Reducing Retirement Inequality

Building Wealth and Old-Age Resilience

Edited by

Olivia S. Mitchell
and
Nikolai Roussanov

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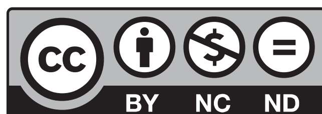

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Chapter 9

Financial Inclusion and Retirement Preparedness in the United States

Vicki L. Bogan

Lengthening life spans, coupled with the precarious state of the US social security system, have brought increasing and intensifying interest in the future of US retirement security. As a further complication, over the past several decades, both public and private sector organizations have been shifting away from defined benefit (DB) plans toward defined contribution (DC) plans (Poterba et al. 2009; Rauh et al. 2020). US households with access to an employer-sponsored retirement plan now predominately use DC instead of DB plans (Pew 2017). Consequently, more people than ever have had to take more responsibility for retirement financial management. Despite this, the majority of Americans are not adequately prepared. Using the 2019 Survey of Consumer Finances (SCF), the Federal Reserve Board (2019) found that only 36 percent of non-retired adults think their retirement saving is on track, with 44 percent indicating retirement saving is not, and 20 percent uncertain. The SCF also showed that 25 percent of non-retired adults had no retirement savings or pension whatsoever. These statistics are even more concerning when we consider the wedge between household objective and subjective retirement adequacy. Using the SCF, Kim and Hanna (2015) found that only 52 percent of households had objective–subjective consistency with respect to retirement adequacy. They showed that households with DB or DC plans were less realistic than those without a plan. Moreover, realistic assessments about retirement adequacy decreased as age increased.

Financial inclusion has been defined by Nanda and Kaur (2016) as the people having available and equality of access to financial services. This relationship includes not only having adequate access to financial institutions, but also having access to employer-sponsored retirement plans and access to financial planning services. Barriers to engaging with these three facets of the financial domain (financial institutions, employer-sponsored retirement plans, and financial planning/advisory services) can significantly hinder households' ability to save and plan for retirement. Nevertheless, the 2021 Federal Deposit Insurance Corporation (FDIC) National Survey

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of Unbanked and Underbanked Households indicated that over 24 million households were either unbanked or underbanked. In 2020, one-third of US workers in the private sector lacked access to a firm-offered retirement plan (Principal Financial Services 2022). Further, Chatterjee and Fan (2023) introduced the concept of financial advice deserts (FADs),[1] and they showed that living in a FAD state was negatively associated with having a retirement account and contributing regularly to a retirement account. In this chapter, we examine issues associated with the impact of financial inclusion on household retirement saving and wealth creation, by focusing on three primary sources of retirement funds: social security, employer-sponsored retirement plans, and other assets/investments.

Factors Influencing Retirement Savings

Much has been written regarding why some employees do not participate in DC pension plans: explanations offered range from budget constraints to bounded rationality. What has become apparent is that retirement-related financial decision-making is affected by a complex set of factors that include household constraints, behavioral influences, and planning strategies (Agnew et al. 2012).

Household constraints

Numerous scholars have focused on examining households' ability to manage their retirement savings. Factors like poor financial literacy (Lusardi et al. 2014), bounded rationality (Benartzi and Thaler 2007), low investment skills (Korniotis and Kumar 2011), cognitive functioning limitations (Bogan and Fertig 2013), and health issues (Bogan et al. 2018; McGarry 2004) all have been shown to negatively affect retirement well-being.

Lusardi et al. (2014) documented that financial sophistication was lacking in older respondents (age 55+), and Korniotis and Kumar (2011) reported that older investors were less capable of applying their investment knowledge and exhibited poorer investment skills. McGarry (2004) found that changes in retirement plans were strongly correlated with changes in physical health. Benartzi and Thaler (2007) discussed how households often make retirement savings decisions that departed from perfect economic rationality, due to constraints on thinking capacity termed 'bounded rationality.' While Bogan and Fertig (2013) found that cognitive functioning limitations increased the share of household financial assets devoted to retirement savings, their later work (Bogan and Fertig 2018) demonstrated that mental health issues, specifically depression and anxiety, decreased the probability of participating in a DC pension and the percent

of financial assets devoted to retirement savings, and increased retirement account withdrawals.

Behavioral influences

The voluntary nature of DC plans also creates room for behavioral influences to negatively affect savings. For example, Benartzi and Thaler (2007) found that most people do not actively manage their retirement plans and default to doing nothing year after year due to *status quo bias*. Another powerful behavioral effect is related to time-inconsistent preferences, used to explain how individuals make savings choices that they regret in the long run (Thaler and Benartzi 2004). Agnew et al. (2012) showed that 401(k) plan participation was related to trust in financial institutions. These behavioral issues result in households not saving enough or not saving at all for retirement.

Planning strategies

Retirement planning is most prevalent for households having specific socioeconomic and demographic characteristics. Using Retirement Confidence Survey (RCS) data, Joo and Grable (2005) determined that those with more education, higher income, and in smaller households tended to have a current retirement savings program. Additionally, they found that employees exposed to employer-sponsored financial education were more likely to have retirement savings. Knoll et al. (2012) analyzed SCF data on young adults (age 22–35), and they reported that after controlling for important characteristics, married young adults were more likely than all other groups (including cohabitors) to identify retirement savings as an important goal. Married individuals were more likely than single individuals to participate in DC plans.

Using the 2016 Survey of Consumer Finances (SCF), Kim et al. (2021) found racial/ethnic disparities in motives for retirement saving. They also showed that home ownership, objective financial knowledge, planning horizon, and age were the most important determinants of the racial/ethnic gap in having a retirement saving motive. Szinovacz et al. (2001) highlighted the weight of family obligations in retirement decisions, and they illustrated significant heterogeneity by household type. Generally, individuals with financial responsibility for children were less prone to retire. However, there were nuanced differences by race. Black males and White females with one child in the household were not as likely to retire, while Black females with one child in the household were more likely to retire.

Financial Inclusion and Retirement

The usage of the term 'financial inclusion' has evolved over time. Historically, the term was used to describe having access to formal banking institutions (Nanda and Kuar 2016). Today, the term is used to describe the importance of not only having access to banking institutions, but also having access to timely and affordable financial products and services. This expanding definition of financial inclusion now covers the entire financial network, encompassing savings, payments, investments, credit, and insurance. When we consider financial inclusion in the context of retirement preparedness, three aspects of the financial network are critical: financial institutions, employer-sponsored retirement plans, and financial planning services.

Financial institutions

In one study, the FDIC (2021) National Survey of Unbanked and Underbanked Households data showed approximately 5.9 million households in the United States are unbanked—that is, they do not have an account at an insured financial institution. An additional 18.7 million households are classified as underbanked—that is, they use alternative financial services (AFS).[2] Table 9.1 shows unbanked and underbanked statistics by income level, and Table 9.2 presents unbanked and underbanked statistics by race.

Rao and Malapit (2015) analyzed the relationship between household structure and financial institution engagement in the United States. They found that an additional child increased female-headed households' likelihood of being unbanked and underbanked. Gross et al. (2012) showed that AFS users were less educated, minority, middle-aged (31–45), lower

Table 9.1 2021 Unbanked and underbanked rates by income level

	Unbanked[a]	Underbanked[b]
Full Sample	4.5	14.1
Less than $15,000	19.8	19.2
$15,000 to $30,000	9.2	18.9
$30,000 to $50,000	4.0	17.3
$50,000 to $75,000	2.1	14.0
At least $75,000	0.6	9.7

Notes:
[a] Unbanked refers to households without an account at an insured financial institution.
[b] Underbanked refers to households that may or may not have an account but obtained (non-bank) AFS. Transaction AFS include money orders, check cashing, and international remittances while credit AFS include payday loans, refund anticipation loans, rent-to-own services, pawn shop loans, and auto title loans.
Source: Author's calculations using data from FDIC (2021).

TABLE 9.2 2021 Unbanked and underbanked rates by race

	Unbanked[a]	Underbanked[b]
Black	11.3	24.7
Hispanic	9.3	24.1
Asian	2.9	16.5
American Indian or Alaskan Native	6.9	25.1
White	2.1	9.3

Notes:
[a] Unbanked refers to households without an account at an insured financial institution.
[b] Underbanked refers to households that may or may not have an account but obtained (non-bank) AFS. Transaction AFS include money orders, check cashing, and international remittances while credit AFS include payday loans, refund anticipation loans, rent-to-own services, pawn shop loans, and auto title loans.
Source: Author's calculations using data from FDIC (2021).

income, unemployed, renters, from larger households. Birkenmaier and Fu (2016) showed that financial knowledge, age, gender, marital status, education, household income, and home ownership were significantly associated with AFS usage. Lusardi and Scheresberg (2013) documented very low levels of financial literacy among most high-cost borrowers and less engagement in high-cost borrowing among those who were more financially literate.[3] Robb et al. (2015) showed that individuals with lower objective financial knowledge and overconfidence in their self-assessed knowledge level were significantly more likely to utilize AFS instruments.

Using Global Findex data, Allen et al. (2016) found that greater financial inclusion was associated with greater proximity to financial intermediaries and lower account costs. Trust in financial institutions also has been demonstrated to be related to financial inclusion. Chatterji et al. (2015) documented how US credit unions grew in market share after the 2008–2009 financial crisis, citing loss of trust in traditional banks. The disparities in financial inclusion among various underrepresented groups often is purported to be the result of lack of trust in the banking system (Chatterji et al. 2015; Gurun et al. 2018). Nonetheless, Bogan and Wolfolds (2022) found that White men were more likely to identify trust as the main reason for being unbanked, compared to underrepresented minority groups. Although Koh et al. (2021) found 'trust in people' to be uncorrelated with household retirement savings behavior, their analysis showed that trust in private and public financial representatives was positively related to retirement savings, investments, and insurance holding.

Retirement plan access

Yogo et al. (2022) reported that geographic variation in financial participation in retirement accounts was related to income, rather than racial

composition. While retirement account participation was negatively correlated with the Hispanic and Black population shares, these correlations significantly weakened when conditioned on income. The heterogeneity in financial inclusion conditioned on income suggests that low retirement plan participation is not simply a matter of inadequate income, but also a function of financial inclusion. That study asserted that a causal effect was lack of access to an employer-sponsored retirement plan, and the authors calculated that universal access could increase retirement account participation for the lowest income quintile by 10 percentage points in a decade.

Financial planning services and financial literacy

Financial illiteracy can inhibit households' ability to prepare for retirement and leave them vulnerable to financial hardship in retirement (Lusardi and Mitchell 2007). Moreover, the same authors concluded that financial illiteracy is concentrated among populations (low-income, limited education, underrepresented minorities, and women) that are acutely vulnerable to financial fragility in retirement. Given the extent of the education required to become financially competent, the time and budget constraints of most financial education programs limit their ability to affect retirement savings behavior. One-time employer seminars on benefits or financial planning are not usually sufficient to rectify the literacy deficits.

Using data from the 2015 National Financial Capability Study, Nam and Loibl (2021) showed that having access to mainstream financial services was more strongly correlated with three key financial-planning behaviors (paying bills on time, emergency savings, and retirement planning), than was participating in employer-provided financial education. These results highlight the importance of targeting financial inclusion with respect to financial planning for low-income adults nearing retirement. In particular, Nam and Loibl (2021) suggest that optimal policies need to include interventions which facilitate financial inclusion, as people approach retirement.

Financial advice provided by financial professionals has been found to play a complementary role to financial literacy, in helping individuals make prudent financial decisions. Chatterjee and Fan (2023) suggest that financial advisors can reduce investment volatility, increase accumulated wealth, and promote sound financial behaviors, yet they also note that residing in a FAD state was negatively associated with both having a retirement account and contributing regularly to the account. This geographic inequality in terms of financial inclusion underscores the need for greater access to financial advice and improved financial literacy among economically marginalized populations, to increase retirement preparedness.

Financial Inclusion Challenges by Source of Retirement Funds

When examining the relationship between financial inclusion and the use of specific household retirement savings vehicles, three chief sources of retirement funds for US households are important to consider: social security, employer-based retirement plans, and other assets (e.g., inheritances, financial assets, and home equity). Next, we will examine financial inclusion-related impediments to households relying on funds from each of these sources.

Social security

Dushi et al. (2017) using Social Security Administration (SSA) data, reported that more than half of the older population lived in households where at least half of total family income came from social security benefits, and almost a quarter received at least 90 percent of family income from social security. Using Census Current Population Surveys (CPS), Lee (2009) found that, while social security was the most common source of income for older women across all racial/ethnic groups, such benefits were inadequate to eliminate poverty among older women. Black women had the highest rates of poverty, because their (and their spouses') low lifetime earnings resulted in benefit levels that were insufficient. Lusardi and Mitchell (2007) found that Hispanics were less likely to benefit from social security due to rules that excluded workers with less formal employment arrangements. Additionally, immigrants who came to the US later in life often found themselves ineligible, due to an insufficient number of payroll tax contributions.

When evaluating retirement preparedness, some households focus on the decision of *when* to retire, seeking to maximize the benefits received from the SSA. Nevertheless, not all retirement decisions are voluntary. Flippen and Tienda (2000) showed that, in the years immediately prior to retirement, Black, Hispanic, and female individuals experienced more involuntary job separation, frequently resulting in retirement or labor force exit. Table 9.3 illustrates the reduced level of benefits for non-White recipients compared to White recipients, using 2021 SSA data on average monthly retirement benefits by race.

Employer-sponsored retirement plans

Employer-sponsored DC retirement plans are appealing for several reasons. Contributions are easily made through payroll deductions, and most employers offer matching funds to supplement employee contributions. Additionally, tax incentives for US employees also encourage retirement

TABLE 9.3 2021 OASI average monthly benefit, by type of benefit and race

	All Races	White	Black	Other
Average retirement benefits	1,611	1,675	1,413	1,228
Retired workers	1,658	1,719	1,447	1,298
Spouses of retired workers	840	906	694	565
Children of retired workers	782	843	685	622

Source: Author's calculations using data from SSA (2022) Master Beneficiary Record, 100 percent sample.

savings through these plans. High- and middle-income employees can therefore benefit by deducting DC contributions from taxable income, and they also can earn tax-deferred returns. Lower-income workers face low marginal tax rates and may not pay capital gains taxes, though they are able to claim a Saver's Credit of up to 50 percent of retirement contributions (Davis and Simms 2025; Yogo et al. 2022).

One factor contributing to low retirement plan participation rates is employment in jobs that do not offer either DC or DB plans. Since lower-wage jobs often do not provide these types of benefits, low-income households are most vulnerable (Yogo et al. 2022). Furthermore, Choi et al. (2011) demonstrated that DC plan access was a necessary but not sufficient condition for participation: specifically, individuals with DC plan access often did not (fully) participate in these plans, even when there was a corporate match and no tax-related restrictions on withdrawals. Moreover, despite the potential tax benefit from the Saver's Credit for lower-income workers, Ramnath (2013) showed that it had little effect on lower-income workers' retirement contributions.

Tamborini and Kim (2020) also documented that, relative to White and Asian American workers, Black and Hispanic workers had lower participation and contribution rates for employer-sponsored DC plans. Accordingly, those authors concluded that socioeconomic disparities by race/ethnicity generated impediments to retirement wealth accumulation for minority groups. 'Lower DC retirement plan participation and contributions among minorities in work life represent an underappreciated earlier-life channel through which racial inequalities in income and wealth in later life are generated' (Tamborini and Kim2020: 837).

Other assets

Due to financial exclusion and limited participation in financial markets, other types of investment vehicles are also less commonly used as sources of retirement income for persons in minority subgroups.

Intergenerational transfers. Intergenerational wealth transfers, especially inheritances and large gifts, serve as a significant source of retirement income for many people (Aubry et al. 2025). Using SCF data from 2010 to 2019, Francis and Weller (2021) detailed that 42.2 percent of White households near retirement age (55–64) had either already received an inheritance or large gift or expected to get one. In contrast, only 13.8 percent of Black households and 11.5 percent of Latino households had received or expected to receive an inheritance or large gift. Near retirement, White households getting an inheritance or large gift received an average of $289,850, while Black households received $100,127 on average, and Latino households received $195,021 on average (Francis and Weller 2021).

Financial assets. The SCF and other surveys consistently depict low asset market participation rates among many US households (Bogan 2014). Numerous factors influence these individual investment patterns, particularly the decision to participate in the stock market. An extensive finance literature demonstrates that portfolio decisions depend on household characteristics such as risk aversion (Gollier 2002); wealth and education (Haliassos and Bertaut 1995); gender (Barber and Odean 2001); health (Bogan and Fertig 2013; Rosen and Wu 2004); and family structure (Bogan 2013, 2015; Bogan and Fernandez 2017). Market frictions (e.g., transaction costs, information costs, taxes) also create barriers to financial market participation (Bogan 2008; Choi et al. 2002; Barber and Odean 2003; Seto and Bogan 2013).

Choi et al. (2002) reported that, as a result of the availability of online trading, individuals already participating in the stock market boosted their investment activity as transaction and information costs fell, and Bogan (2008) showed that more households started participating in financial markets after online trading technology reduced transaction and information costs. Seto and Bogan (2013) analyzed the investment behavior of immigrant households to identify the effects of information costs on household investment behavior, and they found evidence consistent with information access effects. They also reported that immigrants from countries with greater informational exchange and contact with the United States, such as English-speaking countries and those with financial markets highly interlinked with the US, were more likely to invest in stocks. Barber and Odean (2003) demonstrated that taxes were an important influence on an individual's brokerage account investments, by showing that investors preferred to locate bonds and mutual funds in retirement accounts, and to realize losses in their taxable accounts at the end of the tax year.

Numerous studies have shown that financial market participation is lower for specific demographic groups (Bogan 2014). Generally, African

Americans have lower asset values and are less likely to hold higher-risk investments such as stocks (Badu et al. 1999; DeVaney et al. 2007; Plath and Stevenson 2000). Hispanic households have smaller financial portfolios which grow at slower rates than for White households (Plath and Stevenson 2005; Stevenson and Plath 2006), and Hispanic household heads also hold a significantly lower percentage of risky assets relative to total net worth (Coleman 2003). In fact, for every educational level and income quartile, the percentages of both African American and Hispanic households owning risky assets were significantly smaller than the percentage of White households (Choudhury 2001). The risky asset holding differences were largest for the lowest income quartiles, with Black and Hispanic households behaving similarly. Financial inclusion and barriers to participation in investment markets have been offered as the most likely explanation for these low underrepresented minority financial market participation rates (Gutter and Fontes 2006).

Home equity. Minority groups face lending market and housing market discrimination, resulting in lower housing asset values and higher housing debt levels. Constraints on access to credit in terms of both the ability to obtain a loan and higher borrowing rates hinder the ability of such households to build home equity. This, in turn, leads to lower levels of housing equity that can be used as a source of retirement funds (Francis and Weller 2021). Sullivan et al. (2015) found that, while 73 percent of White households were homeowners in 2011, only 47 percent of Latinos and 45 percent of Black people were homeowners. In addition, the same authors reported that Black and Latino homeowners realized lower returns on their investments in home ownership. For every $1 in wealth that accrued to median Black households due to home ownership, median White households accrued $1.34. Further, they found for every $1 in wealth that accrued to median Latino households due to home ownership, median White households accrued $1.54.

Wealth Inequality and Retirement

Suarez et al. (2025) have documented the unequal distribution of retirement wealth by race, concluding that social security benefits are a key resource for all—and for Black and Hispanic households, in particular. Labor market and housing market failures contribute to this greater reliance on social security and the larger proportion of minority households experiencing retirement insecurity relative to White households. In the labor market, occupational segregation forces minorities into lower-paying jobs with limited access to employer-sponsored retirement plans (Francis

and Weller 2021). Thus, retirement insecurity is fueled by lower social security benefits due to lower lifetime earnings, and too little tax-advantaged savings due to exclusion from employer-sponsored retirement savings vehicles (Francis and Weller 2021). Discrimination in lending markets and the residual effects of redlining practices curtail wealth accumulation through real estate (Sullivan et al. 2015). As a result, underrepresented minority households are less likely to be able to build retirement wealth through home equity.

Beyond inequality in labor and housing markets, the broader context of US racial inequality and institutional discrimination also makes financial advancement more difficult for certain groups. Continued racial disparities affect almost every wealth creation avenue (labor income, home equity, education, entrepreneurship) for Black and Hispanic households (Benoit 1999; Bertrand and Mullainathan 2004; Bogan and Darity 2008; Steil et al. 2018). Additionally, the legacy of discrimination means that Black and Latino households are less likely than White households to receive an intergenerational wealth transfer that could ameliorate debt, facilitate acquisition of human capital (education), and/or increase the likelihood of home ownership—all of which are crucial conduits to increasing net worth (Francis and Weller 2021). In this way, the cumulative effects of discriminatory policies and practices reproduce racialized inequities across generations.

Figures 9.1 and 9.2 illustrate persistent and significant income and wealth disparities by race in the US (Shrider et al. 2021; US Census 2019). Faber (2017) highlighted a link between widening US financial services inequality and the wealth consequences of economic downturns on households. Bogan and Wolfords (2022) built on the concept of intersectionality, to examine how the intersection of race and gender were related to financial inclusion in the United States. The latter authors noted that Black women were more likely than any other group to be unbanked or to be underbanked and that, compared to all other race and gender subgroups, lack of money (limited wealth) was more frequently cited by Black women as the primary rationale for why they did not engage with the banking system.

Brown (2012) used panel data from the Health and Retirement Study (HRS) to analyze the wealth trajectories of Black women aged 51–73, and found that, during mid- to late-life, Black women had limited wealth and higher risk of financial fragility. Brown (2012) concluded that the persistently low wealth trajectories of Black women were likely the result of state policies, discrimination, residential segregation, and health disparities. Relative to non-Hispanic Whites, older Black and Hispanic families had higher poverty rates, lower income, less wealth, and greater reliance on social security income (Tamborini and Kim 2020). The same study noted that underrepresented minority groups also faced different average levels of

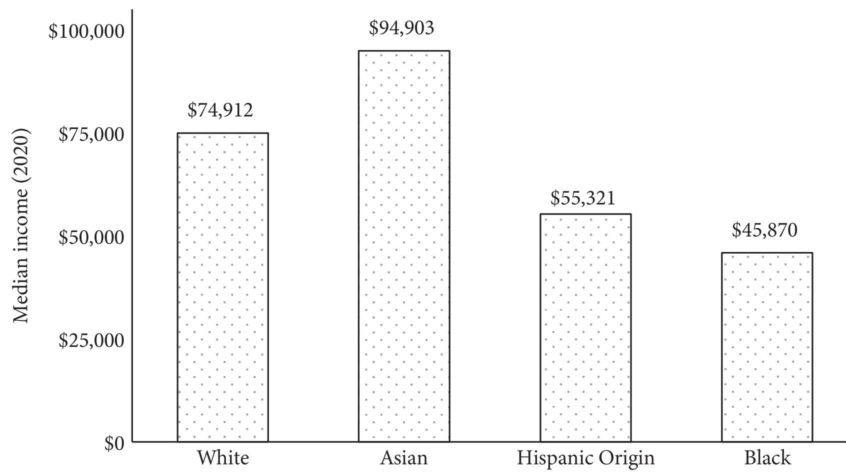

Figure 9.1 2020 US median income by racial group
Source: Author's interpretation of data from Shrider et al. (2021).

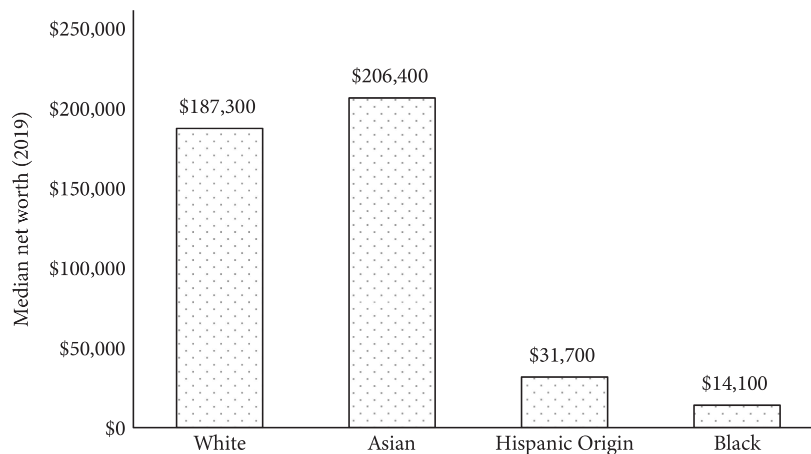

Figure 9.2 2019 US median wealth by racial group
Source: Author's interpretation of data from US Census Bureau (2019).

health, familial support, and life expectancy which affects resource adequacy in retirement. Consistent with Dynan and Elmendorf's (2025) discussion, Table 9.4 presents data on the racial disparities in retirement wealth and demonstrates that racial patterns in retirement savings mirror the observed racial patterns of household wealth inequality.

TABLE 9.4 2019 Retirement plan participation, average wealth, and median wealth by race

	White	Black	Latino/ Hispanic	Other
Share with retirement benefits				
Any retirement plan	73.5%	55.7%	40.4%	68.8%
401(k) plans	57.6%	41.1%	29.5%	59.2%
DB pensions	30.6%	24.4%	15.6%	22.1%
Both 401(k) plans and DB pension	16.6%	12.0%	5.6%	14.9%
Average retirement wealth				
All workplace retirement wealth (401(k) and DB pensions)	$406,583	$288,607	$246,962	$255,739
401(k) balances	$157,911	$85,835	$93,466	$129,458
DB pension wealth	$679,266	$515,086	$462,351	$449,737
Wealth for both 401(k) and DB pensions	$1,033,685	$799,593	$876,513	$543,676
Median retirement wealth				
All workplace retirement wealth (401(k) and DB pensions)	$88,933	$44,000	$45,000	$41,000
401(k) balances	$50,000	$25,000	$30,000	$30,000
DB pension wealth	$253,970	$150,843	$103,989	$157,834
Wealth for both 401(k) and DB pensions	$557,453	$275,151	$283,389	$228,715

Source: Francis et al. (2021).

Conclusion

Retirement underpreparedness by US households is unsurprising, given the magnitude of financial exclusion and wealth inequality, particularly for racial and ethnic minorities. As we unpack the root causes of the low retirement savings statistics to better understand retirement preparedness, it is clear that researchers, policymakers, financial institutions, and employers must work together to reduce retirement insecurity. Yogo et al. (2022: 3) suggested that 'universal access to an employer-sponsored retirement plan is a policy intervention that could boost retirement account participation for low- and middle-income households.' Nevertheless, a broader approach is required. Celerier and Matray (2019) showed that financial inclusion fosters household wealth accumulation. Thus, financial inclusion, defined broadly, is a crucial lever for facilitating retirement preparedness.

The range of organizations, firms, and individuals interested in increasing public awareness and preparedness for retirement is expansive. Policymakers are involved with regulation to protect households. Financial planning professionals collaborate with households to develop retirement savings strategies. Financial institutions, as well as non-profit organizations, facilitate retirement-savings-related education and financial literacy. At the center of these efforts lies a need to address issues related to financial inclusion. Additional examination and dialogue are needed to understand and counteract these concerning trends as a significant retirement crisis looms due to issues related to potential social security insolvency (CBO 2022).

Notes

1. Chatterjee and Fan (2022) define FADs as states in which financial advice received from personal financial advisors (PFAs) and Certified Financial Planners™ (CFP professionals) is limited. Specifically, a state is defined as an FAD if it falls in the bottom quartile of the total number of registered CFP® professionals (or PFAS) in a state by that state's population.
2. Unbanked refers to households that do not have an account at an insured financial institution, and underbanked refers to households that may or may not have an account but obtained (non-bank) AFS. Transaction AFS include money orders, check cashing, and international remittances while credit AFS include payday loans, refund anticipation loans, rent-to-own services, pawn shop loans, and auto title loans.
3. Lusardi and Scheresberg (2013) define high-cost borrowers as those who have used auto title loans, payday loans, refund anticipation loans, pawn shop loans, or rent-to-own stores.

References

Agnew, J.R., L.R. Szykman, S.P. Utkus, and J.A. Young (2012). 'Trust, Plan Knowledge, and 401k Savings Behavior.' *Journal of Pension Economics and Finance*, 11(1): 1–20.

Allen, F., A. Demirguc-Kunt, L. Klapper, M. Soledad, and M. Peria (2016). 'The Foundations of Financial Inclusion: Understanding Ownership and Use of Financial Accounts.' *Journal of Financial Intermediation*, 27: 1–30.

Aubry, J., A. Munnell, and G. Wettstein (2025). 'Wills, Wealth, and Race.' In O.S. Mitchell and N. Roussanov, eds., *Reducing Retirement Inequality: Building Wealth and Old-Age Resilience*. Oxford, UK: Oxford University Press, pp. 107–134.

Badu, Y.A., K.N. Daniels, and D.P. Salandro (1999). 'An Empirical Analysis of Differences in Black and White Asset Liability Combinations.' *Financial Services Review*, 8(3): 129–147.

Barber, B.M. and T. Odean (2001). 'Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment.' *Quarterly Journal of Economics*, 116(1): 261–292.

Barber, B.M. and T. Odean (2003). 'Are Individual Investors Tax Savvy? Evidence from Retail and Discount Brokerage Accounts.' *Journal of Public Economics*, 88(1–2): 419–442.

Benartzi, S. and R.H. Thaler (2007). 'Heuristics and Biases in Retirement Savings Behavior.' *Journal of Economic Perspectives*, 21(3): 81–104.

Benoît, J.P. (1999). 'Color Blind Is Not Color Neutral: Testing Differences and Affirmative Action.' *Journal of Law, Economics, and Organization*, 15(2): 378–400.

Bertrand, M. and S. Mullainathan (2004). 'Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination.' *American Economic Review*, 94(4): 991–1013.

Birkenmaier, J. and Q. Fu (2016). 'The Association of Alternative Financial Services Usage and Financial Access: Evidence from the National Financial Capability Study.' *Journal of Family Economic Issues*, 37: 450–460.

Bogan, V. (2008). 'Stock Market Participation and the Internet.' *Journal of Financial and Quantitative Analysis*, 43 (1): 191–212.

Bogan, V. (2013). 'Household Investment Decisions and Offspring Gender: Parental Accounting." *Applied Economics*, 45(31): 4429–4442.

Bogan, V. (2014). 'Household Investment Decisions.' In H.K. Baker and V. Ricciardi, eds., *Investor Behavior: The Psychology of Financial Planning and Investing*. Hoboken, NJ: John Wiley & Sons, pp. 83–98.

Bogan, V. (2015). 'Household Asset Allocation, Offspring Education, and the Sandwich Generation.' *American Economic Review*, 105(5): 611–615.

Bogan, V. and W. Darity, Jr. (2008). 'Culture and Entrepreneurship? African American and Immigrant Self-Employment in the United States.' *Journal of Socio-Economics*, 37(5): 1999–2019.

Bogan, V. and J. Fernandez (2017). 'How Children with Mental Disabilities Affect Household Investment Decisions.' *American Economic Review*, 107(5): 536–540.

Bogan, V. and A.R. Fertig (2013). 'Portfolio Choice and Mental Health.' *Review of Finance*, 17(3): 955–992.

Bogan, V. and A.R. Fertig (2018). 'Mental Health and Retirement Savings: Confounding Issues with Compounding Interest.' *Health Economics*, 27(2): 404–425.

Bogan, V. and S. Wolfolds (2022). 'Intersectionality and Financial Inclusion in the United States.' *AEA Papers and Proceedings*. 112: 43–47.

Brown, T. (2012). 'The Intersection and Accumulation of Racial and Gender Inequality: Black Women's Wealth Trajectories.' *Review of Black Political Economy*, 39: 239–258.

Celerier, C. and A. Matray (2019). 'Bank-Branch Supply, Financial Inclusion, and Wealth Accumulation.' *Review of Financial Studies*, 32(12): 4767–4809.

Chatterjee, S. and L. Fan (2023). 'Surviving in Financial Advice Deserts: Limited Access to Financial Advice and Retirement Planning Behavior.' *International Journal of Bank Marketing*, 41(1): 70–106.

Chatterji, A.K., J. Luo, and R.C. Seamans (2015). 'Competition between Organizational Forms: Banks v. Credit Unions after the Financial Crisis.' *Academy of Management Proceedings*,. 15855.

Choi, J.J., D. Laibson, and B.C. Madrian (2011). '$100 Bills on the Sidewalk: Suboptimal Investment in 401(k) Plans.' *Review of Economics and Statistics*, 93(3): 748–763.

Choi, J.J., D. Laibson, and A. Metrick (2002). 'Does the Internet Increase Trading? Evidence from Investor Behavior in 401K Plans.' *Journal of Financial Economics*, 64(3): 397–421.

Choudhury, S. (2001). 'Racial and Ethnic Differences in Wealth and Asset Choices.' *Social Security Bulletin*, 64(4): 1-15.

Coleman, S. (2003). 'Risk Tolerance and the Investment Behavior of Black and Hispanic Heads of Household.' *Financial Counseling and Planning*, 14(2): 43–52.

Congressional Budget Office (2022). 'CBO's Long-Term Projections for Social Security.' 1–12. www.cbo.gov/file-download/download/private/165628.

Davis, C. and B. Samms (2025). 'Tax Policy to Reduce Racial Retirement Wealth Inequality.' In O.S. Mitchell and N. Roussanov, eds., *Reducing Retirement Inequality: Building Wealth and Old-Age Resilience*. Oxford, UK: Oxford University Press, pp. 283–304.

DeVaney, S.A., S.T. Anong, and Y. Yang (2007). 'Asset Ownership by Black and White Families.' *Financial Counseling and Planning*, 18(1): 33–45.

Dushi, I., H.M. Iams, and B. Trenkamp (2017). 'The Importance of Social Security Benefits to the Income of the Aged Population.' *Social Security Bulletin*, 77(2). www.ssa.gov/policy/docs/ssb/v77n2/v77n2p1.html.

Dynan, K. and D. Elmendorf (2025). 'Changes in Racial Gaps in Retirement Security over Time.' In O.S. Mitchell and N. Roussanov, eds., *Reducing Retirement Inequality: Building Wealth and Old-Age Resilience*. Oxford, UK: Oxford University Press, pp. 53–78.

Faber, J.W. (2017). 'Cashing in on Distress: The Expansion of Fringe Financial Institutions During the Great Recession.' *Urban Affairs Review*. 55(4): 1–34.

Federal Deposit Insurance Corporation (2021). '2021 FDIC National Survey of Unbanked and Underbanked Households: Executive Summary.' Washington, DC: 1–10. www.fdic.gov/analysis/household-survey/index.html.

Federal Reserve Board of Governors (2019). 'Report on the Economic Well-Being of US Households in 2018.' Washington, DC: 1–55. www.federalreserve.gov/publications/2019-economic-well-being-of-us-households-in-2018-retirement.htm.

Flippen, C. and M. Tienda (2000). 'Pathways to Retirement: Patterns of Labor Force Participation and Labor Market Exit Among the Pre-Retirement Population by Race, Hispanic Origin, and Sex.' *Journal of Gerontology: Social Sciences*, 55B(1): S14–S27.

Francis, D.V. and C.E. Weller (2021). 'Retirement Inequality by Race and Ethnicity.' *Public Policy and Aging Report*, 31(3): 83–88.

Gollier, C. (2002). 'What Does Theory Have to Say About Household Portfolios?' In L. Guiso, M. Haliassos, and T. Jappelli, eds., *Household Portfolios*. Cambridge, MA: MIT. pp. 27–54.

Gross, M.B., J.M. Hogarth, A. Manohar, and S. Gallegos (2012). 'Who Uses Alternative Financial Services, and Why?' *Consumer Interest Annual*, 58.

Gurun, U.G., N. Stoffman, and S.E. Yonker (2018). 'Trust Busting: The Effect of Fraud on Investor Behavior.' *Review of Financial Studies*, 31(4): 1341–1376.

Gutter, M.S. and A. Fontes (2006). 'Racial Differences in Risky Asset Ownership: A Two-Stage Model of the Investment Decision Making Process.' *Financial Counseling and Planning*, 17(2): 64–78.

Haliassos, M. and C.C. Bertaut (1995). 'Why Do So Few Hold Stocks?' *Economic Journal*, 105(432): 1110–1129.

Joo, S-H and J. Grable (2005). 'Employee Education and the Likelihood of Having a Retirement Savings Program.' *Financial Counseling and Planning*, 16(1): 37–49.

Kim, K.T., S. Cho, and S. DeVaney (2021). 'Racial/Ethnic Differences in Holding a Retirement Savings Motive: A Decomposition Analysis.' *Journal of Consumer Affairs*, 55: 464–482.

Kim, K.T. and S. Hanna (2015). 'Do U.S. Households Perceive their Retirement Preparedness Realistically?' *Financial Services Review*, 24: 139–155.

Knoll, M., C. Tamborini, and K. Whitman (2012). 'I Do . . . Want to Save: Marriage and Retirement Savings in Young Households.' *Journal of Marriage and Family*, 74: 86–100.

Koh, B., O. Mitchell, and J. Fong (2021). 'Trust and Retirement Preparedness: Evidence from Singapore.' *Journal of the Economics of Ageing*, 18: 1–10.

Korniotis, G.M. and A. Kumar (2011). 'Do Older Investors Make Better Investment Decisions?' *Review of Economics and Statistics*, 93(1): 244–265.

Lee, S. (2009). 'Racial and Ethnic Differences in Women's Retirement Security.' *Journal of Women, Politics & Policy*, 30(2–3): 141–172.

Lusardi, A. and O. Mitchell (2007). 'Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education.' *Business Economics*. 42:35–44.

Lusardi, A., O. Mitchell, and V. Curto (2014). 'Financial Literacy and Financial Sophistication in the Older Population.' *Journal of Pension Economics & Finance*, 13(4): 347–366.

Lusardi, A. and C. Scheresberg (2013). 'Financial Literacy and High-Cost Borrowing in the United States.' NBER Working Paper Number 18969. Cambridge, MA: National Bureau of Economic Research.

McGarry, K. (2004). 'Health and Retirement: Do Changes in Health Affect Retirement Expectations.' *Journal of Human Resources*, 39(3): 624–648.

Nam, Y. and C. Loibl (2021). 'Financial Capability and Financial Planning at the Verge of Retirement Age.' *Journal of Family and Economic Issues*, 42: 133–150.

Nanda, K. and M. Kaur (2016). 'Financial Inclusion and Human Development: A Cross-Country Evidence.' Management and Labour Studies, 41(2): 127–153.

Pew (2017). *Retirement Plan Access and Participation Across Generations.* Washington, DC: The Pew Charitable Trusts.

Plath, D.A. and T.H. Stevenson (2000). 'Financial Services and the African American Market: What Every Financial Planner Should Know.' *Financial Services Review*, 9(4): 343–359.

Plath, D.A. and T.H. Stevenson (2005). 'Financial Services Consumption Behavior across Hispanic American Consumers.' *Journal of Business Research*, 58(8): 1089–1099.

Poterba, J., S. Venti, and D.A. Wise (2009). 'The Decline of Defined Benefit Retirement Plans and Asset Flows.' In J.R. Brown, J.B. Liebman and D.A. Wise, eds., *Social Security Policy in a Changing Environment*. Chicago, IL: University of Chicago Press, pp. 333–379.

Principal Financial Services (2022). 'Five Reasons We Need Greater Financial Inclusion.' www.principal.com/about-us/news-room/principal-knowledge-center/5-reasons-we-need-greater-financial-inclusion.

Ramnath, S. (2013). 'Taxpayers' Responses to Tax-based Incentives for Retirement Savings: Evidence from the Saver's Credit Notch.' *Journal of Public Economics*, 101: 77–93.

Rao, S. and H.J. Malapit (2015). 'Gender, Household Structure and Financial Participation in the United States.' *Journal of Family Economic Issues*, 36: 606–620.

Rauh, J.D., I. Stefanescu, and S.P. Zeldes (2020). 'Cost Savings and the Freezing of Corporate Pension Plans.' *Journal of Public Economics*, 188.

Robb, C.A., P. Babiarz, A. Woodyard, and M.C. Seay (2015). 'Bounded Rationality and Use of Alternative Financial Services.' *Journal of Consumer Affairs*, 49(2): 407–435.

Rosen, H.S. and S. Wu (2004). 'Portfolio Choice and Health Status.' *Journal of Financial Economics*, 72(3): 457–484.

Seto, S. and V.L. Bogan (2013). 'Immigrant Household Investment Behavior and Country of Origin: A Study of Immigrants to the United States.' *International Journal of Finance and Economics*, 18(2): 128–158.

Shrider, E.A., M. Kollar, F. Chen, and J. Semega (2021). 'Income and Poverty in the United States: 2020.' US Census Bureau. Washington, DC: (Report Number P60-273). www.census.gov/data/tables/2021/demo/income-poverty/p60-273.html.

Social Security Office of Retirement and Disability Policy (2022). 'Annual Statistical Supplement 2022: Appendix E—Selected Statistics on OASDI Benefits in Current-Payment Status by Race.' www.ssa.gov/policy/docs/statcomps/supplement/2022/apne.html.

Steil, J.P., L. Albright, J.S. Rugh, and D.S. Massey (2018). 'The Social Structure of Mortgage Discrimination.' *Housing Studies*, 33(5): 759–776.

Stevenson, T.H. and D.A. Plath (2006). 'Marketing Financial Services to Hispanic American Consumers: A Portfolio-Centric Analysis.' *Journal of Services Marketing*, 20(1): 37–50.

Suarez, G., J. Thompson, and A. Volz (2025). 'Retirement Assets and Wealth Gaps for Black and Hispanic Households.' In O.S. Mitchell and N. Roussanov, eds., *Reducing Retirement Inequality: Building Wealth and Old-Age Resilience*. Oxford, UK: Oxford University Press, pp. 17–52.

Sullivan, L., T. Meschede, L. Dietrich T. Shapiro, A. Traub, C. Ruetschlin et al. (2015). 'The Racial Wealth Gap: Why Policy Matters.' New York, NY: Demos and Institute for Assets and Social Policy.

Szinovacz, M.E., S. DeViney, and A. Davey (2001). 'Influences of Family Obligations and Relationships on Retirement: Variations by Gender, Race, and Marital Status.' *Journal of Gerontology: Social Science* 56B(1): S20–S27.

Tamborini, C. and C. Kim (2020). 'Are You Saving for Retirement? Racial/Ethnic Differentials in Contributory Retirement Savings Plans.' *Journal of Gerontology: Social Sciences*, 75(4): 837–848.

Thaler, R.H. and S. Benartzi (2004). 'Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving.' *Journal of Political Economy*, 112(1): S164–S187.

US Census Bureau (2019). 'Wealth, Asset Ownership, and Debt of Households Detailed Tables: 2019.' Washington, DC. www.census.gov/data/tables/2019/demo/wealth/wealth-asset-ownership.html.

Yogo, M., A. Whitten, and N. Cox (2022). 'Financial Inclusion Across the United States.' SSRN Working Paper. Social Science Research Network.