This description accounts for fluctuations in house prices but may not reflect the behavior of household wealth if borrowing patterns varied over time. The third chart shows the life cycle profile of the difference between the value of houses and the associated mortgage debt, usually





referred to as home equity. Home equity also displays a clear life cycle profile: As households age, they repay their mortgages and thus accumulate more home equity. Remarkably, home equity did not increase much for households younger than 35 years of age between 1998 and 2007 because the increase in house prices was offset by an equivalent increase in mortgage debt. This chart can help illustrate how the decline in house prices affected households: In 2010, households of age 45 had as much home equity, in real terms, as did households of age 35 in 2007. Within a period of 3 years, middle-aged households lost the same amount of home equity that is usually accumulated over a period of 10 years.

Recent work by Hatchondo, Martinez, and Sánchez (2011) shows how a simple model of the life cycle can account not only for the life cycle profile of homeownership, but also for the life cycle profiles of home equity, house prices, nonhousing savings, and mortgage payments. They use the model to study the effects of two alternative policies: restricting borrowing by setting a minimum mort-



gage down payment and making mortgages recourse loans.² They show that if these policies had been in effect before the housing boom, the rise in foreclosures could have been prevented. More research along these lines will be useful in shaping macroprudential policies that may help prevent or at least alleviate the next housing crisis.

Notes

- ¹ Here we refer to the age of the head of the household as the age of the household.
- ² If a borrower defaults on a recourse loan, the lender can seize and sell the funded asset as well as the borrower's unpledged assets or properties.

References

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