

*No Rest for The Weary: Measuring the Changing Distribution of
Wealth in The United States*

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Abstract

Since 1992 wealth for the bottom 90% of households nearing retirement has fallen. The only source of wealth helping the bottom 90% is Social Security. Despite pro savings policies and generous tax breaks for savings, the share of the bottom 50% having any retirement account didn't change in 20 years -- 46% in 1992 and 47% in 2016. Even the middle class suffered with the share of the next 40% having retirement savings that fell from 85% in 1992 to a low of 71% in 2016. Housing ownership increased a bit for the bottom 50% but fell among the middle class and upper middle class. Home equity for the working and middle class fell. Using SCF and HRS data over 20 years, we find the bulk of working-class wealth is government social insurance. Economists should not exclude social insurance from wealth calculations. We find social insurance is the most important source of wealth for most families. Government policies and institutions have failed wealth building for most American households with workers.

Introduction: Rethinking Wealth Accumulation in America

Governments in most rich nations have (or have tried) to cut social insurance, namely state Pay-as-You Go pension systems and promoted individual financial accounts through regulations and tax codes as an alternative (Ghilarducci and Novello 2017, Kohli and Arza, 2011, Blackburn 2011). The results of these policies, however, are far short of what was promised. The result in the United States is a decrease in retirement security. At the same time, other forms of wealth – namely home equity net of debt – have not increased. Using widely available datasets, the Survey of Consumer Finances (SCF) and Health and Retirement Study (HRS), we focus on the wealth accumulation the average American working household has at the end of their lifetime of work. We show that wealth building institutions (and their companion debt-building institutions) in the U.S. are failing the typical American because retirement wealth has eroded and become more unequal.

Since Keynes, economists have identified four major reasons for wealth accumulation: precautionary, speculative, lifecycle, and bequest. Wealth serves as a store of value, a potential stream of income (or housing services) for consumption now or later, or collateral for speculative and leverage purposes and to use for precautionary or insurance reasons. Others have identified social and political status and power as a motive for wealth. Where Americans hold their wealth reflects the primary motive for workers to want wealth: secure finances for their lifespan and

independence to avoid burdening their adult children. For the typical American family, the last reason is the most important reason they hold wealth. We find that social insurance is the most important source of wealth for most families; but researchers, lawmakers, and the public underappreciate how institutions of social insurance such as Social Security build wealth.

We find the bulk of middle- and working-class wealth is in savings from earnings and government social insurance. Economists often do not consider social insurance and other government programs as wealth, and do not enter them in their calculations of wealth inequality.

The primary reason for not including the value of socialized wealth in calculations of wealth inequality is that it cannot be inherited as dynastic wealth or used to gain social status or political power. However, excluding the value of social insurance leads to underestimating the importance of social insurance for working households which primarily hold housing, precautionary, and lifecycle wealth and cannot afford saving with bequest motives. Not including the value of social insurance as wealth also ignores the harms inflicted by policies that have weakened social insurance systems, and as we show in this paper, hides the fact that the decline in value of social insurance has been larger than individual wealth accumulation promoted by these policies.

The second section after the introduction defines wealth. The third section describes the wealth data used in this paper including problems with the data. The fourth section analyzes the categories of wealth that have accumulated after a lifetime using a sample of Americans aged 52 to 65. We chose these age groups to approximate the period in which retirement happens or is contemplated. It is also the time a career or work life is coming to an end. We also examine the retirement racial wealth gap.

The fifth section discusses retirement wealth especially how unions and government policy towards unions and retirement tax favoritism have affected retirement security. The individualized, financialized, commercial, and voluntary employer retirement system hurts the bottom 90% and helps the top 10%. Government tax and union policies are making retirement wealth more unequal. The sixth section compares our findings with prominent studies and briefly discusses policy implications.

The seventh section and areas of further research that focuses on implications of shifting resources from social insurance schemes to individual accumulation of wealth, and the resulting lop-sided and inadequate wealth holding for American workers. The eighth concludes.

Why Wealth?

The definition of wealth is fairly straightforward. The sources and kinds of wealth and the institutions and motivations that create wealth are not so simple. Wealth is a stock of value one can draw income from overtime. For example, home-equity and vehicle equity-wealth have two functions: houses and vehicles provide a service that a household would otherwise have to buy if they didn't own a home or a vehicle. Home equity also represents an illiquid but valuable source of income if the owner sold it. This is the same for a vehicle, though a vehicle should be thought more of as a durable good (Wolff 2017) because it is worth a lot more to an individual than what they can get for on the market. For some households, wealth is used as collateral for loans for the purchase of other assets that households hope to leverage and create even more wealth and income. For very wealthy households, wealth can be used for social and political power; “Wealth, as Mr. Hobbes says, is power”¹ (Smith 1776). Certainly, the elite use wealth to influence heads of state and law and rule makers (Stiglitz 2013).

As we'll see below, the typical household holds wealth in the form of life cycle wealth, which is intended to be used at the end of a working life as a source of income. This kind of asset is a form of insurance against the risk of becoming superannuated or not being able to work for some other reason. The typical person uses wealth as a source of insurance against risk and foreseen costly contingencies.²

A body of research on the racial wealth gap lifts up another more sociological and psychological motivation for having wealth. Wealth can let you be a member of society in a way income can never do. Wealth gives you security and peace of mind. Hamilton and Darity discuss the importance of certain types of wealth in shrinking racial wealth gaps and racial stratification in his proposal for baby bonds (Hamilton and Darity 2010). In a 2023 interview, Hamilton said, “Wealth is the paramount indicator of economic prosperity and well-being” (Klein 2023).

Last, wealth can be held for bequest or dynastic reasons. But research has shown that holding wealth for bequest is only significantly relevant for those at the very top of the wealth distribution (Radpour 2020; Dynan, Skinner, and Zeldes 2004). Sixty percent of inheritance recipients and the

¹ “Also Riches joyned with liberality, is Power; because it procureth friends, and servants: Without liberality, not so; because in this case they defend not; but expose men to Envy, as a Prey.” Hobbes, Thomas, 1651. *Leviathan*, Chapter 1. Ebook <https://www.gutenberg.org/files/3207/3207-h/3207-h.htm>

² We are leaving out the ineffable category of human capital. Human capital are the skills and other assets that a person can sell in the labor market to garner a stream of income.

majority of bequests of \$3,000 or more are received and made by households in the top decile of the wealth distribution (Gale and Scholz 1994).³

Data, sample, and presentation choices

We use two sources of data. First, we use the Health and Retirement Study (HRS), a longitudinal survey of US individuals age 50 and older, to isolate the wealth of households who had members that worked for pay. We compare the HRS numbers against the Survey of Consumer Finances (SCF) because most researchers of wealth use the SCF since it is more focused on providing better estimations of households' assets and debt, though it is only cross-sectional. We prefer the HRS to the SCF because it has a larger sample, better questions about pension plans from previous jobs, and imputed Social Security wealth estimations using data links to Social Security administrative records. In addition, the HRS does not oversample rich people like the SCF does. The larger sample of low- and middle-income households helps with obtaining better estimation of lifecycle wealth among them.

We use samples of households who have a member who is aged 51-56 in 1992 (in HRS) as well as households with household heads aged 51-56 in 1992 (in SCF). We compare our results with data from 2016 HRS, as well as 2022 SCF, again for households with a member aged 51-56. Our analysis starts in 1992 because that is the first wave of the HRS.

We breakdown the household net worth by its components: Primary Residence net of mortgage debt, other Real Estate net of mortgage debt, vehicles net of car loans, Social Security wealth, Retirement Savings and Benefits (DC, DB, IRA), net value of businesses owned by household, directly held stocks and bonds, checking and savings accounts, other savings including CDs, savings bonds, and T-bills, and non-real estate debt.

³ “Dyner, Skinner, and Zeldes (2004) find that a combination of precautionary and bequest motives results in higher saving rates for higher income households and has less effect on lower income households. But these transfers are mostly limited to the wealthiest households. Using data from two connected waves of Survey of Consumer Finances (SCF) Gale and Scholz (1994) find that between 1983 and 1985, 58.2 percent of financial supports higher than \$3,000 were given by households in the top decile of wealth distribution, mostly to their children. Also, over 60 percent of inheritance recipients were in the top decile of wealth distribution. Given the extreme wealth inequality in the United States (see Figure 2), it is no surprise if these transfers could explain large shares of total wealth despite being limited mostly to the top decile of wealth distribution. But, regardless of the actual share of life-cycle savings in the total accumulated wealth, life-cycle wealth and inequality life-cycle wealth are the relevant.” (Radpour 2020.)

The HRS provides an estimate for the present value of expected Social Security benefits, assuming retirement imputed based on individual characteristics and work histories as well as the linked Social Security administrative records. We used the values calculated based on claiming benefits at age 62, which allows for a valid comparison of Social Security wealth over time, despite the cuts in benefits caused by the increases in the Social Security Full Retirement Age (FRA). Given that the Social Security adjustment factors (penalties and credits) for early and delayed claiming are designed to be actuarially fair, assuming a uniform claim age should not, on average, generate a large bias in the Social Security wealth estimations. Social Security wealth data are not included in the estimates based on SCF data.

The values of defined-benefit plans are estimated based on individuals' work histories and retirement plan data from previous jobs. We calculate the present values of expected benefits, based on individuals' expected age of receiving pension benefits.

We report both mean and median estimates of wealth, as well as the changes in them. Medians are much lower than the means especially for lower-level wealth groups. In every group many households have zero and negative wealth (debt).⁴ Though calculating and reporting average wealth provide useful information about wealth levels and add up to 100% over wealth categories, median estimates are preferred in the literature for understanding the level of wealth for a typical person as it is not affected by overaccumulation of a few households (OECD 2013). We choose to emphasize medians because we aim to describe the experience of the typical person, though we also compare medians to the means to judge the medians and to better compare the results with other studies. Reporting both mean and median together provides a more robust understanding of wealth levels and distribution. Comparing the mean with the median we can also get a sense of the skewness of the distribution of wealth in each group. We use our estimates of averages of wealth components to calculate the share of each component in the total net worth.

The HRS median net wealth estimates are higher for all but the top 10% group compared to the SCF as we would expect because it includes Social Security wealth. The other notable difference is that our estimate of retirement savings based on SCF data, which does include defined benefit plan wealth and their decline over time, shows a significant increase. However, the HRS estimates clearly show that for the bottom 90%, the drop in defined benefit retirement plans have been larger

⁴ See Radpour (2020) for disaggregation of wealth deciles. The analysis reveals considerable variation within group.

than the gains in defined contribution plans. Estimates from both HRS and SCF datasets reveal real wealth for the bottom 50% declined in almost all categories, and in some categories for the households in the second wealth group, the next 40%. The wealth declines are largest for the lowest wealth distribution group. We will discuss the HRS results only and refer the reader to the Appendix for the SCF numbers. Likewise, all the HRS dollar numbers are reported in 2016 dollars, and all the SCF dollar amounts are reported in 2022 dollars, unless otherwise noted.

Amount and Distribution of Wealth of American Households

The typical person uses wealth as a source of insurance. Insurance is a method to obtain income in the case of contingent events. Insurance is a source of financial security. Insurance for short-term, relatively lost cost events – a car repair or water heater breaking – is wealth in the form of cash in a checking account. Home equity wealth is used to pay for a stream of housing services; fire insurance in case the house burns; retirement accounts for loss of earnings due to retirement. A promise of a stream of income for a period of time due to a contingent event is a form of wealth. A loss of wealth and insurance is a loss of financial security.

One of the two most important findings in this study is that for the vast majority of Americans nearing retirement, wealth primarily comes from social insurance – Social Security – not stocks and bonds held in retirement accounts and not, contrary to popular opinion, home equity. Home equity has fallen because private financial institutions, with Congressional regulatory permissiveness, created ways for Americans to borrow against their homes with home equity loans (Optimal Blue n.d.; Nakajima and Telyukova 2013; Nakajima and Telyukova 2020).⁵

Notably, Social Security is the most important source of household wealth for half of all households with workers nearing retirement. In 1992, Social Security represented 57% of net wealth for near retirees in the bottom half of the wealth distribution, 33% for the middle class, and 13% for the top 10% (Table 3). However, Congress has eroded Social Security since 1983. The Social Amendments of 1983 introduced significant increases to the age claimants could receive full benefits – the Full Retirement Age was gradually raised from 65 to 67 (for people born in 1960) and increased rewards to delay claiming until age 70 by increasing monthly benefits by 3% to 8% by 2009 for every year waiting to claim past full retirement age to age 70.

⁵ Social Security wealth has the unique property that it cannot be used as collateral and no agent but the federal government can garnish it. Home equity and sometimes 401(k) wealth is used as loan collateral for loans.

The Increase in the Full Retirement Age is effectively a benefit cut. For example, a worker claiming at age 65 who is entitled to a monthly benefit of \$1,000 at her FRA of 65 can only collect \$933 per month if her FRA is 66— a decline of 6.67 percent (Coile 2018). However, the generous Delayed Retirement Credit gives a generous reward of an 8 percent increase in monthly benefits to those who can wait to claim. Less than 9 percent of claimants do (Social Security Administration 2023). The changes in Social Security dovetail with the growth of class-based mortality gaps (Goldman and Orzag 2014) because those who could afford to claim later also live longer (that the rich live longer is not considered in our Social Security Wealth calculations, so the inequality is understated). Differential mortality dynamics make Social Security less progressive over time (Bound, et. al. 2014, Goldman and Orzag 2014).

Inheritances and actively investing in the stock market are insignificant sources of wealth for American working households. Typical older adults in households nearing retirement do not have any significant stock holdings; people nearing retirement do not have large amounts of home equity; and most people nearing retirement have small or nonexistent retirement plans. Most older adults won't be able to replace their preretirement earnings or meet 200% of federal poverty level when they retire (Ghilarducci, Papadopoulos, and Webb 2018; National Council on Aging 2023).

Wealth Fell Between 1992 to 2016 for Typical Older American Households

The accumulation of wealth after a lifetime of investing and working was lower in 2016 than in 1992 for the bottom 90% of the American population.⁶ Median wealth fell drastically for all households over 24 years, falling by \$146,600 from \$629,900 in 1992 (See Tables 1 and 2). At the same time the top 10% gained a substantial amount of wealth from over \$200K to \$881,000; while the bottom 50% lost \$164,600. All wealth levels estimated using the HRS are reported in 2016 dollars.

Insert Table 1 about here

Based on the HRS median findings, the typical households nearing retirement in the bottom half of the wealth distribution had *no* home equity, *no* retirement benefits, and \$188,300 in anticipated total Social Security in 2016. Those in the next 40% had just \$128,000 in home equity, \$200,000 in retirement accounts, and \$300,500 in Social Security wealth. At the top 10% they had more

⁶ Mean real wealth increased by \$35,292 over 34 years, but for the bottom 50% mean wealth fell. (See Appendix Table 1 HRS Means).

house equity, \$305,000, much more retirement savings, \$764,700, and about the same in Social Security wealth (\$311,800) because of the progressive Social Security benefit formula.

Wealth Trends for the Bottom 50%.

HRS data show that median wealth of the bottom 50% fell between 1992 and 2016, by \$164,600. This is stunning, the real value of their home equity fell to zero as did their retirement savings which is a result of the accumulated losses of DB coverage and lack of coverage in DC plans. No down payment mortgages and easy HELOC loans took their toll on home equity.

In contrast mean wealth for the bottom 50% fell between 1992 and 2016 less than the median by \$147,000 (Appendix Table A). Smaller losses from mean estimates reflect that higher wealth households in the bottom 50% lost significantly less wealth than the rest of the group over the same time period.

The largest source of wealth for the typical household in the bottom 50% in 2016 was, of course, Social Security. Median home equity and retirement savings was zero (Table 2). The largest source of mean wealth (HRS) in 2016 for the bottom 50% after Social Security was real estate, at \$34,000, followed by \$25,000 in defined contribution, defined benefit, and Individual Retirement Account (IRA) assets. (The relative values and relative losses are similar in the 2022 SCF data, see Appendix Tables B and C.)

Wealth Trends for the Next 40%:

The median wealth of the older households in the middle-wealth group, the next 40%, also fell between 1992 and 2016 in real terms, by \$1,800. The change in net wealth for the middle class is much smaller in magnitude compared to the losses of the bottom 50%, but are still losses compared to the massive gain the top 10% experienced. The biggest source of the middle class's loss was in home equity, falling \$9,600 from a real value of \$137,600 to \$128,000, followed by losses in checking balances (-\$5,800) and vehicle wealth (-\$5,600). Both retirement benefit wealth and social security also fell, by \$1,720 and \$3,300 respectively.

Wealth Trends for the Top 10%:

Increases in assets are almost entirely at the top 10%. The median wealth for the top 10% of older households in the HRS increased by \$881,000 (Table 1).

The SCF data, which oversamples the wealthy, revealed a similar pattern. The median wealth of the bottom 50% fell between 1992 and 2022 by \$66,600, and the median wealth of households in the next 40% of the wealth distribution also decreased by \$24,500 (in 2022 dollars). At the same time median wealth for the top 10% increased by \$781,100 (Appendix Table B). Comparing mean wealth growth of the top 10%, \$1,210,500 (in 2022 dollars), with the much smaller median growth, between 1992 and 2022, is consistent with the richest households at the top of the top outpacing the typical household in the top 10% (Appendix Table C).

Insert Table 2 About Here

The share of wealth coming from home equity fell for the bottom 90% and rose for the top. The share of wealth coming from retirement savings fell drastically for the bottom 50% -- from 28% of their wealth to just 9%. Retirement wealth policies and institutions simply failed the bottom 50% of the population for 40 years. The next middle 40% were served better. The increase in the share of wealth coming from retirement accounts rose as the share coming from Social Security and home equity fell. The top stayed about even. (See Table 3)

Insert Table 3 About Here

Social Security Wealth Effect on Wealth Distribution

Note that Social Security wealth reduces retirement wealth inequality. For typical workers, accrued Social Security benefits of \$237,100 in 2016 exceed employer-sponsored retirement wealth of \$39,000 (Table 2). At the bottom, the ratio of Social Security wealth to employer sponsored retirement plan wealth is infinite because the median worker in the bottom 50% in 2016 has nothing in retirement savings. So, it is not saying much that Social Security makes retirement wealth more secure. For the middle and upper middle class in the next 40% of the wealth distribution wealth from Social Security is 1.5 times employer sponsored retirement wealth (\$300,500 divided by \$200,000). For the top 10% the ratio is only 0.4 (\$311,800 divided by \$764,700). Adding accrued Social Security benefits to retirement wealth decreases the retirement wealth gap between low and high earners from two and a half times earnings to just over half a year's earnings (Ghilarducci, Radpour, and Webb 2020).

However, Social Security has become more regressive over time as discussed above. Even Medicare, universal health insurance for the elderly, and Medicaid, health insurance for the poor (which pays for health costs not noncovered by Medicare for poor elderly) may be becoming more regressive as the class gaps in longevity grow.

Racial Disparities in Retirement Wealth

The median Black non-Hispanic and Hispanic household nearing retirement holds far less wealth than their white non-Hispanic counterparts, despite a slight decrease in the racial wealth gap between these groups over 1992 to 2016. The median white non-Hispanic household nearing retirement saw net wealth decrease by \$143,000. Similarly, Black non-Hispanic household net wealth decreased by \$141,000, while Hispanic household net wealth only decreased \$75,200. However, both households of color continue to hold far less in overall wealth compared to white non-Hispanic households with only \$326,400 and \$339,700 in 2016 net wealth compared to \$558,700 for white non-Hispanic households (see Tables 4 and 5).

Insert Tables 4 and 5 About Here

Despite lower decreases in overall net wealth of Black non-Hispanic and Hispanic households compared to white non-Hispanic households, Black non-Hispanic and Hispanic households saw much larger decreases in home equity and retirement benefit wealth. Hispanic households saw the highest decrease in home equity with a loss of \$41,300 in housing wealth, followed by Black non-Hispanic households who lost \$34,400, compared to white households who only lost \$24,600 in home equity. Even starker are the disproportionate losses in retirement benefit wealth for Black and Hispanic households. Black households lost the most in retirement benefits wealth (-\$69,200), followed by Hispanic households (-\$55,000), and white households lost the least (\$41,100), though all groups lost out significantly in this category of wealth. The decreases in defined benefit and defined contribution wealth for all three groups were greatest compared to all other wealth categories (Table 5).

Insert Table 6 About Here

Despite losses in employer-sponsored retirement benefit wealth, Social Security wealth plays a large role in reducing racial disparities in retirement wealth. First, Social Security is a large source

of wealth for the median Black Non-Hispanic and Hispanic households nearing retirement in both 1992 and 2016 comprising around 40% of net wealth for both groups compared to 29% for White Non-Hispanic households in both years (Table 6).

For Hispanic workers, the ratio of Social Security wealth to employer sponsored retirement plan wealth is infinite, as with the bottom 50% in 2016, as both groups have no retirement savings. For Black non-Hispanic workers, Social Security wealth is 42 times the median retirement plan wealth and for white non-Hispanic workers, the ratio is much smaller at only 4 times Social Security wealth.

In addition, all racial groups saw increases in Social Security wealth over the 1992 to 2016 period, but Hispanic and Black non-Hispanic households saw far greater increases, \$44,100 and \$35,100 respectively. These major gains in Social Security wealth likely helped to offset net wealth losses for these groups compared to white non-Hispanic net wealth which did not see much growth in Social Security wealth over the time frame (a \$200 increase only).

These results highlight the important role social insurance plays in mitigating racial wealth disparities, particularly in how Social Security is crucial for the retirement security of communities of color. Though it remains important to point out that despite increases in Social Security wealth for Black non-Hispanic and Hispanic households far outpacing those of white non-Hispanic households, white non-Hispanic households still hold the most Social Security wealth of the three groups with \$253,900 in 2016, compared to \$211,200 and \$204,600 for Black non-Hispanic and Hispanic households respectively.

Retirement Wealth Building for American Workers

We just examined the accumulated wealth of American households at the end of their working lives. We touched on the institutions that affect the typical American household's wealth accumulation: Social Security and retirement plans. This section dives deeper into those institutions and focuses on the accumulation of retirement wealth at the end of the typical worker's career. These institutions include 1) unions, voluntary employer retirement plans, and Social Security; 2) government tax and regulation policies affecting mortgages and retirement savings; 3) individual and idiosyncratic savings behaviors and bequests; and 4) the rate of return of these sources of wealth.

Low-wage and middle-income workers miss out on all four forces and factors that generate wealth. Only 23% of low wage workers are offered retirement plans at work (GAO 2023). And even when they are, lower paid employees are often pushed out of participation because these jobs are less secure—employers structure them to have high turnover rates—which makes many employees ineligible to participate in employer-sponsored plans.

Having access to workplace retirement plans does not mean employees can afford to participate in them. Low earners with little discretionary income and different types of debt likely are not able to contribute to voluntary plans. Perhaps even more important and a significant contributor to the retirement wealth gap is that the top-heavy government subsidies for retirement savings—the tax expenditures—are not relevant for the low earners with low marginal tax rates. If not provided with a match, lower earners may not see the necessity of participating in these plans (Toder, Harris, and Lim 2009).

In addition, lifecycle events, low wages and high living expenses, and complexity of investment decisions in the absence of reliable advice also contribute to inequality, and pre-retirement account leakages (Joint Committee on Taxation 2021). Employment shocks are a major cause of early withdrawals from retirement accounts. Lack of job security means spending more time between jobs and dipping into retirement savings instead of saving more. It also means years of not being eligible to participate in workplace retirement plans after experiencing job loss and finding another one. Non-whites are more likely to suffer from many of these factors (GAO 2023). Lack of job security and high risks of job loss, lack of access to credit in emergencies, and low rates of homeownership and high rents especially in cities all contribute to lower retirement savings even among workers of color who have managed to accumulate some retirement assets.

Role of Unions in Accumulating Retirement Wealth

The role of unions in distributing wealth for American workers has not been appreciated. Union members are much more likely to have defined benefit plans and much more likely to negotiate retirement savings plans. Union members are 40% more likely to have access to retirement plans and health plans (BLS 2019a, 2019b).

Also, someone who spends their working life in a union has had to consider trade-offs in the types of compensation they want. Typically, a union leadership polls its members about whether they want a dollar of their pay to go into cash or to health insurance, retirement, and other forms of

consumption. Thus, a union worker is more likely than a nonunion worker to consider their financial future. Also, union members have higher job tenure (Weller and Madland 2018). Therefore, being in the union environment provides an ecosystem in which an individual worker can focus on the long run. Union workers understand their hours, working conditions, and pay will be renegotiated at the end of a 3- or 5-year period. Union members are more likely to be trained than nonunion members (Ghilarducci and Reich 1998). Better job security in a union helps shift worker' focus to long-term planning, including retirement security. Union workers, holding all other factors constant, are more likely to consider the long term than nonunion workers. Holding all relevant factors constant, we expect union members to have a lower discount rate. Since research has shown that attention to the long-term consequences of short-term actions helps lower the discount rate we expect collective consideration of these issues may have had the effect of lowering their discount rate for all union workers' decisions. Further research should test for these possible questions: If union members save more than non-union members, and if that's true, is that because union members are more likely to invest in future oriented behavior saving.

Discussion and Policy Recommendations

Retirement wealth inequality is a real cost of having a voluntary system that relies on employers to provide and employees to contribute to retirement plans. The effective solution to this problem is a mandatory system. Since the Employee Retirement Income Security Act of 1974 only regulates voluntary plans then the federal government can play a limited role in expanding coverage unless there is legislation that subsidizes low wage workers savings, and they are automatically enrolled. Marginal changes like those in the Secure 2.0 Act to automatically enroll workers *if* their employer sponsors a workplace retirement plan will do little to expand coverage because most low-income workers participate in their employer plan if they have access and most do not (GAO 2023; Ghilarducci and Hassett 2021). Lowering safe harbor contributions, weakening nondiscrimination clauses, and raising the age for Required Minimum Distribution (RMDs) in IRAs (as the Secure 2.0 Act did) will increase inequality. People have difficulty managing their own investments, especially low-income workers who don't have access to professionals.⁷ Financial education can

⁷ Testimony from the Advisory Committee (e.g., Ariel Capital) notes the academic research comes to the same conclusion that 401(k) requires professional advice or else they do wrong things like go to brokerage accounts. Managing your own funds is like doing your own plumbing.

never replace professional management of retirement assets and financial decisions. Workers in all plans need affordable and reliable advice from fiduciary advisors and DB plans have those built in.

Strengthening social insurance can provide efficient and equitable solutions to many problems – including health risks, long-term care, and retirement income – that self-insurance through private wealth and precautionary savings cannot resolve (Barr 2020). At the same time, we need to improve the policies and institutions that provide workers with the opportunity to save for retirement and housing.

Social Security benefits reduce the retirement wealth gap between low and high earners and keep retirees out of poverty. Strengthening and expanding Social Security and work-based retirement plans – with robust government matches at the low end of the distribution (which acts as a “sticky” opt out) would help boost retirement income. Policymakers need to pay attention to the risks of student debt and home mortgages and the risk to online stock trading.

Policy approaches that depend on targeted tax incentives, financial literacy programs, and clever designs based on behavioral economics to boost saving miss the mark.

Economists are beginning to appreciate the role government programs and policies play in affecting insurance and wealth. The focus on broader access to retirement assets and Social Security is the correct way to improve working family’s security and increasing earnings is an indirect way to increase retirement wealth for the bottom 90% of the population.

Wolff (2023) projected the share of near retirees at risk of falling below the poverty line increases between 2007 to 2019 and a main cause is a fall in wealth from defined benefit plans. Beshears et al. (2019) found, consistent with our findings that retirement wealth for the bottom 50% has fallen significantly, that household’s ability to maintain their preretirement living standards is rising over time for households with income at or above the median and falling for those households below median income.

We did not include the value of Medicare and Medicaid in our calculations, despite their importance for household finances and wealth at older ages, primarily due to lack of data in our target datasets. Medicare plays an important role in household finances at older age because of its efficiency, and because it works as a source of funds since households contribute to its fund through their working life by paying taxes. Studies have shown that private insurers paid nearly double Medicare rates for all hospital services (Lopez et al. 2020), making Medicare a relatively efficient

system. It is also an important source of benefits. Steuerle and Quakenbush (2018) used average Medicare expenditures per Medicare enrollee to estimate the average value of benefits for individuals. They estimate the average present value of Medicare benefits for a married couple turning 65 in 2020 to be \$498,000, a number comparable to the estimated Social Security wealth and significantly above the average housing wealth of such households.

Further Research

Further research needs to explore three humanitarian and political crises stemming from a fall in retirement assets and security: downward mobility of middle-class workers into poor and near poor elders; increase in poor elders; and burdens on young adults with an increase of poor old Americans needing unpaid care from adult children. Also, it is clear, having a wealthy or unionized parent transfers a wealth legacy to their children by not transferring a debt to them because they are independent.

Further research should address the role of consistent employment at steady wages improves and expands baseline economic security. Lower income people have much higher earnings variances than standard models and policies estimate and assume (De Nardi, Fella, and Paz-Pardo 2022).

Further research also is needed to link the direct connection to weakened unions to lower retirement security for the bottom 90 percent of workers. The failure of policy makers to help balance the power between corporations and workers – to maintain in Galbraith’s words (2017) countervailing power— by supporting workers right to organize has certainly increased employer monopsony power which lowered wages (Naidu 2022) and retirement security.

We did not directly examine the effect of tax and regulatory policy on the distribution of retirement wealth. However, the importance of federal policy in altering the distribution of wealth and the source of wealth for working families is clear from our findings that heavily regulated and subsidized sources of wealth – home equity and retirement wealth has become more unequal. In particular, the interaction of federal and state policy on home ownership and mortgage debt tax deductions with retirement tax policy, that is well known to be regressive— with over 60% of the benefits of income tax expenditures go to the top 20% of earners (CBO 2021; Toder, Harris, and Lim 2009) – should be researched.

Conclusion

American workers' wealth and debt materializes through their access to institutions. Underlying individualized propensities to save, propensities to overindulge in status or luxury goods, financial education, and psychological risk profiles, are less significant determinants of wealth and accumulation than the strength of social insurance and socialized wealth, as well as the institutions of retirement savings, home ownership, credit card and banking practices, and access to short term income maintenance. These institutions are much more important in determining how American workers fund the rest of their life following retirement.

The most important source of wealth comes from savings from earned income— savings are a residual from people's earnings – and government social insurance. We emphasize government insurance is the most important factor in securing retirement income. Despite popular understanding, the main source of worker wealth is *not* home equity – home equity loans and small downpayment loans have eroded home equity as a source of worker wealth. Nor are one of the most Americans generously tax-subsidized sources of wealth – the 401(k)-type retirement accounts – an important source of income for anyone but those at the top.

References

- Beshears, J., Choi, J., Laibson, D., and Ramnath, S. 2019. 'Trends in retirement income adequacy: Evidence from IRS tax data.' In *2^{1st} Annual SSA Research Consortium Meeting*.
- Bound, J., Geronimus, A. T., Rodriguez, J., and Waidmann, T. 2014. 'The implications of differential trends in mortality for Social Security policy.' *Michigan Retirement Research Center Research Paper*, No. 2014-314.
- Barr, N. 2020. *The Economics of the Welfare State*. Oxford, United Kingdom: Oxford University Press.
- Blackburn, R. 2011. *Age Shock: How Finance Is Failing Us*. London; New York: Verso.
- Bureau of Labor Statistics (BLS). 2019a. 'Union Workers More Likely than Nonunion Workers to Have Healthcare Benefits in 2019.' *The Economics Daily*. Bureau of Labor Statistics, U.S. Department of Labor. <https://www.bls.gov/opub/ted/2019/union-workers-more-likely-than-nonunion-workers-to-have-healthcare-benefits-in-2019.htm>. (visited November 15, 2023).

Bureau of Labor Statistics (BLS). 2019b. 'Union Workers More Likely than Nonunion Workers to Have Retirement Benefits in 2019.' *The Economics Daily*. Bureau of Labor Statistics, U.S. Department of Labor. <https://www.bls.gov/opub/ed/2019/union-workers-more-likely-than-nonunion-workers-to-have-retirement-benefits-in-2019.htm>. (visited November 15, 2023).

Congressional Budget Office (CBO). 2021. 'The Distribution of Major Tax Expenditures in 2019.' Congressional Budget Office. <https://www.cbo.gov/publication/57413>.

Coile, C. C. 2018. 'Working longer in the United States: Trends and explanations.' In *Social Security Programs and Retirement around the World: Working Longer* (pp. 299-324). University of Chicago Press.

De Nardi, M., Fella, G., and Paz-Pardo, G. 2022. *Earnings risk, government policy, and household welfare*. Institute for Fiscal Studies. Working Paper, No. W22/17. <https://doi.org/10.1920/wp.ifs.2022.1722>.

Dynan, K. E., Skinner, J., and Zeldes. S. P. 2004. 'Do the Rich Save More?' *Journal of Political Economy* 112 (2): 397–444. <https://doi.org/10.1086/381475>.

Gale, W. G., and Scholz, J. K. 1994. 'Intergenerational Transfers and the Accumulation of Wealth.' *Journal of Economic Perspectives* 8 (4): 145–60. <https://doi.org/10.1257/jep.8.4.145>.

Galbraith, J. 2017. *American capitalism: The concept of countervailing power*. Routledge.

Government Accountability Office (GAO). 2023. 'Older Workers: Retirement Account Disparities Have Increased by Income and Persisted by Race Over Time.' <https://www.gao.gov/products/gao-23-105342>.

Ghilarducci, T., and Hassett, K. A. 2021. 'What If Low-Income American Workers Had Access to Wealth Building Vehicles Like the Federal Employees' Thrift Savings Plan?' Economic Innovation Group. <https://eig.org/inclusive-wealth-building-initiative/>.

Ghilarducci, T. and Novello, A. 2017. 'The Labor Consequences of Financializing Pensions' Schwartz Center for Economic Policy Analysis and Department of Economics, The New School for Social Research, Working Paper Series 2017-3. <https://www.economicpolicyresearch.org/images/Financialization.pdf>.

Ghilarducci, T., Papadopoulos, M., and Webb, A. 2018. '40% of Older Workers and Their Spouses Will Experience Downward Mobility in Retirement.' Schwartz Center for Economic Policy Analysis and Department of Economics, The New School for Social Research. Policy Note Series. <https://www.economicpolicyresearch.org/resource-library/downward-mobility-in-retirement>.

Ghilarducci, T., Radpour, S., and Webb, T. 2020. 'Social Security Reduces Retirement Wealth Inequality.' Schwartz Center for Economic Policy Analysis and Department of Economics, The New School for Social Research. Policy Note Series. <https://www.economicpolicyresearch.org/resource-library/research/social-security-reduces-retirement-wealth-inequality>.

Ghilarducci, T., and Reich, M. 1998. 'Training and Pensions: Substitutes or Complements.' Institute of Industrial Relations. Working Paper Series. Working Paper No. 68. <https://escholarship.org/uc/item/2xq878qt>.

Goldman, D. P., and Orszag, P. R. 2014. 'The Growing Gap in Life Expectancy: Using The Future Elderly Model To Estimate Implications For Social Security And Medicare.' *American Economic Review*, 104(5), 230-233.

Hamilton, D., and Darity, W. 2010. 'Can 'Baby Bonds' Eliminate the Racial Wealth Gap in Putative Post-Racial America?' *The Review of Black Political Economy* 37 (3-4): 207-16. <https://doi.org/10.1007/s12114-010-9063-1>.

Joint Committee on Taxation (JCT). 2021. 'Estimating Leakages from Retirement Savings Accounts.' JCX-20-21. <https://www.jct.gov/publications/2021/jcx-20-21/>.

Klein, E. 2023. 'Transcript: Ezra Klein Interviews Darrick Hamilton.' *The New York Times*, June 23, 2023. <https://www.nytimes.com/2023/06/23/opinion/ezra-klein-podcast-darrick-hamilton.html>.

Kohli, M. and Arza, C. 2011. 'The Political Economy of Pension Reform in Europe', in *Handbook of Aging and the Social Sciences*, Elsevier (pp. 251-64).

Lopez, E., Neuman, T., Jacobson, G., and Levitt, L. 2020. 'How much more than Medicare do private insurers pay? A review of the literature.' *Kaiser Family Foundation*, 15.

- Nakajima, M. and Telyukova, I. A. 2013. 'Housing in Retirement Across Countries.' Boston College Center for Retirement Research Working Paper no. 2013-18. <https://dx.doi.org/10.2139/ssrn.2328733>.
- Nakajima, M. and Telyukova, I. A. 2020. 'Home Equity in Retirement.' *International Economic Review* 61 (2): 573–616. <https://doi.org/10.1111/iere.12435>.
- Naidu, S. and Posner, E. 2022. 'Labor Monopsony and the Limits of the Law.' *Journal of Human Resources* 57 (S): S284-323. <https://doi.org/10.3368/jhr.monopsony.0219-10030R1>.
- National Council on Aging (NCOA). 2023. 'Get the Facts on Economic Security for Seniors.' <https://ncoa.org/article/get-the-facts-on-economic-security-for-seniors>.
- OECD. 2013. 'Analytic Measures.' in *OECD Guidelines for Micro Statistics on Household Wealth*, 161–79. <https://doi.org/10.1787/9789264194878-10-en>.
- Optimal Blue. n.d. 30-Year Fixed Rate Conforming Mortgage Index: Loan-to-Value Greater Than 80, FICO Score Between 720 and 739 [OBMMIC30YFLVGT80FB720A739]. retrieved from FRED, Federal Reserve Bank of St. Louis. <https://fred.stlouisfed.org/series/OBMMIC30YFLVGT80FB720A739>. August 1, 2023.
- Piketty, T. 2015. 'About Capital in the Twenty-First Century.' *American Economic Review*, 105 (5): 48-53.
- Radpour, S. 2020. *Retirement Wealth Inequality: A Critical and Institutional Review*. Doctoral Dissertation, The New School.
- Saad-Lessler, J., Ghilarducci, T., and Bahn, K. 2015. 'Are U.S. Workers Ready for Retirement? Trends in Plan Sponsorship, Participation, and Preparedness.' Schwartz Center for Economic Policy Analysis. <https://www.economicpolicyresearch.org/resource-library/research/are-us-workers-ready-for-retirement>.
- Smith, A 2001, *An Inquiry Into the Nature and Causes of the Wealth of Nations*, ElecBook Classics, Electric Book Co, London, viewed 17 November 2023 .
- Steuerle, C. E., and Quakenbush, C. 2018. 'Social Security and Medicare Lifetime Benefits and Taxes.' *Urban Institute*.
- Stiglitz, J. E. 2013. *The Price of Inequality*. New York: W. W. Norton & Company.

Social Security Administration. 2023. *Annual Statistical Supplement to The Social Bulletin, 2023*.
<https://www.ssa.gov/policy/docs/statcomps/supplement/2023/6b.html#table6.b5>

Toder, E. J., Harris, B. H., and Lim K. 2009. 'Distributional effects of tax expenditures.' Tax Policy Center, The Urban Institute & Brookings Institute.
<https://www.taxpolicycenter.org/publications/distributional-effects-tax-expenditures/full>.

Weller, C. E., and Madland D. 2018. 'Union Membership Narrows the Racial Wealth Gap for Families of Color.' Center for American Progress.
<https://www.americanprogress.org/article/union-membership-narrows-racial-wealth-gap-families-color/>.

Wolff, E. N. 2017. 'Household Wealth Trends in the United States, 1962 to 2016: Has Middle Class Wealth Recovered?' NBER Working Paper No. w24085. Cambridge, MA: National Bureau of Economic Research. <https://doi.org/10.3386/w24085>.

Wolff, E. N. 2023. 'Understanding Trends in Hispanic and African American Retirement Preparedness in the US.' *Wharton Pension Research Council Working Paper*, (2023-15).

Table 1. Change in median wealth from 1992 to 2016, by wealth distribution.

<i>Type of Asset/Debt</i>	<i>Wealth Group</i>			
	All Households	Bottom 50%	Middle 40%	Top 10%
<i>Primary Residence net of mortgage debt</i>	-31,200	-61,900	-9,600	121,000
<i>Other Real Estate net of mortgage debt</i>	0	0	0	0
<i>Vehicles net of car loans</i>	-7,200	-8,800	-5,600	-7,400
<i>Social Security</i>	-31,600	-57,000	-3,300	9,400
<i>Retirement Savings and Benefits (DC, DB, IRA)</i>	-54,800	-42,200	-1,700	198,000
<i>Business (net)</i>	0	0	0	0
<i>Stocks</i>	0	0	0	-51,600
<i>Bonds</i>	0	0	0	0
<i>Checking/Savings Accounts</i>	-6,600	-5,000	-5,800	14,200
<i>CDs, Savings Bonds, T-Bills, and Other Savings</i>	0	0	-900	-17,200
<i>Total Assets</i>	-143,700	-161,200	400	863,800
<i>Non-Real Estate Debt</i>	0	100	0	0
<i>Net Wealth</i>	-146,600	-164,600	-1,800	881,000

Source: Authors calculations using 1992 and 2016 HRS data and 2020 RAND-HRS longitudinal data.

Note: All amounts are calculated in 2016 USD. Cutoffs points for wealth groups are defined based on their net wealth and marital status. For single households the cutoffs are \$361,00 (50th pct.) and \$1,031,100 (90th pct.) in 1992 and \$233,700 (50th pct.) and \$943,500 (90th pct.) in 2016. For couples, the cutoffs are \$678,100 (50th pct.) and \$1,465,500 (90th pct.) in 1992, and \$559,100 (50th pct.) and \$2,004,800 (90th pct) in 2016. Stock and bond categories represent direct ownership (i.e., outside of 401(k)-type plans and IRAs). Household sampling weights.

Table 2. Median wealth by wealth category and distribution in 1992 and 2016

<i>Type of Asset/Debt</i>	2016				1992			
	All Households	Bottom 50%	Middle 40%	Top 10%	All Households	Bottom 50%	Middle 40%	Top 10%
<i>Primary Residence net of mortgage debt</i>	60,000	0	128,000	305,000	91,200	61,900	137,10600	184,000
<i>Other Real Estate net of mortgage debt</i>	0	0	0	0	0	0	0	0
<i>Vehicles net of car loans</i>	10,000	5,000	15,000	27,000	17,200	13,800	20,600	34,400
<i>Social Security</i>	237,100	188,300	300,500	311,800	268,700	245,300	303,800	302,400
<i>Retirement Savings and Benefits (DC, DB, IRA)</i>	39,000	0	200,000	764,700	93,800	42,200	201,700	566,700
<i>Business (net)</i>	0	0	0	0	0	0	0	0
<i>Stocks</i>	0	0	0	0	0	0	0	51,600
<i>Bonds</i>	0	0	0	0	0	0	0	0
<i>Checking/Savings Accounts</i>	2,000	200	8,000	40,000	8,600	5,200	13,800	25,800
<i>CDs, Savings Bonds, T-Bills, and Other Savings</i>	0	0	0	0	0	0	900	17,200
<i>Total Assets</i>	489,500	273,900	871,800	2,690,400	633,200	435,100	871,400	1,826,600
<i>Non-Real Estate Debt</i>	0	200	0	0	0	100	0	0
<i>Net Wealth</i>	483,300	265,700	865,400	2,690,400	629,900	430,300	867,200	1,809,400

Source: Authors calculations using 1992 and 2016 HRS data and 2020 RAND-HRS longitudinal data.

Note: See Table 1.

Table 3. Share of each asset type in net wealth by wealth distribution in 1992 and 2016

<i>Type of Asset/Debt</i>	2016				1992			
	All Households	Bottom 50%	Middle 40%	Top 10%	All Households	Bottom 50%	Middle 40%	Top 10%
<i>Primary Residence net of mortgage debt</i>	14.8%	12.4%	18.5%	11.7%	14.9%	15.3%	17.5%	10.6%
<i>Other Real Estate net of mortgage debt</i>	9.6%	1.3%	5.7%	17.4%	8.6%	3.0%	6.3%	17.0%
<i>Vehicles net of car loans</i>	2.1%	3.6%	2.5%	1.1%	3.3%	3.8%	3.0%	3.2%
<i>Social Security</i>	30.2%	74.6%	32.5%	9.3%	33.3%	56.9%	33.2%	12.6%
<i>Retirement Savings and Benefits (DC, DB, IRA)</i>	26.3%	9.0%	30.4%	28.7%	24.8%	16.6%	28.1%	27.3%
<i>Business (net)</i>	8.9%	0.6%	3.1%	18.6%	5.4%	0.7%	1.9%	14.9%
<i>Stocks</i>	4.1%	0.3%	3.8%	6.1%	4.1%	1.3%	3.7%	7.2%
<i>Bonds</i>	0.8%	0.0%	0.1%	1.9%	0.8%	0.1%	0.3%	2.0%
<i>Checking/Savings Accounts</i>	2.3%	1.3%	2.7%	2.2%	2.8%	2.4%	3.5%	2.2%
<i>CDs, Savings Bonds, T-Bills, and Other Savings</i>	2.0%	0.4%	1.6%	3.1%	2.7%	1.6%	2.9%	3.3%
<i>Total Assets</i>	101.1%	103.6%	101.0%	100.1%	100.7%	101.7%	100.5%	100.1%
<i>Non-Real Estate Debt</i>	-1.1%	-3.6%	-1.0%	-0.1%	-0.7%	-1.7%	-0.5%	-0.1%
<i>Net Wealth</i>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Authors calculations using 1992 and 2016 HRS data and 2020 RAND-HRS longitudinal data.

Note: See Table 1. Shares are calculated based on each asset type's average amount by wealth group.

Table 4. Median wealth by wealth category and race and ethnicity in 1992 and 2016

<i>Type of Asset/Debt</i>	2016				1992			
	White non-Hispanic	Black non-Hispanic	Hispanic	Other	White non-Hispanic	Black non-Hispanic	Hispanic	Other
<i>Primary Residence net of mortgage debt</i>	70,000	0	0	80,000	94,600	34,400	41,300	63,600
<i>Other Real Estate net of mortgage debt</i>	0	0	0	0	0	0	0	5,200
<i>Vehicles net of car loans</i>	12,000	5,000	4,000	10,000	17,200	8,600	5,200	12,000
<i>Social Security</i>	253,900	211,200	204,600	237,800	253,700	176,100	160,500	213,100
<i>Retirement Savings and Benefits (DC, DB, IRA)</i>	60,000	5,000	0	55,000	101,100	74,200	55,000	34,400
<i>Business (net)</i>	0	0	0	0	0	0	0	0
<i>Stocks</i>	0	0	0	0	0	0	0	0
<i>Bonds</i>	0	0	0	0	0	0	0	0
<i>Checking/Savings Accounts</i>	3,000	0	0	3,500	8,600	1,700	300	8,600
<i>CDs, Savings Bonds, T-Bills, and Other Savings</i>	0	0	0	0	0	0	0	0
<i>Total Assets</i>	559,500	333,900	342,900	733,700	703,500	473,000	418,300	533,700
<i>Non-Real Estate Debt</i>	0	0	0	0	0	700	0	0
<i>Net Wealth</i>	558,700	326,400	339,700	731,400	701,700	467,400	414,900	526,800

Source: Authors calculations using 1992 and 2016 HRS data and 2020 RAND-HRS longitudinal data.

Note: See Table 1. Race and ethnicity are determined on individual bases before applying household sampling weights.

Table 5. Change in median wealth from 1992 to 2016 by race and ethnicity.

<i>Type of Asset/Debt</i>	<i>Race & Ethnicity</i>			
	White non-Hispanic	Black non-Hispanic	Hispanic	Other
<i>Primary Residence net of mortgage debt</i>	-24,600	-34,400	-41,300	16,400
<i>Other Real Estate net of mortgage debt</i>	0	0	0	-5,200
<i>Vehicles net of car loans</i>	-5,200	-3,600	-1,200	-2,000
<i>Social Security</i>	200	35,100	44,100	24,700
<i>Retirement Savings and Benefits (DC, DB, IRA)</i>	-41,100	-69,200	-55,000	20,600
<i>Business (net)</i>	0	0	0	0
<i>Stocks</i>	0	0	0	0
<i>Bonds</i>	0	0	0	0
<i>Checking/Savings Accounts</i>	-5,600	-1,700	-300	-5,100
<i>CDs, Savings Bonds, T-Bills, and Other Savings</i>	0	0	0	0
<i>Total Assets</i>	-144,000	-139,100	-75,400	200,000
<i>Non-Real Estate Debt</i>	0	-700	0	0
<i>Net Wealth</i>	-143,000	-141,000	-75,200	204,600

Source: Authors calculations using 1992 and 2016 HRS data and 2020 RAND-HRS longitudinal data.

Note: see Tables 1 and 4.

Table 6. Share of each asset type in net wealth by race and ethnicity in 1992 and 2016

<i>Type of Asset/Debt</i>	2016				1992		
	White non-Hispanic	Black non-Hispanic	Hispanic	Other	White non-Hispanic	Black non-Hispanic	Hispanic
<i>Primary Residence net of mortgage debt</i>	14.6%	13.3%	12.1%	17.4%	14.3%	10.9%	12.1%
<i>Other Real Estate net of mortgage debt</i>	8.0%	8.0%	17.2%	11.4%	10.8%	4.4%	12.1%
<i>Vehicles net of car loans</i>	2.1%	2.2%	2.3%	1.9%	3.1%	2.7%	2.3%
<i>Social Security</i>	28.6%	44.6%	38.4%	28.2%	28.5%	41.4%	38.4%
<i>Retirement Savings and Benefits (DC, DB, IRA)</i>	27.8%	23.2%	14.7%	27.6%	24.3%	36.4%	14.7%
<i>Business (net)</i>	9.0%	6.4%	13.1%	5.8%	7.9%	1.4%	13.1%
<i>Stocks</i>	4.9%	1.3%	1.1%	4.3%	4.7%	0.5%	1.1%
<i>Bonds</i>	1.2%	0.0%	0.0%	0.3%	1.1%	0.0%	0.0%
<i>Checking/Savings Accounts</i>	2.4%	1.6%	1.3%	2.7%	2.8%	2.3%	1.3%
<i>CDs, Savings Bonds, T-Bills, and Other Savings</i>	2.5%	1.1%	0.8%	1.6%	3.3%	1.6%	0.8%
<i>Total Assets</i>	101.1%	101.6%	101.2%	101.1%	100.7%	101.5%	101.2%
<i>Non-Real Estate Debt</i>	1.1%	1.6%	1.2%	1.1%	0.7%	1.5%	1.2%
<i>Net Wealth</i>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Authors calculations using 1992 and 2016 HRS data and 2020 RAND-HRS longitudinal data.

Note: See Tables 1 and 4. Shares are calculated based on each asset type's average amount by wealth group.

Appendix Table A. Mean wealth and change in mean wealth by wealth category and wealth distribution in 1992 and 2016 (thousands of 2016 USD)

<i>Type of Asset/Debt</i>	2016				1992				Change			
	All	Bot. 50 %	Nex t 40 %	Top 10%	All	Bot. 50 %	Nex t 40 %	Top 10%	All	Bot. 50 %	Nex t 40 %	Top 10 %
<i>Primary Residence net of mortgage debt</i>	124	34	171	395	120	65	156	255	4	-31	14	140
<i>Other Real Estate net of mortgage debt</i>	81	4	53	589	70	13	56	411	12	-9	-3	178
<i>Vehicles net of car loans</i>	18	10	23	38	27	16	27	77	-9	-6	-4	-39
<i>Social Security</i>	254	205	301	316	269	239	296	305	-15	-35	4	11
<i>Retirement Savings and Benefits (DC, DB, IRA)</i>	221	25	281	973	201	70	251	661	20	-45	30	312
<i>Business (net)</i>	75	2	29	631	44	3	17	360	31	-1	12	270
<i>Stocks</i>	35	1	35	207	33	5	33	174	2	-5	2	33
<i>Bonds</i>	7	0	1	65	6	0	3	49	1	-0	-1	16
<i>Checking/Savings Accounts</i>	19	4	25	75	23	10	31	52	-4	-7	-6	23
<i>CDs, Savings Bonds, T-Bills, and Other Savings</i>	17	1	15	106	22	7	26	79	-5	-6	-11	27
<i>Total Assets</i>	851	284	933	3,393	813	428	897	2,423	38	-144	36	971
<i>Non-Real Estate Debt</i>	9	10	10	5	6	7	4	3	4	3	5	2
<i>Net Wealth</i>	842	274	924	3,388	807	421	893	2,420	34	-147	30	969

Source: Authors calculations using 1992 and 2016 HRS data and 2020 RAND-HRS longitudinal data.
 Note: See Table 1.

Appendix Table B. Median wealth by wealth category and wealth distribution in 1992 and 2022 (2022 USD) – SCF data

<i>Type of Asset/Debt</i>	2022				1992	
	All	Bot. 50%	Next 40%	Top 10%	All	Bot. 50%
<i>Primary Residence Net of Mortgage Debt</i>	156,000	56,000	315,000	710,000	181,900	65,000
<i>Other Real Estate Net of Mortgage Debt</i>	0	0	0	87,500	0	0
<i>Vehicles Net of Car Loans</i>	20,000	12,000	30,300	42,500	21,700	11,700
<i>Retirement Savings (DC & IRA)</i>	16,000	0	154,100	800,000	13,000	0
<i>Business (Net)</i>	0	0	0	0	0	0
<i>Stocks</i>	0	0	0	22,000	0	0
<i>Bonds</i>	0	0	0	0	0	0
<i>Checking/Savings Accounts</i>	7,200	2,000	25,800	135,000	10,400	2,600
<i>CDs, Savings Bonds, T-Bills, And Other Savings</i>	0	0	9,000	417,000	13,000	0
<i>Total Assets</i>	385,600	90,200	891,200	6,235,700	503,400	154,600
<i>Non-Real Estate Debt</i>	400	1,500	0	0	0	0
<i>Net Wealth</i>	364,300	81,900	889,500	6,235,700	492,800	148,500

Source: Authors calculations using 1992 and 2022 SCF data.

Note: All amounts are calculated in 2022 USD. Cutoffs points for wealth groups are defined based on their net wealth and marital status. For single households the cutoffs are \$200,931.33 (50th pct.) and \$1,152,756.85 (90th pct.) in 1992 and \$111,800 (50th pct.) and \$1,260,000 (90th pct.) in 2022. For couples, the cutoffs are \$688,107.63 (50th pct.) and \$3,580,604.72 (90th pct) in 1992, and \$546,800 (50th pct.) and \$4,512,000 (90th pct) in 2022. Stock and bond categories represent direct ownership (i.e., outside of 401(k)-type plans and IRAs). Household sampling weights.

Appendix Table C. Mean wealth by wealth category and wealth distribution in 1992 and 2022 (2022 USD) – SCF data

<i>Type of Asset/Debt</i>	2022				1992		
	All	Bot. 50%	Next 40%	Top 10%	All	Bot. 50%	Top 10%
<i>Primary Residence Net of Mortgage Debt</i>	302,500	90,400	376,000	1,071,200	322,500	101,100	376,000
<i>Other Real Estate Net of Mortgage Debt</i>	125,400	7,100	88,000	868,000	211,800	16,200	868,000
<i>Vehicles Net of Car Loans</i>	35,000	18,600	41,600	90,900	37,600	20,000	90,900
<i>Retirement Savings (DC & IRA)</i>	306,400	24,300	388,200	1,393,000	163,100	23,600	1,393,000
<i>Business (Net)</i>	369,600	3,900	82,100	3,355,300	328,800	14,900	3,355,300
<i>Stocks</i>	109,300	500	39,200	935,000	97,000	2,700	935,000
<i>Bonds</i>	12,000	0	1,300	114,700	43,300	600	114,700
<i>Checking/Savings Accounts</i>	71,300	9,800	58,800	429,100	81,100	16,300	429,100
<i>CDs, Savings Bonds, T-Bills, And Other Savings</i>	250,900	5,200	108,500	2,053,900	199,000	22,300	2,053,900
<i>Total Assets</i>	1,582,300	159,800	1,183,700	10,300,000	1,484,300	217,800	10,300,000
<i>Non-Real Estate Debt</i>	18,200	15,800	13,500	48,900	14,600	9,600	48,900
<i>Net Wealth</i>	1,564,100	144,000	1,170,200	10,300,000	1,469,700	208,200	10,300,000

Source: Authors calculations using 1992 and 2022 SCF data.

Note: see Appendix Table B.