

#### **RESEARCH REPORT**

# Home Equity Patterns among Older American Households

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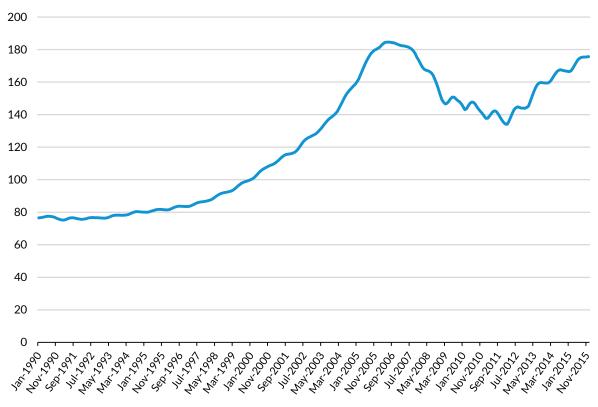
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# Introduction

The past several decades have seen dramatic changes in home values and home debt. The national S&P Case–Shiller Home Price Index more than doubled between January 1990 and its peak in July 2006 (figure 1). As home prices rose, many families took advantage of their gain in home equity and increasingly relaxed lending standards, and used cash-out refinances or took out home equity loans to finance other spending. The ratio of home debt to home value rose sharply over this period, reflecting equity extraction, homes purchased at inflated prices, and the outsized mortgages needed to finance those transactions. From their peak, home prices declined through early 2012 and registered annual decreases in early 2009 that were the largest in the history of the national S&P Case–Shiller Home Price Index dating back to 1975 (S&P Dow Jones Indices 2016a). The housing market crash triggered the financial crisis and subsequent recession that officially began in December 2007. As the recession progressed and high unemployment persisted into the early 2010s, a record number of homeowners, especially those with little or no equity, lost their homes to foreclosure (S&P Dow Jones Indices 2016b). Middle class blacks and Hispanics who bought their homes in the mid-2000s were hit especially hard (Smeeding 2012). Since 2012, home prices have rebounded and by December 2015 had nearly reached their July 2006 peak (S&P Dow Jones Indices 2016a).

For most adults near traditional retirement age, a home is their most valuable asset, dwarfing retirement accounts, other financial assets, and other nonfinancial assets. Although relatively few retirees tap into their home equity, having it provides financial security. However, future generations may be less able than past generations to draw on home equity to help finance their retirement. Later generations of homeowners have taken on more mortgage debt and financed their homes for longer periods than earlier birth cohorts (Smith et al. 2010). And although paying down a mortgage has traditionally been the norm, more and more households have instead shifted their approach to homeownership toward refinancing (Masnick, Di, and Belsky 2006). Recent data show not only that today's older Americans are more likely than their predecessors to have outstanding mortgages, but also that mortgages are the most significant source of debt among indebted older adults (Butrica and Karamcheva 2013; Joint Center for Housing Studies of Harvard University 2014).

FIGURE 1
National S&P Case-Shiller Home Price Index, 1990-2015



Source: S&P Dow Jones, Indices LLC (2016a).

This report is the first in a series examining the role that home equity could play in improving retirement security. Collectively, the reports estimate the amount of home equity that retirees hold today and will likely hold in the future, identify barriers to extracting home equity to finance retirement spending, and suggest ideas that could provide retirees with better access to their home equity.

In this first report, we analyze home equity patterns among older American households using historical and recent data collected from a nationally representative sample of older adults. We examine how much home equity older households have, who taps into that equity, how much housing debt they have, and how these patterns differ over time and across various subgroups. We also estimate the potential role that home equity could play in bolstering retirement security.

## Data

Our analysis is based on the Health and Retirement Study (HRS), a large national survey of Americans age 51 and older that has been interviewing respondents and their spouses every other year since 1992. The HRS is sponsored by the National Institute on Aging (grant number NIA U01AG009740) and is conducted by the University of Michigan. We also use the RAND HRS data file, an easy-to-use longitudinal data set with a subset of HRS variables that was developed at RAND with funding from the National Institute on Aging and the Social Security Administration. We chose the HRS instead of more typical housing and household financial data sources, such as the American Housing Survey and the Survey of Consumer Finances, because it contains detailed information on personal characteristics, health, employment, income, and financial assets in addition to information on homeownership, housing wealth, and housing debt. Furthermore, because the HRS focuses on older adults, its sample sizes are large enough to examine how home equity patterns differ by important characteristics such as education, race and ethnicity, and economic status. Finally, the HRS follows respondents over time, allowing us to observe how changes in homeownership and home equity may be related to changing personal circumstances, such as declines in health.

The data in our analysis come from HRS interviews from 1998 through 2012. We restrict our sample to households in which either the respondent or spouse is at least 65 years old. When both the respondent and spouse meet our age restriction, we select the younger adult to represent the household and its education and race.

Our key variables of interest are housing debt, home equity, and total wealth. Housing debt includes mortgages and home loans, but it excludes reverse mortgages because the HRS doesn't ask respondents to report the amount of their reverse mortgage, only whether they have one. Home equity is the home's value less housing debt. Our analyses focus on primary residences because home equity loans and reverse mortgages cannot be obtained for second homes. Total net wealth includes the value of the primary residence; other real estate; vehicles; individual retirement accounts; Keogh plans; stocks; checking accounts; savings accounts; money market accounts; certificates of deposit; bonds; and other savings net of mortgages, home loans, and nonhousing debt. It excludes the value of future defined-benefit pensions and Social Security benefits. We report income, assets, and debt in 2015 dollars.

# Findings

We begin by reporting on trends in homeownership. We then examine trends in home equity and housing debt among owner-occupied households. Next we look at the share of older households who tap into their home equity and analyze the extent to which home equity could be used to increase retirement income. When sample sizes permit, we show these results by income level, race and ethnicity, and educational attainment.<sup>7</sup>

#### Trends in Older Homeownership Rates Remain Steady

According to US Census Bureau data, homeownership rates in the United States changed course after the Great Recession, increasing steadily between 1998 and 2006 and then falling steadily through 2015 (US Census Bureau 2016). Consequently, the overall homeownership rate declined 1.5 percent from 66.4 percent in 1998 to 65.4 percent in 2012, with the largest decline happening for those under age 45. In contrast, the homeownership rate of adults age 65 and older increased 1.9 percent (from 79.2 to 80.7 percent) during this period. Since 2012, homeownership rates have fallen even further for all age groups (US Census Bureau 2016). Consistent with US Census Bureau data, HRS data show the share of households age 65 and older who own their home increased slightly from 75.3 percent in 1998 to 78.2 percent in 2012 (table 1). Preliminary HRS data show that the share then declined slightly to 77.2 percent in 2014 (not shown in table 1).

#### Home Equity Values Mirror Changes in the Economy

Changes in home values, home debt, and housing equity generally reflect the booms and busts of the housing market and economy. The typical owner-occupied household age 65 and older saw its home equity increase 42 percent between 2000 and 2006 from \$117,000 to \$166,000 in inflation-adjusted dollars. Home equity then declined 22 percent through 2012 to only \$129,000. Despite the decline after 2006, median home equity values remained 10 percent higher in 2012 than in 1998. Although today's older owner-occupied households have significantly more housing equity than their predecessors, the size of their home equity relative to their total wealth has not changed much over this period, ranging from 51.2 to 58 percent. To some extent, this trend can be explained by the increased prevalence of 401(k) plans and individual retirement accounts, which boosted household wealth.

TABLE 1

Trends in Homeownership Rates, Home Values, Home Equity, and Housing Debt among Owner-Occupied Households Age 65 and Older

		Owner-Occupied Households				Owner-Occupied Households with Housing Debt				
Year	Share of homeowners, all households	Median home value	Median HE	Median HE as a share of total wealth	Share with housing debt	Median home value	Median housing debt	Median LTV	Share with ≥ 80% LTV	Share underwater
1998	75.3%	\$126	\$117	53.0%	23.9%	\$146	\$44	31.4%	8.4%	2.9%
2000	76.1%	\$120 \$138	\$117 \$117	51.7%	26.1%	\$160	\$50	34.0%	9.9%	3.5%
2002	76.3%	\$146	\$133	54.0%	27.3%	\$186	\$53	33.3%	8.6%	3.1%
2004	76.1%	\$164	\$145	54.4%	29.9%	\$212	\$67	33.3%	7.8%	2.8%
2006	76.1%	\$183	\$166	58.0%	32.4%	\$237	\$71	31.8%	8.1%	3.3%
2008	76.6%	\$185	\$162	54.4%	34.2%	\$221	\$73	34.8%	12.7%	4.0%
2010	77.8%	\$163	\$142	51.2%	34.8%	\$207	\$76	40.0%	15.9%	7.3%
2012	78.2%	\$155	\$129	51.9%	35.0%	\$191	\$82	44.6%	19.5%	8.2%
Percentage change										
1998-2006	1%	45%	42%	9%	36%	62%	61%	1%	-4%	14%
2006-2012	3%	-15%	-22%	-11%	8%	-19%	15%	40%	141%	152%
1998-2012	4%	23%	10%	-2%	46%	31%	86%	42%	131%	187%

**Source**: University of Michigan Health and Retirement Study.

**Notes**: HE = home equity; LTV = loan-to-value ratio. Dollar amounts are reported in thousands of 2015 dollars. A homeowner's mortgage is considered "underwater" if the LTV ratio is more than 100 percent, meaning the homeowner owes more than the house is worth.

#### Older Homeowners Are Increasingly Indebted

Home equity patterns reflect the housing boom of the 1990s and early 2000s, when home values skyrocketed, followed by the housing bust after 2006, when home values plummeted. However, home equity patterns also reflect trends in housing debt. Nationally, outstanding mortgage debt increased from \$2.5 to \$11.3 trillion between 1990 and 2006 and then declined to \$9.9 trillion in 2015.

We find that between 1998 and 2012, the share of owner-occupied households age 65 and older with housing debt increased from 23.9 to 35 percent. Further, their level of indebtedness nearly doubled from a median of \$44,000 to \$82,000. Most of the increase both in the percentage of older homeowners with housing debt and in their level of housing debt took place before the recession. Although rising medical costs might have played a role in rising debt by forcing older homeowners to borrow against home equity to pay medical bills or preventing them from paying down mortgages as fast as they would otherwise, changing societal attitudes about debt and a false security in home equity driven by the rapid rise in home values in the early 2000s were probably more important factors. The proliferation of innovative mortgage products, the streamlining of home equity and mortgage lending processes, and the aggressive actions of some lenders may have also played a role (Mian and Sufi 2009).

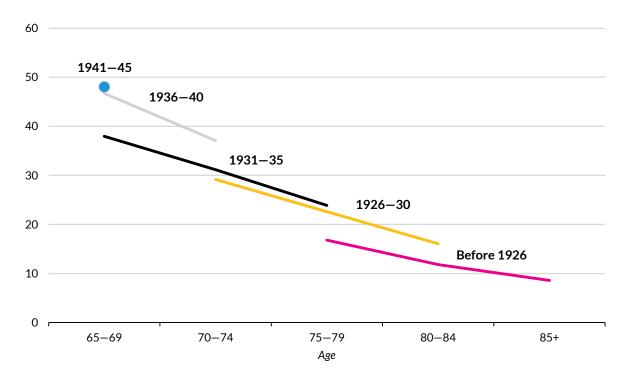
Debt levels continued to rise, though more slowly, after the start of the recession as people lost their jobs, incomes fell, and families struggled to make ends meet. Rising debt and falling home values contributed to the decline in home equity between 2006 and 2012.

Closer inspection of the data by birth year reveals that recent cohorts of older homeowners are more likely than earlier cohorts to have housing debt and to be more indebted at the same ages. At ages 65 to 69, for example, the share of owner-occupied households with housing debt was 48 percent for those born from 1941 to 1945, but only 38 percent for those born from 1931 to 1935 (figure 2). In addition, the median amount of housing debt among those with debt was \$87,000 for those born from 1941 to 1945, but only \$55,000 for those born from 1931 to 1935 (figure 3). Similar cohort differences exist across the age groups. Consequently, today's households are more likely to have debt at older ages because they are entering their retirement years with more debt.

Debt is not necessarily concerning, but it becomes riskier as the amount of debt increases relative to the home value. Trends in loan-to-value (LTV) ratios—the ratio of housing debt to the home value—show that older households with housing debt are increasingly leveraged. The median LTV ratio was only 31.4 percent in 1998 but 44.6 percent in 2012 (table 1).

High LTV ratios signal homes that are risky assets. In fact, most lenders will charge higher interest rates or require private mortgage insurance on loans for more than 80 percent of the home's value to cover the credit losses they expect because such loans are riskier. The share of older owner-occupants with housing debt who had LTV ratios of at least 80 percent more than doubled from 1998 to 2012, with all the increase occurring after the Great Recession. The percentage was only 8.4 percent in 1998; it increased and decreased slightly between 1998 and 2006 and then increased dramatically from 8.1 to 19.5 percent between 2006 and 2012. A homeowner's mortgage is considered "underwater" if the LTV ratio is more than 100 percent—meaning the homeowner owes more than the house is worth. Among households age 65 and older with debt, the share underwater nearly tripled between 1998 and 2012, with most of the increase occurring after the Great Recession. Between 1998 and 2006, the percentage of those underwater hovered at around 3 percent; between 2006 and 2012, it increased from 3.3 to 8.2 percent.

FIGURE 2
Share of Owner-Occupied Households Age 65 and Older with Housing Debt, by Age and Birth Year
Percentage

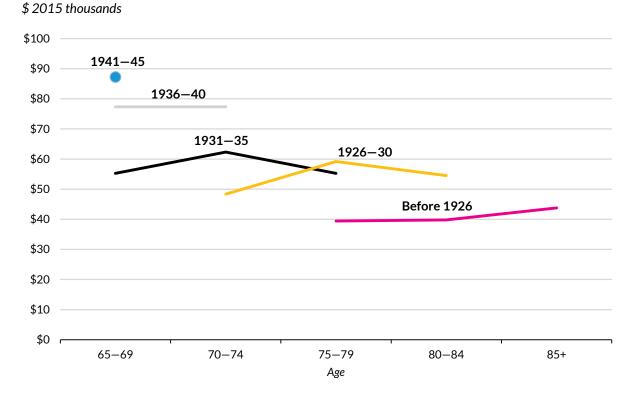


Source: University of Michigan Health and Retirement Study.

Although it's possible that the trend in higher LTV ratios could be driven by a large decline over time in home values, we find that home values actually increased over this period, though not by nearly as much as housing debt. Between 1998 and 2012, median home values among indebted households increased 31 percent; median housing debt increased 86 percent. Also note that between 2006 and 2012, median home values declined 19 percent, but median housing debt still increased 15 percent.

FIGURE 3

Median Housing Debt among Owner-Occupied Households Age 65 and Older with Debt, by Age and Birth Year



Source: University of Michigan Health and Retirement Study.

#### More Older Homeowners Tap into Their Home Equity

Homeowners can tap into their home equity in several ways. They can take out a home equity loan (also known as a second mortgage), obtain and borrow against a home equity line of credit (HELOC), refinance their home with a larger mortgage and take the cash (known as a cash-out refinance), or get a

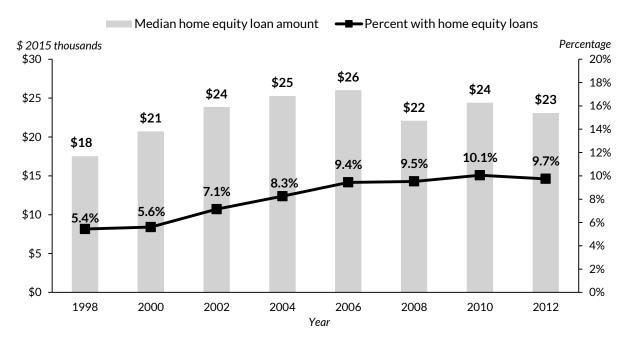
reverse mortgage. They can also sell their home, purchase a less expensive home or rent, and pocket the net proceeds.

The proportion of owner-occupied households age 65 and older who withdrew equity from their home through home equity loans or HELOCs increased dramatically between 1998 and 2012, from 5.4 to 9.7 percent (figure 4). The median loan balance, among those with loans, also increased substantially from \$18,000 to \$23,000 over this period. Deggendorf and Wilcox note that many homeowners undervalue their home equity, suggesting that these statistics might have been even higher had homeowners realized what their housing asset was truly worth. 9

From the data, we observe households taking actions that give them an opportunity to tap into their home equity, such as refinancing their mortgage or selling their home. However, unless households have a home equity loan or a HELOC balance, we can't be certain they withdrew equity. With this in mind, the proportion of older homeowners who potentially tapped into their equity in 2012 increases from 9.7 percent (figure 4) to 16.6 percent (figure 5) if we consider the other ways they might have withdrawn their home equity. Nine percent of households borrowed against their HELOC, 3.9 percent refinanced their mortgage, 1.8 percent made money off the sale of their home, 1.7 percent took out a home equity loan, and 1 percent took a reverse mortgage. The median balance among older households with home equity loans was \$27,000 in 2012 (figure 6). Among those who borrowed against their home equity lines of credit, the median balance was \$24,000, and among those who made money off the sale of their homes, the median profit was \$97,000.

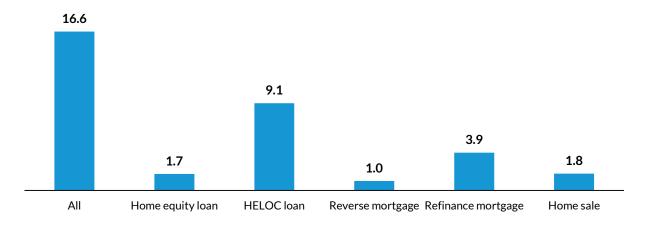
Although respondents don't report why they tapped into their home equity, we can establish some correlations. To do this, we follow households from 2002 to 2012 to observe how their home equity changed depending on whether they experienced a health-related event. We identify households that include a respondent or spouse who reports a nursing home stay or the onset of poor health, a work-limiting condition, or an activity of daily living (ADL) impairment. Our sample is restricted to households that owned their homes in 2002 and did not report any of these health events in that year. Because the oldest households are more likely to experience health events, we separately follow households ages 65 to 69 in 2002 and those age 70 and older in 2002.

FIGURE 4
Share of Owner-Occupied Households Age 65 and Older with Home Equity Loans, and Median Loan Balance among Those with Loans



Source: University of Michigan Health and Retirement Study.

FIGURE 5
Share of Owner-Occupied Households Age 65 and Older Who Potentially Tapped into their Home Equity in 2012, by Method Used
Percentage



**Source:** University of Michigan Health and Retirement Study. **Note:** HELOC = home equity line of credit.

We find that median home equity values declined over the 10-year period for all owner-occupied households in our sample, but values fell significantly more for the oldest households and those that experienced a health-related event during the period. For those ages 65 to 69, for example, median home equity declined 12.1 percent if they experienced a work-limiting condition after 2002 but only 6.7 percent if they didn't (figure 7). The differences are more pronounced among even older households. For those age 70 and older, median home equity declined 33.9 percent if they experienced a work-limiting condition after 2002 but only 25.5 percent if they didn't. For the most part, we find similar differences when we consider poor health, nursing home stays, and difficulties with ADLs.

FIGURE 6

Median Amount of Home Equity Potentially Tapped by Owner-Occupied Households Age 65 and Older in 2012, by Method Used

\$ 2015 thousands



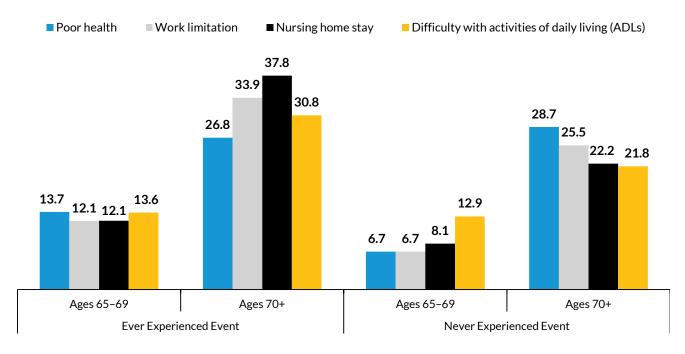
**Source:** University of Michigan Health and Retirement Study. **Note:** HELOC = home equity line of credit.

We can't say with certainty that home equity declined because homeowners extracted some housing wealth to help cover the costs of unexpected health events. Indeed, we find that home equity declined over time for all homeowners in 2002, possibly because home values declined after the Great Recession (as we've already discussed), or homeowners sold their homes after 2002 (because we don't require that those in our sample remained homeowners after 2002), or homeowners tapped into their home equity to deal with other circumstances that we didn't measure. However, the differences we find between households that experienced a health event and those that didn't suggest that these events may have triggered home equity withdrawals.

FIGURE 7

Percentage Decline between 2002 and 2012 in Median Home Equity among Owner-Occupied Households Age 65 and Older in 2002, by Age and Whether Household Experienced a Health-Related Event after 2002

Percentage



Source: University of Michigan Health and Retirement Study.

# Home Equity Can Significantly Improve Retirement Security

Our analysis shows that most older homeowners, even those with housing debt, have amassed a lot of equity in their homes. As a last resort, homeowners could liquidate their home equity (rather than tapping into just a portion of it) to improve their retirement incomes and maintain their economic well-being. Butrica, Murphy, and Zedlewski (2009); Butrica, lams, and Smith (2013); and other researchers have demonstrated that poverty is lower than the official rate when the value of housing and annuitized financial assets, in addition to income, are counted as resources.

We estimate the potential role that home equity could play in bolstering retirement security by computing the annuitized value of home equity net of the cost to rent. <sup>12</sup> Our estimates are for

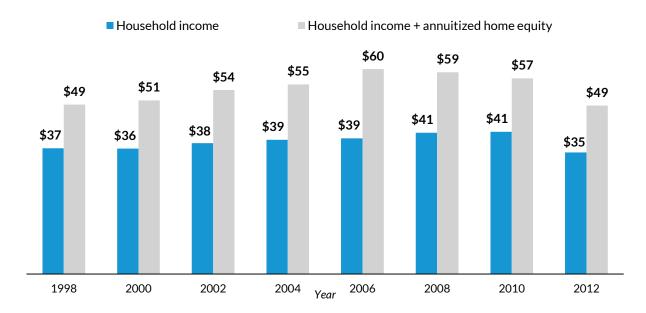
illustrative purposes only because they assume homeowners get the market value when they sell their homes, annuitize all the equity in their homes, and pay no fees.

At the prerecession peak, owner-occupied households could have increased their incomes 54 percent—from \$39,000 to \$60,000—by selling their homes and annuitizing the proceeds (figure 8). Even in 2012, selling their homes and annuitizing the proceeds would have increased their incomes 40 percent, from \$35,000 to \$49,000.

FIGURE 8

Median Household Income among Owner-Occupied Households Age 65 and Older, with and without Accounting for Home Equity

\$ 2015 thousands



Source: University of Michigan Health and Retirement Study.

#### Home Equity Patterns Vary Widely

Homeownership rates among older adults vary widely by income, race and ethnicity, and education. Among households age 65 and older in 2012, only 58.5 percent of the lowest-income households, 63.9 percent of non-Hispanic black households, 62.8 percent of Hispanic households, and 60.6 percent of those without high school diplomas owned their homes (table 2). In contrast, 91 percent of the highest-income households, 81.3 percent of non-Hispanic white households, and 88.1 percent of households with college degrees owned their homes.

In general, minority and low-socioeconomic-status homeowners amassed the least equity in their homes, but it represented nearly all their wealth. Among owner-occupied households, non-Hispanic white households had median home equity values (\$134,000) that were nearly twice those of non-Hispanic blacks (\$72,000) and Hispanics (\$77,000). Yet home equity was only 46.7 percent of total net wealth for non-Hispanic whites. In contrast, home equity represented 86.8 percent of total net wealth for non-Hispanic blacks and 88.6 percent for Hispanics.

The ability to obtain mortgages and home equity loans and the amount available to borrow is tied to income. Only about one-quarter (25.2 percent) of owner-occupied households with the lowest incomes had housing debt in 2012, compared with almost half (48 percent) of those with the highest incomes. Among those with housing debt, the median lowest-income household owed \$49,000; the median highest-income household owed \$120,000. Although education patterns mimic income patterns, differences by race and ethnicity are much less pronounced. For example, 35.1 percent of non-Hispanic white, 37.9 percent of non-Hispanic black, and 32 percent of Hispanic owner-occupied households had housing debt. Additionally, the typical amount owed was \$82,000 for non-Hispanic whites, \$65,000 for non-Hispanic blacks, and \$82,000 for Hispanics.

Not surprisingly, minorities and people with lower socioeconomic status are also more likely to be overextended. Among owner-occupied households with housing debt, nearly one-quarter with lower income, one-third of non-Hispanic black households, one-quarter of Hispanic households, and one-quarter of those without high school diplomas had LTV ratios of at least 80 percent in 2012.

Higher-income, non-Hispanic white, and college-educated older households were more likely to potentially tap into their home equity than those with lower incomes, those who are nonwhite, and those without high school diplomas (figure 9). For example, high-income households were more than twice as likely as low-income households to take out a home equity loan, borrow against their HELOC, take a reverse mortgage, refinance their mortgage, or make money off the sale of their home (23.4 versus 9.2 percent). In general, minority and low-socioeconomic-status homeowners have the most to gain from using their homes to increase their retirement incomes (figure 10). Owner-occupied households age 65 and older could increase their incomes 45 percent among those in the lowest income group and 56 percent among those without high school diplomas. In contrast, those in the highest income group could increase their incomes 17 percent and those with college degrees 32 percent. Nonetheless, older homeowners with low incomes, who are non-Hispanic black or Hispanic, or who lack high school diplomas would have median incomes dramatically lower than their counterparts, even accounting for their homes.

TABLE 2

Trends in Homeownership Rates, Home Values, Home Equity, and Housing Debt among Owner-Occupied Households Age 65 and Older in 2012, by Income, Race/Ethnicity, and Education

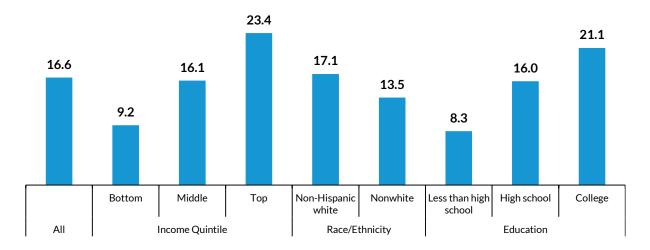
Year	Share of homeowners, all households	Owner-Occupied Households				Owner-Occupied Households with Housing Debt					
		Median home value	Median HE	Median HE as a share of total wealth	Share with housing debt	Median home value	Median housing debt	Median LTV	Share with ≥ 80% LTV	Share underwater	
All	78.2%	\$155	\$129	51.9%	35.0%	\$191	\$82	44.6%	19.5%	8.2%	
Income Bottom Middle Top	58.5% 81.6% 91.0%	\$90 \$155 \$247	\$77 \$124 \$180	87.5% 51.9% 31.4%	25.2% 32.0% 48.0%	\$124 \$180 \$258	\$49 \$75 \$120	50.0% 43.0% 47.1%	22.5% 17.9% 17.3%	9.6% 8.4% 7.1%	
Race/ethnicity Non-Hispanic white Non-Hispanic black Hispanic	81.3% 63.9% 62.8%	\$165 \$93 \$103	\$134 \$72 \$77	46.7% 86.8% 88.6%	35.1% 37.9% 32.0%	\$206 \$124 \$155	\$82 \$65 \$82	43.1% 50.4% 54.0%	18.2% 29.7% 24.2%	7.6% 13.8% 11.5%	
Education Less than high school High school College	60.6% 78.9% 88.1%	\$85 \$144 \$253	\$76 \$111 \$191	84.2% 55.2% 38.4%	20.2% 33.3% 44.3%	\$102 \$155 \$268	\$41 \$70 \$107	45.0% 47.7% 41.3%	23.4% 21.7% 15.9%	9.1% 9.4% 6.6%	

**Source**: University of Michigan Health and Retirement Study.

**Notes**: HE = home equity; LTV = loan-to-value ratio. Dollar amounts are reported in thousands of 2015 dollars. A homeowner's mortgage is considered "underwater" if the LTV ratio is more than 100 percent, meaning the homeowner owes more than the house is worth.

FIGURE 9
Share of Owner-Occupied Households Age 65 and Older Who Potentially Tapped into their Home Equity in 2012, by Income, Race or Ethnicity, and Education

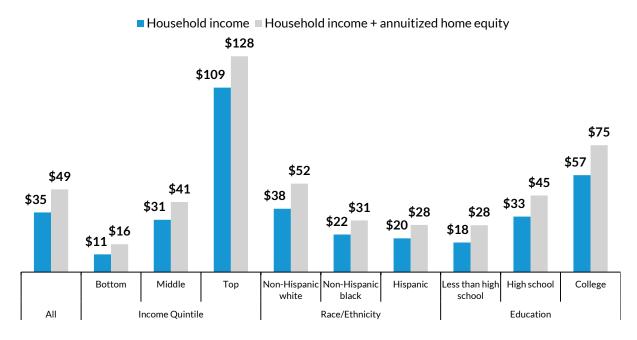
Percentage



Source: University of Michigan Health and Retirement Study.

FIGURE 10

Median Household Income among Owner-Occupied Households Age 65 and Older in 2012, with and without Accounting for Home Equity, by Income, Race or Ethnicity, and Education \$ 2015 thousands



Source: University of Michigan Health and Retirement Study.

# Discussion

For most Americans, owning a home symbolizes the American dream. Not only does a house meet the basic need of shelter, but it's an asset that typically can be used to build wealth as homeowners pay down their mortgages. In fact, many retirement security experts argue that the conventional three-legged stool of retirement resources—Social Security, pensions, and savings—is incomplete because it ignores the home (Brady, Burham, and Holden 2012). Unlike pensions and savings, the majority of older adults, regardless of income, race and ethnicity, and education, own homes that they could use to help finance their retirement.

However, we find that the prospects for accessing home equity diminished substantially after the Great Recession. At the peak of the housing bubble, older homeowners could have increased their retirement income as much as 54 percent by tapping into their home equity. But the housing bubble burst, home values collapsed, and housing debt continued mounting. By 2012, older homeowners could expect to boost their retirement incomes only 40 percent by withdrawing home equity. Nevertheless, the typical owner-occupied household age 65 and older had amassed 10 percent more home equity in 2012 than it had in 1998.

Current housing trends suggest today's older homeowners are even better positioned to use their homes for extra income and more retirement security than they were just two years ago. According to recent census data, their median home value increased 3 percent between 2012 and 2014 to \$170,000.<sup>13</sup>

Of course, older homeowners' financial prospects depend not only on their home's value but also on their housing debt. Although industry data show that the share of Americans with underwater mortgages declined steadily from 31.4 to 13.1 percent between 2012 and 2015, <sup>14</sup> we know from this study that older adults have become increasingly indebted, and more importantly, increasingly leveraged. This is especially true for low-income and black households. Between 1998 and 2012, the median amount of housing debt for owner-occupants with housing debt increased 86 percent overall but 113 percent for low-income households and 150 percent for non-Hispanic black households. The median LTV ratio increased 42 percent overall but 100 percent for low-income households and 68 percent for non-Hispanic blacks. <sup>15</sup>

If these trends continue into the future, retirement security will increasingly depend on retirees having enough income and assets to pay for basic living expenses and to service their debt. In fact, Butrica and Karamcheva (2013) find evidence that older adults deal with their indebtedness by delaying

their retirement and Social Security benefit receipt. Among the sources of debt they analyze, mortgage debt consistently has a stronger effect on labor supply and Social Security receipt than credit card or other debt. Likewise, Ondrich and Falevich (2016) find that declines in housing wealth during the Great Recession lowered married men's likelihood of retiring 14 to 17 percent.

Ideally, older adults would pay off their debts well before retirement age. Accordingly, it is important to identify those who are financially fragile, to better understand their circumstances, and to look for ways to help dig them out of debt before retirement. Financial education and stricter regulations for lending institutions are among the ways that policymakers might help achieve this goal.

Finally, although minority and low-socioeconomic-status homeowners could experience the largest increases in retirement income by using their home equity, they would remain significantly worse off than their non-Hispanic white and high-socioeconomic-status counterparts. For disadvantaged homeowners, Social Security benefits will be their most important source of retirement income, and policymakers working to improve the financial solvency of the program must consider options that protect their benefits.

# **Notes**

- 1. This is a composite of single-family home price indices for the nine US census divisions.
- Index values before May 18, 2006, when the index was launched, are backcasted using the same methodology used to calculate current index values. The first year of available data for the national S&P Case-Shiller Home Price Index is 1975.
- Health and Retirement Study (HRS) public use dataset. Produced and distributed by the University of Michigan
  with funding from the National Institute on Aging (grant number NIA U01AG009740). See "HRS Health and
  Retirement Study: A Longitudinal Study of Health, Retirement, and Aging Sponsored by the National Institute
  on Aging," University of Michigan, accessed October 17, 2016,
  http://hrsonline.isr.umich.edu/index.php?p=start.
- 4. RAND HRS Data, Version O. Produced by the RAND Center for the Study of Aging with funding from the National Institute on Aging and the Social Security Administration. See "RAND HRS data files, supported by NIA and SSA," RAND Corporation, accessed October 17, 2016, http://www.rand.org/labor/aging/dataprod/hrs-data.html.
- 5. Most of the relevant HRS survey questions are consistently asked from 1998 onward.
- 6. Starting in 2010, respondents can identify reverse mortgages when reporting loans that use property as collateral. This information is not available in earlier years.
- 7. We constructed income quintiles based on the distribution of total income among households age 65 and older. The bottom quintile includes households with incomes below the 20th percentile of the income distribution. The middle quintile includes those with incomes between the 40th and 60th percentiles. The top quintile includes those with income at or above the 80th percentile of the income distribution.
- 8. Board of Governors of the Federal Reserve System (US), "Mortgage Debt Outstanding by Type of Property: One- to Four-Family Residences," FRED, Federal Reserve Bank of St. Louis, accessed May 13, 2016, https://research.stlouisfed.org/fred2/series/MDOTP1T4FR.
- Steve Deggendorf and James Wilcox, "Invisible Equity: Do Homeowners See How Much Home Equity They
  Are Sitting On?" FM Commentary, August 3, 2015, http://www.fanniemae.com/portal/aboutus/media/commentary/080315-deggendorf-wilcox.html.
- 10. Net proceeds from home sales are computed by subtracting homeowners' mortgage balance, home loan balance, and new home purchase price (for respondents who purchase a new home) from the current home sale price.
- 11. ADLs include walking across a room, dressing, bathing or showering, eating, and getting into or out of bed.
- 12. We use annuity factors based on life tables from the Social Security Office of the Chief Actuary that vary by age (the younger of the respondent or spouse in a given household) and assume a 6 percent nominal rate of return on assets. We calculate the savings in rent from owning a home (imputed rent) as a 3 percent rate of return on the home value. We account for the rent homeowners would have to pay if they gave up their homes by subtracting the imputed rent from the annuitized value of home equity.
- 13. Authors' calculations from the American Community Survey.
- 14. Svenja Gudell, "Methodology: Negative Equity," *Zillow*, August 23, 2012, http://www.zillow.com/research/q4-2015-negative-equity-11906/.
- 15. The changes between 1998 and 2012 for all older households are reported in table 1. The changes for low-income households and non-Hispanic black households are not shown.

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## References

- Brady, Peter, Kimberly Burham, and Sarah Holden. 2012. *The Success of the U.S. Retirement System*. Washington, DC: Investment Company Institute.
- Butrica, Barbara A., Howard M. Iams, and Karen E. Smith. 2013. "The Poverty Status of Older Americans: How You Measure It Matters." Unpublished Manuscript.
- Butrica, Barbara A., and Nadia S. Karamcheva. 2013. "Does Household Debt Influence the Labor Supply and Benefit Claiming Decisions of Older Americans?" Working paper 2013-22. Chestnut Hill, MA: Center for Retirement Research.
- Butrica, Barbara A., Daniel P. Murphy, and Sheila R. Zedlewski. 2009. "How Many Struggle to Get By in Retirement." Gerontologist 50 (4): 482–94.
- Joint Center for Housing Studies of Harvard University. 2014. Housing America's Older Adults: Meeting the Needs of an Aging Population. Cambridge, MA: Joint Center for Housing Studies of Harvard University.
- Masnick, George S., Zhu Xiao Di, and Eric S. Belsky. 2006. "Emerging Cohort Trends in Housing Debt and Home Equity." Housing Policy Debate 17 (3): 491–527.
- Mian, Atif, and Amir Sufi. 2009. "The Consequences of Mortgage Credit Expansion: Evidence from the U.S. Mortgage Default Crisis." *Quarterly Journal of Economics* 124 (4): 1449–96.
- Ondrich, Jan, and Alexander Falevich. 2016. "The Great Recession, Housing Wealth, and the Retirement Decisions of Older Workers." *Public Finance Review* 44 (1): 109–31.
- S&P Dow Jones Indices. 2016a. S&P/Case-Shiller U.S. National Home Price Index. New York: McGraw-Hill Financial.
- ———. 2016b. S&P/Experian First Mortgage Default Index. New York: McGraw-Hill Financial.
- Smeeding, Timothy. 2012. "Income, Wealth, and Debt and the Great Recession." Stanford, CA: Stanford Center on Poverty and Inequality.
- Smith, Karen E., Melissa Favreault, Barbara Butrica, and Philip Issa. 2010. Final Report: Modeling Income in the Near Term, Version 6. Washington DC: Urban Institute.
- US Census Bureau. 2016. "Current Population Survey/Housing Vacancy Survey, Series H-111." Washington, DC: US Census Bureau.

24 REFERENCES

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