Economic SYNOPSES
short essays and reports on the economic issues of the day
2012 ■ Number 10

Home Equity and Household Income

Rajdeep Sengupta, *Economist*
Bryan J. Noeth, *Research Associate*

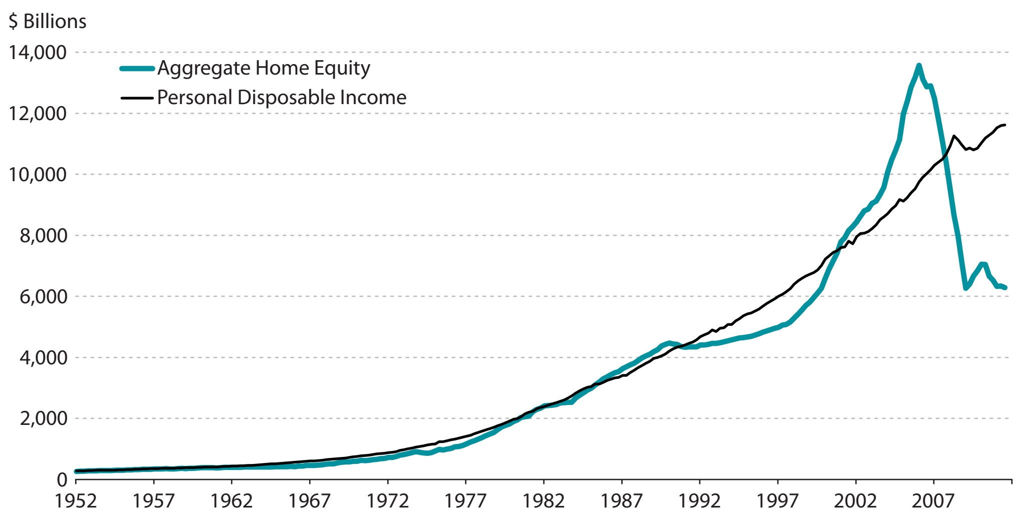
Continuing problems in the U.S. housing market are a significant concern for the ongoing economic recovery. The drop in U.S. home prices since their peak in 2006 caused household wealth to decline by around $7 trillion. Prior to this wealth shock, home prices increased rapidly for over a decade. As shown in the first chart, the appreciation in house values and the associated rise in home equity from the 1950s to the early 1990s seems to closely match the growth in personal disposable income (i.e., income net of taxes). Even before 2000, the increase in home equity did not appear disparate to the growth in personal disposable income. However, the two series show a growing "misalignment" after 2000, which was accompanied by the rapid growth of nontraditional mortgages from 2000 through 2006.

The increase in the supply of credit, especially credit facilitated by nontraditional mortgages, particularly for subprime mortgages, is believed to have contributed in no small measure to this misalignment. First, these mortgages provided an opportunity for homeownership—especially for first-time home buyers—in an environment of rapidly increasing home prices by lowering the initial down payment. Second, subprime mortgages were designed as credit accommodation and debt consolidation products, which depend on the appreciation of the underlying asset rather than the ability of the borrower to repay the loan.[1] Third, these mortgages encouraged investors to speculate in the housing market; some estimates show that investors account for half of purchase originations in states that experienced the largest housing booms and busts.[2]

During 1995-2007, home equity increased more than gross income for high-, low- and middle-income groups.

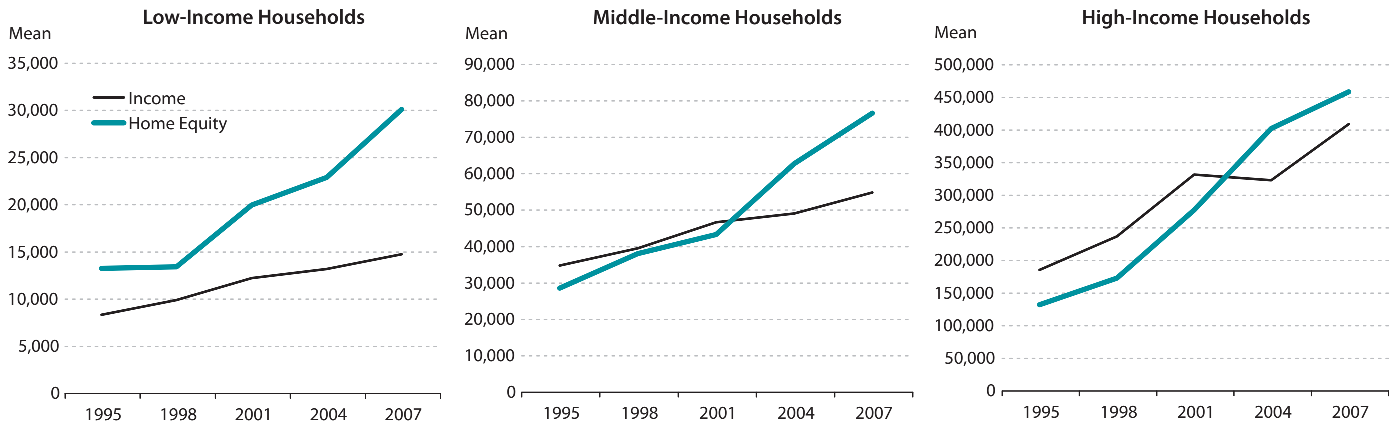
While the first chart uses aggregate data for the U.S. economy, a more interesting comparison uses disaggregated data for income groups.[3] Using Survey of Consumer Finances data from 1995 through 2007, the second chart shows the increase in mean home equity and income for households in three income groups: high income (90th to

Aggregate Home Equity and Disposable Income



NOTE: Aggregate Home Equity = Household Real Estate Assets — Home Mortgage Liabilities.
SOURCE: Federal Reserve Board Flow of Funds, Bureau of Economic Analysis, and Haver Analytics.

Home Equity and Income



NOTE: Series are mean values of groupings for individuals 22 to 65 years of age.
SOURCE: Survey of Consumer Finances.

100th percentile), middle income (40th to 60th percentile), and low income (0 to 20th percentile).[4] Over the period, home equity increased more than gross income for all three groups.

The disparity is largest for the high-income group (home equity increased at an annual growth rate of 11.03 percent, compared with 6.86 percent for income) and smallest for the low-income group (home equity increased at an annual growth rate of 7.13 percent, compared with 4.93 percent for income). To the extent that factors other than fundamentals caused the sharp increase in home equity during the early 2000s, this disparity across income groups would suggest that, contrary to conventional wisdom, the housing bust appears to have disproportionately affected higher-income households. However, it is important to remember that low-income households are more likely to have extracted home equity by using non-traditional mortgages and home-equity lines of credit, which would also explain the disparity across income groups. ■

Notes

[1] See Bhardwaj, Geetesh and Sengupta, Rajdeep. "Subprime Mortgage Design." *Journal of Banking and Finance* (forthcoming, 2012).

[2] See Haughwout, Andrew; Donghoon, Lee; Tracy, Joseph and van der Klaauw, Wilbert. "Real Estate Investors, the Leverage Cycle, and the Housing Market Crisis." Federal Reserve Bank of New York Staff Report No. 514, September 2011; www.newyorkfed.org/research/staff_reports/sr514.html.

[3] Unfortunately, these data are available only up to 2007.

[4] The asymmetry in the groups is largely a result of the summary data as presented in the Survey of Consumer Finances.