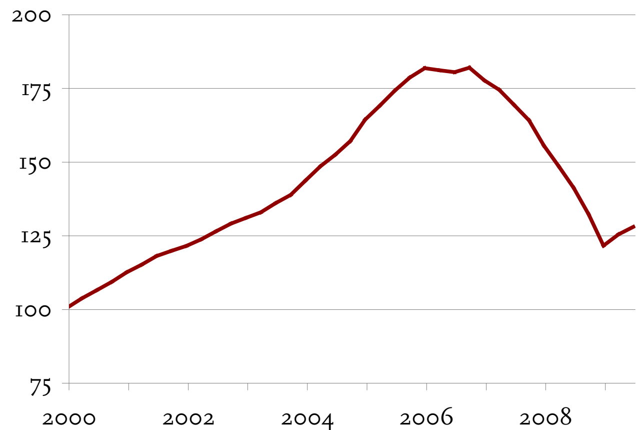
THE NRRI AND THE HOUSE

The National Retirement Risk Index (NRRI) measures the share of American households 'at risk' of being unable to maintain their pre-retirement standard of living in retirement. The Index is calculated by comparing households' projected replacement rates – retirement income as a percent of pre-retirement income – with target rates that would allow them to maintain their living standard. To make the estimates as conservative as possible, the calculation assumes that households derive the maximum possible income from the assets they hold at retirement. A crucial component of that exercise is the highly unrealistic assumption that they access their home equity through a reverse mortgage and invest the proceeds in an inflation-indexed annuity – very few households actually take reverse mortgages or buy annuities. This fact sheet looks at how not taking full advantage of housing equity affects the share of U.S. households 'at risk.'

Given the bursting of the housing bubble, it is tempting to forget how important housing is to the portfolios of older Americans. Indeed, housing prices did collapse. According to calculations based on Federal Reserve data, average house prices, indexed to 100 in 2000, rose to 180 between 2000 and 2006 and subsequently fell back to 120 by the beginning of 2009 (see Figure 1).

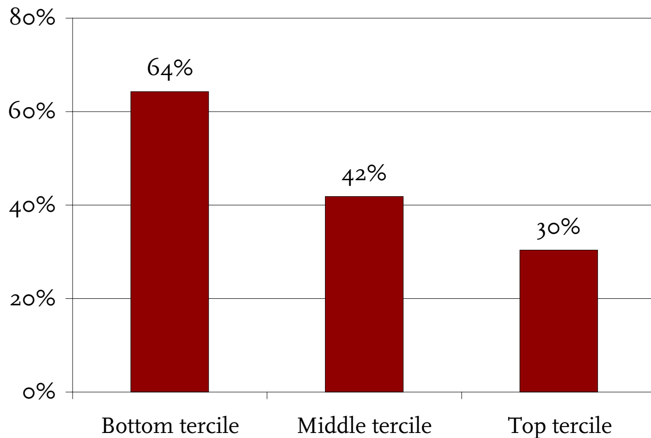
Figure 1. Index of Average U.S. Housing Prices, 2000-2009



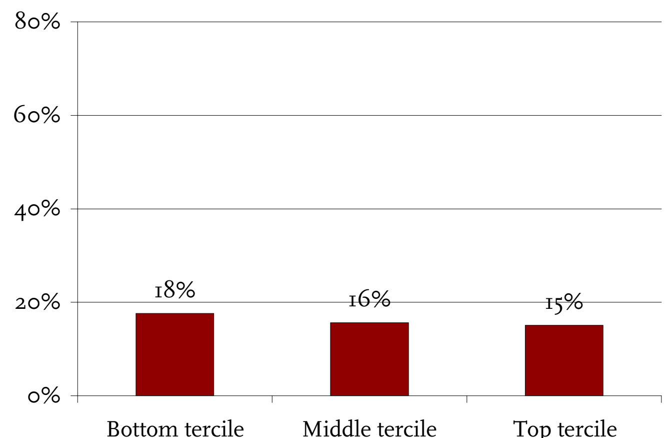
Note: Q1 2000 = 100.
Source: Authors' calculations based on the U.S. Board of Governors of the Federal Reserve System, *Flow of Funds Accounts*; and the U.S. Department of Commerce, *National Economic Accounts*.

Figure 2. Housing as a Percent of Total Wealth, by Income, 2009

A. Excluding Social Security and Defined Benefit Wealth



B. Including Social Security and Defined Benefit Wealth



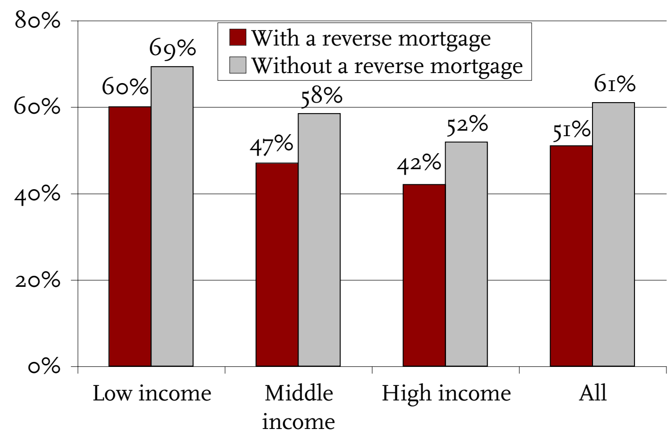
Note: The values reflect the mean of the middle 10 percent in each income tercile.
Source: Authors' calculations based on the U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances*.

However, even after the decline, housing equity remains a crucial component of the assets of most households. Figure 2 on the previous page reports the value of housing as a percent of assets, excluding Social Security and defined benefit wealth, for households in the bottom, middle, and top third of the income distribution. As one would expect, housing is the major component of wealth for the bottom tercile, but only about one third of wealth for those in the top tercile. However, including the present discounted value of lifetime Social Security and pension benefits in total wealth changes the picture substantially. Since Social Security is of such major importance for low-income households, housing as a percent of total wealth declines substantially. A smaller reduction occurs for middle and top tercile households. As a result, when wealth is defined more broadly, housing accounts for roughly the same share across income groups. Thus, reversing the treatment of housing in the NRRI would be expected to have a comparable effect across all income groups.

The treatment of housing in the NRRI is as follows. In retirement, homeowners are assumed to take out a reverse mortgage, which gives them access to a portion of the eventual proceeds from selling their home while they continue to live in the home. Since interest payments are added to the loan principal over the life of the loan to be repaid at sale, the amount that can be borrowed varies inversely with the interest rate. At current rates, the formula yields an amount equal to roughly 50 percent of the value of the house for a 65-year-old borrower. The second assumption is that the proceeds of the reverse mortgage are invested in an inflation-indexed immediate annuity, a strategy that at current interest and annuity rates will generally yield a higher lifetime income than the alternative of taking the reverse mortgage lifetime income withdrawal option. Here, interest rates have the opposite effect. The lower the rate, the less the household receives in income.

To calculate the impact of not tapping home equity, the NRRI was re-estimated assuming that households left their housing equity as a bequest. This assumption is probably more realistic than that assumed in calculating the Index, since most homeowners generally hold on to their home until they die and only 2 percent of those eligible have chosen a reverse mortgage. Not tapping home equity through a reverse mortgage increases the percent of those 'at risk' by about 10 percentage points, raising the NRRI in 2009 from 51 percent to 61 percent (see Figure 3).

Figure 3. The National Retirement Risk Index, With and Without a Reverse Mortgage



Source: Authors' calculations.

This change is striking: its impact on the percent of households 'at risk' is greater than that of the stock market crash.

Conclusion

Even after the bursting of the real estate bubble, housing remains a key piece of the retirement security puzzle. How baby boomers and future cohorts use their home equity will have a significant impact on how well they fare in retirement. Today, very few homeowners have a reverse mortgage. However, protecting home equity may be a luxury that future retirees can ill afford as Social Security replaces a smaller share of pre-retirement incomes and people rely increasingly on meager 401(k) balances rather than on traditional pensions.

The issue of home equity has implications for both households and the financial services industry. Households should be cautious about tapping their equity before retirement so that it is preserved for retirement needs. Financial services firms need to acknowledge that existing reverse mortgages are often complicated and expensive and that the industry needs to develop innovative approaches to ensure that retirees have easy and efficient access to their equity.