

Jason J. Fichtner, PhD
Jason.Fichtner@jhu.edu

Johns Hopkins University,
School of Advanced
International Studies

Household Debt and Financial Well-Being in Retirement

September 27, 2019

Center for Financial Security

University of
Wisconsin-Madison

1300 Linden Drive
Madison, WI 53706

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

The research reported herein was performed pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Retirement and Disability Consortium. The opinions and conclusions expressed are solely those of the author and do not represent the opinions or policy of SSA or any agency of the Federal Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of the contents of this report. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply endorsement, recommendation, or favoring by the United States Government or any agency thereof.

Abstract

Recent trends in housing and financial asset appreciation would appear to be improving the financial well-being of older Americans. However, without also understanding debt, it is impossible to know whether retirees are wealthier or better off. This paper addresses two related topics: first, how have household debt and net asset levels evolved for those past age 50, and second, controlling for net asset levels, have debt-to-assets ratios improved or worsened for this group over time? Increasing debt-to-asset ratios may suggest retirees will be less financially secure in retirement. This paper uses the RAND Health and Retirement Study (HRS) panel data for 1992–2016 to investigate household debt and net asset levels for this population and calculate debt-to-asset ratios.

1. Introduction

The national newspapers are full of stories claiming that Americans are woefully unprepared for retirement. A top story in the *Wall Street Journal*-affiliated publication *MarketWatch* was titled “Our Next Big Crisis Will Be a Retirement Crisis” (Arends 2014). An often-cited index of retirement preparedness compiled by the Center for Retirement Research at Boston College finds that “50 percent of households are ‘at risk’ of not having enough to maintain their living standards in retirement” (Center for Retirement Research 2019). Referencing a similar study by Putman Investments, financial reporter Robert Powell writes, “Americans are on track to replace just 61% of their current income once they reach retirement” (Powell 2014). Powell notes that the picture looks even gloomier for those without employer-sponsored retirement plans, who are “projected to be able to replace just 42% of their working income once they retire, even with Social Security factored in.”

The perception that the United States is facing a “retirement crisis” has been fueled by the economic crisis that began in 2008 and resulted in a great and unanticipated loss of wealth for millions of Americans. The US stock market, as measured by the broad S&P 500 Index, fell nearly 57% from a peak on October 10, 2007, to its bottom on March 9, 2009.¹ Housing prices plummeted and unemployment rose quickly to double digits. Survey research suggests financial wealth for the median household declined by 15% as a result of the crisis (Hurd and Rohwedder 2010). The uneven pace of the recovery from that crisis and its lingering effects have further underscored the sense of that Americans are not prepared for retirement.

Add to this conversation the narrative that retirees and near-retirees have taken on more debt over time and thus are likely to face financial fragility in retirement as debt-serving costs overwhelm available income and assets. By some accounts, Americans are entering retirement in worse financial shape than any generation since Harry Truman was president (Gillers et al.

¹ The S&P 500 Index value at market close on October 10, 2007, was 1562.47; its value at close on March 9, 2009, was 676.53. The data are available from Yahoo Finance. The National Bureau of Economic Research (NBER), the arbiter of the start and end dates of a recession, determined that the recession that began in December 2007 ended in June 2009, roughly coinciding with the peak and trough dates of the S&P 500 Index. For more information on NBER’s Business Cycle Dating Committee, see: <https://www.nber.org/cycles/recessions.html>.

2018). Americans have low levels of savings and are taking on higher debt levels; bankruptcy filings have increased among older Americans (*Wall Street Journal* 2018).

But do these statistics truly equate to a looming “retirement crisis”? Some would say no. Economists Syl Schieber and Andrew Biggs (2014), for instance, argue that “the story about the declining income prospects of retirees is not true.” Schieber and Biggs base their argument on the fact that the data most often cited to support the prospect of a crisis are compiled by the Social Security Administration based on the Current Population Survey (CPS) from the US Census Bureau. CPS data do not accurately reflect the total amount of income in retirement derived from individual retirement accounts. When Schieber and Biggs instead analyzed tax return data from the Internal Revenue Service, the reported income was much higher: “The CPS suggests that in 2008 households receiving Social Security benefits collected \$222 billion in pensions or annuity income. But federal tax filings for 2008 show that these same households received \$457 billion of pension or annuity income.”

To support a financially secure retirement, many financial planners suggest a total “replacement rate”—the percentage of preretirement income a person will need in retirement—of 70% (Singletary 2013). Social Security was designed to replace about 40% of a person’s preretirement income, with higher replacement rates for lower-income workers;² the rest must be covered by an employer pension or personal retirement savings. For example, a person who earns \$50,000 in each of the final five years leading up to retirement should plan to have enough retirement savings to generate \$35,000 a year in income ($\$50,000 \times 0.70$). The 70% figure includes income received from Social Security. However, 70% is just a general rule of thumb; everybody’s retirement needs are different. For example, some find they need less in retirement as their consumption tends to decline and their house may be paid off. And the proper way to measure replacement rates is currently debated by scholars³—whether they should be based on average lifetime earnings, wage-adjusted earnings, earnings in the final year before retirement, or a

² Depending on the measure of replacement rate used, Social Security benefits may provide a higher replacement rate than 40 percent. As noted by Biggs and Springstead (pg. 15, 2008), “Measuring replacement rates is far from straightforward, and different replacement rate measures can result in widely different indicators of retirement income adequacy.” Further, “Social Security pays higher average replacement rates to those with lower lifetime earnings, although there is significant dispersion of replacement rates within groups with similar lifetime earnings.”

³ See, for example, Biggs and Springstead (2008), Blahous (2012), and Goss, Clingman, Wade, and Glenn. (2014).

combination of these and other factors.⁴ Furthermore, for many groups, Social Security replacement rates are higher than most people understand, due to the way the Social Security Administration historically presented replacement rates. In many cases total retirement income, including Social Security benefits, far exceeds a 70% replacement rate (Blahous 2012). Further, it's important to keep in mind that recent economic conditions have vastly changed the retirement landscape for many people. Declines in assets and high unemployment as a result of the 2008 financial crisis changed retirement plans for many Americans, and the lingering effects of those shocks have likely influenced retirement behavior. Many Americans responded to the financial crisis by reducing consumption and increasing saving. Moreover, based on a then-preliminary analysis of the data, it also seems that some will elect to receive retirement benefits at age 62, reversing the pre-crisis trend to file at later ages (Fichtner, Phillips, and Smith 2011).

Additionally, a lengthy period of low interest rates has made building wealth for retirement harder and amplified the risk of depleting wealth during the decumulation phase of retirement. As a result, both of the financial crisis and of the low interest rate environment that followed it, households across most of the 2014 wealth distribution took significant losses from which they have not fully recovered. The top 10% of 2014 households have seen marked improvements in their wealth since the Great Recession and average wealth has improved, but about 25% of retirement households reported negative net asset positions by 2014. Those in the bottom quartile who own homes have extracted equity from their homes to finance their retirement. At this point,

⁴Biggs, Pang, and Schieber provide a good discussion of this issue in the Abstract of their paper: "Financial advisors commonly use earnings replacement rates to assist workers in their retirement planning. Policymakers and analysts use them to gauge the adequacy of Social Security benefits and other retirement income in allowing retirees to maintain preretirement living standards. In recent years, the Social Security trustees regularly published replacement rates that have been widely interpreted as the extent to which Social Security benefits replace earnings of workers at various points in the lifetime earnings distribution. However, the trustees' replacement rates are calculated differently than those generally used for retirement planning purposes possibly leading to confusion among policymakers and others regarding how much of workers' earnings are replaced by Social Security and how much those workers need to save on their own for retirement. Financial planners calculate replacement rates by comparing an individual's retirement income to that same individual's pre-retirement earnings, generally earnings in the years immediately preceding retirement. The Social Security Administration, by contrast, effectively calculates replacement rates by comparing retiree incomes to the incomes of contemporaneous workers. This latter measure is often used in other countries, but differs both qualitatively and quantitatively from the more common replacement rate calculations used for financial planning purposes. We find that replacement rates calculated on a financial planning basis are generally higher than those published by the Social Security trustees and that Social Security benefits generally replace somewhat more of individual workers' earnings than the trustees' rates suggest" (Biggs, Pang, and Schieber 2015).

homeowners in the bottom 10% of the wealth distribution have extracted essentially all available home equity (Fichtner and Seligman 2017).

However, it's unclear what all of these statistics really mean for retirement. Schieber and Biggs (2014) stress that retirees aren't headed for the poor house. Others express more alarm. No "one size fits all" answer to the question of how well people are doing in retirement can characterize the problems clearly. Neither view—that "We are all going to be living our golden years in poverty" or "everybody's doing fine"—is an accurate description of reality (Gale, Gelfond, and Fichtner 2019). The nuances are important when discussing potential public policy solutions or reforms.

Though the focus of this paper is on those age 50 and older, it is important to keep in mind that each generation faces unique retirement challenges. Generation Xers were uniquely influenced by the shift from defined benefit plans to defined contribution plans and the economic impacts of the Great Recession. Similarly, although they are the most educated generation in history, Millennials face several obstacles to accumulating sufficient wealth. Relative to previous generations, their careers have gotten off to a rockier start because of the financial crisis; they are more likely to have contingent jobs without benefits; they have lower net worth and higher student debt than previous generations, and they are marrying, buying homes, and having children later; they will live longer; they will have to manage their own retirement plans to a greater extent; they will face increased burdens from resolution of the government's long-term fiscal shortfalls; and they face an economic future with projections of lower rates of return and economic growth (Gale, Gelfond, and Fichtner 2019).

Although previous research efforts reach different conclusions on the overall status of retirement saving adequacy, two robust conclusions emerge. First, retirement saving status varies across different groups. Members of racial and ethnic minorities tend to be less likely to be saving adequately, as do single-headed households, younger workers, those with fewer years of formal education, those without retirement plans, and those with lower incomes. Second, while many households appear to be saving enough to expect to maintain pre-retirement living standards in retirement, virtually no one claims that many households are well-insured against all risks. For

example, Hurd and Rohwedder (2012) find that the risk of a health shock reduces the share of the population that is adequately prepared for retirement (by their definition) by 3 to 13 percentage points, depending on marital status and educational attainment. Poterba, Venti, and Wise (2015) find that even among those who amass significant wealth, a large health shock or death of a spouse can result in a significant decline in assets. VanDerhei (2014) cites longevity risk and health care costs as significant threats to retirement saving.

Financial security in retirement can greatly be influenced not only by a household's level of savings and assets, but also by the amount of debt accumulated. Many financial advisors suggest paying off the mortgage on a primary residence before retirement (see, for instance, Orman 2018). However, one survey found that 44 percent of Americans aged of 60–70 have a mortgage when they retire (Hays 2018). Further, as noted in the abstract of a study by Collins, Hembre, and Urban (2018) found that “Americans over age 60 are more than three times as likely to have mortgage debt in 2015 compared to 1980, a 24-percentage point increase.” But credit supply is expanding for everyone, including seniors, and mortgage debt is only one factor that can impact the financial security of retirees, other debt from car loan or credit cards can also reduce financial security as more income in retirement is dedicated to paying off debt.

2. Literature Review

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). However, researchers are sharply divided on whether this means that older Americans are, or will be, less financially secure.

In an interview published in the *Wall Street Journal* (Tergesen 2017), two well-known retirement experts described very different outlooks for retirees. Alicia Munnell, director of the Center for Retirement Research at Boston College, argued that baby boomers' retirement outlook is distressing because about half of households won't be able to maintain their current standard of living once they retire. This is due to longer life expectancy, increasing cost of healthcare,

persistently low interest rates which lower the return to savings, and a decline in traditional sources of income, such as defined-pension plans. Munnell also points out that 401(k) plans are not making up the financial gap necessary for a secure retirement and that there's a significant coverage gap in the number of private-sector workers participating in such plans.

However, Andrew Biggs, a resident scholar at the American Enterprise Institute, argued that households will not face a major decline in their standard of living in retirement. Biggs noted that seniors currently have some of the lowest poverty rates and that retirees' real income has continued to rise in the last three decades. However, Biggs did allude to the importance that Social Security benefits play in the financial security of retirees by pointing out that without Social Security reform, Social Security beneficiaries could face a 25% reduction in benefits when the trust funds are depleted in the mid-2030's. If that happens, then many retirees would actually be less financially secure and the country would then face a retirement crisis.

It is important to point out where the research literature agrees and where it disagrees in order to focus on optimal policy options. Existing evidence suggests that the generations immediately before baby boomers (people born in the 1930s to mid-1940s) were adequately prepared for retirement by all measures. Using Survey on Consumer Finances data, Gale and Pence (2006) found that in 2001, the older age groups had accrued a higher aggregate net worth than the same age group in 1989. Scholz, Seshadri, and Khittrakun (2006) examined the degree to which households were optimally preparing for retirement by constructing a stochastic life cycle model using Health and Retirement Study (HRS) data. They found that over 80% of people born in the 1930s have accumulated more wealth than their optimal retirement targets, and for those not meeting their targets, the magnitude of the deficit was typically small.

Additionally, research by Collins, Scholz, and Seshadri (2013) using Survey of Consumer Finance (SCF) data found that “net wealth levels for the pre-World War II cohort and the post-War cohort are similar, with some evidence the younger group has fared relatively better” (pg. 1). Further, the authors found no significant evidence to support the claim that younger households are falling behind older cohorts, although the younger cohorts “are borrowing more than the prior generation, relative to total assets and to income” (pg. 2).

Presentations at a conference on debt in retirement, held in May 2019 by the Pension Research Council at the University of Pennsylvania Wharton School of Business, offer a different perspective.⁵ For example, one presentation notes that debt held by those “ages 55–80 has increased by 87% since 2003,” and much of that debt increase is attributable to mortgage debt (Brown et al. 2019). The authors further note that debt “repayment among older borrowers was reliable in the past, and, despite growing debt, remains reliable today” (Brown et al. 2019, slide 16). Brown, Dynan, and Figinski (2019) looked at the risk of financial hardship in retirement and suggested that some economic insecurity could be predicted for households nearing retirement due to changes in debt and wealth compared to previous cohorts. That said, the discussant on Brown, Dynan, and Figinski’s paper suggested that a more holistic and nuanced view of debt and wealth in retirement is necessary when discussing potential public policies aimed at improving economic well-being in retirement (Sabelhaus 2019).

The bottom line is that a one-size description of the financial preparedness or security of Americans as they approach or enter retirement is not responsible. Further, the context of debt in retirement as it relates to financial security needs much more study. Policymakers need to be careful in generalizing results. This paper now turns to the HRS panel data for 1992–2016 to investigate household debt and net asset levels for this population, focusing on various debt-to-asset ratios to get a sense of how people who are approaching retirement, and those who are at retirement, compare over time.⁶

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

⁵ Unfortunately, the conference papers are not yet published. However, many of the PowerPoint slides for the presentations are available on the conference website, <https://pensionresearchcouncil.wharton.upenn.edu/2019-symposium-remaking-retirement-debt-in-an-aging-economy/>.

⁶ Along with the study reported in this paper, the Center for Financial Security is funding a number of other projects that deal with debt in retirement, including Stephanie Moulton, Donald Haurin and Caezilia Loibl, “Debt Stress and Mortgage Borrowing in Older Age: Implications for Economic Security in Retirement,” and Haydar Kurban, “The Impacts of Payday Loan Use on the Financial Wellbeing of OASDI and SSI Beneficiaries.” Both can be found online at <https://cfsrdrc.wisc.edu/projects/2019>.

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.⁷

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.⁸ While new entrants to the HRS are between 50 and 56, new entrants may have spouses that 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 Lusardi, Mitchell, and Oggero (2018), expanded to include additional HRS cohorts and the more recent 2016 HRS data.

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 Fichtner and Seligman’s (2017) approach, expanded to include additional HRS cohorts and the more recent

⁷ For general information about the HRS, see <https://hrs.isr.umich.edu/about>.

⁸ 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.

2016 HRS data. This framework allows for comparison to and expansion of Fichtner and Seligman's (2017) work.

Table 1 provides summary data for debt, assets, and debt-to-asset ratios for the first set of analyses. Focusing first on the 50–55 age grouping, the percentage of households with some debt rose from 73% for the HRS baseline to 78% for the Mid Boomers, consistent with mainstream media stories that debt is increasing with each cohort and that debt may lead to lower financial well-being in retirement. However, the percentage of household with some debt fell to 71% for the Late Boomer cohort. More interestingly, the median value of debt held almost tripled, from more than \$23,000 for the HRS baseline to just over \$69,000 for the Mid Boomers, then fell dramatically to just over \$26,000 for the Late Boomers, back in line with the HRS baseline cohort.⁹ Though the use of averages in the HRS can be highly sensitive to outliers, the average total debt of households age 50–55 in the HRS baseline surveyed in 1992 was almost \$72,000, and the average increased, with the Mid Boomers having an average total debt of over \$122,000 (a 70% increase). The average debt fell for the Late Boomer cohort, to about \$102,700.

⁹ All dollar values have been adjusted to 2018 levels.

Table 1.

| 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 |
| Total debt (2018 \$) | | | | | | | | | |
| HRS Baseline (Survey Year 1992) | 73.2% | \$71,906 | \$23,267 | 64.9% | \$47,605 | \$8,591 | 63.0% | \$37,368 | \$5,369 |
| War Babies (Survey Year 1998) | 76.0% | \$82,731 | \$43,135 | 73.2% | \$63,601 | \$32,351 | 75.7% | \$108,320 | \$15,405 |
| Early Boomers (Survey Year 2004) | 76.4% | \$118,849 | \$66,466 | 77.3% | \$110,526 | \$53,172 | N/A | N/A | N/A |
| Mid Boomers (Survey Year 2010) | 77.7% | \$122,212 | \$69,094 | 75.6% | \$103,823 | \$57,579 | N/A | N/A | N/A |
| Late Boomers (Survey Year 2016) | 70.8% | \$102,688 | \$26,156 | 69.8% | \$82,371 | \$30,341 | N/A | N/A | N/A |
| 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 |
| Value of other debt (2018 \$) | | | | | | | | | |
| HRS Baseline | 41.2% | \$7,446 | \$0 | 36.9% | \$4,242 | \$0 | 34.3% | \$3,499 | \$0 |
| War Babies | 42.0% | \$8,708 | \$0 | 39.7% | \$7,643 | \$0 | 39.3% | \$8,058 | \$0 |
| Early Boomers | 44.3% | \$13,295 | \$0 | 44.5% | \$8,086 | \$0 | N/A | N/A | N/A |
| Mid Boomers | 52.7% | \$12,951 | \$921 | 48.7% | \$10,603 | \$0 | N/A | N/A | N/A |
| Late Boomers | 46.9% | \$10,141 | \$0 | 44.7% | \$11,954 | \$0 | N/A | N/A | N/A |
| Assets by Cohort in the HRS | | | | | | | | | |
| | | Mean | Median | | Mean | Median | | Mean | Median |
| Total assets (2018 \$) | | | | | | | | | |
| HRS Baseline (Survey Year 1992) | | \$482,024 | \$232,672 | | \$500,299 | \$264,888 | | \$513,277 | \$306,053 |
| War Babies (Survey Year 1998) | | \$490,440 | \$249,567 | | \$546,332 | \$283,458 | | \$695,827 | \$226,459 |
| Early Boomers (Survey Year 2004) | | \$645,224 | \$308,400 | | \$654,986 | \$301,754 | | N/A | N/A |
| Mid Boomers (Survey Year 2010) | | \$518,207 | \$241,830 | | \$563,999 | \$264,286 | | N/A | N/A |
| Late Boomers (Survey Year 2016) | | \$554,517 | \$192,510 | | \$380,800 | \$177,862 | | N/A | N/A |
| 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 |
| Value of liquid assets (2018 \$) | | | | | | | | | |
| HRS Baseline | | \$102,755 | \$16,108 | | \$116,904 | \$21,477 | | \$139,846 | \$31,321 |
| War Babies | | \$109,983 | \$15,405 | | \$185,884 | \$12,324 | | \$123,945 | \$6,932 |
| Early Boomers | | \$141,795 | \$13,293 | | \$135,650 | \$9,305 | | N/A | N/A |
| Mid Boomers | | \$107,028 | \$7,485 | | \$101,794 | \$8,061 | | N/A | N/A |
| Late Boomers | | \$79,343 | \$3,139 | | \$75,819 | \$5,231 | | N/A | N/A |

| Debt Ratios by Cohort in the HRS | Ages 50-55 | | Ages 56-61 | | Ages 62-70 | |
|--|------------|--------|------------|--------|------------|--------|
| | Mean | Median | Mean | Median | Mean | Median |
| Total debt/total assets | | | | | | |
| 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 2004) | 5.12 | 0.20 | 0.67 | 0.19 | N/A | N/A |
| 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 | | | | | | |
| HRS Baseline | 0.54 | 0.21 | 0.23 | 0.05 | 0.16 | 0.00 |
| War Babies | 0.36 | 0.31 | 0.29 | 0.23 | 0.32 | 0.23 |
| Early Boomers | 0.41 | 0.36 | 0.38 | 0.38 | N/A | N/A |
| Mid Boomers | 0.50 | 0.43 | 0.45 | 0.36 | N/A | N/A |
| Late Boomers | 0.38 | 0.35 | 0.36 | 0.28 | N/A | N/A |
| Other debt/liquid assets | | | | | | |
| HRS Baseline | 8.31 | 0 | 8.00 | 0.00 | 6.14 | 0.00 |
| War Babies | 33.34 | 0 | 60.51 | 0.00 | 189.61 | 0.00 |
| Early Boomers | 35.53 | 0 | 23.57 | 0.00 | N/A | N/A |
| Mid Boomers | 82.16 | 0.05 | 15.65 | 0.00 | N/A | N/A |
| Late Boomers | 57.33 | 0.01 | 152.25 | 0.00 | N/A | N/A |
| Authors Calculations. RAND HRS 2016 (v1). Includes All Individuals: Respondents and Spouses by Wave. | | | | | | |
| All monetary values in \$2018. All data weighted. Outliers Removed Cohort 4 in Wave 4. | | | | | | |

But increasing debt may be manageable if assets are also increasing in value. Again, focusing on the 50–55 age grouping, the median value for total assets for the HRS baseline was about \$232,700, increasing slightly to \$241,800 for Mid Boomers and coming in only slightly lower for Late Boomers, at \$192,500. The mean was over \$482,000 for the HRS baseline cohort; it increased to \$518,200 for the Mid Boomers and to \$554,500 for Late Boomers.

It appears that household total debt burden for those age 50–55 is increasing with time, but it is slightly less for the Late Boomer cohort. A look at the ratio of total debt to total assets bears this out this proposition. For the HRS baseline cohort, the median debt-to-asset ratio was 12%. The ratio increases with each successive cohort, increasing to 28% for the Mid Boomers, again consistent with mainstream media stories that debt is increasing for each cohort and that debt may lead to less financial well-being in retirement, but then declines to 19% for the Late Boomer cohort. In this instance, focusing on averages is misleading, as a few outliers dominate the resulting average value. To get a clear perspective on how this age group is faring, the median is a better measure.

A similar pattern emerges with respect to households age 56–61, the five years that precede retirement for many people. Getting a better handle on debt burdens before retirement could lead to a more financially secure retirement. However, median total debt for households with either

the respondent or spouse age 56–61 has been increasing from cohort to cohort, again consistent with some previous research and stories in the media, with the recent exception of the Late Boomer cohort. For the HRS baseline, the median total debt level was about \$8,600. The median debt dramatically increased to \$32,400 for the War Babies, \$53,200 for Early Boomers, and \$57,600 for Mid Boomers. The data suggest a 570% increase in the median total debt from the HRS baseline cohort of this age group, surveyed in 1992, and the Mid Boomers, surveyed in 2010 (two years after the 2008 financial crisis). However, the financial recovery has resulted in an improvement of the median total debt for the Late Boomer cohort age 56–61. In 2016, eight years after the 2008 crisis, the median total debt for this cohort was \$30,300.

Unfortunately, the total asset value for this age group has not increased commensurate with debt levels. Median total assets, in 2018 dollars, were flat: about \$265,000 for the HRS baseline cohort, \$264,300 for the Mid Boomers, \$177,900 for the Late Boomers. Early Boomers in this age group, surveyed in 2004 (before the 2008 financial crisis), saw their median asset value increase to \$301,800. A more detailed look at the ratio of total debt to total income shows an increase in debt burdens in the years just before retirement. For the HRS baseline, the debt-to-asset ratio was 4%; the ratio increased to 12% for the War Babies, 19% for the Early Boomers, and 23% for the Mid Boomers. The Late Boomers are holding steady at 23%.

Tables 2, 3, and 4 offer more detailed summary statistics on debt, assets, and debt-to-asset ratios for households in the 50–55, 56–61 and 62–70 age groups. In the 55–61 age group, the 90th percentile for the total debt-to-asset ratio was 50% for the HRS baseline cohort, meaning 10% of this population had debt worth 50% of their total assets. This measure increases to 68% for War Babies, 87% for Early Boomers, and 114% for Mid Boomers, meaning that 10% of Mid Boomers aged 56–61 have debt totaling more than their assets are worth, a potentially troubling statistic that could indicate lower financial well-being in retirement.

Table 2.

| Debt by Cohort in the HRS | Ages 50-55 | | | | | | |
|--|------------------|-----|---------|--------------|-----------|-----------|-----------|
| | Debt Holders (%) | p10 | p25 | p50 / Median | p75 | p90 | Mean |
| Total debt (2018 \$) | | | | | | | |
| HRS Baseline | 73.2% | \$0 | \$0 | \$23,267 | \$89,489 | \$193,297 | \$71,906 |
| War Babies | 76.0% | \$0 | \$539 | \$43,135 | \$115,540 | \$207,972 | \$82,731 |
| Early Boomers | 76.4% | \$0 | \$1,063 | \$66,466 | \$159,517 | \$287,131 | \$118,849 |
| Mid Boomers | 77.7% | \$0 | \$1,727 | \$69,094 | \$183,100 | \$332,804 | \$122,212 |
| Late Boomers | 70.8% | \$0 | \$0 | \$26,156 | \$136,012 | \$298,181 | \$102,688 |
| Value of mortgages on primary residence (2018 \$) | | | | | | | |
| HRS Baseline | 52.5% | \$0 | \$0 | \$5,369 | \$67,385 | \$150,342 | \$50,496 |
| War Babies | 55.9% | \$0 | \$0 | \$21,567 | \$92,432 | \$175,621 | \$61,456 |
| Early Boomers | 57.7% | \$0 | \$0 | \$39,879 | \$132,931 | \$239,276 | \$88,258 |
| Mid Boomers | 55.7% | \$0 | \$0 | \$38,002 | \$139,138 | \$276,377 | \$93,006 |
| Late Boomers | 42.2% | \$0 | \$0 | \$0 | \$115,087 | \$266,793 | \$83,227 |
| Value of all home debt on primary residence (2018 \$) | | | | | | | |
| HRS Baseline | 57.3% | \$0 | \$0 | \$16,108 | \$73,381 | \$161,081 | \$59,078 |
| War Babies | 60.3% | \$0 | \$0 | \$30,811 | \$101,675 | \$184,864 | \$67,426 |
| Early Boomers | 62.7% | \$0 | \$0 | \$51,843 | \$144,422 | \$259,216 | \$97,030 |
| Mid Boomers | 59.0% | \$0 | \$0 | \$48,366 | \$155,462 | \$287,893 | \$100,705 |
| Late Boomers | 45.4% | \$0 | \$0 | \$0 | \$120,319 | \$281,656 | \$88,281 |
| Value of other debt (2018 \$) | | | | | | | |
| HRS Baseline | 41.2% | \$0 | \$0 | \$0 | \$3,580 | \$14,318 | \$7,446 |
| War Babies | 42.0% | \$0 | \$0 | \$0 | \$6,162 | \$23,108 | \$8,708 |
| Early Boomers | 44.3% | \$0 | \$0 | \$0 | \$6,647 | \$26,586 | \$13,295 |
| Mid Boomers | 52.7% | \$0 | \$0 | \$921 | \$11,516 | \$34,547 | \$12,951 |
| Late Boomers | 46.9% | \$0 | \$0 | \$0 | \$10,462 | \$29,295 | \$10,141 |

| Assets by Cohort in the HRS | Ages 50-55 | | | | | | |
|--|------------|-----------|--------------|-----------|-------------|-----------|--|
| | p10 | p25 | p50 / Median | p75 | p90 | Mean | |
| Total assets (2018 \$) | | | | | | | |
| HRS Baseline | \$13,173 | \$94,859 | \$232,672 | \$480,311 | \$986,172 | \$482,024 | |
| War Babies | \$14,481 | \$110,918 | \$249,567 | \$534,103 | \$1,129,211 | \$490,440 | |
| Early Boomers | \$9,172 | \$120,303 | \$308,400 | \$682,203 | \$1,434,328 | \$645,224 | |
| Mid Boomers | \$4,039 | \$70,826 | \$241,830 | \$573,482 | \$1,082,477 | \$518,207 | |
| Late Boomers | \$523 | \$20,925 | \$192,510 | \$562,359 | \$1,339,198 | \$554,517 | |
| Value of primary residence (2018 \$) | | | | | | | |
| HRS Baseline | \$0 | \$47,429 | \$134,234 | \$241,621 | \$402,702 | \$180,784 | |
| War Babies | \$0 | \$69,324 | \$144,810 | \$231,080 | \$362,025 | \$183,044 | |
| Early Boomers | \$0 | \$73,112 | \$187,433 | \$365,561 | \$598,190 | \$275,677 | |
| Mid Boomers | \$0 | \$28,789 | \$166,978 | \$316,682 | \$575,786 | \$229,299 | |
| Late Boomers | \$0 | \$0 | \$125,550 | \$313,875 | \$627,749 | \$225,440 | |
| Value of primary & secondary residences (2018 \$) | | | | | | | |
| HRS Baseline | \$0 | \$53,694 | \$143,183 | \$268,468 | \$465,344 | \$209,243 | |
| War Babies | \$0 | \$77,027 | \$153,283 | \$246,485 | \$385,133 | \$200,017 | |
| Early Boomers | \$0 | \$82,417 | \$199,397 | \$388,159 | \$673,961 | \$308,886 | |
| Mid Boomers | \$0 | \$40,305 | \$172,736 | \$345,471 | \$598,188 | \$256,066 | |
| Late Boomers | \$0 | \$0 | \$136,012 | \$334,800 | \$658,921 | \$239,157 | |
| Value of liquid assets (2018 \$) | | | | | | | |
| HRS Baseline | \$0 | \$1,790 | \$16,108 | \$66,222 | \$196,877 | \$102,755 | |
| War Babies | \$0 | \$1,541 | \$15,405 | \$84,729 | \$277,296 | \$109,983 | |
| Early Boomers | \$0 | \$1,329 | \$13,293 | \$86,405 | \$307,736 | \$141,795 | |
| Mid Boomers | \$0 | \$461 | \$7,485 | \$46,523 | \$204,980 | \$107,028 | |
| Late Boomers | \$0 | \$0 | \$3,139 | \$31,387 | \$183,094 | \$79,343 | |
| Debt Ratios by Cohort in the HRS | | | | | | | |
| | | | | | | | |
| Total debt/total assets | | | | | | | |
| HRS Baseline | 0.00 | 0.00 | 0.12 | 0.37 | 0.66 | 2.16 | |
| War Babies | 0.00 | 0.01 | 0.17 | 0.43 | 0.75 | 11.62 | |
| Early Boomers | 0.00 | 0.01 | 0.20 | 0.47 | 0.80 | 5.12 | |
| Mid Boomers | 0.00 | 0.03 | 0.28 | 0.66 | 1.15 | 3.69 | |
| Late Boomers | 0.00 | 0.00 | 0.19 | 0.56 | 1.04 | 9.50 | |
| All primary residence LTV | | | | | | | |
| HRS Baseline | 0.00 | 0.00 | 0.21 | 0.52 | 0.75 | 0.54 | |
| War Babies | 0.00 | 0.00 | 0.31 | 0.61 | 0.78 | 0.36 | |
| Early Boomers | 0.00 | 0.04 | 0.36 | 0.60 | 0.82 | 0.41 | |
| Mid Boomers | 0.00 | 0.04 | 0.43 | 0.73 | 0.94 | 0.50 | |
| Late Boomers | 0.00 | 0.00 | 0.35 | 0.61 | 0.81 | 0.38 | |
| Other debt/liquid assets | | | | | | | |
| HRS Baseline | 0.00 | 0.00 | 0.00 | 0.25 | 2.40 | 8.31 | |
| War Babies | 0.00 | 0.00 | 0.00 | 0.27 | 4.67 | 33.34 | |
| Early Boomers | 0.00 | 0.00 | 0.00 | 0.50 | 5.84 | 35.53 | |
| Mid Boomers | 0.00 | 0.00 | 0.05 | 1.60 | 16.67 | 82.16 | |
| Late Boomers | 0.00 | 0.00 | 0.01 | 1.80 | 20.00 | 57.33 | |
| Authors Calculations. RAND HRS 2016 (v1). Sample includes respondents & spouses age 50-55. | | | | | | | |
| All monetary values in \$2018. All data weighted. Outliers Removed Cohort 4 in Wave 4. | | | | | | | |

Table 3.

| Debt by Cohort in the HRS | Ages 56-61 | | | | | | |
|--|------------------|-----|---------|--------------|-----------|-----------|-----------|
| | Debt Holders (%) | p10 | p25 | p50 / Median | p75 | p90 | Mean |
| Total debt (2018 \$) | | | | | | | |
| HRS Baseline | 64.9% | \$0 | \$0 | \$8,591 | \$57,273 | \$134,234 | \$47,605 |
| War Babies | 73.2% | \$0 | \$0 | \$32,351 | \$97,054 | \$183,324 | \$63,601 |
| Early Boomers | 77.3% | \$0 | \$1,329 | \$53,172 | \$182,515 | \$304,412 | \$110,526 |
| Mid Boomers | 75.6% | \$0 | \$691 | \$57,579 | \$155,462 | \$276,377 | \$103,823 |
| Late Boomers | 69.8% | \$0 | \$0 | \$30,341 | \$111,949 | \$245,868 | \$82,371 |
| Value of mortgages on primary residence (2018 \$) | | | | | | | |
| HRS Baseline | 41.7% | \$0 | \$0 | \$0 | \$35,796 | \$105,597 | \$32,680 |
| War Babies | 53.0% | \$0 | \$0 | \$9,243 | \$72,405 | \$154,053 | \$47,703 |
| Early Boomers | 54.0% | \$0 | \$0 | \$19,940 | \$150,212 | \$261,874 | \$87,404 |
| Mid Boomers | 53.5% | \$0 | \$0 | \$28,789 | \$131,279 | \$237,224 | \$82,164 |
| Late Boomers | 45.6% | \$0 | \$0 | \$0 | \$92,070 | \$209,250 | \$66,048 |
| Value of all home debt on primary residence (2018 \$) | | | | | | | |
| HRS Baseline | 46.9% | \$0 | \$0 | \$0 | \$46,534 | \$117,589 | \$38,947 |
| War Babies | 57.4% | \$0 | \$0 | \$23,108 | \$80,108 | \$154,053 | \$52,032 |
| Early Boomers | 61.1% | \$0 | \$0 | \$39,879 | \$167,627 | \$265,862 | \$97,585 |
| Mid Boomers | 56.0% | \$0 | \$0 | \$34,547 | \$138,189 | \$247,588 | \$87,749 |
| Late Boomers | 46.9% | \$0 | \$0 | \$0 | \$102,532 | \$230,175 | \$68,009 |
| Value of other debt (2018 \$) | | | | | | | |
| HRS Baseline | 36.9% | \$0 | \$0 | \$0 | \$2,506 | \$8,949 | \$4,242 |
| War Babies | 39.7% | \$0 | \$0 | \$0 | \$5,392 | \$18,486 | \$7,643 |
| Early Boomers | 44.5% | \$0 | \$0 | \$0 | \$6,647 | \$26,586 | \$8,086 |
| Mid Boomers | 48.7% | \$0 | \$0 | \$0 | \$11,516 | \$33,971 | \$10,603 |
| Late Boomers | 44.7% | \$0 | \$0 | \$0 | \$10,462 | \$26,156 | \$11,954 |

| Assets by Cohort in the HRS | Ages 56-61 | | | | | | |
|--|------------|-----------|--------------|-----------|-------------|-----------|--|
| | p10 | p25 | p50 / Median | p75 | p90 | Mean | |
| Total assets (2018 \$) | | | | | | | |
| HRS Baseline | \$19,688 | \$109,177 | \$264,888 | \$515,458 | \$1,036,286 | \$500,299 | |
| War Babies | \$13,865 | \$112,305 | \$283,458 | \$592,797 | \$1,195,796 | \$546,332 | |
| Early Boomers | \$3,589 | \$112,992 | \$301,754 | \$700,191 | \$1,555,295 | \$654,986 | |
| Mid Boomers | \$3,224 | \$92,126 | \$264,286 | \$624,152 | \$1,355,399 | \$563,999 | |
| Late Boomers | \$209 | \$28,249 | \$177,862 | \$443,400 | \$902,913 | \$380,800 | |
| Value of primary residence (2018 \$) | | | | | | | |
| HRS Baseline | \$0 | \$62,643 | \$134,234 | \$232,672 | \$357,957 | \$170,989 | |
| War Babies | \$0 | \$75,486 | \$150,972 | \$246,485 | \$385,133 | \$185,025 | |
| Early Boomers | \$0 | \$66,466 | \$186,104 | \$365,561 | \$531,725 | \$252,163 | |
| Mid Boomers | \$0 | \$57,579 | \$184,251 | \$316,682 | \$518,207 | \$238,902 | |
| Late Boomers | \$0 | \$0 | \$125,550 | \$313,875 | \$470,812 | \$189,241 | |
| Value of primary & secondary residences (2018 \$) | | | | | | | |
| HRS Baseline | \$0 | \$68,012 | \$141,393 | \$259,519 | \$420,600 | \$198,362 | |
| War Babies | \$0 | \$77,027 | \$154,053 | \$277,296 | \$423,647 | \$205,923 | |
| Early Boomers | \$0 | \$79,759 | \$199,397 | \$381,513 | \$664,656 | \$273,628 | |
| Mid Boomers | \$0 | \$69,094 | \$194,616 | \$345,471 | \$575,786 | \$267,224 | |
| Late Boomers | \$0 | \$0 | \$136,012 | \$313,875 | \$523,124 | \$201,040 | |
| Value of liquid assets (2018 \$) | | | | | | | |
| HRS Baseline | \$0 | \$2,685 | \$21,477 | \$94,859 | \$282,786 | \$116,904 | |
| War Babies | \$0 | \$924 | \$12,324 | \$114,000 | \$318,891 | \$185,884 | |
| Early Boomers | \$0 | \$1,329 | \$9,305 | \$80,423 | \$361,573 | \$135,650 | |
| Mid Boomers | \$0 | \$461 | \$8,061 | \$54,124 | \$253,346 | \$101,794 | |
| Late Boomers | \$0 | \$21 | \$5,231 | \$36,619 | \$198,787 | \$75,819 | |
| Debt Ratios by Cohort in the HRS | Ages 56-61 | | | | | | |
| | p10 | p25 | p50 / Median | p75 | p90 | Mean | |
| Total debt/total assets | | | | | | | |
| HRS Baseline | 0 | 0 | 0.04 | 0.24 | 0.50 | 0.83 | |
| War Babies | 0 | 0 | 0.12 | 0.35 | 0.68 | 49.31 | |
| Early Boomers | 0 | 0.01 | 0.19 | 0.58 | 0.86 | 0.67 | |
| Mid Boomers | 0 | 0.02 | 0.23 | 0.58 | 1.19 | 7.72 | |
| Late Boomers | 0 | 0.00 | 0.23 | 0.51 | 0.86 | 20.28 | |
| All primary residence LTV | | | | | | | |
| HRS Baseline | 0 | 0 | 0.05 | 0.36 | 0.65 | 0.23 | |
| War Babies | 0 | 0 | 0.23 | 0.52 | 0.73 | 0.29 | |
| Early Boomers | 0 | 0 | 0.38 | 0.66 | 0.85 | 0.38 | |
| Mid Boomers | 0 | 0 | 0.36 | 0.69 | 1.00 | 0.45 | |
| Late Boomers | 0 | 0 | 0.28 | 0.57 | 0.80 | 0.36 | |
| Other debt/liquid assets | | | | | | | |
| HRS Baseline | 0 | 0 | 0 | 0.1 | 1.30 | 8.00 | |
| War Babies | 0 | 0 | 0 | 0.16 | 4.55 | 60.51 | |
| Early Boomers | 0 | 0 | 0 | 1.00 | 10.00 | 23.57 | |
| Mid Boomers | 0 | 0 | 0 | 1.25 | 14.09 | 15.65 | |
| Late Boomers | 0 | 0 | 0 | 1.40 | 18.57 | 152.25 | |
| Authors Calculations. RAND HRS 2016 (v1). Sample includes respondents & spouses age 56-61. | | | | | | | |
| All monetary values in \$2018. All data weighted. Outliers Removed Cohort 4 in Wave 4. | | | | | | | |

| Assets by Cohort in the HRS | Ages 62-70 | | | | | | |
|--|------------|-----------|--------------|-----------|-------------|-----------|--|
| | p10 | p25 | p50 / Median | p75 | p90 | Mean | |
| Total assets (2018 \$) | | | | | | | |
| HRS Baseline | \$51,904 | \$137,814 | \$306,053 | \$572,732 | \$1,184,839 | \$513,277 | |
| War Babies | \$23,111 | \$101,367 | \$226,459 | \$466,782 | \$1,209,319 | \$695,827 | |
| Early Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Mid Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Late Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Value of primary residence (2018 \$) | | | | | | | |
| HRS Baseline | \$8,949 | \$80,540 | \$143,183 | \$250,570 | \$357,957 | \$189,246 | |
| War Babies | \$0 | \$38,513 | \$131,716 | \$200,269 | \$308,107 | \$238,281 | |
| Early Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Mid Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Late Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Value of primary & secondary residences (2018 \$) | | | | | | | |
| HRS Baseline | \$21,477 | \$89,489 | \$156,606 | \$268,468 | \$447,447 | \$225,558 | |
| War Babies | \$0 | \$38,513 | \$131,716 | \$200,269 | \$346,620 | \$241,728 | |
| Early Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Mid Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Late Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Value of liquid assets (2018 \$) | | | | | | | |
| HRS Baseline | \$89 | \$5,369 | \$31,321 | \$127,075 | \$357,957 | \$139,846 | |
| War Babies | \$0 | \$1,232 | \$6,932 | \$123,859 | \$700,943 | \$123,945 | |
| Early Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Mid Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Late Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Debt Ratios by Cohort in the HRS | Ages 62-70 | | | | | | |
| | p10 | p25 | p50 / Median | p75 | p90 | Mean | |
| Total debt/total assets | | | | | | | |
| HRS Baseline | 0 | 0 | 0.02 | 0.15 | 0.39 | 1.39 | |
| War Babies | 0 | 0.02 | 0.10 | 0.44 | 0.87 | 0.28 | |
| Early Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Mid Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Late Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| All primary residence LTV | | | | | | | |
| HRS Baseline | 0 | 0 | 0 | 0.23 | 0.55 | 0.16 | |
| War Babies | 0 | 0 | 0.23 | 0.50 | 0.92 | 0.32 | |
| Early Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Mid Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Late Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Other debt/liquid assets | | | | | | | |
| HRS Baseline | 0 | 0 | 0 | 0.05 | 0.83 | 6.14 | |
| War Babies | 0 | 0 | 0 | 1.50 | 3.75 | 189.61 | |
| Early Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Mid Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Late Boomers | N/A | N/A | N/A | N/A | N/A | N/A | |
| Authors Calculations. RAND HRS 2016 (v1). Sample includes respondents & spouses age 62-70. | | | | | | | |
| All monetary values in \$2018. All data weighted. Outliers Removed Cohort 4 in Wave 4. | | | | | | | |

A house is often the primary asset in retirement; one reason debt levels have increased over time is that home prices have also increased. 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 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 is \$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 average \$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 mortgage debt as they neared and entered retirement, a positive sign for financial well-being in retirement.

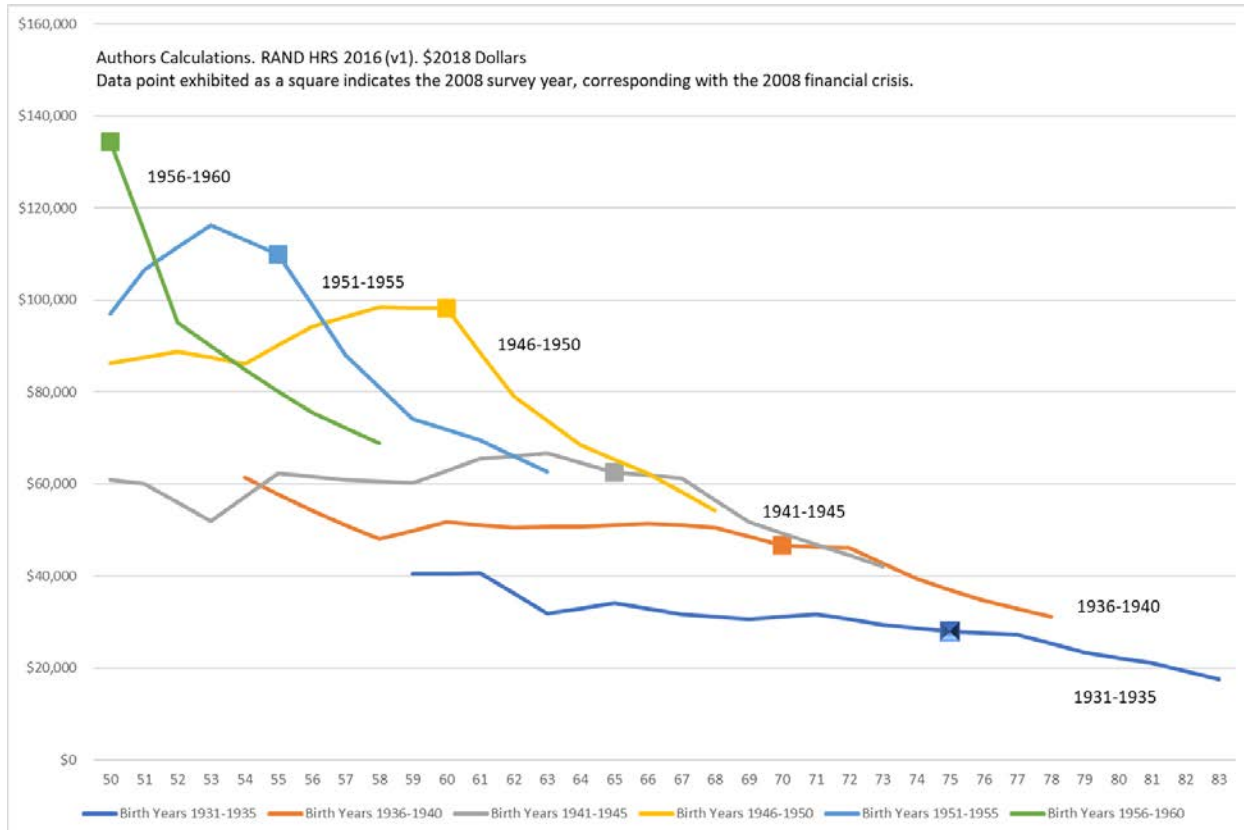
The story is not as clear for the Mid Boomers. The median loan-to-value ratio for Mid Boomers at age 50–55 was 43% (average 50%). The ratio declined for this group, to 36% (average 45%) by the time they reached the 56–61 age group. The detailed tables shed further light on home debt. For the HRS baseline cohort at age 50–55, 10% had a loan-to-value ratio of 75% or more, while 10% of Mid Boomers had a ratio of 94% or more at age 50–55. At age 56–61, 10% of the HRS baseline cohort had a loan-to-value ratio of 65% or higher. However, among Mid Boomers at age 56–61, 10% owed 100% of their home's value, indicating that they have no home equity in the years preceding retirement.

An additional descriptive analysis of the HRS 1992–2016 data allows another view of how long-term debt and asset trends have played out across age groups over time. For this analysis,

households were segmented into five-year birth cohorts: those born 1931–1935, 1936–1940, 1941–1945, 1946–1950, 1950–1955, and 1956–1960.

Plotting total debt by birth-year cohort, shown in Figure 1, tells an interesting story. Generally, as people get older, they tend to reduce debt. This trend is easily visible for HRS respondents born between 1931 and 1935; average total debt for this cohort is around \$40,000 in their late 50s and declines to less than \$20,000 by the time they reach their early 80s. Other birth-year cohorts exhibit similar patterns. Note that the data point exhibited as a square indicates the 2008 survey year, corresponding with the 2008 financial crisis. The Late Boomer cohort experienced very high average debt levels in 2008, but since has been reducing their debt levels, suggesting that this cohort may have better financial well-being in retirement.

Figure 1. Average Total Debt by Birth Year Cohort

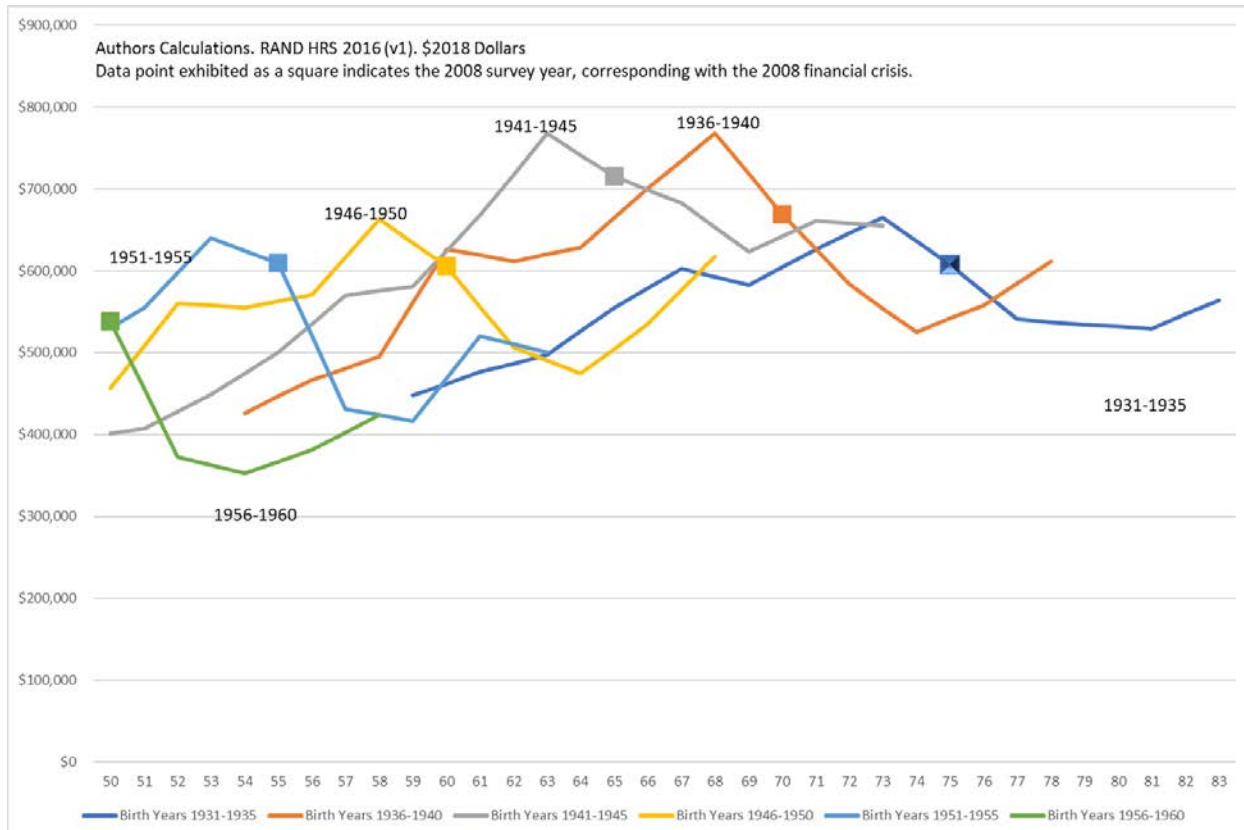


Similarly, people tend to build up assets leading up to retirement and then spend them down.

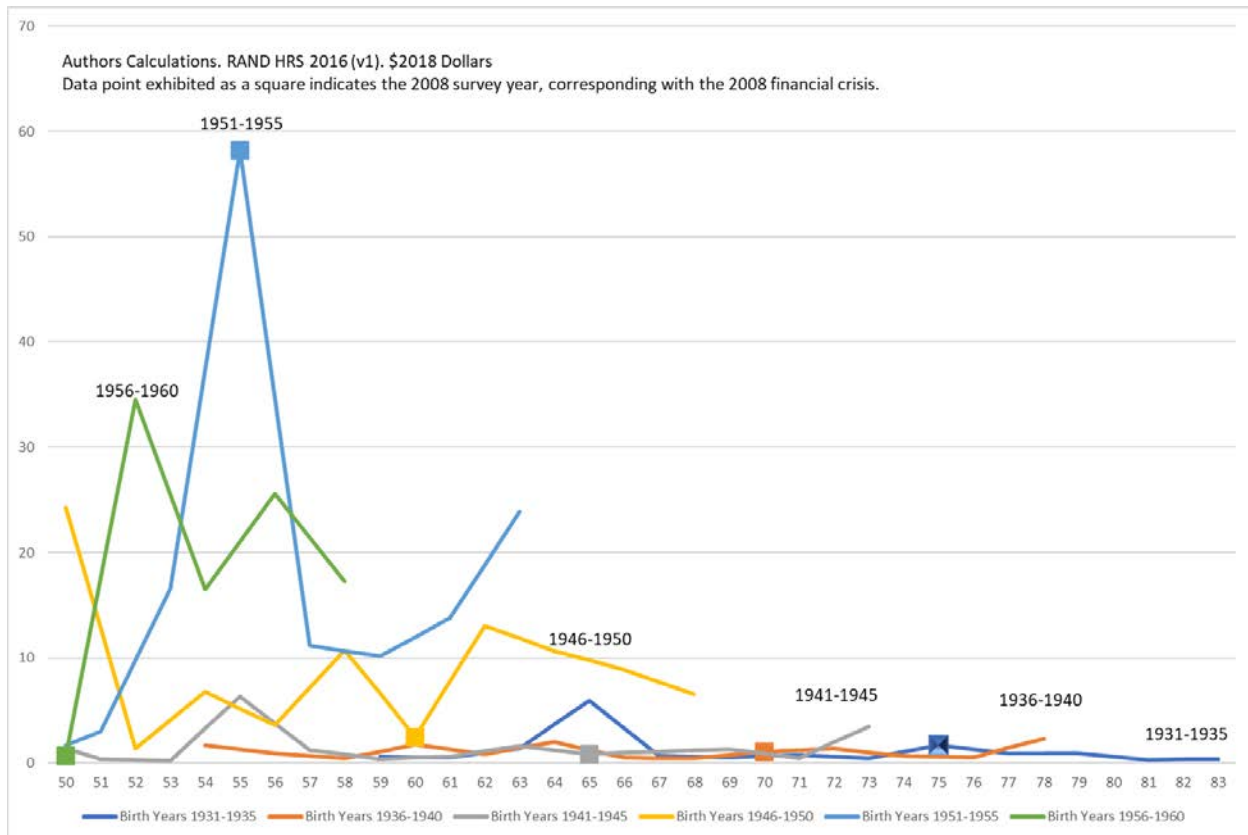
However, as Figure 2 shows, average total assets for all birth-year cohorts declined significantly

as a result of the 2008 financial crisis. While the 1946–1950 birth cohort had recovered its losses by the 2016 survey, the other cohorts are still catching up. For many people nearing retirement, the 2008 financial crisis resulted in a major reduction in financial assets that continues to have major implication for retirement security and financial well-being in retirement.

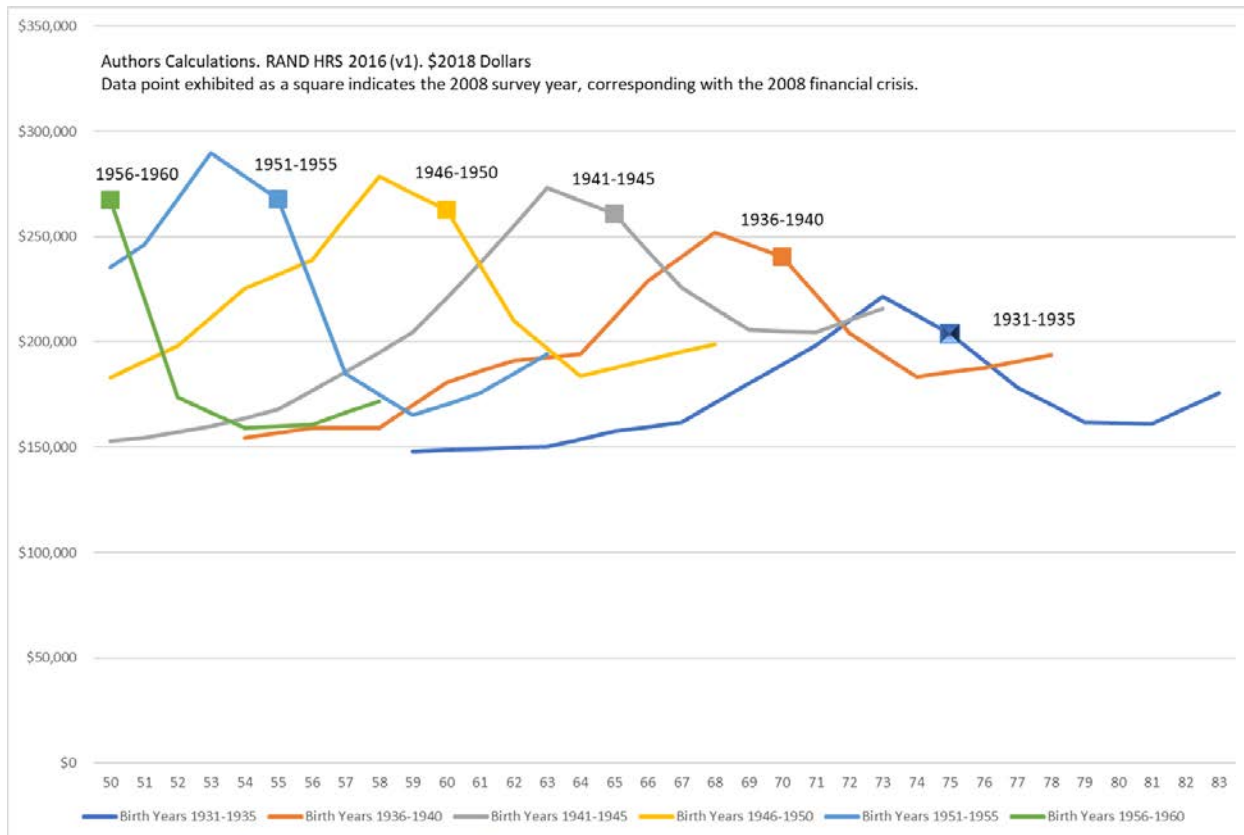
Figure 2. Average Total Assets by Birth Year Cohort



The average debt-to-asset ratios presented in Figure 3 are heavily influenced by some extreme values. Nonetheless, the debt-to-asset ratios for the oldest birth-year cohorts appear to be relatively moderate and manageable over time. However, the more recent birth-year cohorts—those born 1951–1955 and 1956–1960—have debt-to-asset ratios that are quite high and could suggest some financial fragility as these respondents retire. Again, however, the influence of some extreme values influences the average in this summary data.

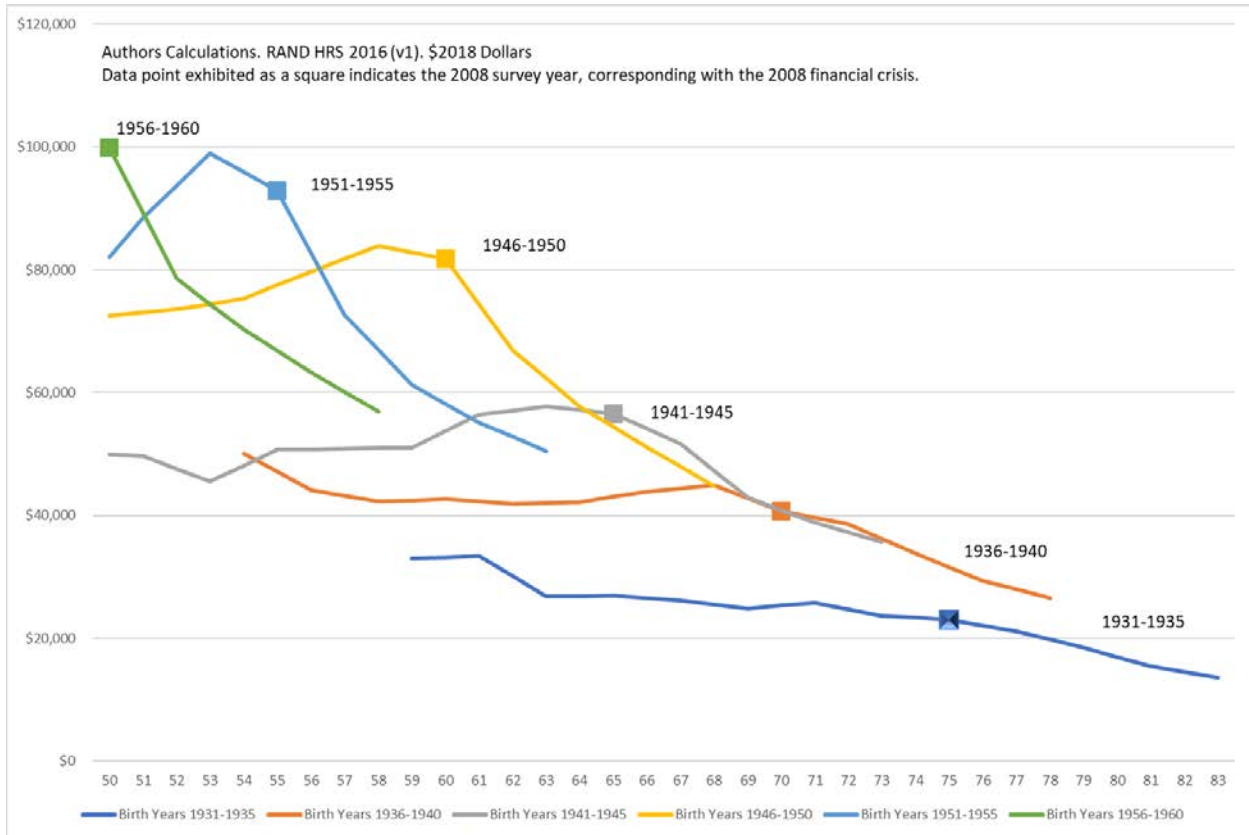
Figure 3. Average Debt to Asset Ratio by Birth Year Cohort

The home is an important asset in retirement, and the HRS data include information on home and mortgage values, allowing the construction of loan-to-value ratios. First, as seen in Figure 4, home values for all age cohorts generally rise with the economy. However, each cohort experienced a significant reduction in the average value of primary residences as a result of the 2008 financial crisis.

Figure 4. Average Value of Primary Residence by Birth Year Cohort

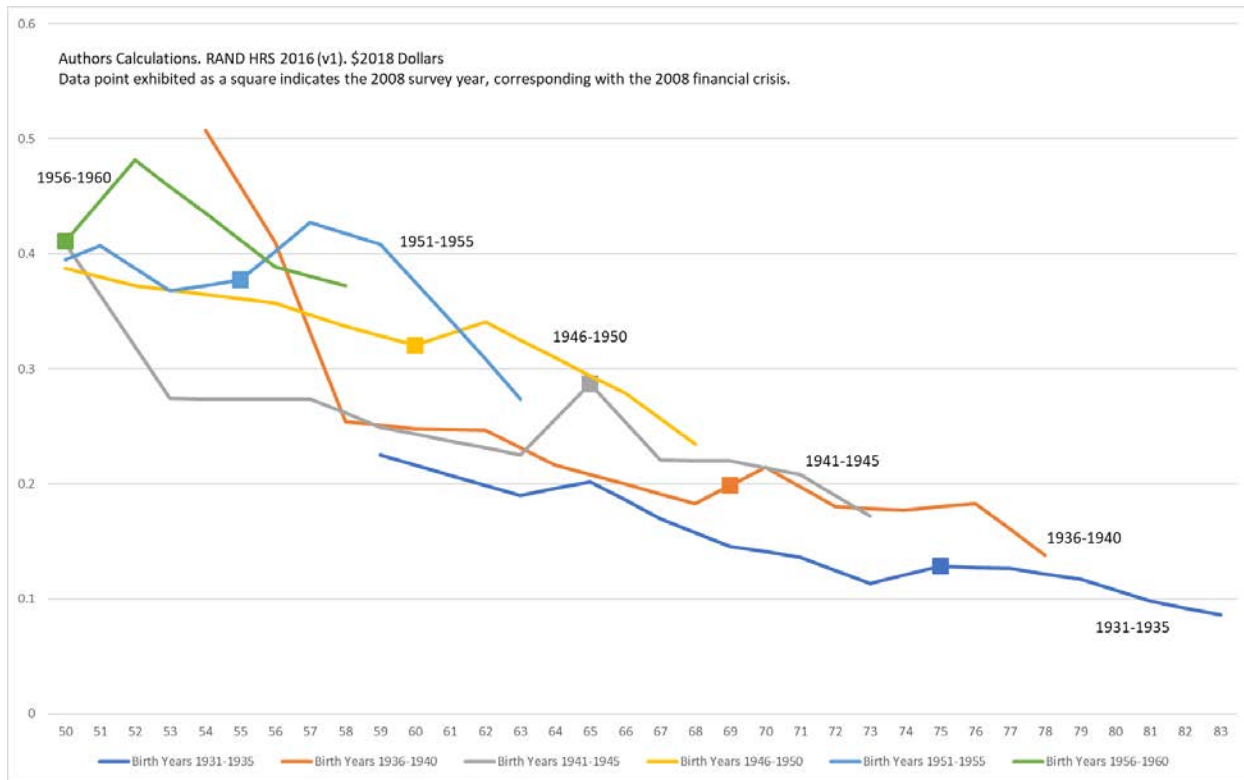
On the basis of averages alone, data from the 2016 survey show that none of the cohorts have recovered those losses in value since the crisis. The general patterns of decline are relatively uniform for each cohort, suggesting that any shock to the housing market could have a major impact on the financial well-being of retirees. Reassuringly, homeowners have continued to pay down their mortgages, as shown in Figure 5.

Figure 5. Average Value of All Primary Residence Home Debt by Birth Year Cohort



As one would then expect, the loan-to-value ratio has generally continued to decline, shown in Figure 6, securing home value that might otherwise be at risk in a future shock to the housing market.

Figure 6. Average Loan to Value by Birth Year Cohort (Percent)

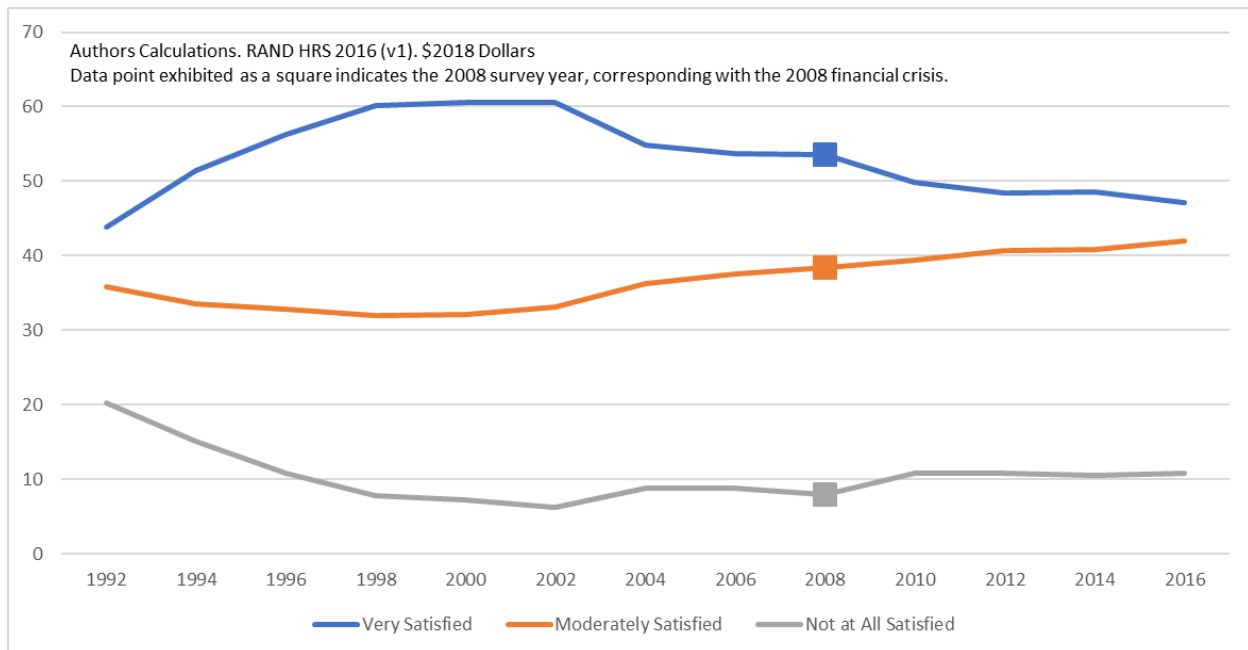


In fact, while the loan-to-value ratio has generally been higher for later cohorts at similar ages, some initial evidence suggests that, since the crisis and ensuing recession, the youngest cohorts are accelerating mortgage pay-down relative to those who came before them. As a result, more recent cohorts may have better financial well-being in retirement than is often portrayed in the mainstream media.

While this paper has primarily focused on debt and asset levels for various age groups and cohorts near or in retirement, another interesting angle of research is whether debt levels are correlated with satisfaction in retirement. It might be assumed that as cohorts 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. The HRS has asked respondents in each survey wave to report their level of satisfaction in retirement. While retirement satisfaction can be related to many different factors—income, wealth, health, marital

status, number of friends, and other elements—an analysis of debt to retirement satisfaction, somewhat surprisingly, showed no correlation between debt or asset levels and retirement satisfaction for any cohorts. Interestingly, as shown in Figure 7, the percentage of respondents who reported they were “Very,” “Moderately” and “Not at all” satisfied with retirement has remained relatively constant over time, with some decline in the number indicating they are “Very” satisfied with retirement and slightly more indicating they are “Moderately” satisfied.

Figure 7. Retirement Satisfaction (Percent)



That said, much more research is necessary to support any conclusion regarding the relationship between debt levels and retirement satisfaction. The story likely is more complicated than it appears from these data. 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.

4. Conclusion and Discussion

Each generation faces unique economic challenges in saving for retirement. Some generations experience strong economic growth and generally rising wages, while others face structural

changes in the economy that affect asset and debt accumulation. For example, Generation Xers were uniquely influenced by the shift from defined-benefit retirement plans to defined-contribution plans and the economic impacts of the Great Recession. As this analysis has shown, debt burdens are increasing for the near-retirement age population over time. But the story is more nuanced than it might appear; early evidence suggests the financial condition of the Late Boomer cohort is improving. Further, the one-size-fits-all story that there is a “retirement crisis” on the horizon creates an incomplete picture of the true financial landscape faced by many future retirees.

However, given that people are tending to live longer, the likely reality is that people will need to save more on their own and work longer, either retiring later or working to generate some income during retirement, especially if they carry higher debt burdens into retirement. That said, financial security in retirement is still obtainable. One final point is worth emphasizing in this regard—the importance of Social Security benefits in retirement (Fellowes et al. 2019). Individuals should 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 debt in retirement is more complicated and more nuanced than is often portrayed in the popular press, further research needs to be done before rushing to any policy conclusions. Further analysis is necessary to understand how people use housing wealth in retirement and how financial well-being in retirement might be different for those who own their homes outright versus those who carry home mortgage debt into retirement. Further, research is needed to understand how debt and financial well-being in retirement differ for those who have housing assets versus those who rent. Additional research is necessary regarding racial, gender-based, or geographical disparities that can impact 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.

Acknowledgments

Thank you to Jason S. Seligman for providing thoughtful help, comments, and suggestions. Also, thank you to the entire staff at the University of Wisconsin Center for Financial Security and the Social Security Administration for their support in managing the Retirement and Disability Research Consortium.

References

- Arends, Brett. "Our Next Big Crisis Will Be a Retirement Crisis." *Market Watch*, March 3, 2014. <https://www.marketwatch.com/story/our-next-big-crisis-will-be-a-retirement-crisis-2014-03-03>
- Biggs, Andrew G., Gaobo Pang, and Sylvester J. Schieber. "Measuring and Communicating Social Security Replacement Rates." AEI Economic Policy Studies Working Paper 2015-01. American Enterprise Institute, January 8, 2015.
- Biggs, Andrew G., and Glenn Springstead. "Alternative Measures of Replacement Rates for Social Security Benefits and Retirement Income," *Social Security Bulletin* 68, no. 2 (2008): 1-19.
- Blahous, Charles. "Understanding Social Security Benefit Adequacy: Myths and Realities of Social Security Replacement Rates." Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, November 2012.
- Brown, Jason, K. Dynan, and T. Figinski. "The Risk of Financial Hardship in Retirement: A Cohort Analysis." *Remaking Retirement? Debt in an Aging Economy*. Pension Research Council, 2017. <https://pensionresearchcouncil.wharton.upenn.edu/wp-content/uploads/2019/05/5-2-19-Brown-Dynan-Figinski-Slides.pdf>
- Brown, Meta, Donghoon Lee, Joelle Scally, and Wilbert van der Klaauw. "The Graying of American Debt." *Remaking Retirement? Debt in an Aging Economy*. Pension Research Council, 2019. https://pensionresearchcouncil.wharton.upenn.edu/wp-content/uploads/2019/05/Brown_PRC_May2019.pdf
- Center for Retirement Research. *National Retirement Risk Index*. Boston College, Chestnut Hill, MA, 2019. <https://crr.bc.edu/special-projects/national-retirement-risk-index/>
- Collins, J. Michael, Erik Hembre, and Carly Urban. "Exploring the Rise of Mortgage Borrowing Among Older Americans." May 2018. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3171777
- Collins, J. Michael, John Karl Scholz, and Ananth Seshadri. "The Assets and Liabilities of Cohorts: The Antecedents of Retirement Security." Research Brief 209. Michigan Retirement Research Center, 2013.
- Fellowes, Matt, Jason J. Fichtner, Lincoln Plews, and Kevin Whitman. "The Retirement Solution

- Hiding in Plain Sight: How Much Retirees Would Gain by Improving Social Security Decisions.” United Income, 2019.
- Fichtner, Jason, and John Phillips, and Barbara Smith. "Retirement Behavior and the Global Financial Crisis." Chapter 5 in *Reshaping Retirement Security: Lessons from the Global Financial Crisis*, R. Maurer, O. Mitchell, and M. Warshawsky (Eds.), Oxford University Press, 2012.
- Fichtner, Jason, and Jason Seligman. “Retirement Saving and Decumulation in a Persistent Low-Return Environment.” Working Paper. Pension Research Council, University of Pennsylvania, 2017.
- Gale, William, Hilary Gelfond, and Jason Fichtner. “How Will Retirement Savings Change by 2050? Prospects for the Millennial Generation.” Brookings Institution, Washington, DC, 2019.
- Gale, William, and Karen Pence. “Are Successive Generations Getting Wealthier, and if so, Why?” Brookings Institution, Washington, DC, 2006.
- Gillers, Heather, Anne Tergesen, and Leslie Scism. “A Generation of Americans is Entering Old Age the Least Prepared in Decades.” *Wall Street Journal*, June 22, 2018.
<https://www.wsj.com/articles/a-generation-of-americans-is-entering-old-age-the-least-prepared-in-decades-1529676033>
- Goss, Stephen, Michael Clingman, Alice Wade, and Karen Glenn. “Replacement Rates for Retirees: What Makes Sense for Planning and Evaluation?” *Actuarial Note* no. 155, July 2014. Social Security Administration.
- Hays, Kim. “Many Retired People Don’t Expect to Pay Off Mortgages.” *AARP Money*, March 26, 2018. <https://www.aarp.org/money/credit-loans-debt/info-2018/retired-paying-off-mortgage-fd.html>
- Hurd, Michael D., and Susann Rohwedder. “The Effects of the Economic Crisis on the Older Population.” Working Paper No. 2010-231. Michigan Retirement Research Center, 2010.
- Hurd, Michael, and Susann Rohwedder. “Economic Preparation for Retirement.” In *Investigations in the Economics of Aging*, edited by David Wise, 77-113. Chicago, IL: University of Chicago Press, 2012.
- Lusardi, Annamaria, Olivia Mitchell, and Noemi Oggero. “Debt and Financial Vulnerability on the Verge of Retirement.” NBER Working Paper No. 23664. National Bureau of

- Economic Research, 2017.
- Lusardi, Annamaria, Olivia Mitchell, and Noemi Oggero. “The Changing Face of Debt and Financial Fragility at Older Ages.” *AEA Paper and Proceedings* 108 (2018): 407–411.
- Orman, Suze. “This Is When to Pay Off Your Mortgage.” *CNBC*, October 12, 2018. <https://www.cnbc.com/2018/10/12/suze-orman-this-is-when-to-pay-off-your-mortgage.html>
- Pew Research Center. “Chapter 3: Net Worth By Asset.” *Social & Demographic Trends*, July 26, 2011. <https://www.pewsocialtrends.org/2011/07/26/chapter-3-net-worth-by-type-of-asset/>
- Poterba, James, Steven Venti, and David Wise. “What Determines End-of-Life Assets? A Retrospective View.” NBER Working Paper No. 21682. National Bureau of Economic Research, 2015.
- Powell, Robert. “Americans Fall Short on Retirement Income.” *Market Watch*, May 2, 2014.
- Sabelhaus, J. Discussant Comments on “Remaking Retirement? Debt in an Aging Economy.” Pension Research Council, 2019. <https://pensionresearchcouncil.wharton.upenn.edu/wp-content/uploads/2019/05/Sabelhaus-PRC-Comments-May-2019.pdf>
- Schieber, Sylvester J., and Andrew G. Biggs. “Retirees Aren’t Headed for the Poor House.” *Wall Street Journal*, January 23, 2014. <https://www.wsj.com/articles/andrew-biggs-and-sylvester-schieber-retirees-aren8217t-headed-for-the-poor-house-1390522110>
- Scholz, John Karl, Ananth Seshadri and Surachai Khitatrakun. 2006. “Are Americans Saving Optimally for Retirement?” *Journal of Political Economy* 114, no. 4 (2006): 607–643.
- Singletary, Michelle. “The Color of Money: Calculating the ‘Replacement Rate.’” *Washington Post*, December 31, 2013.
- Tergesen, Anne. “Is There Really a Retirement Savings Crisis?” *Wall Street Journal*, April 23, 2017. <https://www.wsj.com/articles/is-there-really-a-retirement-savings-crisis-1492999861>
- VanDerhei, Jack. “What Causes EBRI Retirement Readiness Ratings to Vary: Results from the 2014 Retirement Security Projection Model.” Issue Brief No. 396. Employee Benefit Research Institute, 2014.
- Wall Street Journal*. “You Guess: What’s the Debt Burden for Americans Entering Retirement?” *Wall Street Journal*, December 21, 2018. <https://www.wsj.com/graphics/you-guess-are-americans-retiring-with-too-much-debt/>

West, Loraine, Samantha Cole, Daniel Goodkind, and Wan He. "65+ in the United States: 2010."
Current Population Reports, WP2014-07. U.S. Census Bureau, 2014.



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