CLOSING THE GAP

THE ROLE OF PUBLIC PENSIONS IN REDUCING RETIREMENT INEQUALITY

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EXECUTIVE SUMMARY

This study analyzes the impact of defined benefit pensions, especially public pensions, on retirement income security and wealth distribution by race, gender, and educational attainment in the U.S. It serves as a companion report to *Closing the Gap* fact sheets, which are designed to inform the public about the social equity impact of pensions in each state and the District of Columbia. The fact sheets can be accessed at https://www.nirsonline.org/reports/closingthegap/.

Based on analyses of U.S. Census Bureau and other data sources on income, retirement plans, and other household assets, this report finds that public pensions play an outsized role in the retirement income security of older adults and reduce wealth inequality by race and gender. Pension income provides a critical buffer against economic hardship in old age for all groups, especially Black and Latino seniors, seniors without college degrees, and women. Furthermore, the relatively even distribution of pension income and its wealth value helps to soften wealth inequality, providing a critical source of household wealth for older women and Black families. While policy debates about public pensions are often framed exclusively as financial liabilities, public pensions are also a critical form of wealth for workers and retirees. As private pension coverage declines, public sector retirement benefits form a bulwark of middle-class retirement security, particularly for marginalized communities who have been shut out of other wealth-building opportunities.

Detailed report findings are as follows:

1. Pensions, which continue to be a critical source of retirement income for seniors, reduce retiree poverty and near-poverty across race, sex, and educational attainment. Pensions' anti-poverty effect is the largest for Black and Latino retirees and retirees of all races who do not have a four-year college degree.

- 35% of individuals age 65 and older are direct recipients of pension benefits. White men are most likely to have pension income (43%), followed by Black men (35%), white women (34%), and Black women (33%).

- While Latino senior men and women are least likely to receive a pension (25% and 18%, respectively), this income source is much more important than retirement accounts for this community. Only 8% and 4% of Latino men and women, respectively, have income from a 401(k) or individual retirement account (IRA), compared to 15% of all U.S. seniors.

- Pensions reduce economic hardship among retirees, defined for this analysis as persons age 65 and older who have at least $5,000 in Social Security income or pension income and less than $5,000 in earnings. Among retirees with their own pension income, or whose spouse or other resident family member received pension income, 91% lived above 200% of the Federal Poverty Level (FPL) in 2018-2020. In contrast, only 60% of retirees without pension income were above 200% FPL. (A commonly-used threshold for meeting basic needs, 200% FPL in 2020 was $23,120 for older singles and $32,180 for older couples.)

- Retired white men and women with pension income were respectively 38% and 47% more likely to be above 200% FPL than those without pension income.
- Retired Black women, Latino men, and Black men were twice as likely to have incomes above 200% FPL if they had a pension. Retired Latinas with pension income were 63% more likely to be above this basic income threshold.

- Among retirees without a bachelor's degree, those with some college education or an associate degree were 47% more likely to be above 200% FPL if they had pension income. Those with no college education were 73% more likely to be above 200% FPL than those without a pension.

2. Pension income is distributed relatively evenly among recipients by race, while public pension income is distributed more equally by gender than private pension and 401(k) income.

- In 2018-2020, 23.2 million Americans age 55 and older received pension income totaling $470 billion annually from a union, private employer, or government plan. More than 11.1 million older adults received income

from public pensions, which provided $259 billion, or 55% of total pension income. Nearly 12.7 million received private pension income.

- The typical Black pensioner received about the same annual benefit as a typical white pensioner ($15,180 vs. $15,460).

- Women made up over half (54%) of public pension recipients, compared to 46% of private pension recipients.

- The gender gap in average annual benefits is significantly smaller for public pensions—which provided women 75% of the median annual benefit for men ($18,600 vs. $24,700)—than other non-Social Security retirement income sources. Women with private pension income received 60% of the median annual benefit of male beneficiaries ($8,100 vs $13,400), while women with 401(k)/IRA income received 59% of men's median annual 401(k)/IRA income ($6,000 vs. $10,200).

3. Pension benefits currently in payment to adults age 55 and older in the U.S. represent $5.6 trillion in household wealth, boosting middle-class family net worth and narrowing racial and gender wealth gaps.

- Counting only pensions already in payment (i.e., not including pension benefits payable to those still working), people of color hold 20.1% of public pension wealth and 18.0% of private pension wealth held by adults age 55+, compared to 12.4% of 401(k)/IRA assets and 13.2% of total net worth.

- Including the present value of pension income in household wealth boosts the typical (median) net worth of older families by 36%. Older Black family median net worth is increased 86% by pensions, with public pensions providing more than half of this impact.

- The progressive impact of pensions on the Latino community is constrained by their historical under-representation in public sector employment. Nonetheless, pension benefits increase older Latino families' median wealth by 32.4%, with two-thirds of this boost coming from private pensions. Pensions also increase Latinos' collective wealth by 15.5%, compared to the average of 10.6% for all older families. Public pensions alone increase the aggregate wealth of older Latino families by 10.5%.

- Public pension income plays a larger role in narrowing the gender wealth gap among older adults than private pension income and 401(k)/IRA assets. More than half (50.4%) of public pension wealth is held by women, compared to 38.2% of private pension wealth and 38.6% of 401(k)/IRA assets.

INTRODUCTION

Public sector defined benefit (DB) pensions, which provide secure monthly income in retirement, form one of the last remaining bulwarks of middle-class retirement security in the U.S. alongside Social Security. While most discussions of public pensions center on pension benefits as financial liabilities to state and local governments, public pensions also make up a significant share of middle-class household wealth. Retirement wealth makes up the largest financial asset for U.S. households, and public pensions account for nearly half of the non-Social Security share of retirement wealth.[1]

This report explores the race, gender, and class equity impacts of public sector defined benefit pensions in the U.S., based on analyses of data from the U.S. Census Bureau and the U.S. Bureau of Labor Statistics.[2] This report finds that public pensions play an outsized role in overall retirement plan coverage for all racial groups in the U.S., with the largest relative impact on Black and Latino communities. Pensions ensure that retirees are able to meet basic expenses and avoid falling into economic hardship. This effect benefits all races, with particular significance for communities of color that lack access to generational wealth and for workers without college degrees. Finally, public pensions exert a measurable leveling effect on the distribution of retirement wealth and overall family wealth by race and gender.

This report serves as a companion report to 51 state-level Closing the Gap fact sheets designed to inform the public about the social equity impact of pensions in each state and the District of Columbia. The toolkit can be accessed at https://www.nirsonline.org/reports/closingthegap/.

The national-level analysis of the impact of pensions on retirement security in this report relies primarily on the 2019, 2020, and 2021 Survey of Income and Program Participation (SIPP), a U.S. Census Bureau household survey that includes questions on family structure, employment, income, pensions, retirement accounts, and other household assets. The analysis of public sector employment demographics in this report uses the Current Population Survey/Annual Social and Economic Supplement (CPS ASEC), a joint survey of the Census Bureau and the U.S. Bureau of Labor Statistics.[3] The state fact sheets associated with this study rely exclusively on CPS ASEC, which has data on pension income but not assets. In both cases, pension wealth is imputed by the author using survey data on benefit amounts and recipient demographic characteristics, in conjunction with mortality tables from the Society of Actuaries. Detailed methodology notes can be found in the appendices.

Unless otherwise stated, all dollar values in this report were inflation-adjusted to 2020 values.

The remainder of this Introduction highlights recent research on retirement inequality by race and gender and the impact of pensions on the wealth distribution; explains why public pensions have particular importance for women and workers of color; and summarizes the methodology. Then, **Section 1** provides an overview of income sources among Americans age 65 and older, and analyzes the impact of family-level pension income receipt on retiree poverty by race, gender, and education. **Section 2** examines the distribution of pension income by race, gender, and educational attainment among recipients age 55 and older and among all adults age 55 and older. **Section 3** analyzes the impact of pension wealth on the net worth of families with reference persons age 55 and older.

Defined Benefit pensions provide lifetime retirement income, usually based on the employee's final average salary and years of service. While most public pensions are jointly funded by employers and employees, the employer is ultimately responsible for promised benefits. Pension assets are pooled in a trust and invested by professionals, with oversight by a board of trustees.

Defined Contribution plans, such as 401(k)s, are individually managed investment accounts. The employer and/or employee contribute, depending on the plan. While the employer is responsible for providing low-cost investment options, the employee assumes all investment risk.

Retirement Inequality in the U.S.

There is an extensive body of research on retirement inequality by class, race, and gender, with broad consensus that most U.S. households are behind on retirement readiness and that retirement wealth inequality has increased across most axes of socioeconomic difference in recent decades.

For instance, Munnell, Hou and Sanzenbacher (2018) found that the share of households at risk of being unable to maintain their pre-retirement standard of living in retirement was significantly higher for Blacks and Hispanics than for whites.[4] Brown & Oakley (2018) found that the median retirement savings account balance was zero among Latinos, who have the lowest rates of workplace retirement account access in the private sector.[5] Morrissey (2016, 2019), Mitchell and Sabelhaus (2020), and the U.S. Government Accountability Office (2023) present multiple metrics of retirement asset distribution that show worsening inequality by race and income since the Great Recession.[6]

The effect of the gendered pay gap on women's retirement income is compounded by their caregiving responsibilities, which lead women to have shorter average careers and more part-time employment than do men.[7] According to a recent study by Johnson, Smith, and Butrica, women's caregiving costs them an average of $58,000 in lost retirement income from retirement plans and Social Security.[8]

At the same time, Porell and Almeida (2009) found that pensions keep seniors out of economic hardship, with the largest impact on Black seniors.[9] Oakley, Brown, Saad-Lessler & Rhee noted that women who worked in public administration and education had a substantial share of household income from DB pensions, and this boosted their overall retirement income compared to women who worked in other sectors.[10] Thus, public pensions are an important tool in the fight to reduce race and gender inequality in income and wealth.

In terms of the impact of DB pensions on wealth distribution, existing research generally indicates that while DB pension wealth is concentrated in the top half of the income and wealth distribution, it is nonetheless more evenly distributed than both non-retirement wealth and defined contribution (DC) and IRA wealth. Thus, including DB pensions in household wealth has the impact of reducing inequality, while the rise of 401(k)s-type plans and decline of pension coverage worsen wealth inequality. Sabelhaus and Volz (2019) found that most of this impact was evident in the reduced retirement wealth share of the third quartile (the 25% just above the middle) of the wealth distribution.[11]

Jacobs et al. (2021) found that the wealth value of pensions and Social Security benefits accounts for more than half of all household wealth, even at the middle of the wealth distribution, and that including these assets moderates measures of wealth concentration.[12] Karamcheva and Perez-Zetune (2020) found that DB pension wealth "offset some of the inequality in net worth among families with different levels of education or income" and that the DB pensions' declining share of national retirement wealth vis-a-vis DC plans likely contributed to the increase in the Gini coefficient (an inequality measure) of household wealth between 1989 and 2019.[13]

Importantly, the moderating impact of pensions on wealth inequality extends to the racial wealth gap. A 2021 analysis by Thomson and Volz found that the inclusion of Social Security and pensions in household wealth shrinks wealth disparities between white families on the one hand and Black and Hispanic families on the other.[14]

Significance of Public Pensions for Women and People of Color

Recent analyses of DB pension wealth do not separate out the impact of public pensions, but there are important reasons to suspect that public pensions play a particularly salient role in the economic security and asset-building of women and people of color, including the demographics of public sector employment.

Public sector jobs provide middle-class economic opportunity, including retirement benefits, for all racial groups in the U.S., with particularly large impacts on Black workers and female workers. **Figure 1** shows the percentage of workers employed in public sector jobs by race, and by race and sex, from the Census Bureau's Current Population Survey/Annual Social and Economic Supplement.[15] The public sector accounted for 16.0% of wage and salary employment in the U.S. in 2018-2020. Black workers and workers in the "Other" race category (not Hispanic/Latino and not single-race white, Black, or Asian) were the most heavily concentrated in public sector jobs, with 19.0% and 18.6%, respectively, employed in the public sector. White workers were slightly over-represented (17.1%), while Asian workers and especially Latino workers were significantly under-represented (12.1% and 11.4%, respectively).

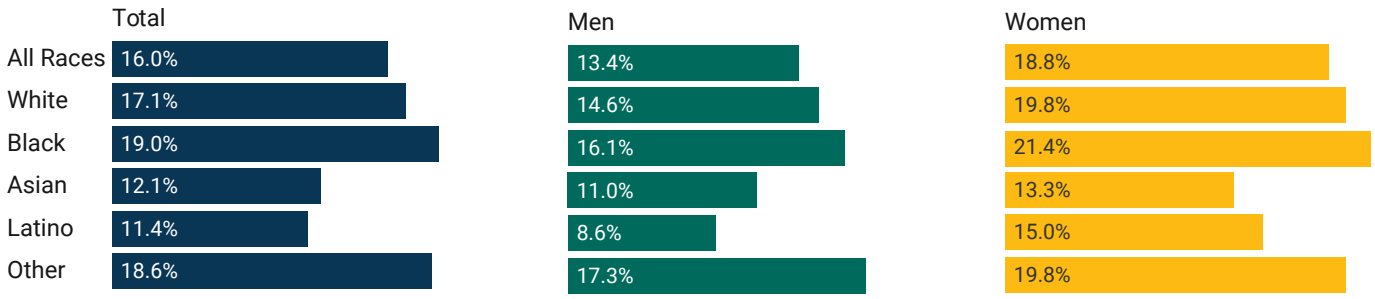
However, when employment patterns are further disaggregated by sex, it appears that women were generally well-represented in the public sector (18.8%), while men are generally under-represented (13.4%). Black female workers were the most heavily concentrated in the public sector, with 21.4% employed in federal, state, and local government

jobs in 2018-2020. Next, 19.8% of both white and "Other" race female workers were employed in public sector jobs. Latina and Asian women were employed in the public sector at lower rates (15.0% and 13.3%, respectively) than the overall workforce. Among men, those in the "Other Race" category are most likely to work in the public sector (17.3%), followed by Black men (16.1%). White men are somewhat under-represented (14.6%), while Asian men and especially Latino men are least likely to work in public sector jobs (11.0% and 8.6%, respectively).

Public sector jobs provide higher rates of retirement benefit coverage than private sector jobs across their respective wage distributions. **Figure 2** illustrates data from the U.S. Bureau of Labor Statics' National Compensation Survey (NCS) on employee participation rates in employer sponsored retirement plans, by sector and wage quartile (grouping of 25% of workers, sorted by wage level). The difference is pronounced for the bottom half of workers: 85% of the second quartile of workers and 70% of the bottom quartile in the public sector participate in an employer sponsored retirement plan, compared to only 48% and 23% in the private sector. This mirrors the fact that overall compensation in the public sector is much less unequal than in the private sector.

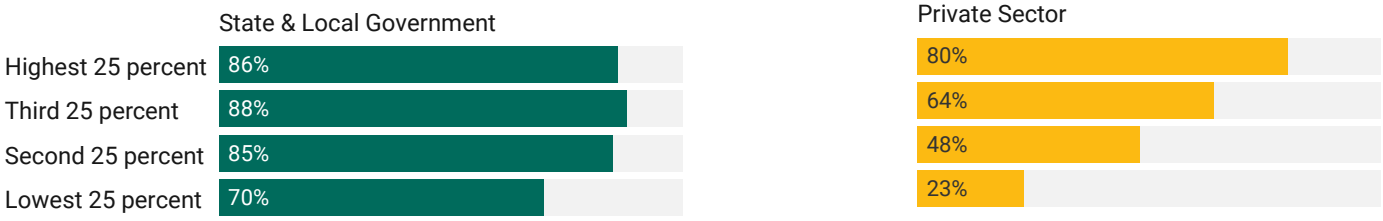
Furthermore, NCS data indicates that 75% of public sector employees are covered by DB pensions, compared to only 11% of private sector employees. Private sector pension coverage dropped off precipitously from the 1980s to the 2000s for a number of reasons, including declining unionization, economic restructuring, and more stringent accounting and funding rules. Meanwhile, public employers maintained their pensions and, following the 2007-2008 financial crisis, largely chose to reduce benefits for new hires and increase cost-sharing with employees rather than close their plans to new entrants. Thus, public pensions form an important bulwark for middle-class retirement security, particularly for marginalized communities who have been shut out of other wealth-building opportunities.[16]

Figure 1: Share of Workers Employed in Public Sector, by Race and Gender, 2018-2020



Note: Author's analysis of CPS ASEC. Universe is U.S. wage and salary employees age 21-64.

Figure 2: Public vs. Private Sector Employee Retirement Plan Participation Rates by Wage Quartile



Note: Data from National Compensation Survey/Employee Benefit Survey, March 2022. Universe is U.S. non-farm wage and salary employees.

SECTION I: PENSIONS SUPPORT ECONOMIC SECURITY ACROSS RACE, GENDER, AND EDUCATIONAL DIVIDES AMONG OLDER AMERICANS

This section examines the impact of pension income on retiree poverty by race, gender, and educational attainment. Given the importance of Social Security income, this analysis focuses on adults who are at least age 65, the median claiming age for Social Security benefits.[17]

To provide context for the poverty analysis, **Figure 3** and **Figure 4** show the percentage of adults age 65 and older in 2018-2020 with key sources of personal income: Social Security, pensions, earnings, 401(k)/IRA income, and more than $1,000 annual property income (interest, return on non-retirement financial assets, and rent).[18] (The $1,000 threshold was applied to property income because a large number of people have only a trivial amount of total property income, such as nominal interest from bank accounts.) Figure 3 shows this data for all adults age 65 and older and by race, gender, and educational attainment, while Figure 4 provides race-by-gender detail.

Social Security is the primary pillar of retirement income. Out of 53.8 million seniors age 65 and older represented in the SIPP during 2018-2020, 46.4 million (86%) received Social Security as part of their personal income, covering 86% of adults age 65 and older. The second most important source is pension income, defined in this brief as retirement, disability, and survivor benefits from a union, private employer, or government pension fund. For all races, both sexes, and all educational attainment groups, pensions were the second most common source of retirement income after Social Security, and 19.0 million (35%) reported receiving pension income. Across all racial groups, about one out of five people in this age group had earnings (income from a job or business). After SIPP introduced new questions on retirement account income in the survey for calendar year 2020, 20% of seniors reported drawing income from a 401(k) or IRA.[19]

Figure 3: Share of Adults Age 65+ with Personal Retirement Income Source, 2018-2020

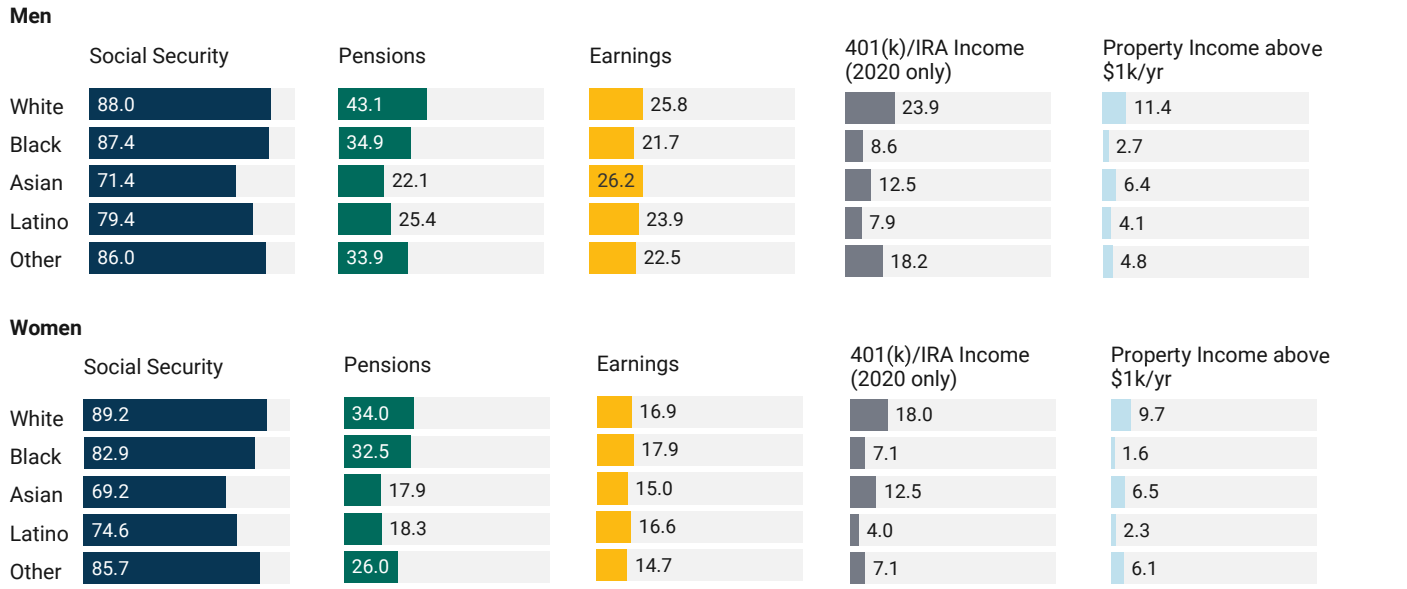
(Percentages)

	Social Security	Pensions	Earnings	401(k)/IRA Income (2020 only)	Property Income (above $1k/yr)
All Adults Age 65+	86.4	35.3	20.6	15.1	8.8
White	88.7	38.2	20.9	18.0	10.5
Black	84.7	33.5	19.4	7.1	2.0
Asian	70.1	19.7	19.8	12.5	6.5
Latino	76.7	21.4	19.8	4.0	3.1
Other	85.8	29.6	18.2	7.1	5.5
Men	86.5	39.9	25.2	20.6	9.7
Women	86.3	31.6	16.8	15.1	8.0
<=HS Degree	87.1	28.9	14.7	3.5	3.6
Some College/Assoc. Degree	89.3	35.8	20.7	12.9	7.5
Bachelor's Degree	84.2	38.2	25.4	18.1	14.3
Advanced Degree	82.0	48.3	30.7	25.4	18.5

Note: Author's analysis of SIPP. Universe is U.S. adults age 65+. Pension income includes retirement, disability, and survivor benefits from a union, private employer, or government pension. Property income includes rental income, interest, and dividends excluding returns on assets held in retirement accounts. 401(k)/IRA income includes income from employer-sponsored retirement accounts, Individual Retirement Accounts, or Keogh plans.

Figure 4: Share of Adults Age 65+ with Personal Retirement Income Source, by Race-Gender, 2018-2020

(Percentages)



Note: Author's analysis of SIPP. Universe is U.S. adults age 65+. Pension income includes retirement, disability, and survivor benefits from a union, private employer, or government pension. Property income includes rental income, interest, and dividends excluding returns on assets held in retirement accounts. 401(k)/IRA income includes income from employer-sponsored retirement accounts, Individual Retirement Accounts, or Keogh plans.

Poverty Analysis Methodology

This section examines the impact of pensions on retiree economic security, by comparing the poverty status of individuals age 65 and older who had DB pension income in their own name or via a resident family member—generally a spouse—to the poverty status of seniors who did not. In order to focus on retirees, this analysis is limited to seniors age 65 and older with less than $5,000 in annual earnings and at least $5,000 in annual Social Security benefits or pension income in their own name in 2018-2020. About 30% of public pension participants do not participate in Social Security.

While there were demographic differences between the two groups, key financial indicators (outside of pension income receipt) were comparable. Those with pension income in their own name or through a spouse or other family member and those without pension income have similar Social Security benefits ($17,192 vs $18,430 median, $18,162 vs. $17,955 mean). The pension group was only slightly more likely to have 401(k)/IRA income than the non-pension group (21.9% vs. 19.1%). While the $5,000 earnings limit was applied at the individual level, slightly less than 4% of both groups had positive earnings in their families. The non-pension group was more heavily female, while the pension group was more likely to have a bachelor's degree. However, as shown below, the pension advantage in reducing poverty is stronger for women and retirees without bachelor's degrees.

Poverty status is measured by the Census Bureau at the family level, based on the number of family members within a household and their total income. The following analysis estimates the share of seniors with family incomes above 200% of FPL, a threshold often used to represent an adequate, but modest standard of living. In 2020, 200% FPL for older households was $23,120 for singles and $32,480 for couples.[20] According to the University of Massachusetts Boston Elder Index—a more comprehensive measure of basic retirement income needs than FPL—the average single senior who rents their home needed a yearly income of $30,900 in the U.S. in 2020, while the average senior renter couple needed $41,316 to avoid significant economic hardship.[21]

Poverty Analysis Findings

Figure 5 shows that a significantly larger share of the U.S. retirees with pension income were above 200% FPL in 2018-2020 (91%) compared to retirees without pension income (60%). Among white retirees, those with pension income were 43% more likely to be above 200% FPL than those without pension income (92% vs. 64%). Similarly, among

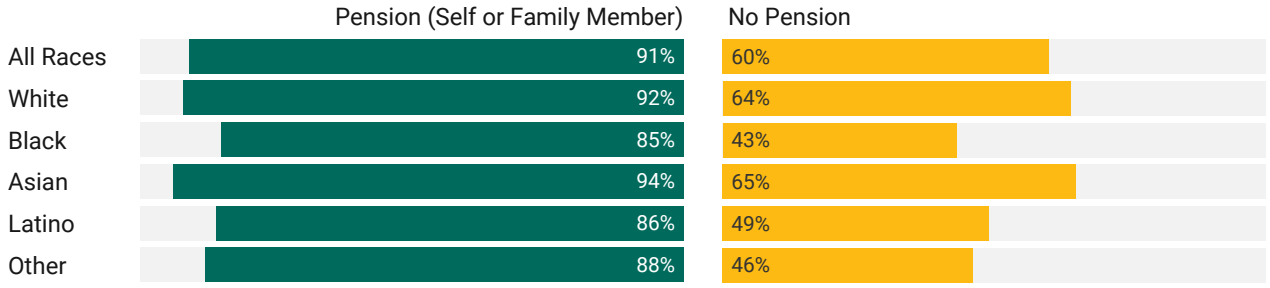
Asian retirees the probability of having basic retirement income adequacy was 45% higher for those who have pension income compared to their counterparts without pensions (94% vs 65%).

Pensions provide an even larger relative boost to Black and Latino retirees when it comes to ensuring a basic level of retirement income. Black retirees with pension income were twice as likely as other Black retirees to have incomes above 200% of the federal poverty threshold (85% vs. 43%) in 2018-2020. Latino retirees with pension income were 76% more likely than those without a pension to exceed this basic income threshold (86% vs 49%).

The economic security of both retired men and retired women is improved by pension income, with a larger relative boost for women (**Figure 6**). Male retirees with pension income were 47% more likely to be above 200% FPL than those without pension income (93% vs. 64%) in 2018-2020. Female retirees with pension income were 53% more likely to have incomes above this threshold than those without pension income (88% vs 58%). When racial groups are disaggregated by gender, it turns out that Latino men receive the second largest boost from pension income, after Black women. Black women are 99% more likely to be above 200% FPL if they have a pension (79% vs 40%); Latino men are 93% more likely (87% vs 45%); and Black men are 90% more likely (90% vs. 47%). (See **Figure 6**.)

In addition, retirees fare better economically with a pension regardless of educational attainment, with the largest improvement among those without bachelor's degrees (**Figure 7**). Almost all college-educated retirees with pension income (96% of those with advanced degrees and 94% of those with a bachelor's degree) had family incomes above the 200% FPL threshold in 2018-2020, compared to 75% among their counterparts without pension income. Retirees with some college education or an associate degree were 47% more likely to be above 200% FPL if they had pension income (92% vs. 63%). Those with no college education were 73% more likely to be above 200% FPL than those without a pension: 85% of retirees with pension income exceeded 200% FPL, compared to 49% of those without.

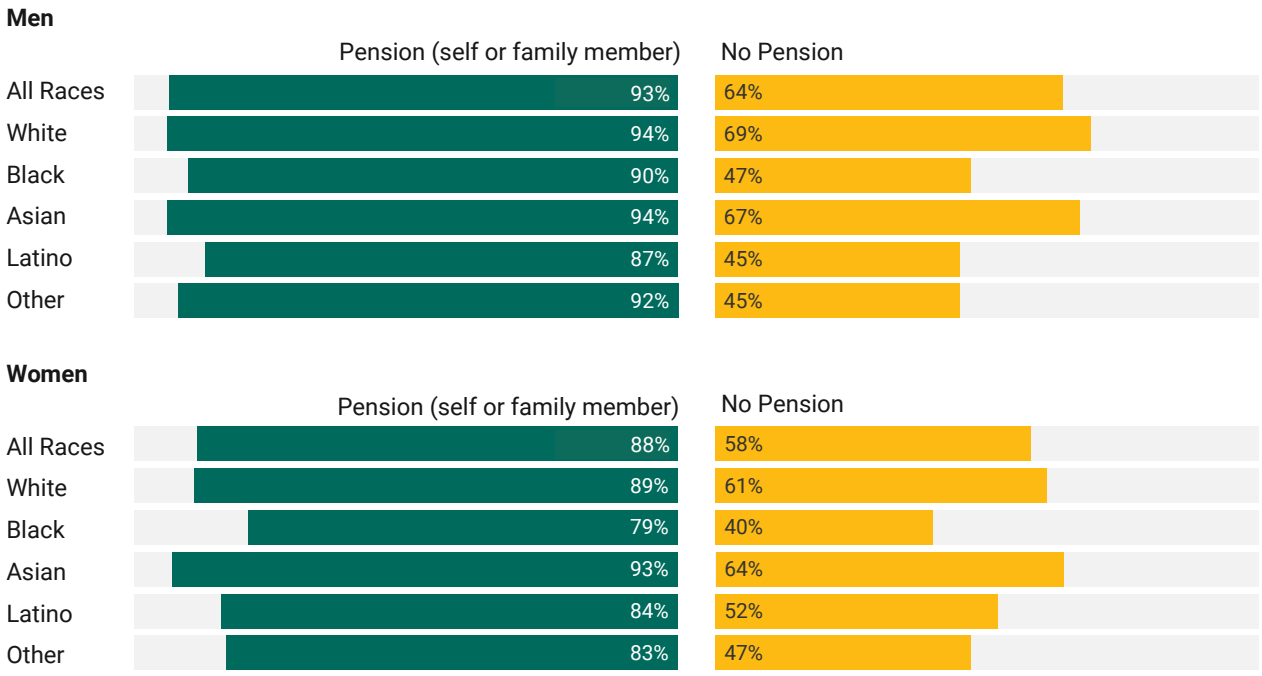
Figure 5: Share of Retirees Above 200% FPL by Race, 2018-2020



Note: Author's analysis of 2019-2021 SIPP. Universe is U.S. adults age 65 and older who received at least $5,000 in annual Social Security or pension income (including retirement, disability, and survivor pensions) and less than $5,000 in annual earnings.

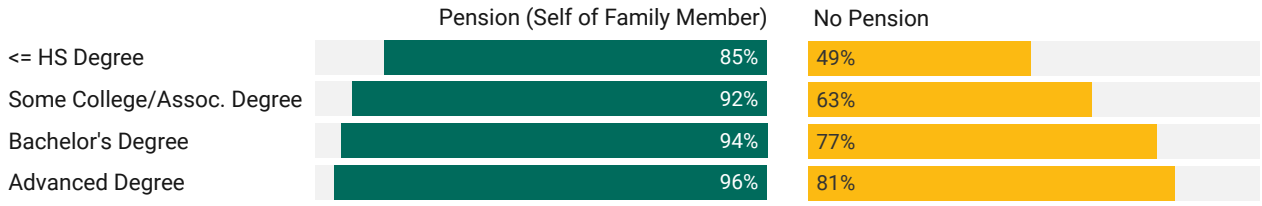
...RETIREES FARE BETTER ECONOMICALLY WITH A PENSION REGARDLESS OF EDUCATIONAL ATTAINMENT, WITH THE LARGEST IMPROVEMENT AMONG THOSE WITHOUT BACHELOR'S DEGREES

Figure 6: Share of Retirees Above 200% FPL by Race and Gender, 2018-2020



Note: Author's analysis of 2019-2021 SIPP. Universe is U.S. adults age 65 and older who received at least $5,000 in annual Social Security or pension income (including retirement, disability, and survivor pensions) and less than $5,000 in annual earnings.

Figure 7: Share of Retirees Above 200% FPL by Educational Attainment, 2018-2020



Note: Author's analysis of 2019-2021 SIPP. Universe is U.S. adults age 65 and older who received at least $5,000 in annual Social Security or pension income (including retirement, disability, and survivor pensions) and less than $5,000 in annual earnings.

SECTION II: PENSION INCOME DISTRIBUTION AMONG RECIPIENTS

Based on an analysis of SIPP data, an estimated 23.2 million adults age 55 and older were direct recipients of pension income – from a union, company, or local, state, or federal government plan (including military pensions) – totaling $470 billion (in 2020 dollars) annually during 2018-2020.[22] More than 11.1 million older adults received income from public pensions, which provided $259 billion, or 55% of total pension income.[23] Nearly 12.7 million received private pension income.[24] About half a million pensioners received both public and private pension income. Although not included in the pension income distribution analysis below, an additional 8.9 million older adults benefited from pension income received by a spouse or other family member with whom they lived.

The composition of direct pension income recipients is described in **Table 1**. Private pensioners skew older than public pensioners, signaling the long decline of pension coverage in the private sector. Current pensioners are disproportionately white, though the public pensioners are slightly more diverse than private pensioners (20.1% people of color vs. 18.2%). Notably, women make up a majority (53.5%) of public pension recipients, reflecting the role of teaching, health and human services, and other feminized sectors of public employment.

Pensions typically provide significant but modest benefits, with a relatively low degree of inequality by race (**Figure 8**). The typical (median, or 50th percentile) pensioner age 55 and older in the U.S. received $15,800 in benefits annually in 2020 dollars, while the average (mean) benefit was $20,300. Typical (median) pension benefits were similar for white pensioners and Black pensioners ($15,600 and $16,100, respectively). While only 20% of Asian seniors have pension income, they receive significantly higher typical benefits ($19,400). Latino and "Other" race pensioners received the lowest benefits, with a typical annual pension income of $13,400 and $12,300, respectively.

Women received 71% of men's median pension income ($13,200 vs. $18,600) (**Figure 9**). But the gender gap in benefits was significantly lower in public pension income, with women receiving 75% of men's typical benefit ($18,600 vs. $24,700). Among those with private pension income, women received only 60% of men's benefits ($8,100 vs. $13,300).

Differences by education were more pronounced (**Figure 10**). Median annual pension income ranged from $11,200 for recipients with no college education to $25,800 for those with advanced degrees. The ratio between pensioners without a four-year college degree and those with at a bachelor's degree or higher was higher for public pensions (52%, or $15,000 vs. $28,800) than for private pensions (48%, or $8,600 vs. $18,200).

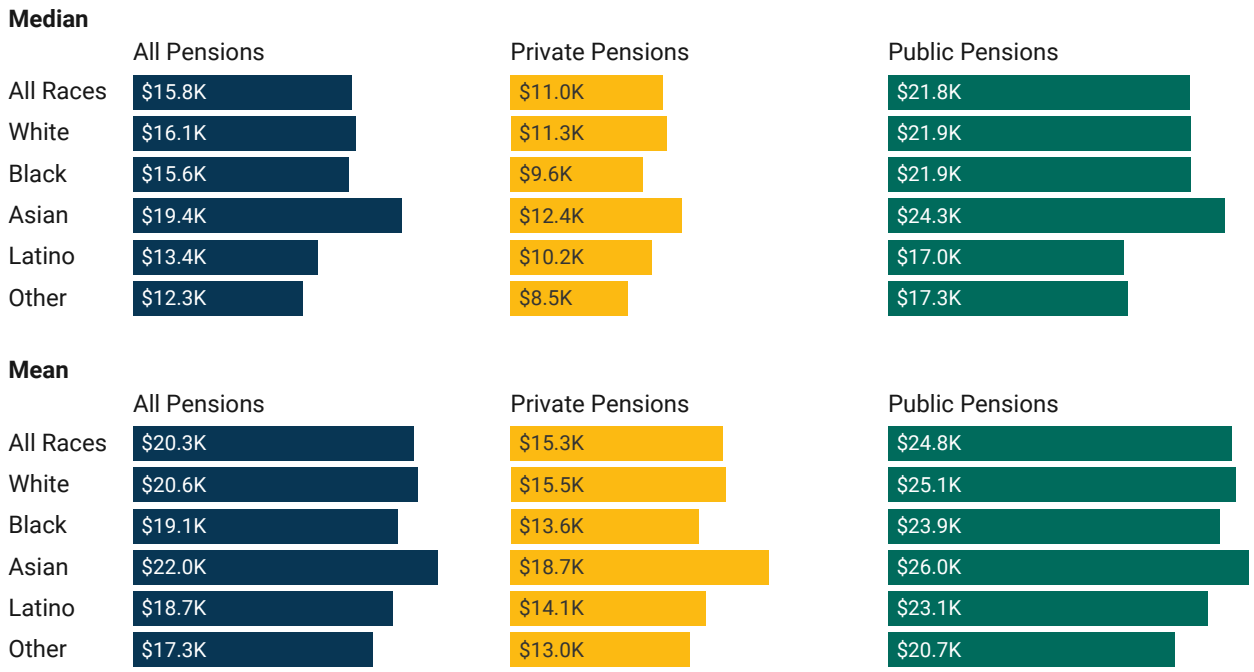
Table 1: Characteristics of Adults Age 55+ with Pension Income, 2018-2020

		All Pensions	Public Pensions	Private Pensions
Age	55 to 64	18.1%	22.1%	14.1%
	65 to 75	45.1%	45.1%	45.4%
	75+	36.8%	32.8%	40.4%
	Total	**100.0%**	**100.0%**	**100.0%**
Race	White	80.7%	79.9%	81.8%
	Black	9.4%	10.0%	8.6%
	Asian	2.4%	2.1%	2.6%
	Latino	5.8%	6.0%	5.4%
	Other	1.8%	2.0%	1.6%
	Total	**100.0%**	**100.0%**	**100.0%**
Gender	Men	50.8%	46.5%	54.3%
	Women	49.2%	53.5%	45.7%
	Total	**100.0%**	**100.0%**	**100.0%**

Note: Author's analysis of 2019-2021 SIPP. Universe is U.S. adults age 55 and older who received a retirement, disability, or survivor pension from a union, corporate, or government pension plan. Totals may not add up due to rounding.

Figure 8: Average Pension Income among Recipients Age 55+, 2018-2020

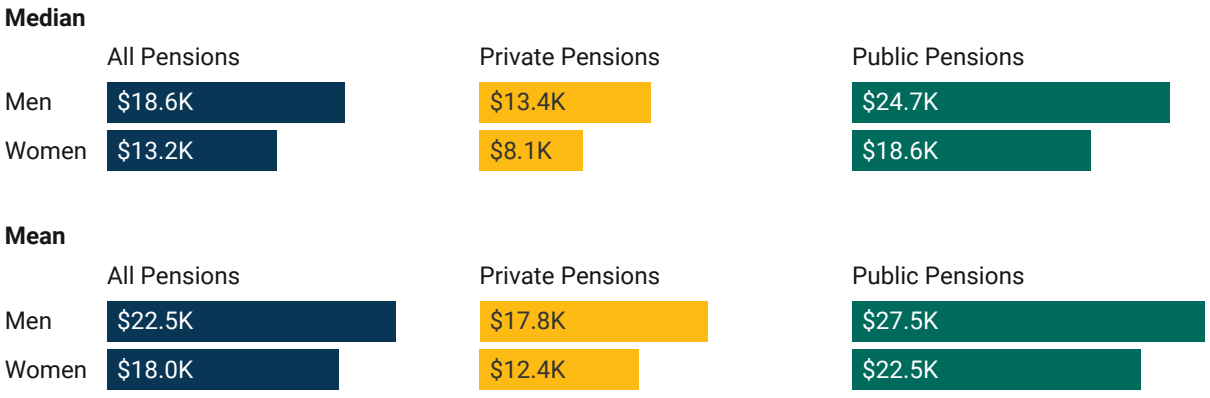
(2020 dollars)



Note: Author's analysis of 2019-2021 SIPP. Universe is U.S. adults age 55 and older who received a retirement, disability, or survivor pension in their own name from a union, corporate, or government pension plan.

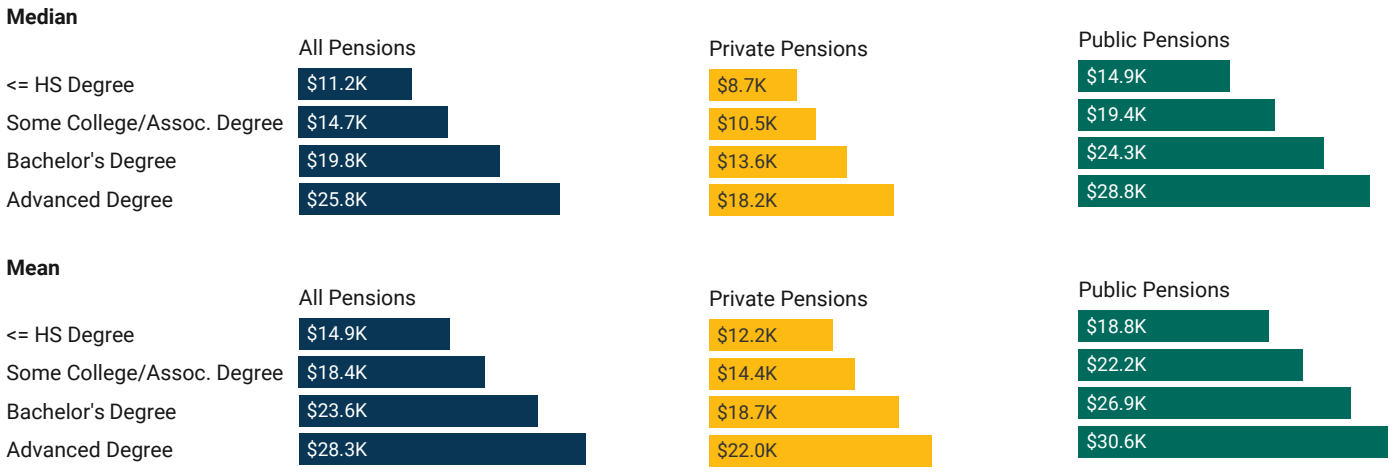
Figure 9: Average Pension Income among Recipients Age 55+, by Gender, 2018-2020

(2020 dollars)



Note: Author's analysis of 2019-2021 SIPP. Universe is U.S. adults age 55 and older who received a retirement, disability, or survivor pension in their own name from a union, corporate, or government pension plan.

Figure 10: Average Pension Income among Recipients Age 55+, by Educational Attainment, 2018-2020



Note: Author's analysis of 2019-2021 SIPP. Universe is U.S. adults age 55 and older who received a retirement, disability, or survivor pension in their own name from a union, corporate, or government pension plan.

SECTION III: PENSIONS HELP MITIGATE RETIREMENT WEALTH INEQUALITY BY RACE, GENDER, AND EDUCATIONAL ATTAINMENT

In addition to ensuring a dignified retirement for recipients and buffering vulnerable communities against economic hardship, pension income represents a significant source of household wealth. This section presents an analysis of the wealth distribution impacts of pension income, based on the pension wealth estimation model developed for this study using SIPP and other data sources. Among pensioners age 55 and older, pension wealth is distributed relatively evenly among pensioners by race and gender. Among all individuals age 55 and older, pension wealth—especially public pension wealth—is distributed more equitably by race and gender than DC/IRA assets. Finally, pensions have a measurable impact on overall distribution of household wealth among older families by race, narrowing the Black-white gap in typical (median) household net worth and softening overall racial inequality in average (mean) household wealth.

Pension Wealth Imputation Methodology

Surveys of household wealth do not include the value of pensions. However, a stream of regular pension income can be translated into lump-sum wealth (or "present value") based on the recipient's life expectancy. In order to measure the wealth distribution impacts of pensions, we calculated the present value of pension benefits over the remainder of each pensioner's life expectancy. For public pension benefits, this analysis applied a two percent annual increase in benefits to account for the fact that a large majority of pension systems provide automatic inflation adjustments, typically capped at two percent. To translate the resulting flow of payments into a net present value (i.e., lump-sum amount in 2020 dollars), we used a 5.5% discount rate that represents the liability-weighted average of actuarial discount rates across the entire universe of pension plans. Much ink has been spilled over pension discount rates, but the main goal of using this method was to produce consistent estimates of pension wealth across public and private sources.

This analysis expanded the age range to 55 and older to capture a larger share of pension benefits. While most workers with pensions retire in their 60s, police and firefighter pensions typically have a normal retirement

age of 55. In addition, most pension plans offer disability pensions for workers who become permanently disabled on the job but are not yet eligible for retirement pensions, and survivor pensions may be awarded to spouses and other designated beneficiaries when a worker or retiree dies.

While it might have been preferable to estimate the value of pension benefits among workers who currently participate in a pension or have vested pension benefits from a former job, this was not practical within the scope of this study due to the limitations of the SIPP related to job history. (A potential alternative data source, the Survey of Consumer Finances, includes a measure of job tenure, but lacks detail related to public sector employment and public vs. private sources of pension income.) Therefore, the results presented below include only the wealth value of pensions currently in payment. Pensions in payment represent approximately half of total pension liabilities for both public and private pensions, based on our analysis of DOL Form 5500 data for private pensions and a sampling of actuarial reports for large public pension funds.

Details about mortality assumptions and the rate weighting method are provided in **Appendix A**.

Pension Wealth Model Results

Key results from the pension wealth estimation model are presented in **Figure 11**, **Figure 12**, and **Figure 13**, which depict the average (mean) wealth value of pensions in payment by race, gender, and educational attainment, respectively.

The distribution of pension wealth by race is markedly even among pension income recipients (Figure 11). This holds true for the wealth represented by all pension income, public pension income, and private pension income. Black pensioners held an average of $238,000 in pension wealth, virtually equal to the average of $242,000 among white pensioners in 2013-2021. Older Black adults with public pension income held an average of $312,000 in public pension wealth, similar to the $315,000 average among their white counterparts. While Asian older adults are less likely to have pension income than their white and Black counterparts, they had higher average pension wealth than any other group -- $261,000 for all pensions, $343,000 for public pensions, and $197,000 for private pensions.

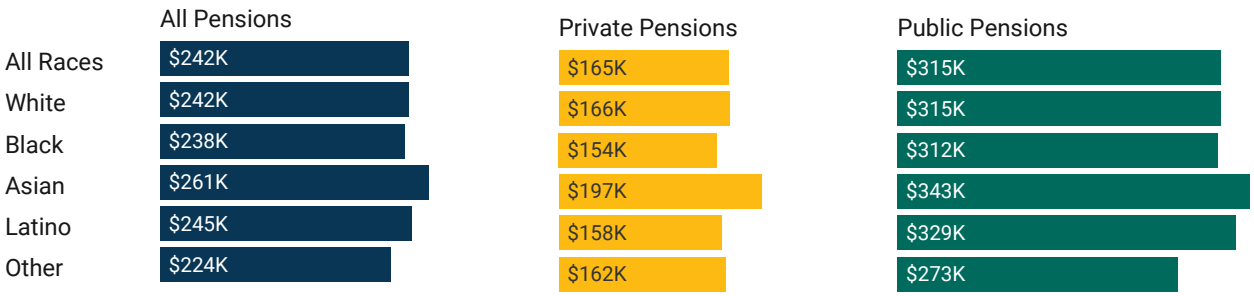
The higher wealth value of public pensions compared to private pensions stems in part from more generous benefit formulas, earlier retirement ages, and annual cost-of-living adjustments (COLAs), as well as longer life expectancy among public pension participants.[25]

Female pensioners age 55 and older have 80% of the average pension wealth of male pensioners ($225,000 vs. $258,000) (Figure 12). Among those with public pension income, women have 82% of the public pension wealth held by men ($299,000 vs. $335,000). The gender gap is wider for those with private pension income: women hold 70% of the average private pension wealth of men ($137,000 vs. $189,000). While historical gender wage gaps and women's truncated careers due to caregiving suppress their retirement wealth, pension income over women's longer lifespans offsets some of this inequality.

Unsurprisingly, there is wider inequality in pension wealth by education. Pensioners without college education had 50% of the average pension wealth of those with advanced degrees for all pensions, and 60% for public pensions. Similarly, pensioners without college degrees had 59% of the average pension wealth of those with a bachelor's degree or higher due to the latter's higher pay. (See Figure 13.)

Figure 11: Average (Mean) Wealth Value of Pensions in Payment to Adults Age 55+, by Race and Pension Type, 2018-2020

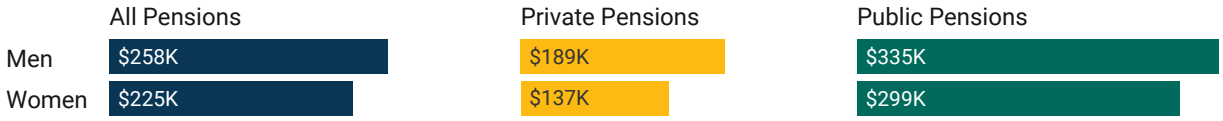
(2020 Dollars)



Note: Author's analysis of SIPP. Universe is adults age 55 and older with retirement, disability, or survivor pension income from a union, private employer, or government pension plan. See Appendix for pension wealth imputation methodology.

Figure 12: Average (Mean) Wealth Value of Pensions in Payment to Adults Age 55+, by Gender and Pension Type, 2018-2020

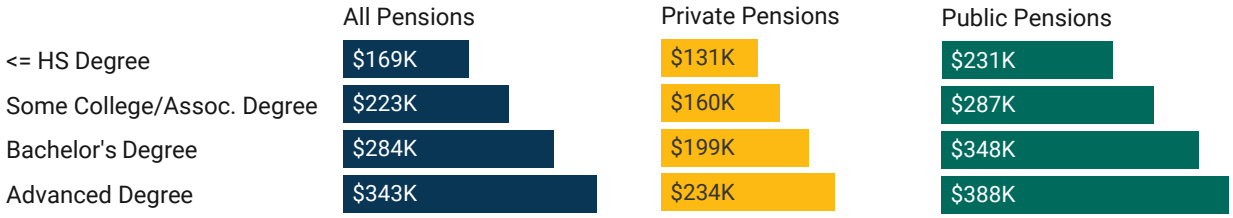
(2020 dollars)



Note: Author's analysis of SIPP. Universe is adults age 55 and older with retirement, disability, or survivor pension income from a union, private employer, or government pension plan. See Appendix for pension wealth imputation methodology.

Figure 13: Average (Mean) Wealth Value of Pensions in Payment to Adults Age 55+, by Educational Attainment and Pension Type, 2018-2020

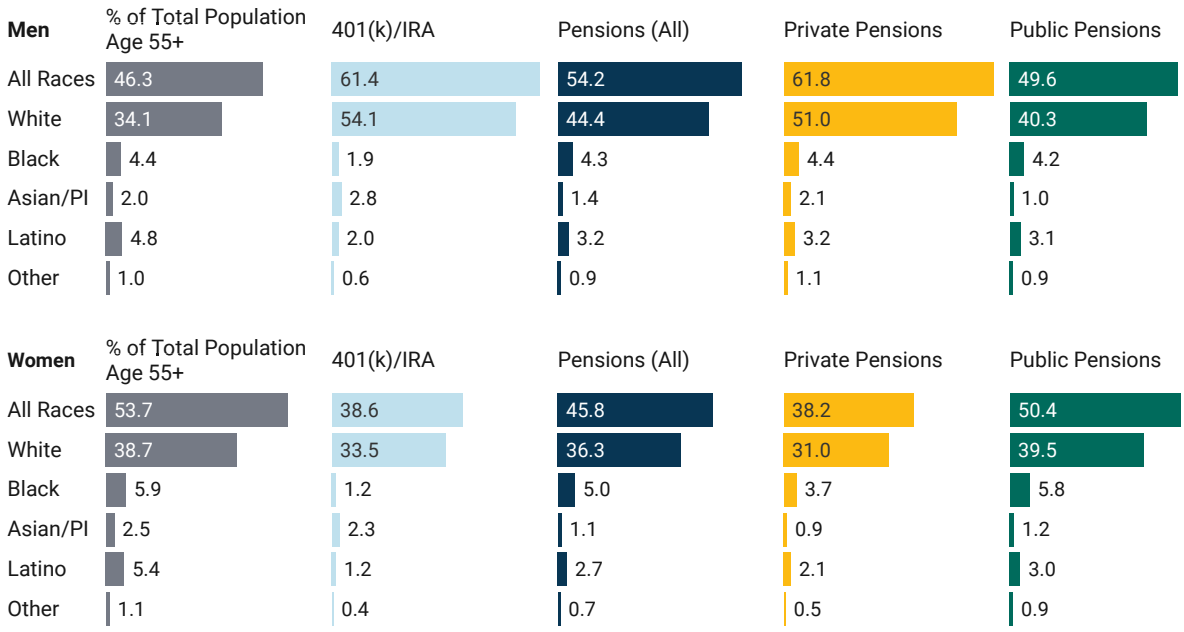
(2020 dollars)



Note: Author's analysis of SIPP. Universe is adults age 55 and older with retirement, disability, or survivor pension income from a union, private employer, or government pension plan. See Appendix for pension wealth imputation methodology.

Figure 14: Distribution of 401(k)/IRA and Pension Wealth among Adults Age 55+, by Gender and Race, 2018-2020

(Percentage)



Note: Author's analysis of 2019-2021 SIPP. Universe is adults age 55 and older. See Appendix for pension wealth imputation methodology.

Impact of Pension Wealth on Overall Wealth Distribution among Older Individuals and Families

Because the wealth value of pension income is distributed relatively evenly among recipients by race, pensions also exert a positive impact on the overall wealth distribution. While the SIPP under-estimates the net worth of the wealthiest families, who are overwhelmingly white, the following analysis offers important insights on the impact of public and private pensions on the distribution of wealth by race and gender.

Pensions, particularly public pensions, are distributed more equally by race and gender than are 401(k)/IRA assets. **Figure 14** shows the distribution of people, 401(k)/IRA assets, and pension wealth across race-gender groups within the age 55 and older population in 2018-2020. White men—who comprised 34.1% of adults age 55 and older—held a disproportionately large share of all forms of wealth. However, their share of public pension wealth (40.3%) was significantly lower than their share of private pension wealth (51.0%) and 401(k)/IRA assets (54.1%). White women held slightly larger than their 38.7% population share in public pension wealth (39.5%), likely due to their heavy presence in public education and health and social services. Notably, Black men and women, who respectively comprised 4.5% and 5.9% of the population, had near-parity in public pension wealth (4.2% and 5.8%, respectively). Among Latino men, the share of total pension assets was about two-thirds of their population share (3.2% vs 4.8%), and among Latina women it was half (2.7% vs. 5.4%), but this was still significantly higher than their relative shares of 401(k)/IRA assets (2.0% and 1.2%, respectively).

Pension wealth also has an impact on the distribution of wealth across families, though not as dramatic as its impact on individual wealth. **Figure 15** and **Figure 16** illustrate the increase in median and mean family wealth, by race, resulting from the addition of private and public pension wealth. Families with reference persons age 55 and older were selected for this analysis. Because the SIPP is focused on lower-income households and for privacy and sample size reasons do not report the full wealth of the wealthiest households, these charts do not fully capture the extent of wealth concentration in the U.S.

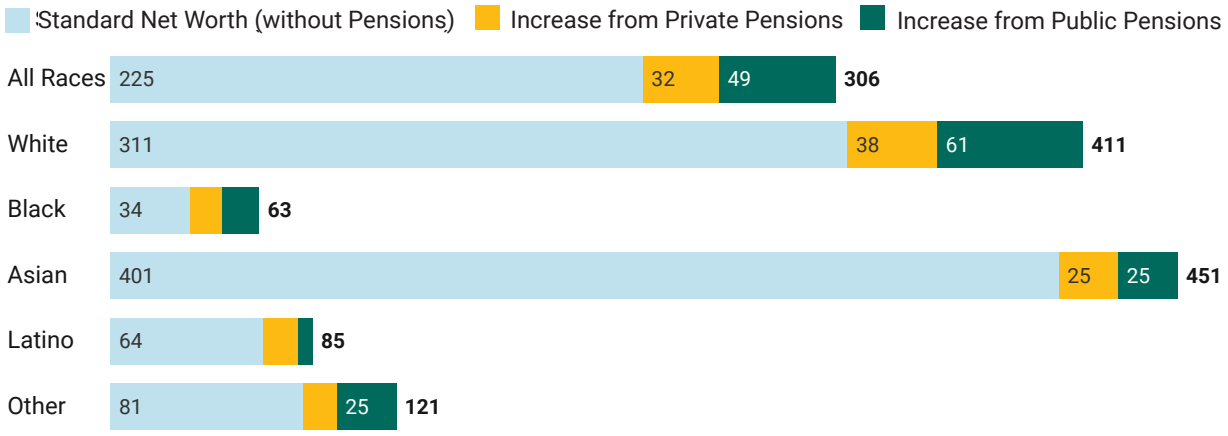
The baseline racial wealth gap is stark: the typical Black family had 15% of the net worth of the typical white family ($34,000 vs. $225,000) before including pension wealth, while the typical Latino family had 28% ($64,000) (Figure 15). The incremental increase in median wealth from adding pension wealth for these communities seems small at first glance because pensioners occupy a higher rank within economically disadvantaged communities. In more affluent populations, a greater share of people with pension income are located around the middle of the group income distribution. White median family net worth sees a more obvious boost, because those with pensions are clustered towards the middle of the wealth distribution for white families.

At the same time, because Black and Latino communities are economically disadvantaged, the relative impact of pension wealth for these groups is large. **Figure 17** shows the percentage increase in median and mean family net worth by race when pensions are included.[26] Pension wealth increases the median net worth of older Black families by 86%, and public pensions account for most of this difference (46%). Similarly, the collective wealth of older Black families—as represented by mean net worth—increases 28% after accounting for pension wealth, and public pensions alone account for a 19.1% increase. The percentage change in median net worth from pension wealth among older Latino families is on par with that of older white families, and the former's collective wealth increased by 16%.

PENSIONS ALSO MAKE A BIGGER DIFFERENCE IN THE FINANCIAL LIVES OF BLACK AND LATINO FAMILIES, WHO ARE HISTORICALLY DISADVANTAGED VIS-A-VIS WEALTH-BUILDING OPPORTUNITIES

Figure 15: Median Net Worth including Wealth Value of Pension Income, Families Age 55+, by Race, 2018-2020

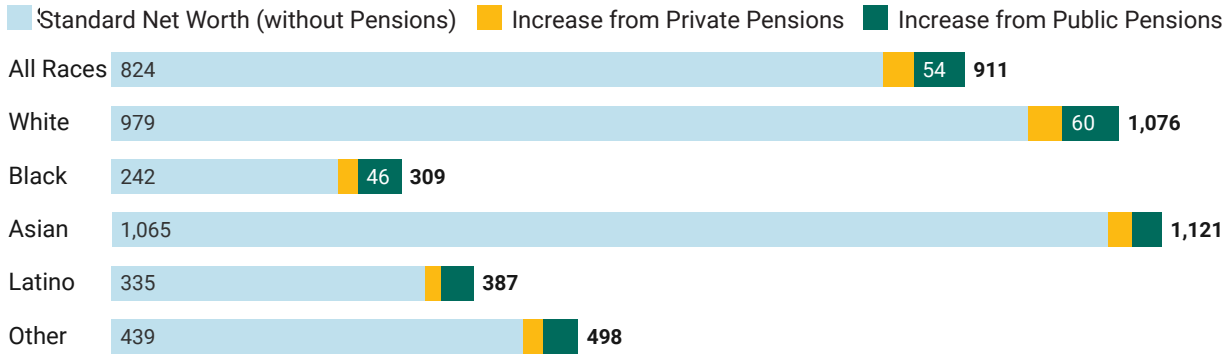
(Thousands of 2020 dollars)



Note: Author's analysis of 2019-2021 SIPP. Universe is families with reference persons age 55 and older. See Appendix for pension wealth imputation methodology.

Figure 16: Mean Net Worth including Wealth Value of Pension Income, Families Age 55+, by Race, 2018-2020

(Thousands of 2020 dollars)

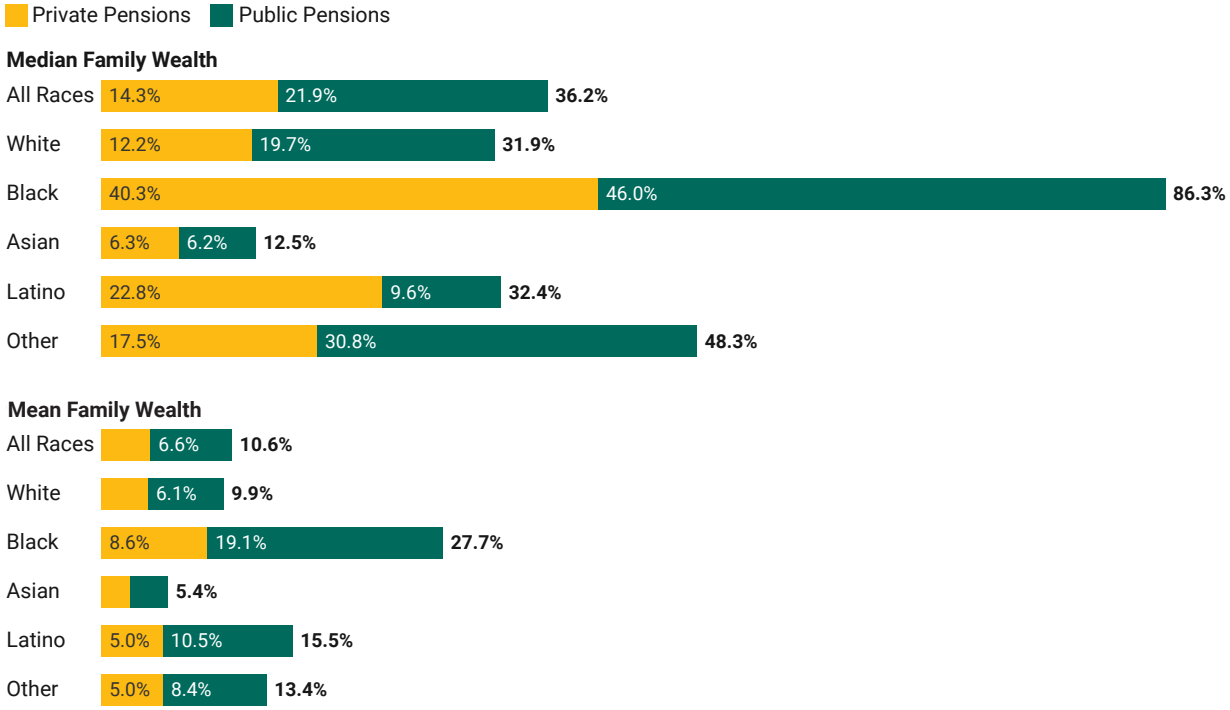


Note: Author's analysis of 2019-2021 SIPP. Universe is families with reference persons age 55 and older. See Appendix for pension wealth imputation methodology.

Finally, in order to quantify the impact of pensions on the racial wealth inequality among older families, we calculated two indicators before and after adding pensions to household net worth: 1) the ratio of group median wealth to population median wealth, and 2) the ratio of group mean wealth to population mean wealth. The first provides an indicator of wealth inequality among typical families from each racial group, while the second measures the distribution of aggregate wealth across racial groups. (In a perfectly egalitarian world, the median-to-median and mean-to-mean ratios for all racial groups would be 1, or 100%.)

Figure 18 illustrates the results of the above analysis as follows: The percentage values in the chart represents baseline ratios before and after pension wealth was added, while the arrows represent the direction and magnitude of change in this ratio after pension wealth is included. Almost

Figure 17: Percentage Increase in Net Worth of Families Age 55+ from Wealth Value of Pension Income, by Race, 2018-2020



Note: Author's analysis of 2019-2021 SIPP. Universe is families with reference persons age 55 and older. See Appendix for pension wealth imputation methodology.

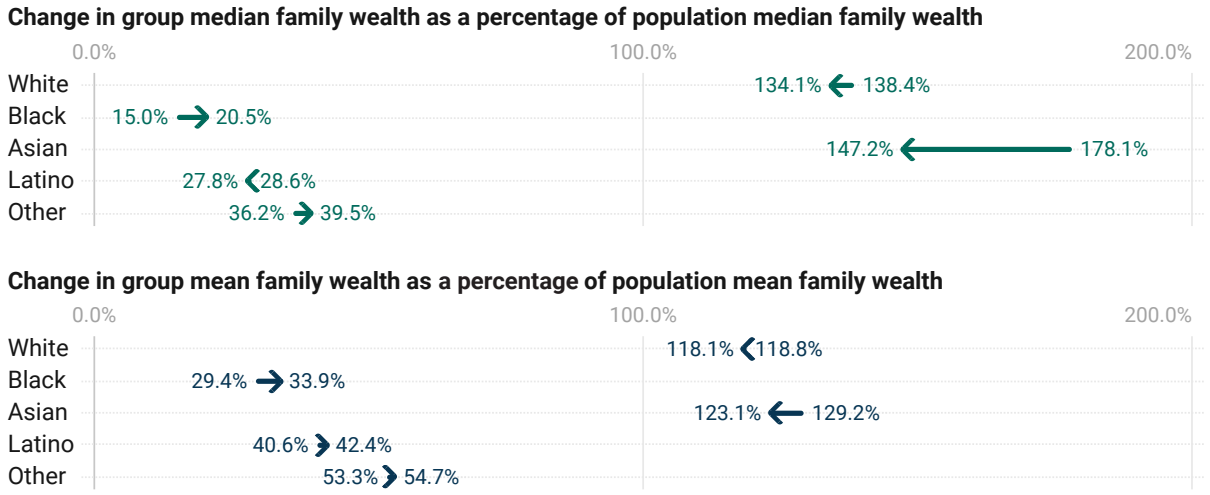
all arrows point towards 100%, indicating that pensions have an equalizing effect on the distribution of household wealth by race.

For example, the median net worth of older Black families was 15.0% of the median for all older families using the standard household wealth measure, and 20.5% after accounting for the value of pension income. Typical families in the "Other" race category also moved in a similar direction, from 36.2% to 39.5%. Conversely, the ratio of typical white family net worth to the population median decreased slightly after accounting for the value of pension income, from 138.4% to 134.1%. The median-to-median ratio for older Asian families decreased to a much larger degree, from 178.1% to 147.2%, due to the low rate of pension income receipt. (See Figure 18.)

Latinos form an exception to the pattern of decreased inequality among typical families by race; the ratio of median Latino family wealth to the total median decreased slightly from 28.6% to 27.8% due to the markedly low rate of pension income receipt in this community. However, pensions modestly increased older Latino families' relative share of total wealth. The ratio of Latino average (mean) family wealth to overall average family wealth increased from 40.6% to 42.4%. Indeed, Figure 18 shows that all groups' relative share of household wealth moved towards 100% after the addition of pension wealth, albeit to a smaller degree than median-to-median ratios. In other words, pensions narrow the racial wealth gap among older families. It is important to understand that this does not mean that white and Asian families do not benefit from pensions. Rather, pensions are distributed much more equitably than other household assets. Pensions also make a bigger difference in the financial lives of Black and Latino families, who are historically disadvantaged vis-a-vis wealth-building opportunities.

Given that the SIPP underestimates the net worth of the wealthiest households in the U.S. due to the nature of its sample and topcoding, and the fact that white families dominate the top one percent, the mean-to-mean ratios for older Black and Latino families in Figure 18 are over-estimates. The mean-to-mean ratios are likely inflated for older Asian families as well. Nonetheless, the direction of change in the wealth distribution still hold with more comprehensive measures of wealth, as illustrated by studies using the Survey of Consumer Finances.[27]

Figure 18: Change in Distribution of U.S. Older Family Wealth after Adding Wealth Value of Pension Income



Note: Author's analysis of 2019-2021 SIPP. Universe is families with reference persons age 55 and older. See Appendix for pension wealth imputation methodology.

CONCLUSION

Public pension benefits are vital community assets and an important policy tool in the fight against race and gender inequality. Pensions ensure adequate retirement income, providing a critical buffer against economic hardship in old age for all groups, with the greatest effects on women, Blacks, Latinos, and seniors without a four-year college degree. Pensions also represent a significant form of household wealth. The wealth value of pension income, particularly public pension income, is distributed more equitably by race and gender than other private financial assets, narrowing the racial wealth gap among older families. Indeed, women hold more than half of the wealth value of public pension benefits currently in payment. In addition, public pensions form a key pillar of Black middle-class economic security, increasing the median wealth of older Black families by 46%.

Given the decline of corporate pensions and the rise of highly unequal 401(k) benefits in the private sector, public pensions serve as a critical bulwark for middle-class retirement security alongside Social Security. As policymakers continue to grapple with an aging society and persistent race and gender disparities in economic outcomes, public pensions should be viewed as a powerful means to promote economic security in retirement across race, gender, and educational divides.

GIVEN THE DECLINE OF CORPORATE PENSIONS AND THE RISE OF HIGHLY UNEQUAL 401(K) BENEFITS IN THE PRIVATE SECTOR, PUBLIC PENSIONS SERVE AS A CRITICAL BULWARK FOR MIDDLE-CLASS RETIREMENT SECURITY ALONGSIDE SOCIAL SECURITY

APPENDIX A: METHODOLOGY FOR THIS REPORT

Data sources

Much of the analysis in this report is based on the U.S. Census Bureau's Survey of Income and Program Participation (SIPP). SIPP is a cross-sectional panel survey, and its latest iteration consists of overlapping four-year panels, with a new panel launched every year. The 2018 panel launched in 2018, with the first wave covering the 2017 calendar year. However, due to the COVID-19 pandemic, the 2019 panel was discontinued after the first year. For this report, we combined the 2019, 2020, and 2021 releases of SIPP data in order to achieve sufficient unweighted sample size for detailed cross-tabulations. The Census Bureau weighted the public dataset so that the combined panels each year add up to the population for that year. Thus, the weighted population total in the 2019 SIPP, which included two concurrent panels, is similar to the weighted population total in the 2021 SIPP which included three concurrent panels.

The pandemic created difficulties with under-response rates for all household surveys, including SIPP, with lower-income households and communities of color were disproportionately impacted. We checked estimates across years in order to guard against idiosyncratic distortion of findings.

In addition, we found approximately 5,400 families in the dataset with more than one family reference person in the same month. In those cases, we used age and income tiebreakers to create a clean set of family reference persons in the December monthly records, first selecting the oldest person family reference persons status, and then the person with higher annual personal income.

Income and poverty

SIPP data consists of person-month records. For analyzing income, we aggregated pensions and other monthly personal income variables annual totals at the individual level, and then aggregated the results at the family level. SIPP also includes variable on the ratio between each person's family annual income and the federal poverty level, which we used to determine which retirees were above 200% FPL.

SIPP includes detailed variables on the source and amount of income. For the purposes of this report, individuals were counted as having pension income in their own name if they reported having retirement, disability, or survivor pension income from a union or corporate pension; a state or local government pension; a federal civilian pension; a military pension (not counting Veterans Administration benefits) or U.S. Rail Road pension.

Imputation of pension wealth

The SIPP includes estimates of pension income, but not the wealth value of pensions. We imputed pension wealth among pension recipients as the net present value of pensioners' annual pension income benefit. The imputation model for estimating the wealth value of pensions builds on the author's previous work in partnership with professional actuaries comparing the value of pensions with hypothetical 401(k)s for public school teachers.[28] It is generally similar to the methodology in Sabelhaus & Volz (2019) for imputing the wealth value of pension income, except for different assumptions and methods regarding the discount rate and the fact our study uses more finely grained mortality assumptions.

For this study, we first calculated full-year benefit amounts by multiplying the pension income reported for December of the SIPP survey reference year by 12. (This is because some pensioners began to receive their pension after January of the reference year.) Then we multiplied the annualized benefit for each recipient by an annuity factor, which is the cost or present value of $1 of annual income for the remainder of someone's life, given key demographic and economic factors. For example, if the annuity factor is 15, the present value of a $10,000 annual pension is $150,000. Annuity factors are calculated from three key inputs: mortality rates, assumptions about Cost of Living Adjustments (COLAs), and an interest rate. For this study, we used Society of Actuaries (SOA) RP-2014 mortality rates projected forward with SOA generational mortality improvement scale MP-2018; a 2% COLA for public pensions and none for private pensions; and a 5.5% discount rate that reflects the actuarial liability weighted average across private, state/local, and federal pension plans, explained at length in the section that follows.

RP-2014 mortality rates are differentiated by blue collar/white collar, male/female, and disabled/healthy annuitant, resulting in 8 sets of rates. We checked a sampling of our

model results against the SOA's online annuity factor calculator using the same mortality tables, and found that the results closely matched. RP-2014 is based on private pension mortality experience, and public pension participants have longer life expectancy. Thus, public pensions either use their own base mortality tables or apply adjustment factors to RP-2014 rates. Based on a sample of several state pension plans that do the former, we applied an adjustment factor of .78 through age 79 and 1.13 for age 80 and older. The results were found to be similar to published sample mortality rates from a small sampling of large public pension plans.

Each pensioner in the SIPP sample was assigned an annuity factor specific to their sex, age, education, whether or not their pension was a disability pension, and whether their pension came from a public or private sector plan. Given the lack of past occupation data in the 2018-2021 SIPP, we used education as a proxy: white collar mortality rates for those with a Bachelor's Degree or higher, and blue collar mortality rates for all others.

To keep computational load manageable, we assumed that each pensioner chose a single life annuity, i.e., that the monthly pension benefit they received during the SIPP survey reference period will stop when the pensioner dies. However, most married people receive pension benefits as a joint-and-survivor annuity that continues in full or in part to a spouse or named survivor when the original recipient dies. Joint-and-survivor benefit options reduce the monthly benefit compared to a single life annuity because it covers a longer, joint life expectancy. In order to choose a single life annuity instead, the retiree must obtain a signed release from their spouse per federal regulations for private pensions and state policy for state and local pensions. This means that this report underestimates the value of pension income among married people receiving retirement pensions, because the pension benefit payments are only projected over the retiree's life expectancy rather than the longer, joint life expectancy of retiree and spouse.

Discount rate

We applied a uniform discount rate of 5.5% in order to have apples-to-apples valuation of pension wealth across the entire universe of pensions, private, state/local, and federal. This is the average actuarial discount rate across all private and public pensions, weighted by (normalized) actuarial liabilities, calculated as follows:

- First, we gathered data on pension fund actuarial liabilities and discount rates for public and private pensions. For state/local pensions, we used the national total actuarial liability estimate from the Annual Survey of Public Pensions and calculated a liability-weighted mean discount rate from the Public Funds Survey dataset for 2020. For private pensions we used the national aggregate private pension liability estimate from Federal Reserve series Z.1 and a liability-weighted mean discount rate derived from Form 5500 data. For each federally managed pension system (CSRS, FERS, military, and Railroad Retirement Fund), we used data from their actuarial reports.

- Next, we normalized pension liabilities using a single arbitrary discount rate of 5% using the method developed by actuary Doug Chandler for adjusting pension liabilities for different discount rates.[29] In addition to reported actuarial liabilities and discount rates, a key input into this method is the share of pension liabilities that are for pensions already in payment. To calculate this share for private pensions, we used Form 5500 data. For state and local pensions, we calculated the average share from actuarial valuations for the 10 largest pension plans in the Public Fund Survey. For each federal pension system, we used data from their actuarial report.

- Finally, we calculated the mean actuarial discount rate for all pensions, weighted by the normalized liability estimates.

This rate is lower than the current average of 6.8% for state and local pensions, and higher than the current AAA corporate bond yield of approximately 4.5%. A lower discount rate would increase the estimated value of pensions. The discount rate matters little in a comparison of the distribution pension wealth among recipients, or across the whole population. However, to the extent that this report uses a higher discount rate than the corporate bond rate, it understates the impact of pensions on the overall distribution of household wealth compared to studies that use a lower discount rate.[30]

Finally, while it would have been preferable to include estimates of pension wealth for workers who are not yet retired, this was impractical given data limitations. SIPP does not provide the job tenure data that would allow reasonable estimates of future pension benefits. While the Federal Reserve's Survey of Consumer Finances does provide job tenure data for workers in DB plans, the tenure distribution in the public dataset for 2019 at the time of our study was markedly skewed in relation to the typical tenure distribution reported by pension plans. In addition, the public SCF dataset does not allow the identification of public sector employees or public pension recipients.

APPENDIX B: DATA FOR SELECTED FIGURES

FIGURE 15

(THOUSANDS OF 2020 DOLLARS)

RACE OF FAMILY REFERENCE PERSON	STANDARD NET WORTH (WITHOUT PENSIONS)	INCREASE FROM PRIVATE PENSIONS	INCREASE FROM PUBLIC PENSIONS
ALL RACES	824	33	54
WHITE	979	37	60
BLACK	242	21	46
ASIAN	1065	25	32
LATINO	335	17	35
OTHER	439	22	37

FIGURE 16

(THOUSANDS OF 2020 DOLLARS)

RACE OF FAMILY REFERENCE PERSON	STANDARD NET WORTH (WITHOUT PENSIONS)	INCREASE FROM PRIVATE PENSIONS	INCREASE FROM PUBLIC PENSIONS
ALL RACES	225	32	49
WHITE	311	38	61
BLACK	34	14	16
ASIAN	401	25	25
LATINO	64	15	6
OTHER	81	14	25

FIGURE 17

	RACE OF FAMILY REFERENCE PERSON	PRIVATE PENSIONS	PUBLIC PENSIONS
INCREASE IN MEDIAN FAMILY WEALTH	ALL RACES	14%	22%
	WHITE	12%	20%
	BLACK	40%	46%
	ASIAN	6%	6%
	LATINO	23%	10%
	OTHER	18%	31%
INCREASE IN MEAN FAMILY WEALTH	ALL RACES	4%	7%
	WHITE	4%	6%
	BLACK	9%	19%
	ASIAN	2%	3%
	LATINO	5%	11%
	OTHER	5%	8%

APPENDIX C: METHODOLOGY FOR STATE FACT SHEETS

The following is a methodology summary for *Closing the Gap* fact sheets for each of the 50 states plus the District of Columbia, which can be found at www.nirsonline.org.

Data source

Income, poverty, and workplace retirement coverage are based the author's estimates from IPUMS CPS ASEC data, from a combined data from 2014 to 2021. For the 2014 CPS ASEC, we used the 3/8 sample used to pilot new income questions that were subsequently integrated into the full survey. For income and poverty, we used alternative weights developed by the Census Bureau to compensate for higher non-response rates among lower-income households during the pandemic for the 2019, 2020, and 2021 survey years (ASECWTCVD in IPUMS). All dollar amounts were adjusted to 2020 values using the CPI99 variable and associated annual deflators provided by IPUMS.

Income and poverty

State-level analysis of the share of retirees above 200% FPL using CPS-ASEC generally mirrored the national analysis described in based using SIPP, with one analytical difference: pensioners who did not receive at least $5,000 in Social Security annually were not included in the universe. (The inclusion of this group in the national analysis occurred after data was finalized for the states, and the share of pensioners above 200% FPL did not change significantly.)

Beginning with the 2019 CPS ASEC, Census Bureau implemented data processing changes to take advantage of new income questions from the 2014/2015 survey redesign. This resulted in more detailed variables on retirement income including separate variables on income from retirement accounts vs. income from pensions. Consequently, there is discontinuity in retirement income estimates between 2014-2018 and 2019-2021, with higher retirement income reported in the latter. Thus, poverty estimates derived from the combined 2014-2021 sample are slightly higher than estimates in the national study, which used the SIPP rather than CPS.

Workplace retirement plan participation

Workers were considered to participate in a workplace retirement plan if they reported directly that they participate in a retirement plan at the longest job they held during the reference year in the CPS ASEC. In addition, to compensate for known problems with under-reporting in response to the CPS ASEC survey question about workplace retirement benefit coverage since the survey's redesign in 2014/2015, we also included workers who reported receiving dividend or interest income from a qualified retirement plan. This method is less precise than the one developed by Sabelhaus (2020) using CPS and IRS Statistics of Income, but is sufficient for the purposes of comparing retirement plan coverage by sector.

Applied nationally, the above method matched the private sector benchmark (51% private sector participation rate in 2019 per the U.S. Bureau of Labor Statistics' National Compensation Survey), but fell significantly short of the 83% state and local benchmark. This is likely because most public employees are covered by a DB pension as the sole or primary retirement plan, while the retirement plan coverage estimation method described above uses supplemental variables related to DC and IRA accounts and none related specifically to DB pensions. To partially offset this bias, private sector employees who reported receiving interest income from a plan consistent with their sector, and public employees who reported interest income from any kind of qualified retirement plan, were added to the retirement plan participant count. The results were still skewed against the public sector, so we applied a small upward adjustment factor to public sector participation rates so that the two sectors had the same relative magnitude of difference when compared to the NCS.

Pension wealth imputation

We used the same pension wealth imputation model described above for the national analysis, but with CPS ASEC pension income data. Given the availability of slightly more detailed educational attainment data in CPS ASEC, we applied white collar annuity factors to pensioners with academic associate degrees, alongside those with bachelor's degrees.

ENDNOTES

1. According to the author's analysis of the Federal Reserve's Survey of Consumer Finances, U.S. households had $46.1 trillion in financial assets and $16.6 trillion in 401(k)-type retirement accounts and IRAs in 2019. Adding the Federal Reserve's estimate of $16.1 trillion in defined-benefit pension wealth, the financial asset total is $52 trillion and the retirement asset total is $32.7 trillion.
2. U.S. Census Bureau American Community Survey data obtained from IPUMS USA University of Minnesota, www.ipums.org; U.S. Bureau of Labor Statistics Current Population Survey/Annual Social and Economic Supplement data obtained from IPUMS-CPS, University of Minnesota, cps.ipums.org.
3. Ibid.
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11. John Sabelhaus and Alice H. Volz, February 1, 2019, "Are Disappearing Employer Pensions Contributing to Rising Wealth Inequality?" FEDS Notes, Board of Governors of the Federal Reserve System.
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15. All charts and tables in this report were created with Datawrapper.
16. Richard Rothstein, 2017, *The Color of Law: A Forgotten History of How Our Government Segregated America*, New York City: W.W. Norton.
17. The median Social Security claiming of age of 65 in 2021 can be inferred from Figure 2 on p. 8 of Congressional Research Service, 2022, "The Social Security Retirement Age," Congressional Research Service Report No.

R44670, https://crsreports.congress.gov/product/pdf/R/R44670.

18. Where income was earned on assets held jointly by members of a household, such as a savings account or rental property, the SIPP codes each owner as receiving a proportionate share of asset income.
19. The 2019 and 2020 surveys grouped this income with other sources.
20. Poverty status is generally measured at the family level based on the number of members, but the vast majority of seniors in comparison universe either lived alone or with a spouse or partner.
21. The Elder Index™ [Public Dataset], Gerontology Institute, University of Massachusetts Boston, 2021, https://elderindex.org/. Actual benchmarks are by county; statewide thresholds are weighted averages.
22. Author's analysis of SIPP data from the 2019, 2020, and 2021 surveys.
23. The remaining public pension benefits are primarily from federal government and military pensions.
24. These counts are not mutually exclusive; 582,000 adults age 55 and older received both private and public pension income.
25. Public pension systems that use SOA RP mortality rates, which are based on private pension system experience, typically adjust these rates to yield longer average expectancy.
26. We first calculated median baseline net worth (a), median net worth after adding private pensions (b), and median net worth after adding both private and public pensions (c). The incremental difference (b-a) is depicted as the change in median net worth from private pension wealth, and the difference (b-a) is depicted as the change in median net worth from public pensions wealth. Results vary slightly if the order of addition is reversed, but the general magnitude of change and the combined impact of public and private pensions remain the same.
27. Sabelhaus and Volz, op cit.; Jacobs et al., op cit.
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30. For instance, Sabelhaus and Volz, op cit. and Jacobs et al., op cit. use a 5% discount rate to calculate the present value of pension benefits.

WHO WE ARE & WHAT WE DO

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The National Institute on Retirement Security is a non-profit research and education organization established to contribute to informed policymaking by fostering a deep understanding of the value of retirement security to employees, employers, and the economy as a whole.

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Through our activities, NIRS seeks to encourage the development of public policies that enhance retirement security in America. Our vision is one of a retirement system that simultaneously meets the needs of employers, employees, and the public interest. That is, one where:

- employers can offer affordable, high quality retirement benefits that help them achieve their human resources goals;

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- the public interest is well-served by retirement systems that are managed in ways that promote fiscal responsibility, economic growth, and responsible stewardship of retirement assets.

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- High-quality research that informs the public debate on retirement policy. The research program focuses on the role and value of defined benefit pension plans for employers, employees, and the public at large. We also conduct research on policy approaches and other innovative strategies to expand broad based retirement security.

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