Jason J. Fichtner, PhD Johns Hopkins University Jason.Fichtner@jhu.edu

Home Ownership and Housing Debt in Retirement: Financial Asset for Consumption Smoothing or Albatross Around the Neck of Retirees?

Center for Financial Security

University of Wisconsin-Madison

1300 Linden Drive Madison, WI 53706

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Abstract

For many retirees, the home is their most valuable asset. A house is used both as investment and to support consumption. If the home is paid for at retirement, the retiree no longer has to service a mortgage or pay monthly rent, freeing up retirement income for other purposes. However, an outstanding mortgage creates a greater amount of mandatory expense that may threaten the ability of Social Security benefits to replace income available for consumption in retirement. Additionally, home equity can be used to finance consumption in retirement, be it general or targeted, such as for emergent health-related expenses or a financial emergency. This research uses the Health and Retirement Study (HRS) panel data for 1992–2016 to investigate how the changing nature of housing debt in retirement impacts retirement security.

1. Introduction

For many retirees, the home is their most valuable asset. A house can be used both as an investment and to support consumption. If the home is paid for at retirement, the retiree no longer has to service a mortgage or pay monthly rent, freeing up retirement income for other purposes. In this case, a large portion of income from Social Security can be devoted to consumption, benefiting the household's standard of living in retirement. However, an outstanding mortgage creates a greater amount of mandatory expense that may threaten the ability of Social Security benefits to replace income available for consumption in retirement.

Additionally, home equity can be used to finance consumption in retirement, be it general or targeted, such as for emergent health-related expenses or a financial emergency. While recent trends in housing asset appreciation appear to be improving the financial well-being of older Americans, without an understanding the level and use of housing debt it is difficult to know whether homeowners are in fact more financially secure in retirement.

In a previous paper for the SSA RDRC, I showed how debt levels, including housing debt, have increased over time. This investigation led to further inquiry regarding whether increased housing debt, controlling for assets levels, is being used in a strategic manner, for instance to pay off higher-cost debt, smooth consumption, or weather financial shocks (such as a health-related shock), or it is driving up debt-servicing costs to the detriment of financial well-being in retirement.

This research paper addresses three related topics. First, the paper updates information on how household mortgage-related debt has evolved for various cohorts in the Health and Retirement Study. Second, the paper offers an inquiry into how homeowners use home debt near and in retirement. Third, the paper considers what important public policy lessons may be gleaned regarding the role of home-related debt in a financially secure retirement.

This research uses the Health and Retirement Study (HRS) panel data for 1992–2016 to investigate housing debt and conduct an analysis into the impact of the changing nature of

housing debt in retirement on retirement security. Home mortgage interest rates have been generally declining or low since 1992, and home mortgage rates have been under 6% since the 2008 financial crisis (for a traditional 30-year fixed loan).

While the HRS data collection began in 1992, questions pertaining to the date of home purchases and sales did not begin until later waves of the HRS. Beginning with the 2008 wave, the HRS began asking questions related to the mortgage crisis. Hence, while this research looks at the entirety of the HRS to get insights into how housing debt and the use of housing debt has changed since 1992, the primary focus of attention will be on data beginning with the 2008 HRS.

One theory justifying housing debt specifically, controlling for net worth, is that such debt finances home ownership, which can help to protect overall wealth from both idiosyncratic shocks and the adverse impacts of financial cycles, reducing some forms of financial vulnerability. This theory may be particularly true for fixed-interest rate housing debt, which makes up the majority of home loans. *In this case, controlling for net worth, households utilizing some housing debt should be seen to do better on measures of financial and overall well-being.*Additionally, if lower interest rates allow households to either refinance existing debt or take on more debt but reduce monthly debt servicing payments, such debt can further improve financial well-being.

However, an alternate theory is that housing debt crowds out a household's ability to spend on other needs in retirement, thereby inflicting additional risk on the household's balance sheet and creating additional financial and psychological stress. *In this case, controlling for net worth, households holding housing debt should be seen to do worse in terms of financial and overall well-being.*

Both stories may be valid, depending on the relative magnitude of housing debt, the availability of other sources of income, and the age of the household. Using specifications for housing debt and financial measures within the HRS, this research explores the use of housing debt for retirees and near-retirees.

Note that the data upon which this research was conducted were collected before the current economic recession and health pandemic, which has caused considerable social, economic, and financial disruption. While the analysis does not cover the current crisis facing the country, some attempt will be made throughout the paper to touch upon the likely meaning of the results in the context of current economic conditions.

2. Literature Review

Paying off a mortgage was once considered a rite of passage to be completed before retirement. As Michelle Singletary, the financial columnist for the *Washington Post*, noted:

There was a time when people had mortgage-burning parties to celebrate the day they were released from their biggest debt. My grandmother, Big Mama, longed for the day she would no longer have a *mortgage albatross around her neck*. Without a mortgage, Big Mama lived comfortably in retirement for more than two decades on Social Security and a small pension. She didn't have a retirement nest egg of seven figures, either. (Singletary 2018) (Emphasis added.)

However, mortgage-burning parties no longer seem the norm. While 37% of U.S. homes no longer have a mortgage attached to them (Hagan 2019),¹ the share of households headed by someone older than 65 that have a mortgage has increased from 32% in 2009 to 38% in 2017, according to data from the American Community Survey (Neal 2019). Currently, more than 9 million households age 65 or older have mortgage debt (Rexrode 2020).

Recent surveys show that older Americans have taken on substantially more debt and face more financial insecurity as they near retirement, compared to their predecessors, mostly due to having purchased more expensive homes with smaller down payments (Lusardi, Mitchell, and Oggero 2017, 2018). An increasing share of homeowners aged 65 and older are now carrying some type of home debt. According to a report by the Joint Center for Housing Studies of Harvard University (2019), in 2016, 46% of homeowners aged 65–79 and 26% of homeowners age 80 and older had mortgage debt, compared to only 24% of homeowners aged 65–79 and just 3% of homeowners age 80 and older three decades ago (Joint Center for Housing Studies 2019). A

¹ The 37% figure is based on data from Zillow. An Urban Institute analysis based on American Community Survey data, similarly reports 37.1% of homes were without a mortgage in 2017 (Neal 2019).

2016 study using the New York Fed Consumer Credit Panel (CCP) found, "Real per capita residential debt among those 65+ in the CCP grew by 89 percent from 2003 to 2017" (Brown, et al. 2019, p. 1). Using data from the Survey of Consumer Finances (SCF), the authors also found that "the bulk of the growth in debt held by older Americans from 2001 to 2016 is attributable to increased reliance on housing debt secured by higher-valued primary and other residential property among the most affluent members of the household asset distribution" (Brown et al. 2019, p. 17). Additionally, a Congressional Research Service report analyzing SCF data shows that the growth in average debt among elderly households largely came from mortgages (Li 2019). Other research conducted with the HRS has found that overall, net housing equity has been rather stable over HRS cohorts, while other assets have on average grown (Fichtner and Seligman 2018). These findings suggest that many American households have chosen to carry larger balance sheets with higher liabilities but also higher assets to diversify their housing wealth. Whether or not this decision is prudent depends on individual preferences, at least when the challenge of unwinding leverage is not acute.

A low-interest rate environment and easier access to credit makes it easier to take out home-related debt. Using credit reporting data from 1999 to 2010 and controlling for other factors, Bhutta and Keys (2016) found that home equity extraction in that period peaked in 2003, when mortgage rates reached what were then historic lows. They estimated that a 100-basis point drop in mortgage rates is associated with a 3-percentage point rise in the likelihood of home equity extraction, or 27% relative to the average extraction rate of 11% over the period 1999–2010. The authors further found that the relationship between home equity extraction and interest rates "was similar in magnitude to the relationship with home price growth" (Bhutta and Keys 2016, p. 1744).

Citing reports from the Federal Housing Finance Agency, an article in *The Wall Street Journal* noted that borrowers over age 65 account for nearly 10% of all mortgages originated annually (McLaughlin 2020). A 30-year fixed mortgage taken out at age 65 will not expire until the homeowner's 95th birthday. For someone taking out a similar loan at age 70, the expiration of will not come until their 100th birthday.

Some concern exists that higher levels of debt at older ages will act as an albatross around the neck of retirees and lead to financial insecurity, and possibly even bankruptcy in retirement. A 2011 study focusing on the rise in bankruptcy filings by older Americans found that "while multiple factors, such as health problems and medical debts, contribute to elders' financial distress, the dominant force appears to be overwhelming burdens related to credit cards" (Pottow 2011, p. 119). This finding suggests that housing debt might be more financially manageable for retirees than other higher-interest debt, such as consumer credit cards. The CRS report also noted that "the proportion of bankruptcy filers aged 65 and older increased from 2.1% in 1991 to 12.2% in 2013–2016 (approximately 97,600 households), and the elderly cohort is the fastest-growing age demographic *even after adjusting for the aging of the population*" (*Li 2019, p. 11*). *The* report, however, also concluded that "much of the rise in debt among older Americans is not necessarily associated with financial insecurity in retirement" (p. 19).

Carrying home debt during retirement might also lessen a household's ability to weather financial shocks, such as a recession. According to a report issued by the Consumer Financial Protection Bureau (CFPB 2014), "from 2007 to 2011, the percentage of older homeowners who were seriously delinquent in paying their mortgage (90+ days late or in foreclosure) increased five-fold. The serious delinquency rate among mortgage holders age 65 to 74 increased from 0.85 to 4.96 percent" (p. 10). The delinquency rate for homeowners age 75 and older was even greater, increasing from 1.01% to 5.87% over the same period.

Debt levels might also affect decisions about when to retire and when to begin claiming Social Security retirement benefits. Butrica and Karamcheva (2019) found "that among those with debt, both the presence and level of debt increase the likelihood that older adults work, reduce the likelihood that they collect social security benefits, and reduce the likelihood that they are retired. Among older adults with debt, we find that credit card debt has a significantly larger effect on work, social security benefit receipt, and retirement than does mortgage debt and other types of debt" (p. 2).

Further, it might reasonably be assumed that as households experience increased debt levels over time, their retirement satisfaction would decline, or conversely, people would be more satisfied in retirement as debt levels decline or asset levels increase. However, a 2015 study published in the *Journal of Financial Counseling and Planning* found no relationship between holding a mortgage and financial satisfaction in retirement, even as household debt levels increased (Seay et al. 2015). Similarly, using the HRS, Fichtner (2019) found no correlation between debt or asset levels and retirement satisfaction for any of the cohorts studied.

While it might once have been a rule-of-thumb that the mortgage should be paid off before retirement, the decision to pay off a mortgage is more complicated today, influenced as it is by a variety of factors, such as age, income, level of savings, mortgage size, interest rates, home value, tax considerations, and personal preferences. "Perhaps each generation has a different social comfort level with respect to debt. While prior generations used debt more sparingly, more recent generations have access to a greater supply of credit to purchase homes and cars, finance education, or support general consumption and therefore may be more comfortable with higher levels of debt" (Fichtner 2019, p. 28). Further, given the current low-interest-rate environment for home debt, borrowing against home equity to pay off higher interest debt, such as consumer credit card debt, might make financial sense.

That all said, from the perspective of financial security, being mortgage-free in retirement has many advantages. First, not having a mortgage frees up cashflow for consumption. Housing (mortgage or rental payments) is often a household's largest singly monthly bill. Mortgage payments in retirement may become unaffordable for those living on a fixed income. Second, paying off the mortgage before retirement frees up that money for other uses, such as travel, entertainment, or managing a financial or health shock. Third, homes are often the largest financial asset a household has in retirement. A home that is mortgage-free allows the homeowner to tap a greater net reserve of home equity to pay for unexpected events, such as home repairs or long-term medical care. Fourth, many people choose to move homes during retirement, to relocate or to downsize. A paid-off house allows greater financial flexibility to use proceeds of a home sale to pay for a new home or fund assisted living if conditions warrant. Finally, financial numbers aren't everything; many people benefit from the peace of mind of knowing their house is paid off and they don't have to worry about paying for a place to live during retirement.

3. Data Analysis

The HRS is a longitudinal panel survey of individuals age 50 and older that collects a wealth of information about households' demographic characteristics, their financial and economic situations, and their health. The HRS is administered by the University of Michigan and sponsored by the Social Security Administration and the National Institutes on Aging. Begun in 1992, the HRS surveys individuals every two years, interviewing the same households from prior waves, and replenishes the sample with new birth cohorts over age 50 every six years.²

Using the HRS, this study presents two sets of evaluations. First, the assets and debt of households in five different cohorts are analyzed in the first year the households enter the HRS. The HRS baseline was first surveyed in 1992; the War Babies were first surveyed in 1998; the Early Boomers in 2004, the Mid Boomers in 2010, and the Late Boomers in 2016. For each cohort, households are analyzed by group according to whether the respondent or spouse was aged 50–55, 56–62, or 62 and over.³ While new entrants to the HRS are between 50 and 56, new entrants may have spouses who are in a different age group. In this analysis, so long as either the respondent or the spouse is within the specified age grouping, the household is included in the analysis. This analysis allows for a summary overview of debt, assets, and debt-to-asset ratios and how they compare across cohorts and over time. This framework is similar to one used by Fichtner (2019), Lusardi, Mitchell, and Oggero (2018), and several other research teams.

Second, a further descriptive analysis, again using the 1992–2016 HRS data, allows another look at how long-term debt and assets trends have played out across age groups over time. For this analysis, households are segmented into five-year birth cohorts: respondents born 1931–1935, 1936–1940, 1941–1945, 1946–1950, 1950–1955, and 1956–1960. While the 1956–1960 birth cohort is included, the young age and relative short duration of this group within the HRS data offer less information on debt and asset trajectories. This methodology is similar to that used by Fichtner (2019), Fichtner and Seligman (2018), and several other research teams.

² For general information about the HRS, see https://hrs.isr.umich.edu/about.

³ New cohorts are entered into the HRS every six years; therefore, some respondents have not yet reached an age where they can be included in all age-group analyses. For example, the Late Boomers entered the HRS in 2016 and have not yet reached the age where they can be included in an analysis of those age 62 and over. In the tables, "N/A" indicates that the cohort was not yet of age to be included in the specified age-breakout analysis.

Figure 1 displays data from the U.S. Census Bureau, showing that homeownership rates in the United States have remained fairly consistent over the past few decades. The overall homeownership rate ranges between the mid-60% level and 70% from 1982 to 2017. Homeownership rates are higher for older households, with those age 45 and older having higher homeownership rates than the US average, while those between 35 and 44 tend to be near or below the US average and households under age 35 have much lower homeownership rates.

90 80 70 60 50 40 30 20 10 2012 **United States** Less than 35 years — 35 to 44 years. 45 to 54 years 55 to 64 years 65 years and over

Figure 1. Annual U.S. Homeownership Rates by Age

Source: Derick Moore, United States Census Bureau, https://www.census.gov/library/stories/2018/08/homeownership-by-age.html

Consistent with the Census Bureau data, the HRS data, shown in Table 1, also show higher homeownership rates for older households. Interestingly, the Late Boomer cohort, which entered the HRS in 2016, has notably lower levels of homeownership rates compared to older cohorts. While those who were aged 50–55 in the HRS Baseline cohort had a 79% homeownership rate, increasing to 88% for those aged 62–70, the Late Boomers reported only a 61.7% homeownership rate for those aged 50–55 and a 67% rate for those age 56–61. The Late Boomer cohort was not yet old enough to have any data for ages 62–70 (indicated with an N/A in the table).

Table 1.

Frequency of Home Ownership by HRS Cohort	Ages 50-55	Ages 56-61	Ages 62-70	Total	
	Own Home (%)	Own Home (%)	Own Home (%)	Own Home (%)	
HRS Baseline (Survey Year 1992)	79.0%	81.5%	88.0%	79.9%	
War Babies (Survey Year 1998)	82.8%	81.0%	81.0%	83.3%	
Early Boomers (Survey Year 2004)	79.9%	80.0%	N/A	79.7%	
Mid Boomers (Survey Year 2010)	73.5%	77.1%	N/A	76.3%	
Late Boomers (Survey Year 2016)	61.7%	67.0%	N/A	64.4%	

Authors Calculations. RAND HRS 2016 (v1). Includes All Individuals: Respondents and Spouses by Wave. Weighted Represents new entrants for that cohort into the HRS.

A house is often the primary asset in retirement; one reason debt levels have increased over time is that home prices have also increased. Table 2 provides summary data for home debt, home asset values, and loan-to-value ratios for each HRS cohort by age group as they entered the HRS.⁴ Both the median and average values of mortgages on primary residences steadily increased for the 50–55 age group, until the 2008 financial crisis. The median mortgage value for the HRS baseline was \$5,400 (average \$50,500), while the median for Mid Boomers was just over \$38,000 (average \$93,000). Home values also increased, but not commensurate with debt. For members of the HRS baseline cohort at age 50–55, the median value of the primary residence was \$134,200 (average \$180,800) for the HRS baseline and \$167,000 (average \$229,300) for the Mid Boomers. For those aged 56–61, the median value held steady at \$134,200 (but averaged \$171,00) for the HRS baseline but increased to \$184,300 (average \$238,900) for Mid Boomers.

What's more important is how leveraged the house is as retirement nears. For the HRS baseline cohort, the median household at age 50–55 had a 21% debt-to-value ratio on their primary residences (average 54%). This value declined to 5% (average 23%) for this group once they reached the 56–61 age group and further declined to 0% (average 16%) by the time they were age 62–70. This trend suggests that members of the HRS baseline cohort were reducing home

⁴ For a more detailed review and analysis of household debt and assets levels, see Fichtner (2019).

mortgage debt as they neared and entered retirement, a positive sign for financial well-being in retirement.

Table 2.

Debt by Cohort in the HRS	Ages 50-55			Ages 56-61			Ages 62-70		
	Debt Holders (%)	Mean	Median	Debt Holders (%)	Mean	Median	Debt Holders (%)	Mean	Median
Value of mortgages on primary									
residence (2018 \$)									
HRS Baseline	52.5%	\$50,496	\$5,369	41.7%	\$32,680	\$0	37.2%	\$24,785	\$0
War Babies	55.9%	\$61,456	\$21,567	53.0%	\$47,703	\$9,243	47.4%	\$95,237	\$0
Early Boomers	57.7%	\$88,258	\$39,879	54.0%	\$87,404	\$19,940	N/A	N/A	N/A
Mid Boomers	55.7%	\$93,006	\$38,002	53.5%	\$82,164	\$28,789	N/A	N/A	N/A
Late Boomers	42.2%	\$83,227	\$0	45.6%	\$66,048	\$0	N/A	N/A	N/A
Value of all home debt on primary									
residence (2018 \$)									
HRS Baseline	57.3%	\$59,078	\$16,108	46.9%	\$38,947	\$0	43.4%	\$28,859	\$0
War Babies	60.3%	\$67,426	\$30,811	57.4%	\$52,032	\$23,108	52.4%	\$99,274	\$9,243
Early Boomers	62.7%	\$97,030	\$51,843	61.1%	\$97,585	\$39,879	N/A	N/A	N/A
Mid Boomers	59.0%	\$100,705	\$48,366	56.0%	\$87,749	\$34,547	N/A	N/A	N/A
Late Boomers	45.4%	\$88,281	\$0	46.9%	\$68,009	\$0	N/A	N/A	N/A
Assets by Cohort in the HRS		Ages 50-55			Ages 56-61			Ages 62-70	
•		Mean	Median		Mean	Median		Mean	Median
Value of primary residence (2018									
\$)									
HRS Baseline		\$180,784	\$134,234		\$170,989	\$134,234		\$189,246	\$143,183
War Babies		\$183,044	\$144,810		\$185,025	\$150,972		\$238,281	\$131,716
Early Boomers		\$275,677	\$187,433		\$252,163	\$186,104		N/A	N/A
Mid Boomers		\$229,299	\$166,978		\$238,902	\$184,251		N/A	N/A
Late Boomers		\$225,440	\$125,550		\$189,241	\$125,550		N/A	N/A
Value of primary & secondary		, -	, ,,,,,,,		/	, -,		,	,
residences (2018 \$)									
HRS Baseline		\$209,243	\$143,183		\$198,362	\$141,393		\$225,558	\$156,606
War Babies		\$200,017	\$153,283		\$205,923	\$154,053		\$241,728	\$131,716
Early Boomers		\$308,886	\$199,397		\$273,628	\$199,397		N/A	N/A
Mid Boomers		\$256,066	\$172,736		\$267,224	\$194,616		N/A	N/A
Late Boomers		\$239,157	\$136,012		\$201,040	\$136,012		N/A	N/A
Debt Ratios by Cohort in the HRS		Ages 50-55			Ages 56-61			Ages 62-70	,,,
best national content in the ring		Mean	Median		Mean	Median		Mean	Median
Total debt/total assets		Wican	Wicalan		Wican	Wicalan		Wicum	Wicaian
HRS Baseline (Survey Year 1992)		2.16	0.12		0.83	0.04		1.39	0.02
War Babies (Survey Year 1998)		11.62	0.17		49.31	0.12		0.28	0.10
Early Boomers (Survey Year		5.12	0.20		0.67	0.19		N/A	N/A
2004)		5.12	0.20		0.07	0.13		14,71	14,71
Mid Boomers (Survey Year 2010)		3.69	0.28		7.72	0.23		N/A	N/A
Late Boomers (Survey Year 2016)		9.50	0.19		20.28	0.23		N/A	N/A
All primary residence LTV		3.50	0.23		20.20	0.23		, ^	14/15
HRS Baseline		0.54	0.21		0.23	0.05		0.16	0.00
War Babies		0.34	0.21		0.23	0.03		0.10	0.00
Early Boomers		0.30	0.31		0.23	0.23		N/A	0.23 N/A
Mid Boomers		0.50	0.30		0.38	0.36		N/A	N/A
ויווע ביטוווכוס		0.30	0.45		0.43	0.30		N/A	N/A

Authors Calculations. RAND HRS 2016 (v1). Includes All Individuals: Respondents and

The story is not as clear for the Mid Boomers. The median loan-to-value ratio for Mid Boomers at age 50–55 was 43% (average 50%). The ratio declined to 36% (average 45%) by the time they reached the 56–61 age group.

Spouses by Wave.

All monetary values in \$2018. All data weighted. Outliers

Removed Cohort 4 in Wave 4.

An additional descriptive analysis of the HRS 1992–2016 data allows another view of how homeownership trends and the use of home debt have played out across age groups over time. For this analysis, households were segmented into five-year birth cohorts: 1931–1935, 1936–1940, 1941–1945, 1946–1950, 1950–1955, and 1956–1960. The results of this exercise, displayed in Figure 2, offer some interesting insights. First, homeownership rates for all cohorts declined after the 2008 Great Recession. The decline in homeownership rates was more pronounced for the younger cohorts, with those born 1956–1960 exhibiting approximately a 17-percentage point drop in homeownership rates immediately following the Great Recession. For those born 1936–1940, homeownership rates declined only slightly in the two years after the Great Recession. Second, as of the 2016 HRS, homeownership for each cohort remains below its pre-Great Recession level. Third, comparing the birth-year cohorts at a specific average age is also illuminating; both the 1956–1960 and 1951–1955 cohorts exhibit less home ownership than the older three cohorts. Fourth, as one might expect, as cohorts get older, homeownership rates decline, as the elderly move out of their homes, potentially into assisted-living housing. This trend can be seen in the 1931–1935, 1936–1940, and 1941–1945 birth-year cohorts.

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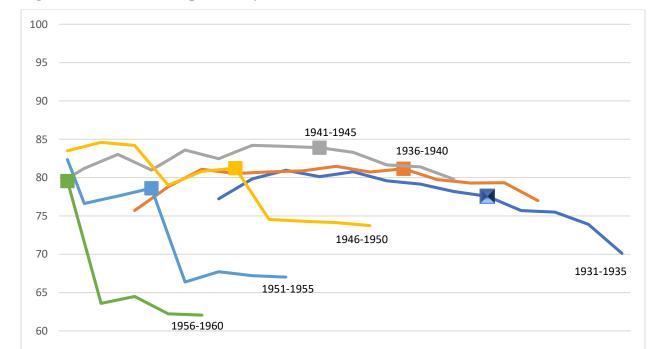


Figure 2. Homeownership Rates by Birth-Year (Percent)

Notes: Authors Calculations. RAND HRS 2016 (v1). Data point exhibited as a square indicates the 2008 survey year, corresponding with the 2008 financial crisis. X Axis is Average Age / Y Axis is Percent.

50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83

Birth Years 1931-1935 Birth Years 1936-1940 Birth Years 1941-1945

Birth Years 1946-1950 Birth Years 1951-1955 Birth Years 1956-1960

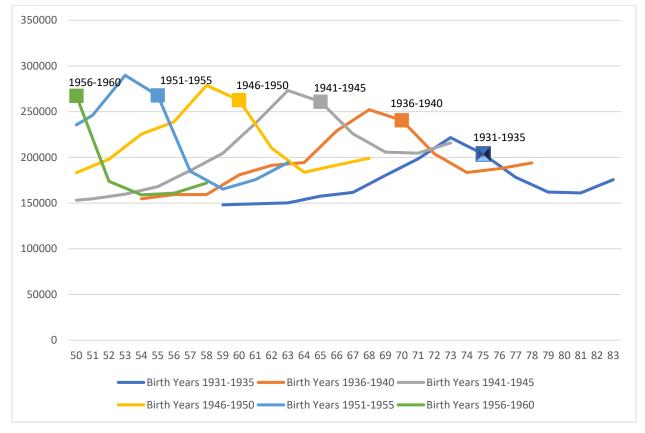


Figure 3. Average Value of Primary Residence by Birth-Year Cohort

Notes: Authors Calculations. RAND HRS 2016 (v1). \$2018 Dollars. Data point exhibited as a square indicates the 2008 survey year, corresponding with the 2008 financial crisis. X Axis is Average Age.

On the basis of averages alone, data from the 2016 survey show that none of the cohorts have recovered those losses in value. The general patterns of decline are relatively uniform for each cohort, suggesting that any shock to the housing market could have a major impact on the financial well-being of retirees. Reassuringly, homeowners have continued to pay down their mortgages, as shown in Figure 4. As one would then expect, the loan-to-value ratio has generally continued to decline, shown in Figure 5, securing home value that might otherwise be at risk in a future shock to the housing market.

In fact, while the loan-to-value ratio has generally been higher for later cohorts at similar ages, some initial evidence suggests that, since the 2008 Great Recession, the youngest cohorts are accelerating mortgage pay-down relative to those who came before them. As a result, more recent cohorts may have better financial well-being in retirement than is often portrayed in the mainstream media. Though, again, these data do not reflect the current 2020 economic downturn.

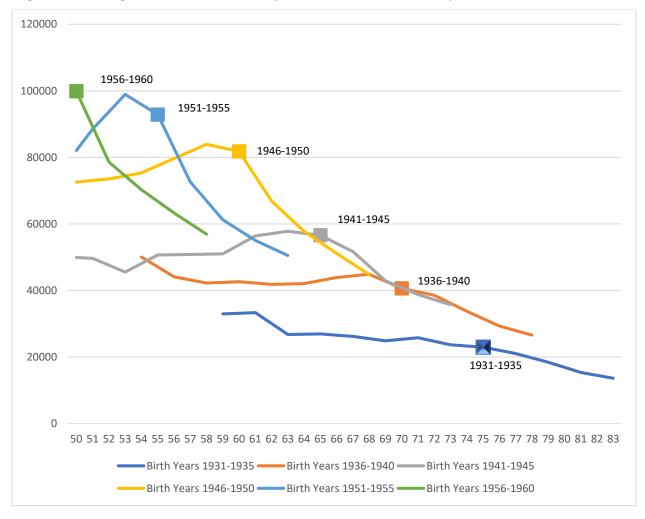


Figure 4. Average Value of All Primary Residence Home Debt by Birth-Year Cohort

Notes: Authors Calculations. RAND HRS 2016 (v1). \$2018 Dollars. Data point exhibited as a square indicates the 2008 survey year, corresponding with the 2008 financial crisis. X Axis is Average Age.

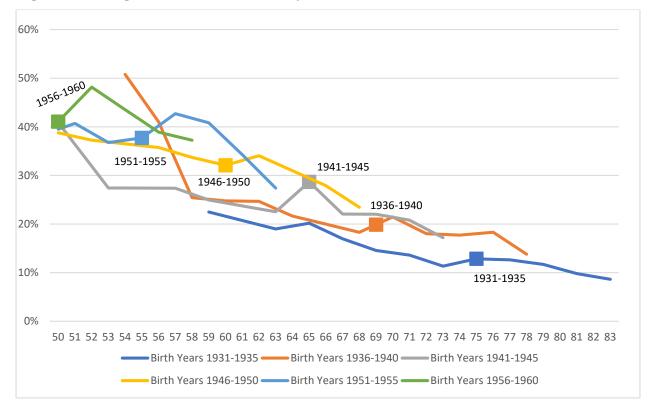


Figure 5. Average Loan-to-Value Ratio by Birth-Year Cohort (Percent)

Notes: Authors Calculations. RAND HRS 2016 (v1). \$2018 Dollars. Data point exhibited as a square indicates the 2008 survey year, corresponding with the 2008 financial crisis. X Axis is Average Age / Y Axis is Percent.

Additionally, as shown in Figure 6, the percentage of households that own their primary home and pay off their mortgage increases steadily with age. While the 1931–1935 birth-year cohort generally exhibits higher levels of mortgage-free homeownership than other cohorts, the percentage of those owning their homes that have paid off their mortgage steadily increases with age. For example, for those in the 1931–1935 cohort, who had an average age of 83 in 2016, almost 85% of those that owned a home had paid off their mortgage. This trend toward paying off the mortgage was uninterrupted by the Great Recession. Although homeownership rates declined after the Great Recession, those that maintained homeownership continued to pay off their mortgages as they got older. It is unclear whether or not this trend will continue as a result of the 2020 economic recession.

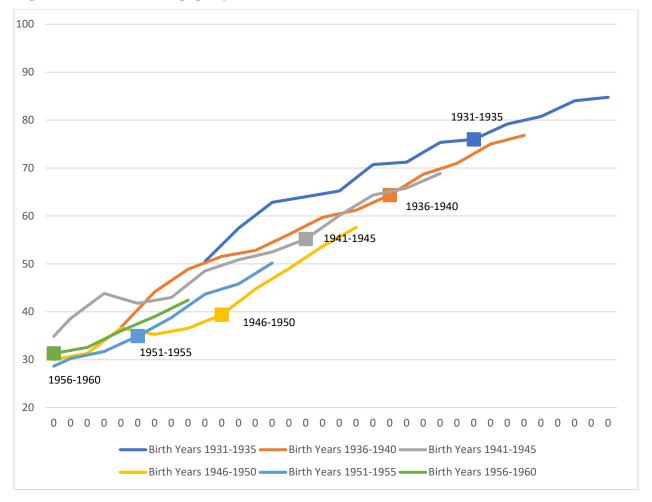


Figure 6. Paid-Off Mortgage by Birth-Year Cohort (Percent)

Notes: Authors Calculations. RAND HRS 2016 (v1). Data point exhibited as a square indicates the 2008 survey year, corresponding with the 2008 financial crisis. X Axis is Average Age / Y Axis is Percent.

In response to the Great Recession, the HRS added a few questions beginning in 2008 to study whether survey respondents had refinanced their homes in the last two years and, if so, why. These questions were only asked through the 2014 HRS. While the sample size is limited and covers only a few years of data, some interesting observations are worth noting. Figure 7 shows the percentage of households in the HRS, conditional on owning a home, sorted by birth-year cohort, that refinanced.

The 1931–1935 cohort, which had average ages between 75 and 81 during the survey period, exhibited the lowest level of refinancing. Between 11% and 13% of those in the 1931–1935 birth-year cohort that owned their homes refinanced between 2008 and 2014. The youngest birth

year cohort (1956–1960) exhibited a consistent level of refinancing during the survey period, near 20%. Interestingly, the middle birth-year cohorts all showed an increase in the percentage of those with a home that refinanced after the Great Recession. Given the small sample size and limited number of survey years in which questions related to refinancing were asked, generalizations from these observations need to be made carefully.

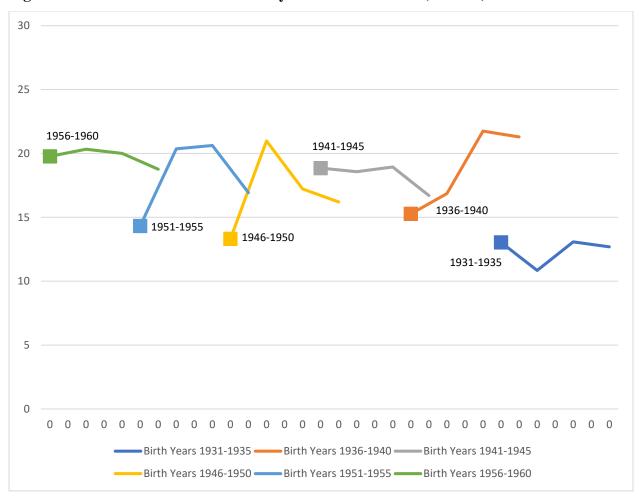


Figure 7. Households that Refinanced by Birth-Year Cohort (Percent)

Notes: Authors Calculations. RAND HRS 2016 (v1). Data point exhibited as a square indicates the 2008 survey year, corresponding with the 2008 financial crisis. X Axis is Average Age / Y Axis is Percent.

Using credit-report data for 1999–2010, Bhutta and Keys (2016) estimated that a 100-basis point drop in mortgage rates is associated with a 3-percentage point rise in the likelihood of home equity extraction. On a standard 30-year fixed-rate mortgage, refinancing \$250,000 from a 5% APR to a 4% APR would reduce the monthly mortgage payment by almost \$150. On a \$500,000 30-year fixed mortgage, a 100-basis point reduction in the interest rate from 5% to 4% would

result in a monthly payment reduced by almost \$300. As can be seen in Figure 8, the average 30-year fixed mortgage rate has been steadily declining for the past few decades. The refinancing activity after the Great Recession took place at time when home mortgage interest rates were declining, suggesting that homeowners took advantage of lower mortgage rates to refinance.

Figure 8. 30-Year Fixed Mortgage Rates



Source: United States Federal Reserve. Accessed July 19, 2020. https://fred.stlouisfed.org/series/MORTGAGE30US

Table 3 displays HRS respondents' answers to why they refinanced between 2008 and 2014. The sample size is small, but the data provide some interesting observations. For example, between 2010 and 2014 for the 1931–1935 birth-year cohort, between 61% and 68% of refinances were done "to get a lower interest rate." The comparable figure for 2008 was 29.7%. In fact, the rate of refinancing to get a lower interest rate sharply increases across all cohorts beginning with the 2010 HRS and after the Great Recession. The rise is most notable for the youngest cohort, those born 1956-1960, with only 6% responding that they refinanced to get a lower interest in 2008, jumping to 64% in 2010 and 75.7% in 2014, as interest rates continued to decline.

Table 3. Reasons for Refinancing

Dinth Voors 1041 1045	Δυστασο Δσο	C.F.	67	60	71
Birth Years 1941-1945	Average Age	65 2008	67 2010	69 2012	71 2014
To Cot a Lawer Interest	Survey Year	49.00%	54.20%	68.60%	
To Get a Lower Interest		49.00% 8.00%	11.50%	12.80%	70.50%
To Reduce the Amount of		4.00%	2.30%	4.70%	10.20% 1.10%
To Pay Off a Palloon Mo		2.00%	0.80%	4.70% N/A	1.10%
To Pay Off a Balloon Mo		2.00%	13.70%	5.80%	9.10%
To Raise Cash for Other	_		2.30%	2.30%	
Had To/Was Forced To/ To Consolidate Debt	Didii t have a Choice	N/A 3.00%	3.10%	3.50%	N/A 1 10%
To Get a Fixed Interest F	2240	2.00%			1.10% 2.30%
	tate		5.30%	N/A	
Other		2.00%	6.90%	2.30%	4.60%
Don't Know		N/A 1.00%	N/A	N/A	N/A
Refused		1.00%	N/A	N/A	N/A
Birth Years 1946-1950	Average Age	60	62	64	66
	Survey Year	2008	2010	2012	2014
To Get a Lower Interest		37.20%	58.40%	74.30%	72.70%
To Reduce the Amount		14.10%	14.50%	7.30%	10.00%
To Pay Off the Mortgage	,	2.60%	0.60%	2.80%	2.70%
To Pay Off a Balloon Mo		N/A	1.80%	N/A	0.90%
To Raise Cash for Other		30.80%	14.50%	5.50%	6.40%
Had To/Was Forced To/		2.60%	0.60%	0.90%	N/A
To Consolidate Debt		2.60%	5.40%	5.50%	3.60%
To Get a Fixed Interest F	Rate	5.10%	1.20%	0.90%	0.90%
Other		N/A	2.40%	1.80%	2.70%
Don't Know		1.30%	N/A	0.90%	N/A
Refused		1.30%	0.60%	N/A	N/A
Birth Years 1951-1955	Average Age	55	57	59	61
	Survey Year	2008	2010	2012	2014
To Get a Lower Interest	,	39.10%	67.90%	72.70%	74.90%
To Reduce the Amount		10.10%	5.10%	10.30%	11.70%
To Pay Off the Mortgage		2.90%	2.20%	2.60%	0.60%
To Pay Off a Balloon Mortgage		1.50%	N/A	1.00%	0.60%
To Raise Cash for Other		40.60%	11.00%	3.60%	2.90%
Had To/Was Forced To/	· ·	1.50%	0.70%	1.00%	1.80%
To Consolidate Debt		1.50%	3.70%	4.10%	0.60%
To Get a Fixed Interest F	Rate	2.90%	4.40%	1.60%	1.20%
Other		N/A	4.40%	6.00%	5.90%
Don't Know		N/A	N/A	N/A	N/A
Refused		N/A	0.70%	N/A	N/A
Birth Years 1956-1960	Average Age	50	52 2010	54 2012	56 2014
T- C-t - 1 l-t t	Survey Year	2008	2010	2012	2014
To Get a Lower Interest Rate To Reduce the Amount of Mortgage Payments		6.00%	64.00%	63.90%	75.70%
		5.00%	12.00%	12.00%	6.00%
To Pay Off the Mortgage		N/A	N/A	5.80%	1.10%
To Pay Off a Balloon Mo	0 0	1.00%	N/A	1.40%	N/A
To Raise Cash for Other	_	2.00%	8.00%	4.80%	4.30%
Had To/Was Forced To/	uan't Have a Choice	1.00%	N/A	2.40%	1.60%
To Consolidate Debt	N-4-	N/A	4.00%	3.40%	4.30%
To Get a Fixed Interest F	tate	N/A	4.00%	0.50%	0.50%
Other		1.00%	8.00%	5.80%	6.50%
Don't Know		N/A	N/A	N/A	N/A
Refused		1.00%	N/A	N/A	N/A

A relatively consistent number of respondents across cohorts responded that they refinanced in order to reduce the amount of mortgage payments. Ignoring the 2008 survey year and just focusing on 2010, 2012, and 2014, the percentage of respondents that reported that they refinanced to reduce the amount of mortgage payments ranged from a low of 5.1%, for the 1951–1955 birth-year cohort in 2010, to a high of 21.9%, for the 1936–1940 cohort in 2014. However, the number that chose this response was often in a much tighter range of 10% to 14%.

Also of interest, a very low percentage of those that refinanced did so to consolidate debt. With the exception of the 1931–1935 cohort in 2008, in no other year did the percentage of people from any cohort indicating they refinanced to consolidate debt reach 6%. The same goes for those that responded they refinanced to move to a fixed interest rate. At no point do more than 5.4% indicate that reason for refinancing. In 2008, 10.8% of those in the 1931–1935 cohort, the oldest HRS birth-year cohort, that refinanced did so to consolidate debt.

The responses for the 2008 wave of the HRS, at the time of the Great Recession, are particularly noteworthy. In 2008, of those in the 1931–1935 birth-year cohort that refinanced, 37.8% indicated they did so "To Raise Cash for Other Things." This response was the greatest frequent for this cohort in 2008. Similarly, raising cash for other things was the most frequent response for the 1936-1940 cohort (42.0%) and the 1951–1955 cohort (40.6%). The response was a close second for the 1941–1945 cohort (29.0%) and the 1946–1950 cohort (30.8%). Raising cash for other things could encompass anything, including health shocks, financial shocks, travel, or discretionary spending. However, the number of households indicating they refinanced to raise cash for other things markedly dropped after 2008, in the 2010, 2012, and 2014 HRS, suggesting that for many homeowners, home equity was a significant financial lifeline during the Great Recession.

Figure 9 shows the percentage of those that owned their home that also had a home equity line of credit (HELOC). A HELOC can be on a house that has a mortgage or is paid off. For every cohort, the number of homeowners with a HELOC declined after the 2008 Great Recession. Also of note, generally speaking, younger birth-year cohorts appear more comfortable with having outstanding lines of credit on their homes, as the percentage of homes with a HELOC is greater

for each successive cohort. Further the percentage of homes with a HELOC declines with age for every birth-year cohort. However, a HELOC does not have to have a positive loan balance. While some may use a HELOC to fund special projects such as home improvements, others may maintain the open line of credit simply for easy access to emergency funds.

50 45 40 35 1956-1960 1946-1950 1951-1955 30 1941-1945 25 1936-1940 20 1931-1935 15 10 Birth Years 1931-1935 —— Birth Years 1936-1940 —— Birth Years 1941-1945 Birth Years 1946-1950 —— Birth Years 1951-1955 —— Birth Years 1956-1960

Figure 9. HELOC by Birth-Year Cohort (Percent)

Notes: Authors Calculations. RAND HRS 2016 (v1). Data point exhibited as a square indicates the 2008 survey year, corresponding with the 2008 financial crisis. X Axis is Average Age / Y Axis is Percent.

Figure 10 shows the percentage of homeowners that had a HELOC with a positive loan balance. While the numbers are relatively small, both the 1956–1960 and 1951–1955 younger cohorts reported an increase in the percentage of homeowners that had a HELOC with a positive loan balance after the 2008 Great Recession, in the 2010 HRS. That number then declined in both the

2012 and 2014 HRS. The other three cohorts all exhibited a reduction in the percentage of homeowners that had a HELOC with a positive loan balance after the 2008 Great Recession.

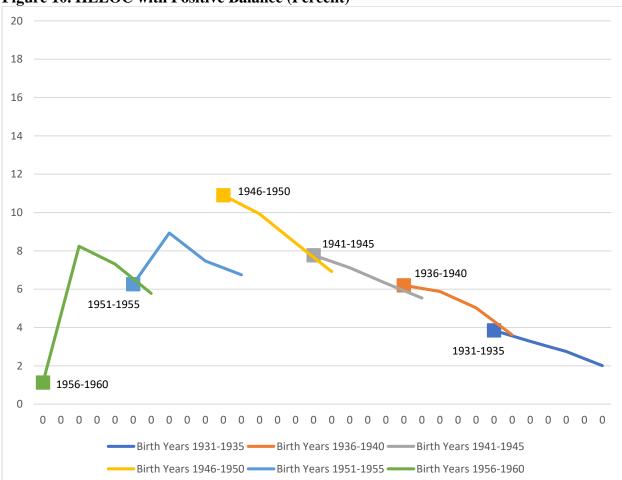


Figure 10. HELOC with Positive Balance (Percent)

Notes: Authors Calculations. RAND HRS 2016 (v1). Data point exhibited as a square indicates the 2008 survey year, corresponding with the 2008 financial crisis. X Axis is Average Age / Y Axis is Percent.

Although the HRS did not ask about the use of any HELOC, one possible use of home equity would be to purchase a second home. However, there doesn't seem to be much of a story with respect to second homes. As shown in Figure 11, the percentage of respondents in the HRS that reported owning a second home is relatively consistent among the birth-year cohorts. The oldest cohort, those born between 1931 and 1935 had the lowest second-home ownership rate. But, again, the range of second-home ownership falls within a relatively narrow band of between a low of 16% and a high of just over 20%.

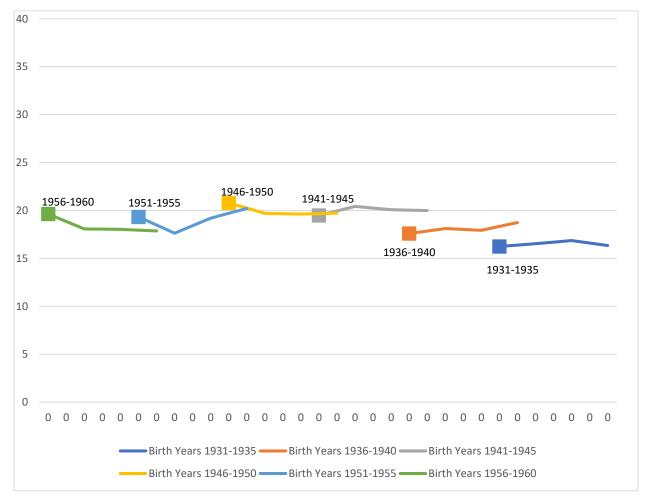


Figure 11. Own A Second Home (Percent)

Notes: Authors Calculations. RAND HRS 2016 (v1). Data point exhibited as a square indicates the 2008 survey year, corresponding with the 2008 financial crisis. X Axis is Average Age / Y Axis is Percent.

As noted at the beginning of this paper, the HRS survey data occurred before the current economic recession caused by the COVID-19 health pandemic. However, mortgage refinancing activity has increased notably during the current economic crisis. While refinancing activity increased in 2019 as mortgage rates continued to fall, refinancing activity spiked in the first quarter of 2020 as the economic recession caused by the pandemic began and various government policies and interventions in the credit markets led to even lower home mortgage interest rates.

If the results in this paper hold, suggesting that many homeowners that refinanced during the 2008 Great Recession did so to raise cash for other things, then it is likely that many homeowners will do so again during this current recession. Many people will also likely refinance to take advantage of the historically low home mortgage interest rates and to reduce monthly payments or number of payments. An uptick in HELOC use may also emerge as people look to their homes to provide a stream of income as they struggle with job loss or furlough and exhaust unemployment benefits.

4. Conclusion and Discussion

HRS survey respondents showed a high level of homeownership rates and a house is often the primary asset in retirement. Whether or not home ownership and housing debt in retirement is a financial asset that allows for consumption smoothing or an albatross around the neck of retirees requires a more nuanced answer than a simple yes or no. As the results of this paper show, while the percentage of homeowners paying off their mortgage before retiring has declined with each new birth-year cohort, most retirees that own a home still tend to pay off their mortgage as they get older. Hence, these data suggest that older households are generally managing their homerelated debt in retirement, just delaying the age at which they are mortgage-free.

Further, the number of homeowners that refinanced to "raise cash for other things" was relatively low during the 2010, 2012, and 2014 HRS waves. However, the number was quite high during the 2008 HRS, suggesting that while some homeowners refinanced to fund consumption, in times of economic recession, home equity is a financial lifeline for many retirees and near-retirees. Additionally, while the percentage of homeowners that have a HELOC is relatively consistent and stable across all birth-year cohorts, the younger cohorts (1956–1960 and 1951–1955) reported an increase in the percentage of homeowners that had a HELOC with a positive balance after the 2008 Great Recession in the 2010 HRS. But that percentage declined in both the 2012 and 2014 HRS. The other three cohorts all exhibited a reduction in the percentage of homeowners that had a HELOC with a positive balance after the 2008 Great Recession, further suggesting that the home can be an asset in or near retirement that provides a financial lifeline during turbulent economic times.

Similar to the narrative about whether a "retirement crisis" looms on the horizon, the narrative that a home-debt related retirement crisis is brewing because more homeowners are entering retirement with home-related debt is too binary. This binary frame paints a far too simple and incomplete picture of the true financial landscape faced by many current and future homeowners in retirement. While some homeowners are indeed overleveraged, the literature suggests that high credit card debt is more likely to cause financial distress and lead to bankruptcy than high home-related debt (Pottow 2011).

While Social Security benefits are obviously an important component of financial security in retirement for millions of Americans, Social Security benefit payments are likely playing an expanding role in the ability of retirees to qualify for a mortgage or a refinance in retirement. Borrowers over age 65 account for nearly 10% of all mortgages originated annually, and Social Security benefit payments are being counted as income by mortgage lenders when determining whether a retiree qualifies for a mortgage. A mortgage in retirement could expose a retiree on a fixed income to financial stress later in life if an increasing share of the monthly Social Security retirement benefit is required to make the monthly mortgage payment. A mortgage expiration for a person taking out a 30-year fixed mortgage at age 65 wouldn't be until their 95th birthday. For someone taking out a similar loan at age 70, the expiration of the term wouldn't come until their 100th birthday. However, a retiree in need of money today could refinance their home and use their Social Security benefit to cover the mortgage payments later. In other words, for a homeowner, Social Security can be a source of income in retirement or can effectively be turned into a lump sum by leveraging home equity.

One final point worth emphasizing with regard to the importance of Social Security benefits in retirement is how delayed claiming can maximize wealth in retirement and provide a higher monthly benefit amount to service debt payments in retirement (Fellowes et al. 2019). Individuals in need of greater or more consistent monthly income might consider the merits of claiming Social Security retirement benefits later to access a higher monthly benefit and maximize the inflation-protected annuity value Social Security provides.

Given that the story of home debt in retirement is more complicated and nuanced than is often portrayed in the popular press, further research needs to be done before rushing to any policy conclusions. Additionally, because the topic here relates to homeownership, this paper did not address the financial security of those who are primarily renters in retirement. Home ownership can be an asset that provides a financial lifeline for retirees during tough economic times. Absent other substantial assets, retirees who rent are likely to be more reliant on Social Security and might have a more difficult time weathering a health or financial shock. Hence, further research is needed to understand how debt and financial well-being in retirement differ for those who rent versus those who have housing assets.

As the current economic recession and health pandemic have shown, additional research is also necessary regarding racial, gender-based, or geographical disparities that can impact home ownership rates and financial well-being in retirement. Policymakers will need answers to these questions when considering how changes to Social Security's financing or benefits might impact the financial well-being of retirees. Finally, the HRS is a valuable tool for researchers and policymakers that collects a wealth of information about households' demographic characteristics, their financial and economic situations, and their health. Additional consideration and funding should be given to how future waves of the HRS can incorporate supplemental questions to shed further light on how retirees and near-retirees are using Social Security, government services, other income, debt, and financial assets in retirement, especially given the current economic recession and healthcare pandemic.

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Center for Financial Security

School of Human Ecology University of Wisconsin-Madison

1300 Linden Drive Madison, WI 53706

608-890-0229 cfs@mailplus.wisc.edu cfs.wisc.edu