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An Update on Women's Retirement Preparedness

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EXECUTIVE SUMMARY

Most Americans struggle to adequately save for retirement, but women face unique challenges in saving, largely stemming from a gender pay gap that persists into a retirement wealth gap. This update of previous research from the National Institute on Retirement Security (NIRS) takes a fresh look at the data on women's retirement preparedness.

Relying on data from the 2014 Survey of Income and Program Participation (SIPP), this research finds that older women receive approximately 80 percent of the retirement income that older men receive - nearly identical to the gender pay gap for American women. The data also reveals that different groups of women have very different retirement experiences, with older women in a first marriage faring better than the rest, and widows, especially those age 80 and older, seeing a marked decline in income.

The report's key findings are as follows:

- In 2016, women age 65 and older had a median household retirement income of $47,244 or 83 percent of median household income for men ($57,144).
- Women earn less than men over the course of their career. Men with savings in a defined contribution (DC) plan far surpass the earnings trajectory of women with savings in a DC plan, and earn significantly more than women without DC savings.
- Women experience a steep decline in income past age 80. Women age 80 and older are much more likely to be widows and widowhood presents challenges on both the income and cost side of retirement.
- There are stark differences in the sources of income for women in the top and bottom income quintiles. Women with less than $20,000 of income in retirement are much more dependent on Social Security income, whereas women with income above $80,000 receive much more from earnings and property income.
- Divorce presents a complex set of issues relating to retirement preparedness. The timing of divorce seems to matter, as does the division of assets following a divorce.
- Caregiving, especially spousal caregiving, has a strong effect on retirement preparedness, and this particularly impacts women as they remain much more likely to provide caregiving than men.

INTRODUCTION

The story of women's retirement security is one of persistent inequality. The reality of the gender pay gap during a woman's working life is well-established. Although the number changes slightly from year to year, women in the United States earn roughly $0.80 for every dollar earned by a man, with certain demographic groups earning much less. This update of previous research from the National Institute on Retirement Security (NIRS) finds that this gender pay gap persists and becomes a retirement wealth gap in exactly the same proportion.

Many of the factors influencing the retirement wealth gap for women are related to their role in the labor force. Women are much more likely to work part-time as compared to men, and part-time employees are less likely to have access to an employer-provided retirement savings plan.[1] Women are also much more likely to take time out of the labor force to provide caregiving, either to their children, elderly parents, or an ailing spouse. This time spent out of the labor force negatively impacts women's ability to save for retirement.

Even when women work full-time and for a full career, they typically earn less than men. By tracking age-earnings over the course of a career, the data show that men with defined contribution (DC) savings have higher age-earnings than women with defined contribution savings at every stage of their careers (men and women without DC savings have even less). Because retirement savings often are based on a percentage of one's earnings, this translates into fewer dollars of retirement savings for women. And this lower level of saving is particularly problematic for women saving in a DC plan because women live longer than men and have more years of retirement to finance, which mean their savings have to stretch further. Health care costs and long-term care costs in retirement are challenging for most people, but can be more so for women, who bear these costs for longer and may have already spent down assets if their spouse predeceases them.

This report proceeds in four parts. The first part details the inequalities in retirement savings between men and women. The second part examines the sources of income for men and women in retirement and the ways in which they differ. The third part considers the complicated impact of divorce on women's retirement security. The fourth part looks at the impact of various types of caregiving on retirement savings.

NOTES ON DATA

The Survey of Income and Program Participation (SIPP) is a household-based survey featuring a nationally representative sample interviewed over a multi-year period. The 2014 SIPP panel comprises a sample of 53,070 housing units interviewed over four years. After the 2008 SIPP panel, the survey underwent a redesign to reduce costs. The redesign changed the structure of the survey from one where respondents are interviewed three times per year and gathers information about the previous four months, to a survey where respondents are interviewed once per year and the recall period is a whole year. The number of questions were also reduced, leading to a loss of information on retirement plan sponsorship and participation rates. To make up for that loss, the Social Security Administration (SSA) financed a one-time supplement that was fielded in September-November 2014. The SSA supplement data can be merged with wave 1 data to capture information on retirement plans for respondents in wave 1.

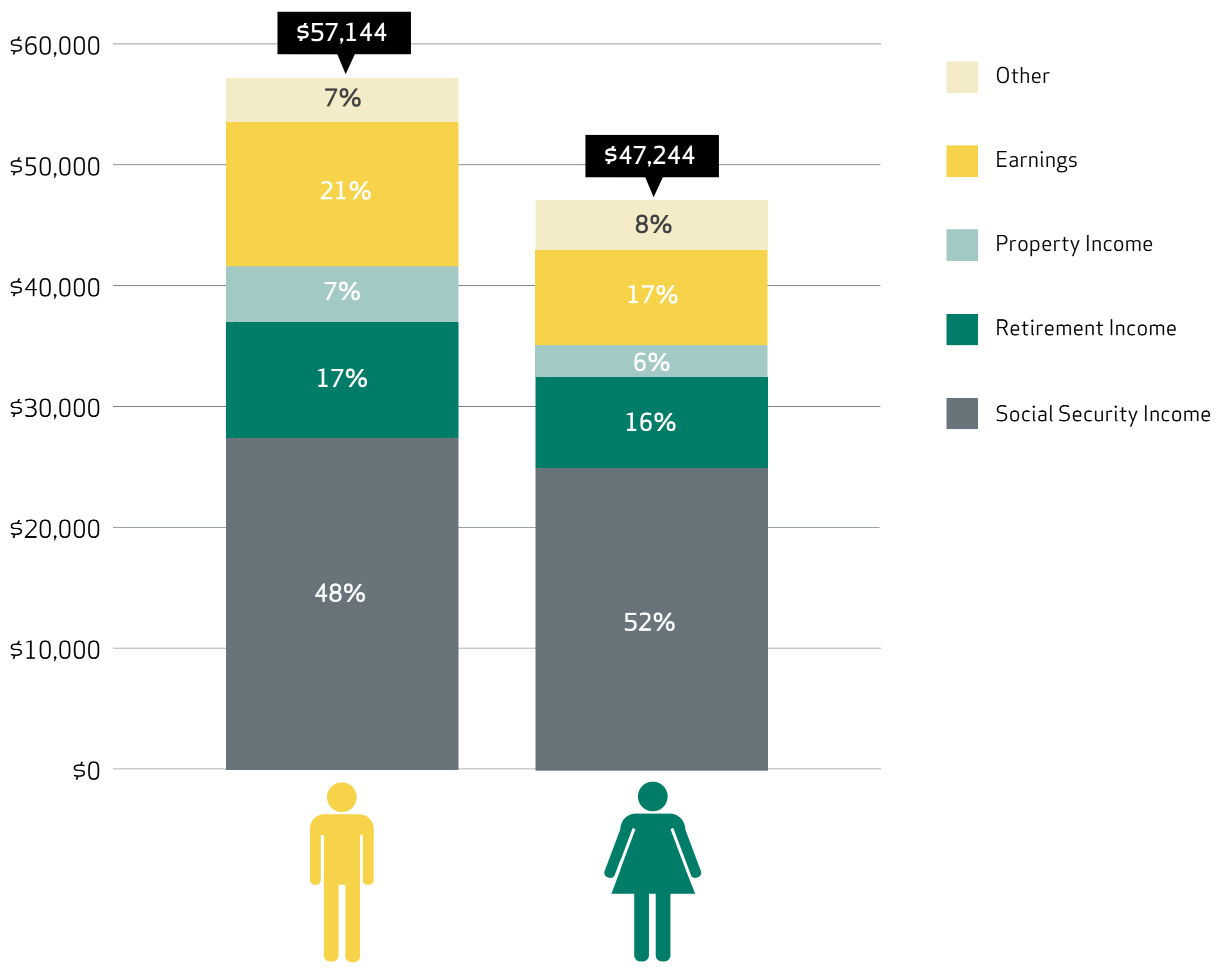
This report uses data from the first four waves of the 2014 Survey of Income and Program Participation (SIPP). These data were collected to reference calendar years 2013, 2014, 2015, and 2016. The analysis on sources of income relies on data from the twelfth month of each reference year. The analysis of retirement plan sponsorship, participation and eligibility relies on data from wave 1 of the 2014 panel merged with the SSA Supplement. The reference period for all data in waves 1-4 is the previous calendar year, while the reference period for the SSA supplement data on pensions is the interview date (September-November 2014).

PART ONE: INEQUALITY

As shown in **Figure 1**, the median household income for women aged 65 and older in 2016 was $47,244 or 83 percent of median household income for men ($57,144), based on data from wave 4 of the 2014 Survey of Income and Program Participation (SIPP). This ratio is slightly higher than in the first three waves of the 2014 SIPP with 80 percent in waves 1, 2, and 3 (2013, 2014, and 2015), but is consistent with the gender pay gap for all working American women during those years. According to the National Committee on Pay Equity, women earned 78.3 percent of men's earnings in 2013, 78.6 percent in 2014, 79.6 percent in 2015, and 80.5 percent in 2016.[2]

Despite this inequality in income, men and women have many similarities when it comes to retirement savings and preparedness. Slightly more women work for an employer that offers a retirement plan, but slightly more men are eligible to participate in a plan and take up that offer, which leads to the participation rate being the same between the two genders.

Figure 1: **The composition of median household income for men and women, age 65 and over, in 2016**



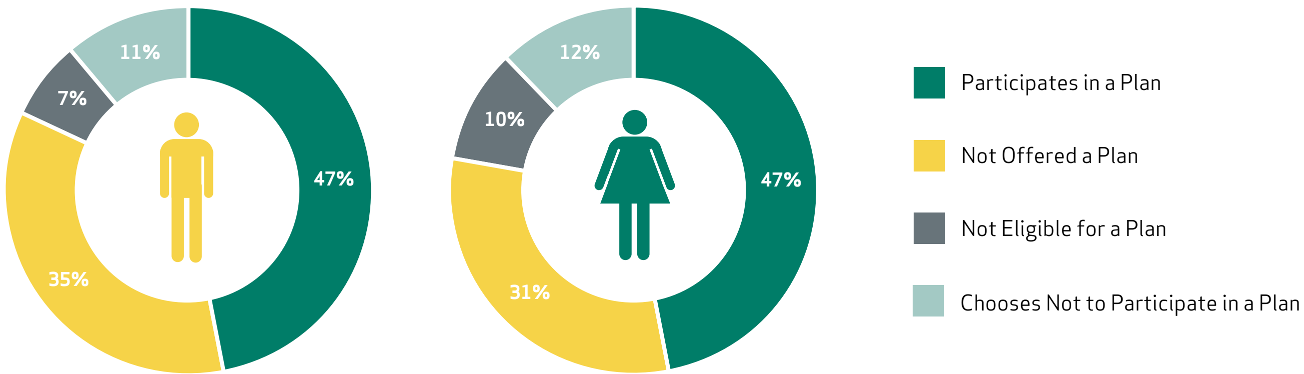
Source: Author's tabulations based on data from the twelfth month of the SIPP 2014 Panel, Wave 4 (Reference period December 2016) for respondents ages 65+. Median household income denominated in nominal $2016.

Table 1: **Percent of working men and women that participate in any employer-sponsored retirement plan, historically**

Year	Offered a Plan	Eligible for a Plan	Employee Take-Up Rate	Participates in a Plan*	Offered a Plan	Eligible for a Plan	Employee Take-Up Rate	Participates in a Plan*
	Men				Women			
1998	60%	85%	91%	46%	60%	78%	87%	41%
2003	61%	88%	90%	48%	64%	82%	88%	46%
2006	57%	86%	88%	43%	61%	83%	85%	43%
2009	58%	90%	87%	45%	61%	86%	86%	45%
2012	60%	89%	86%	46%	63%	85%	86%	46%
2014	65%	89%	81%	47%	69%	85%	79%	47%

Source: Author's calculations using data from 2014 SIPP Wave 1 merged with SSA Supplement. Sample limited to those with a job or business who are age 18-65. The reference period for SSA supplement data on pensions is the interview date. The SSA supplement data were collected September-November 2014. Data for 2012 derived from SIPP 2008 panel, wave 11. Data for 2009 derived from SIPP 2008 panel, wave 3. Data for 2006 derived from SIPP 2004 panel, wave 7. Data for 2003 derived from SIPP 2001 panel, wave 7. Data for 1998 derived from SIPP 1996 panel, wave 7.

Figure 2: **Access to, elibility for, and participation in, an employer-sponsored retirement plan, by gender, in 2014**

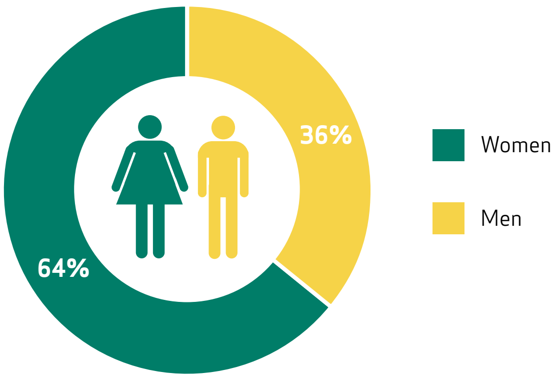


Source: Author's tabulations based on data from the SIPP 2014 Panel, Wave 1 merged with the SSA supplement. Data on retirement coverage references September-November 2014, for respondents ages 18-65 working at a job or business.

Working for an employer that offers a retirement savings plan is the first step toward retirement savings for most working people. Working for an employer that offers a plan, however, does not mean that an employee is eligible to participate in the plan. Employees may have to work a certain number of hours each year to be eligible or may have to have worked for the employer for a certain number of years before they are eligible to participate. **Table 1** shows that the percentage of women offered a plan increased nearly ten percent from 2012 to 2014, but the eligibility rate remained the same, leading to a participation rate that is almost flat as well. After becoming eligible for an offered plan, an employee must choose to participate, if the plan does not offer auto-enrollment. An eligible employee choosing to participate in an offered plan yields the participation rate. The data shows that 47 percent of both men and women were participating in an employer-sponsored plan in 2014.

Women are more likely to work part-time than men and represent a greater proportion of part-time workers. In 2016, 19 percent of women worked part-time, compared to 11 percent of men. Moreover, women constitute two-thirds of part-time workers, as seen in **Figure 3**. Part-time workers are much less likely to be eligible to participate in an employer-provided retirement savings plan, which constricts their ability to accumulate retirement savings. For example, in some plans covered by the Employee Retirement Income Security Act (ERISA), an employee must work a certain number of hours each year before being eligible to participate, and this excludes many part-time employees. The Setting Every Community Up for Retirement Enhancement (SECURE) Act that was enacted in December 2019 will encourage employers to provide coverage to part-time employees, which may lead to improved retirement savings for women.[3]

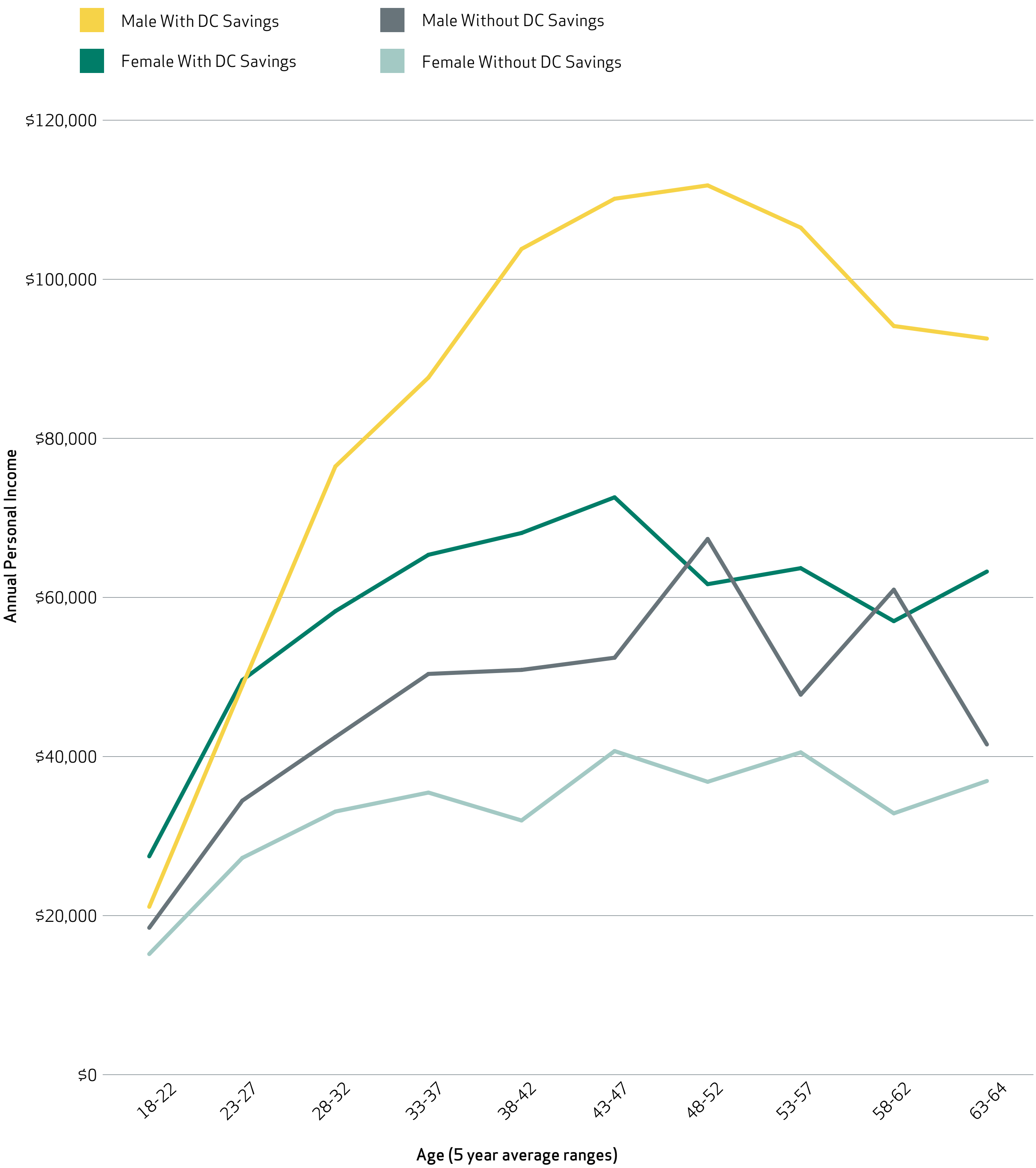
Figure 3: **Percentage of part-time employees, by gender, in 2016**



Source: Author's tabulations based on data from the twelfth month of the SIPP 2014 Panel, Wave 4 (Reference period December 2016), for respondents ages 18-65.

One way to observe the pay discrepancy between men and women is to measure the trajectory of age-earnings over the course of a career. **Figure 4** displays the age-earnings profiles of four groups: men with DC savings, women with DC savings, men without DC savings, and women without DC savings. Men with DC savings have a much higher age-earnings trajectory than any of the other three groups, and their trajectory is smoother. They are also the only group to achieve six figure earnings during their career. Women with DC savings will barely achieve $72,000 in earnings at the peak of their career (which occurs earlier in their career than for men); men without DC savings never even achieve that. Women without DC savings have much lower age-earnings, peaking around $40,000. This discrepancy in earnings interacts with the weaknesses of the defined contribution savings system. Previous research has shown how high-income earners benefit more from the DC system than moderate and low-income earners do.[4] This inefficient system serves to exacerbate the earnings gap between men and women (and between high-earning men and lower-earning men). This shows up in the data because the two groups with DC savings have higher earnings than the two groups without DC savings.

Figure 4: **Age earnings profiles by gender and DC savings**



Source: Author's tabulations based on data from the twelfth month of the SIPP 2014 Panel, Wave 4 (Reference period December 2016), for respondents ages 18-64 with non-zero earnings.

Different industries also offer access to different types of retirement plans (**Table 2**). Those who work in public administration are most likely to be offered a defined benefit (DB) plan, either alone or with a defined contribution plan. Meanwhile, those who work in the finance and insurance industries are most likely to be offered a DC plan, with just over half only being offered a DC plan and another quarter being offered both a DC and a defined benefit plan. Those who work in the Accommodation and Food Services industries are most likely to not be offered a plan at all, with more than half of these workers not being offered a plan through their employer.

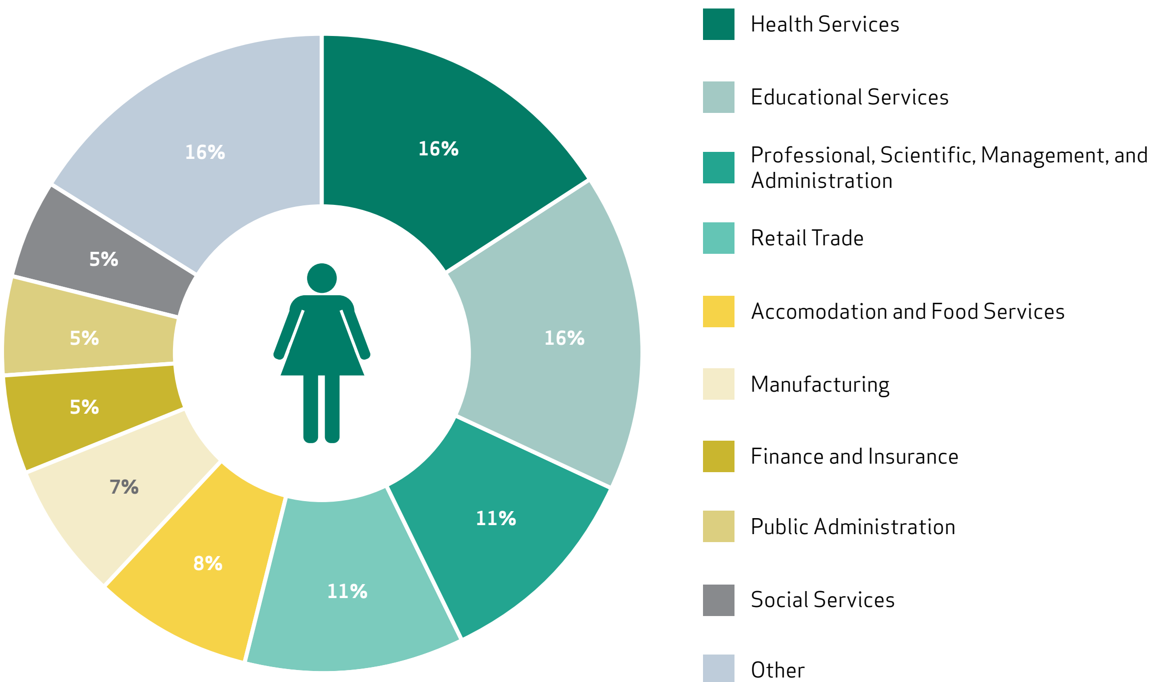
This variation in access to retirement plans by industry is true for both men and women, i.e., men and women who work in the same industry have similar access to different types of retirement plans. However, which industries men and women work in varies more widely. Women are much more likely than men to work in Health Services and Educational Services and men are twice as likely as women to work in Manufacturing. The two genders are more equal among the other industries identified in **Figure 5**.[5]

Table 2: **Women's retirement coverage by industry in 2014**

Industry	Both DB and DC Coverage	DB Only Coverage	DC Only Coverage	No Coverage
Health Services	17%	17%	45%	21%
Educational Services	17%	27%	42%	14%
Retail Trade	9%	12%	49%	29%
Public Administration	28%	33%	30%	9%
Professional, Scientific, Management and Administration	12%	12%	41%	35%
Accomodation and Food Services	2%	8%	37%	53%
Manufacturing	16%	14%	46%	23%
Finance and Insurance	24%	17%	51%	8%
Social Services	7%	16%	38%	39%

Source: Author's calculations using data from 2014 SIPP Wave 1 merged with SSA Supplement. Sample limited to those with a job or business who are age 18-65. The reference period for SSA supplement data on pensions is the interview date. The SSA supplement data were collected September-November 2014. Data for 2012 derived from SIPP 2008 panel, wave 11. Data for 2009 derived from SIPP 2008 panel, wave 3. Data for 2006 derived from SIPP 2004 panel, wave 7. Data for 2003 derived from SIPP 2001 panel, wave 7. Data for 1998 derived from SIPP 1996 panel, wave 7.

Figure 5: **Women's employment, by industry, in 2016**

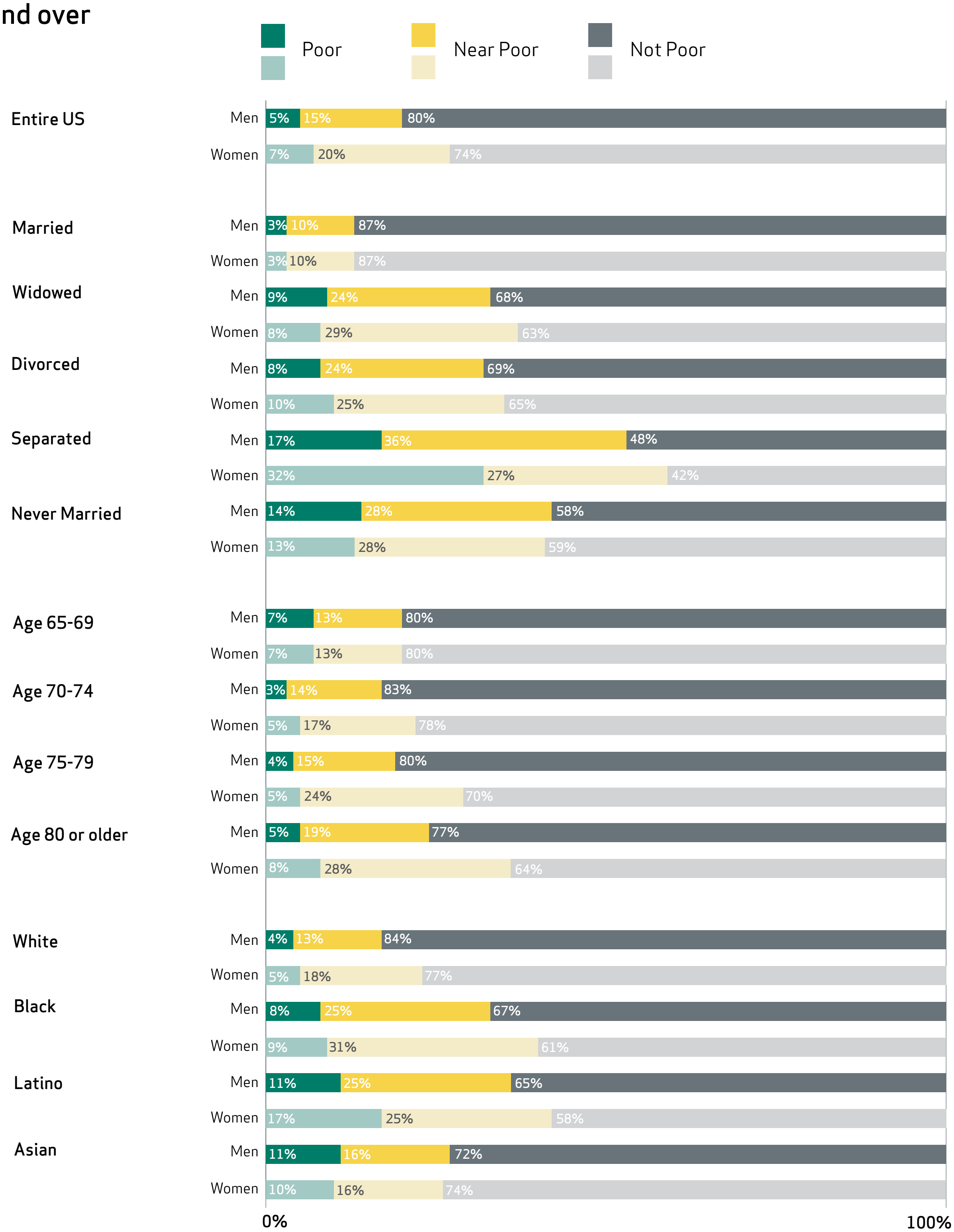


Source: Author's tabulations based on data from the twelfth month of the SIPP 2014 Panel, Wave 4 (Reference period December 2016), for respondents ages 18-65.

In important ways, other demographic characteristics seem to determine retirement outcomes more than gender differences (**Figure 6**). Women aged 65 and older are slightly more likely to be poor or near-poor than older men; however, men and women in similar circumstances seem to have roughly similar outcomes related to poverty. For example, older men and older women that are still married have nearly identical poverty rates (three percent, the lowest rate of any demographic category examined). As older Americans age, the proportion of married men only decreases slightly, while the number of married women declines significantly as the number of widows increases.

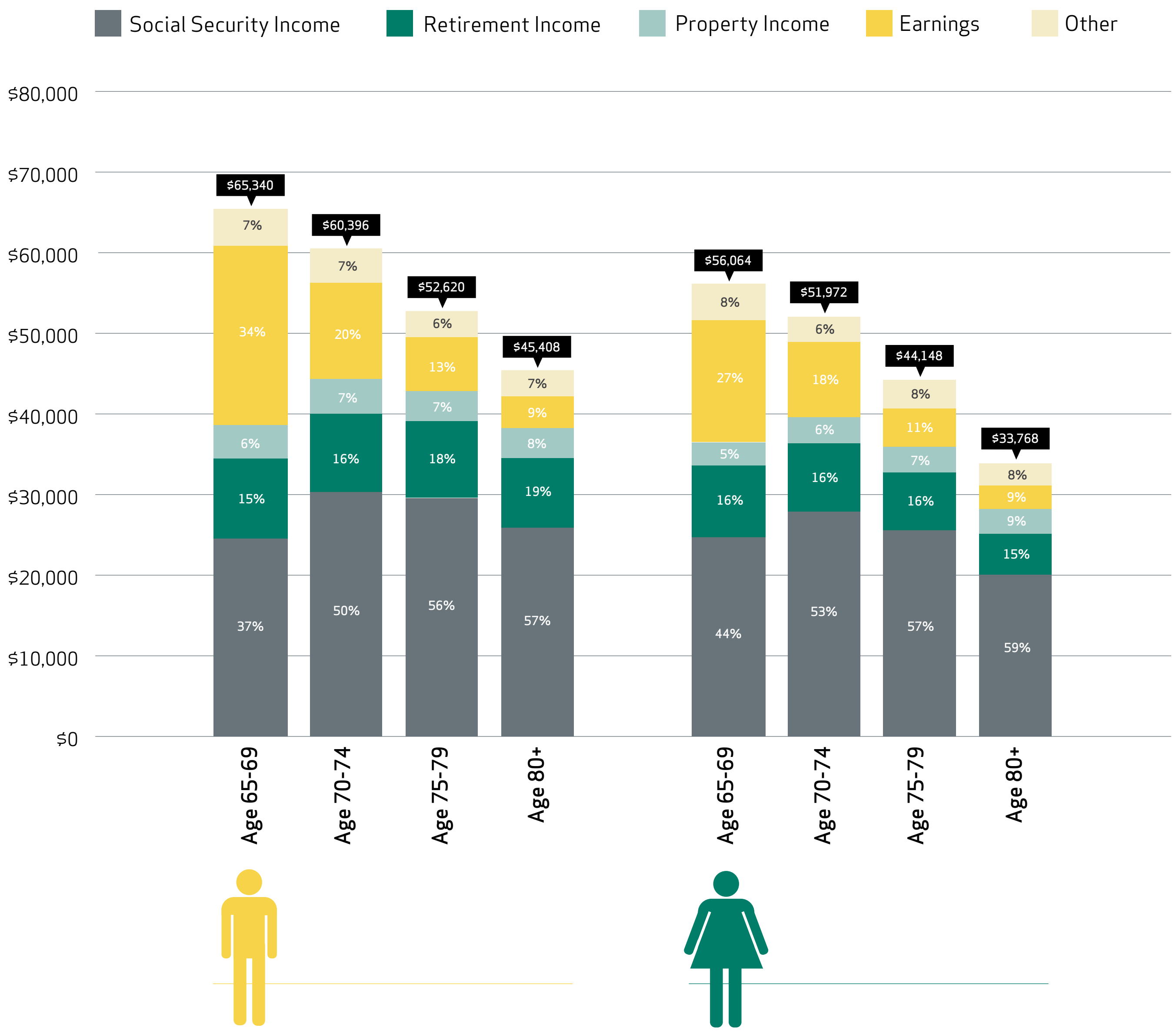
Across older age cohorts, poverty rates remain nearly the same between men and women, until reaching age 80+, when poverty rates for women increase noticeably (**Figure 7**). Because women live longer than men, there simply are more women in their eighties than men, and those women are more likely to be widows. Nearly two-thirds of women age 80 and older are widows, compared to men age 80 and older, nearly two-thirds of whom are still married. The median household income of women age 80+ drops significantly compared to men age 80+ and even compared to women age 75-79. A longer lifespan comes with a price for women in their eighties and nineties.

Figure 6: **Poverty rates by demographic category, in 2016, for women and men, age 65 and over**



Source: Author's tabulations based on data from the twelfth month of the SIPP 2014 Panel, Wave 4 (Reference period December 2016) for respondents ages 65+. Poor is defined as living in a household where household income falls below the poverty line. Near poor indicates household income between 100 and 199% of the poverty line. Not poor refers to households with income at or more than twice the poverty line.

Figure 7: **The composition of median household income for men and women, age 65 and over, by age, in 2016**



Source: Author's tabulations based on data from the twelfth month of the SIPP 2014 Panel, Wave 4 (Reference period December 2016) for respondents ages 65+. Median household income denominated in nominal $2016.

Comparing demographic profiles of the elderly poor against all elderly Americans yields some important findings as seen in **Table 3**. The elderly poor are less likely to be married (29%) and more likely to be divorced (22%), widowed (33%), or never-married (12%) than all elderly Americans. These findings relating to marital status reveal a simple truth: there is power in having multiple income streams in retirement.[6]

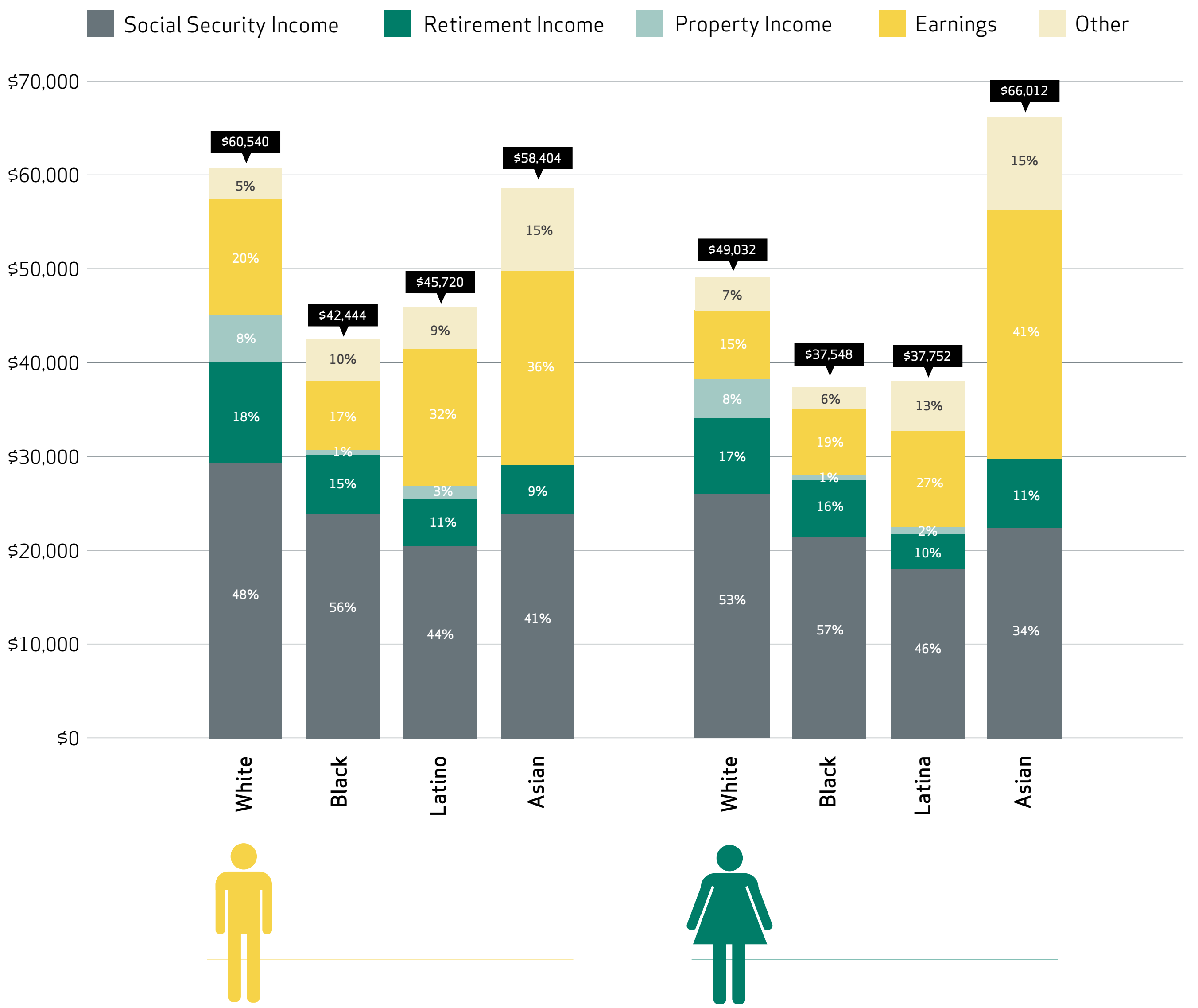
Married older Americans, both men and women, fare better in retirement than any group of non-married older Americans, whether divorced, widowed, or never-married. The elderly poor also are more likely to be Black or Latino. These findings relating to race confirm what is already known about income and wealth disparities among racial groups in the U.S (**Figure 8**).

Table 3: **Demograhic profiles of the poor and of all elderly, ages 65 and over, in 2016**

	Poor	All Seniors
Married	29%	56%
Widowed	33%	23%
Divorced	22%	14%
Separated	4%	1%
Never Married	12%	5%
Age 65-69	41%	33%
Age 70-74	18%	25%
Age 75-79	15%	18%
Age 80 or older	26%	24%
White	58%	78%
Black	13%	9%
Latino	21%	9%
Asian	8%	4%

Source: Authors' tabulations using SIPP 2014 wave 4 data (Reference period December 2016). Sample is limited to individuals ages 65+. Poverty threshold: Monthly Poverty Threshold – A monthly set of income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the threshold, then the family and each member in the family group is in poverty. The monthly poverty threshold is based on before-tax income. The monthly poverty threshold does not include non-cash benefits (such as public housing, Medicaid, and Food Stamps).

Figure 8: **The composition of median household income for men and women, age 65 and over, by ethnicity, in 2016**



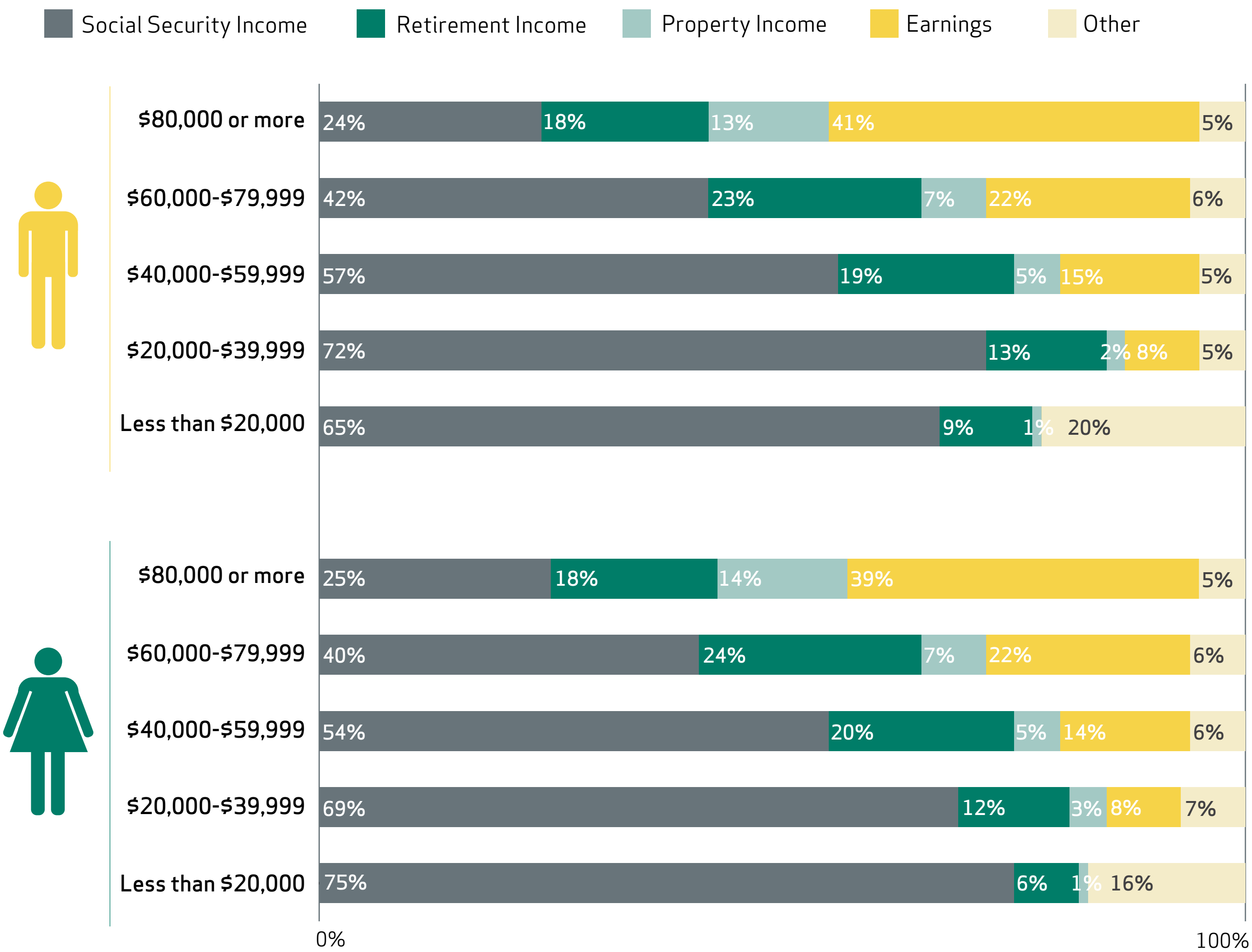
Source: Authors' tabulations using SIPP 2014 wave 4 data (Reference period December 2016). Sample is limited to individuals ages 65+.

PART TWO: SOURCES OF INCOME

Social Security is the largest income source for most demographic groups age 65 and over. Older women receive a somewhat higher percentage of their income from Social Security than older men, but older men receive a slightly higher percentage from earnings than older women. Social Security represents a greater percentage of income for those lower on the income scale for both men and women, whereas earnings is a greater income source for both men and women who are higher on the income scale. Widowed men and women rely the most on Social Security and the least on earnings. As men and women age, they also rely more on Social Security and less on earnings.

There are stark differences between low-income and high-income older women when it comes to their sources of income (**Figure 9**). Older women with less than $20,000 in median household income receive 75 percent of their income from Social Security on average. This compares to just 25 percent of income from Social Security for older women with $80,000 or more per year. Additionally, older women in the lowest income

Figure 9: **The composition of median household income for men and women, age 65 and over, by total household income, in 2016**



Source: Authors' tabulations using SIPP 2014 wave 4 data (Reference period December 2016). Sample is limited to individuals ages 65+.

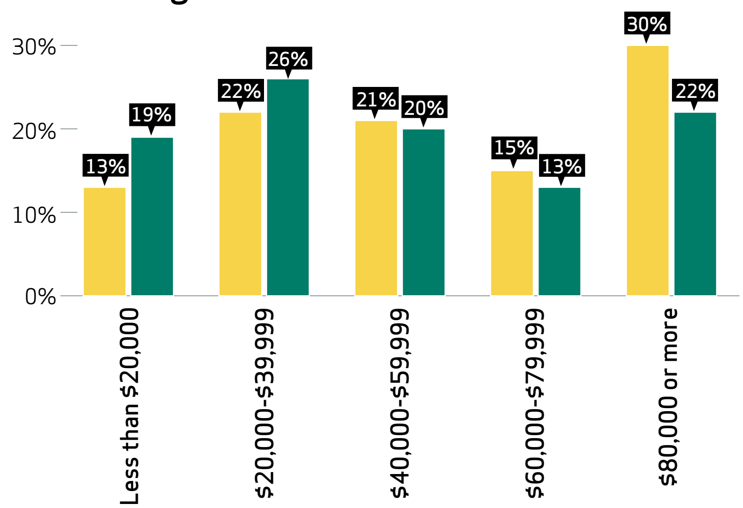
quintile receive 13 percent of their income from government transfer programs, compared to just 1 percent of income for older women in the highest quintile. Finally, older women in the highest quintile receive nearly two-fifths of their income from earnings, whereas older women in the lowest quintile receive no income from earnings.[7]

Interestingly, women in the fourth and third income quintiles, relative to the other three quintiles, receive higher proportions of their income from what the SIPP calls "retirement income", which is mostly various forms of defined benefit pension income.[8] This appears to bolster the argument that DB pensions act to protect a middle-class retirement. Previous NIRS research indicated that older Americans in the middle of the income distribution saw a greater proportion of their income replaced by DB pension income than those lower or higher on the income scale.[9] Women in the lowest two income quintiles are much less likely to have worked for an employer who provided a DB pension. Women in the highest income quintile may have earned a DB pension, but their income from other sources likely accounts for a greater proportion of their total income. For example, women in the top income quintile receive a much greater proportion of their income from property than the other four quintiles. As DB pension participation continues to decline, women are likely to be worse off in retirement because they will have to make their DC savings last for longer, due to their greater longevity.

When considering gender differences in retirement income, it is important to remember that women typically live longer than men, so their costs over their lifetime are higher because they have to pay for more years of retirement and they spend more years being single in retirement. Healthcare costs and housing costs are two of the largest costs older women will face, and housing inequality is increasing for older Americans.[10] Older women pay for more years of retirement with less money, which is why widows are particularly vulnerable (**Figure 10**).

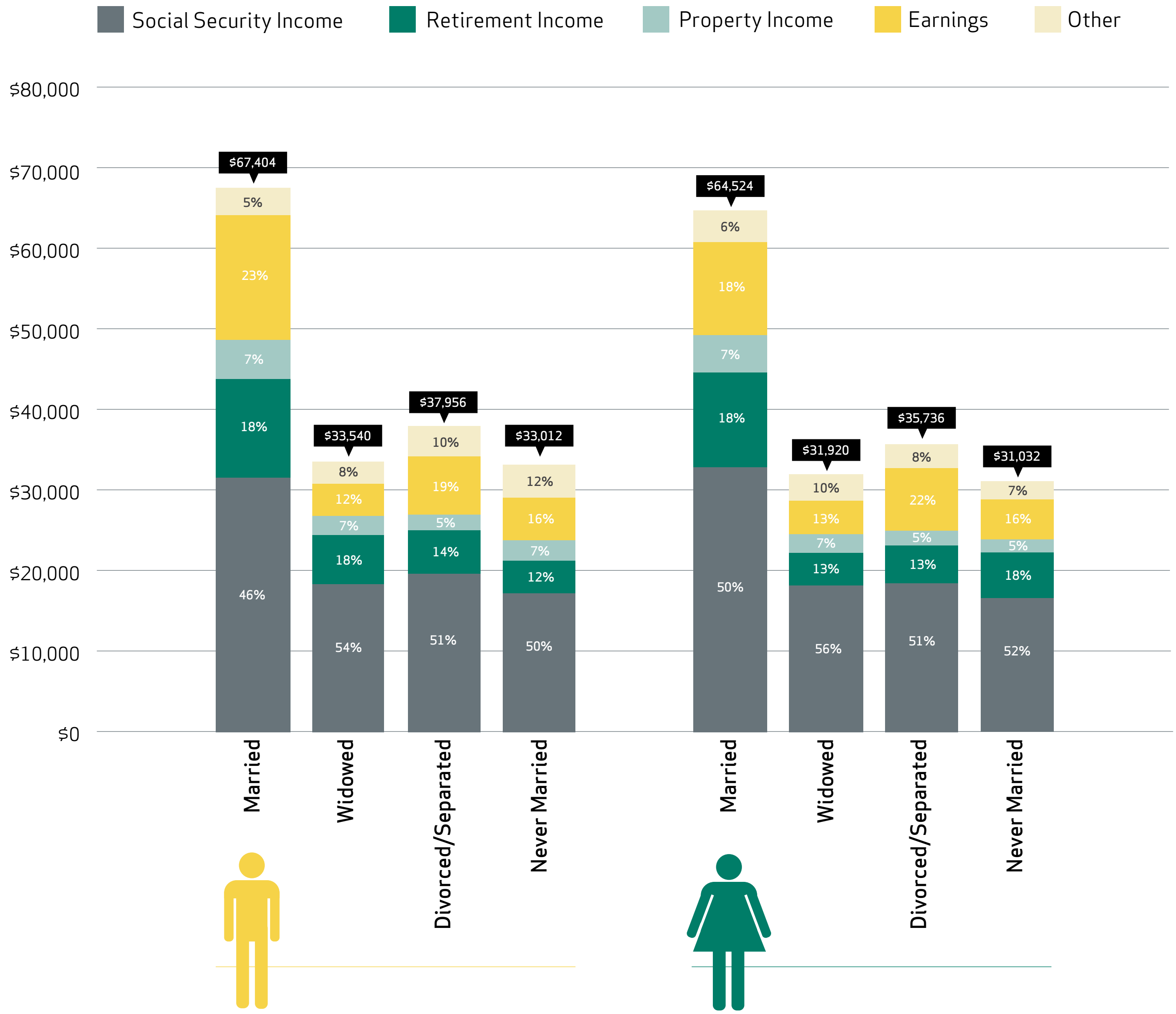
According to the SIPP data, 97 percent of older married women are living with someone, whereas 92 percent of older not-married women are living alone. This means these women have to bear more financial burdens by themselves. Once an older woman loses her spouse, she may have some reduced costs, but she also likely receives less total income, even with any survivor income she may receive. A widow also may have lost financial resources if her spouse incurred large end of life costs before passing.

Figure 9.2: **Percentage of men and women in income range**



Source: Authors' tabulations using SIPP 2014 wave 4 data (Reference period December 2016). Sample is limited to individuals ages 65+.

Figure 10: **The composition of median household income for men and women, age 65 and over, by marital status, in 2016**



Source: Authors' tabulations using SIPP 2014 wave 4 data (Reference period December 2016). Sample is limited to individuals ages 65+.

PART THREE: THE IMPACT OF DIVORCE ON RETIREMENT SECURITY

Divorce poses a major challenge in terms of retirement savings for women. The data suggest that the timing of a separation and/or divorce matters. If it happens early in a woman's life, she may have time to accrue her own retirement savings according to the data. Looking at women ages 18-64, married women fare the best in terms of retirement preparedness, followed by widowed women and divorced women (**Table 4**). Separated women of working age do poorly by comparison. However, the numbers change somewhat for women aged 65 and older.

Divorced women surpass married women in the value of individually owned DC accounts, although married women have much higher household DC savings (**Table 5**). Widowed women fare worse, while never married women seem to accumulate more savings once reaching retirement age. The sample size of elderly separated women was too small for a reliable analysis, so this report does not examine this group.

Table 4: **Individual retirement preparedness, those ages 18-64, in 2016**

		Value of Independently Owned DC Accounts		Value of Household DC Accounts		Participation in DB Account	
		Mean Values	Median Values	Mean Values	Median Values	Mean Values	Median Values
Men	Total	$53,386	$0	$98,482	$7,000	8%	0%
	Married	$84,874	$5,000	$136,055	$25,047	11%	0%
	Widowed	$64,674	$0	$67,969	$0	13%	0%
	Divorced	$58,951	$0	$58,591	$0	8%	0%
	Separated	$14,332	$0	$47,331	$0	4%	0%
	Never Married	$16,411	$0	$62,495	$0	3%	0%
Women	Total	$35,702	$0	$99,434	$7,000	7%	0%
	Married	$50,126	$0	$139,313	$27,000	9%	0%
	Widowed	$49,624	$0	$60,868	$0	6%	0%
	Divorced	$38,613	$0	$54,632	$1,000	7%	0%
	Separated	$10,478	$0	$22,259	$0	4%	0%
	Never Married	$13,099	$0	$61,214	$0	3%	0%

Source: Author's tabulations based on data from the twelfth month of the SIPP 2014 Panel, Wave 4 (Reference period December 2016), for respondents ages 18-64.

Married women are better off in terms of retirement savings as compared to single women, but marriage presents its own retirement challenges. The structure of Social Security works against dual-earner couples. Social Security currently provides a spousal benefit of up to 50 percent of the working spouse's benefit to the non-working spouse. In dual-earner couples, where each couple earns their own benefit, it is possible that no spousal benefit is provided. This can result in a scenario in which two couples, one single-earner and one dual-earner, both have the same annual income during their working years, but the single-earner couple receives more from Social Security because they receive the full benefit of the working spouse plus an additional 50 percent for the non-working spouse. The dual-earner couple may receive two smaller benefits that total less than that of the single-earner couple.

Much of the retirement savings infrastructure in the United States was established at a time when fewer women worked outside of the home, meaning they relied on a spousal benefit for their retirement income. Now, older women will only spend about half of their adult lives married. According to the Center for Retirement Research (CRR), "the percentage of women in their 50s who report being married has been declining steadily over the last 40 years."[11] Divorce is the main factor, but there has also been an increase in the number of women who have never married.

Table 5: **Individual retirement preparedness, those ages 65 and over, in 2016**

		Value of Independently Owned DC Accounts		Value of Household DC Accounts		Participation in DB Account	
		Mean Values	Median Values	Mean Values	Median Values	Mean Values	Median Values
Men	Total	$98,846	$0	$148,965	$1,600	9%	0%
	Married	$113,882	$0	$179,296	$21,000	10%	0%
	Widowed	$74,757	$0	$74,575	$0	6%	0%
	Divorced	$62,416	$0	$93,333	$0	8%	0%
	Separated	$8,920	$0	$19,203	$0	0%	0%
	Never Married	$68,584	$0	$81,313	$0	7%	0%
Women	Total	$49,272	$0	$109,645	$0	5%	0%
	Married	$56,798	$0	$170,589	$13,400	6%	0%
	Widowed	$29,060	$0	$41,766	$0	4%	0%
	Divorced	$66,965	$0	$83,580	$0	5%	0%
	Separated	-	-	-	-	-	-
	Never Married	$57,092	$0	$85,053	$0	9%	0%

Source: Author's tabulations based on data from the twelfth month of the SIPP 2014 Panel, Wave 4 (Reference period December 2016), for respondents ages 65+.

Dual-earner married couples also tend to save less than they should for retirement. CRR has shown that dual-earner, single-saver households fall significantly behind in terms of their retirement preparedness.[12] This may be because only one earner in the couple has access to a retirement savings plan through their employer. A couple may be saving, but may only be saving enough for an individual. This means that as a household, a couple may not have adequate savings to sustain their standard of living in retirement. It is critical that both spouses save for retirement in a dual-earner couple or that the spouse with access to a plan save an appropriate amount to replace both earners' income in retirement.

The impact of divorce is significant and lingers. Divorce is costly, and it also can lead to the division of retirement assets that then fail to grow as much as they would have otherwise. CRR calculated the impact of divorce on the National Retirement Risk Index (NRRI).[13] This calculation confirms that divorce puts people at greater risk of falling behind their standard of living in retirement, but divorced single women seem to fare better than divorced single men or previously divorced people who remarry. Using data from the 2016 Survey of Consumer Finances, CRR researchers determined that half of divorced single women own a home, which is a major asset that decreases the likelihood of falling behind in retirement. The 2014 SIPP reveals that 92 percent of divorced women aged 65+ live alone, so owning a home is a major factor for retirement security for these women.[14]

Being previously married increases the risk of falling behind in retirement in subsequent marriages. The divorce rate is 2.5 times higher for those in remarriages than those in first marriages, which means couples with a previously married spouse are at greater retirement risk. In fact, CRR determined that married couples with a previous divorce for at least one of the spouses are the most at risk of falling behind their standard of living in retirement.[15]

Other researchers have noted the increase in "gray divorce," which is divorce among older Americans. Brown and Lin found that the divorce rate among middle-aged and older adults doubled during the 1990s and 2000s, a time when the overall national divorce rate was stabilizing and perhaps declining.[16] Divorce for older women seems to be connected to women's economic empowerment. Older women who work full-time and have some measure of financial autonomy are more likely to divorce, according to Brown and Lin. Women who work full-time and have the economic resources to live on their own are more likely to work for an employer that provides a retirement savings plan, which means these women who divorce likely can accrue retirement savings, as the SIPP data show.[17]

One issue of particular relevance to retirement plans relating to divorce is a qualified domestic relations order (QDRO). A QDRO is a special court order that grants a person a right to a portion of the retirement benefits his or her former spouse has earned through participation in an employer-sponsored retirement plan. QDROs may be prepared during divorce proceedings, but they also can be filed years after divorce.

Under a QDRO, the person who earned the benefit is called the "participant" and the person who is designated to receive a share of that benefit is called the "alternate payee." QDROs can award benefits to the alternate payee while the participant is alive, as well as survivor benefits if the participant dies. There is an important distinction between a domestic relations order and a qualified domestic relations order. Any family law court can issue a domestic relations order, but a domestic relations order becomes qualified only once it is accepted by the plan. The rules governing QDROs differ among the hundreds of thousands of private retirement plans in the U.S. and differ between public and private plans. Under a public plan, the relevant order may not even be called a QDRO; under federal plans it is called a Court Order Acceptable for Processing (COAP). It is important for women going through a divorce to obtain a QDRO so they can receive retirement benefits to which they are legally entitled. But there seem to be practical barriers that prevent QDROs from being implemented as intended. A lack of knowledge among many family law practitioners means that QDROs are often filed too late or never filed at all, meaning eligible women miss out on retirement assets.

PART FOUR: CAREGIVING AND RETIREMENT SAVINGS

Caring for a child, grandchild, parent, or ailing spouse can widen the already substantial gender wealth gap.[18] Women are more likely to be caregivers, and caregiving makes it more difficult for people to save for their own retirement.

Caregiving is not a one-off event, but potentially occurs multiple times over the course of one's life. This includes caring for children, grandchildren, older parents, and ailing spouses,[19] and the need or desire to care for someone can happen at any age.[20] Caregiving often is unexpected, for instance, when a parent or spouse falls ill. Women are more likely than men to provide care (60% of caregivers are women), and they typically will spend more time caring for someone else when a couple takes on such responsibilities.[21]

Several labor market factors exist that are associated with caregiving, especially for women, that make saving for retirement harder.[22] Women often cut back on their hours at work or leave the workforce to handle the time consuming, physically and often emotionally demanding caregiving work.[23] Also, women could lose access to employer-sponsored retirement plans during caregiving. In terms of earnings, women who are caregivers often have lower earnings because of social pressures, cultural expectations, or discrimination.[24] Lower earnings also means decreased tax incentives to save for retirement. And those caring for someone else often experience more job instability due to the unexpected demands from caregiving. And frequent job changes make it more difficult to access employer-sponsored retirement benefits because of vesting requirements.

These are not the only factors that make it harder for caregivers to save for retirement. Caregivers often provide financial support to parents and ailing spouses, leaving less money for retirement savings. Further, caregivers can experience a decline in physical and emotional health when taking care of an older parent or a sick or disabled spouse.[25] Worse health status not only increases out-of-pocket expenditures, but also makes it more difficult for people to work for pay. Basically, caregivers can incur higher costs, creating additional obstacles to saving.

Table 6 shows total retirement wealth in DC plans and DB pensions by caregiving, gender, and age from 2010 to 2016.[26] Women always have less retirement wealth than men. And, those with caregiving risk generally have less total retirement wealth than those without such risks (**Table 6**). For example, women older than 50 years who are living with a healthy spouse had a median retirement savings balance of $104,547 as compared to $60,835 for women who live with a spouse who is sick or disabled (**Table 6**). Also, women 50 years old and older living with a child 10 years old or younger had $65,278 in median retirement wealth, while women without children had $114,000 (**Table 6**). Furthermore, women 50 years and younger, who have financially dependent parents had a median retirement wealth of only $16,000, while it was $24,980 for those without dependent parents (**Table 6**). Since caregiving risk is associated with lower retirement wealth and women are more likely to face caregiving risks than men, caregiving risks widen an already large gender wealth gap.[27]

The gaps in retirement wealth associated with caregiving follow primarily from differences in DC account balances. This largely stems from the fact that 401(k) plans and Individual Retirement Accounts (IRAs) have become more widespread over time. Also, individuals can make choices, including the choice not to participate, in these accounts, unlike DB pensions. For example, caregivers often are less likely to participate in a 401(k) plan at work, and they may even contribute less to such plans than non-caregivers, possibly to accommodate additional financial demands.[28] Yet, caregivers generally have no choice as to whether to participate and how much to contribute in a DB pension. Participation in a pension typically is mandatory, which helps alleviate the adverse financial impacts of caregiving.

Table 6: **Median retirement wealth by caregiving risk, gender and age, 2010 to 2016**

Type of Caregiving	Caregiving Status	Younger Than 50 Years		50 Years and Older	
		Women	Men	Women	Men
All Caregiving Risk	Non-caregivers	$30,933	$53,056	$103,111	$229,613
	Caregivers	$23,715	$46,400	$65,278	$154,666
	% Difference	30%	14%	58%	48%
Parental Care Risk	Non-caregivers	$24,747	$50,000	$93,006	$240,000
	Caregivers	$23,000	$35,000	$97,955	$208,283
	% Difference	8%	43%	-5%	15%
Parents as Financial Dependents	No Dependents	$24,980	$50,000	$93,953	$237,154
	Dependents	$16,000	$26,702	$68,467	$243,000
	% Difference	56%	87%	37%	-2%
Spousal Care Risk	Healthy Spouse	$31,634	$56,000	$104,547	$242,531
	Sick/Disabled Spouse	$25,000	$40,000	$60,835	$100,000
	% Difference	27%	40%	72%	143%
Child Care Risk	No Children	$23,765	$32,420	$114,000	$216,853
	Younger Children	$24,317	$45,369	$61,866	$135,741
	Older Children	$36,000	$89,636	$87,100	$240,000

Source: Authors' calculations based on Board of Governors. Federal Reserve System. Various years. Survey of Consumer Finances. Washington, DC: Fed. Sample includes people in wage and salary employment and the self-employed. Sample only includes married women and men when considering spousal care risk. Retirement wealth is the sum of DC accounts and imputed DB pension wealth in 2016 dollars, deflated by CPI-U-RS. Median retirement wealth amounts calculated only for people who have positive retirement wealth. Caregiving risk is defined as having either child care risk, parental care risk or spousal care risk. Child care risk refers to living with children 10 years old and younger or children older than 10 years. Parental care risk refers to living with parents and grandparents. Parental financial dependents refers to living with parents and grandparents who are financially dependent on the respondent and her spouse. Spousal care risk refers to living with a spouse who is in poor health or disabled. For more details on retirement plan participation and savings behavior, please see Christian E. Weller & Michele E. Tolson (2020): The Retirement Savings Penalty Borne by Women, Challenge, DOI: 10.1080/05775132.2020.1723290.

Table 7 shows 401(k) balances for those who have such accounts by gender and caregiving risk. The biggest caregiving-related differences are associated with spousal caregiving risks. Younger women with a sick or disabled spouse, for example, had a median balance of $8,249 from 2010 to 2016, compared to $15,000 for those with a healthy spouse (**Table 7**).

Table 7: **Conditional median DC account balances by caregiving risk, gender and age, 2010 to 2016**

Type of Caregiving	Caregiving Status	Younger Than 50 Years		50 Years and Older	
		Women	Men	Women	Men
All Caregiving Risk	Non-caregivers	$17,370	$30,933	$41,927	$117,546
	Caregivers	$12,159	$27,840	$33,541	$67,000
	% Difference	43%	11%	25%	75%
Parental Care Risk	Non-caregivers	$14,927	$30,000	$43,306	$111,086
	Caregivers	$14,000	$15,467	$35,610	$97,955
	% Difference	7%	94%	22%	13%
Parents as Financial Dependents	No Dependents	$14,927	$30,000	$43,355	$111,086
	Dependents	$14,927	$15,467	$32,424	$109,297
	% Difference	0%	94%	34%	2%
Spousal Care Risk	Healthy Spouse	$15,000	$33,160	$41,244	$123,733
	Sick/Disabled Spouse	$8,249	$20,622	$28,739	$30,000
	% Difference	82%	61%	44%	312%
Child Care Risk	No Children	$14,369	$21,001	$44,213	$114,000
	Younger Children	$12,194	$28,000	$35,226	$66,320
	Older Children	$20,000	$50,000	$37,581	$113,422

Source: Authors' calculations based on Board of Governors. Federal Reserve System. Various years. Survey of Consumer Finances. Washington, DC: Fed. Sample includes people in wage and salary employment and the self-employed. Sample only includes married women and men when considering spousal care risk. Sample for parental care risk measures includes only those who have at least one parent still alive. All dollar values in 2016 dollars, deflated by CPI-U-RS. Median DC assets and DB pension wealth only calculated for those who have such assets. Child care risk refers to living with children 10 years old and younger or children older than 10 years. Parental financial dependents refers to living with parents and grandparents who are financially dependent on the respondent and her spouse. Spousal care risk refers to living with a spouse who is in poor health or disabled. "n.a." indicates not applicable due to small sample size. Weller & Tolson (2020). For more details on retirement plan participation and savings behavior, please see Christian E. Weller & Michele E. Tolson (2020): The Retirement Savings Penalty Borne by Women, Challenge, DOI: 10.1080/05775132.2020.1723290.

Table 8: **Caregiving and retirement savings, from 2008 to 2014**

	Women				Men			
	No Caregiving	Past Caregivers	Potential Caregivers	Current Caregivers	No Caregiving	Past Caregivers	Potential Caregivers	Current Caregivers
Parental Caregivers								
Share with 401(k) plan	30.9%	25.0%	38.0%	29.8%	38.1%	33.3%	37.3%	35.6%
Median 401(k) contributions	5.0%	4.0%	5.3%	4.4%	6.0%	5.4%	6.2%	7.3%
Mean 401(k) balance (unconditional)	$34,382	$28,620	$38,270	$30,573	$70,369	$83,522	$89,671	$66,285
Median wealth	$200,745	$193,353	$268,028	$187,489	$201,177	$165,412	$269,187	$239,177
Mean wealth	$380,339	$499,406	$408,173	$331,666	$475,193	$432,920	$769,143	$327,635
Spousal caregiving								
Share with 401(k) plan	32.0%	-	25.5%	26.2%	38.0%	-	32.1%	25.2%
Median 401(k) contributions	5.5%	-	3.8%	3.6%	6.0%	-	3.0%	3.6%
Mean 401(k) balance (unconditional)	$37,579	-	$8,937	$27,637	$78,267	-	$32,512	$21,710
Median wealth	$276,519	-	$101,600	$117,353	$280,709	-	$134,948	$68,937
Mean wealth	$415,145	-	$179,921	$350,240	$510,943	-	$208,212	$193,530

Source: Authors' calculations based on University of Michigan. Health and Retirement Study. Various years. Ann Arbor, MI: University of Michigan. Parental caregiving refers to providing personal care to parents and parents-in-law. Spousal caregiving refers to providing help with activities of daily living to a spouse who needs such help. The sample for parental caregivers includes those at least 50 years old, who have at least one parent or parent-in-law alive. The sample for spousal caregivers includes people 50 years old and older, who are married. "n.a." stands for not available since sample sizes are too small. Likelihood of 401(k) participation calculated only for wage and salary employees. Median 401(k) contributions and median 401(k) balances only calculated for people with 401(k) accounts. Total retirement wealth is the sum of all 401(k) balances of the respondent and the spouse plus IRA balances at the household level. Median 401(k) account balances, median wealth and median retirement wealth calculated only for near retirees, those who will retire within the next two waves. All average wealth calculations are unconditional means, whereby we do not account for whether somebody has that particular asset or not. Our sample again only includes near retirees. All dollar figures are deflated to 2014 dollars by using the Consumer Price Index for Urban Consumers, Research Series (CPI-U RS). Source is Bureau of Labor Statistics. CPI-U RS. Washington, DC: BLS. Christian Weller acknowledges previous funding from AARP for part of his research on caregiving and reteirement savings.

Other data sources also indicate that caregiving worsens the retirement gender wealth gap.[29] **Table 8** summarizes data from the University of Michigan's Health and Retirement Study (HRS) for spousal and parental caregivers.[30] Spousal caregivers live in households with less wealth than non-caregivers. Women who care for their spouse lived in households that had less than half the median wealth of non-caregiver households – $117,353 compared to $276,519 – from 2008 to 2014 (**Table 8**). For men, the relevant gap amounted to $68,397 compared to $280,709 during that same period (**Table 8**). These differences in total family wealth by caregiving status follow from differences in 401(k) account balances as caregivers have smaller account balances than non-caregivers (**Table 8**). Importantly, these gaps follow from stark differences in 401(k) participation and contribution rates as spousal caregivers are much less likely to participate in such plans and when they do, they contribute less (**Table 8**). The large wealth gaps associated with spousal caregiving reflect similar trends in the prior tables.

Parental caregiving also appears to be associated with less wealth (**Table 8**). The median family wealth for women was $187,489 compared to $200,745 for non-caregivers (**Table 8**). Their average wealth also was lower (**Table 8**). But men had a median wealth of about $239,177 as caregivers, while non-caregivers owned $201,177 from 2008 to 2014 (**Table 8**). Yet, their average wealth also was lower among families with parental caregiving responsibilities as compared to non-caregivers (**Table 8**). These differences again reflect somewhat lower 401(k) account balances, participation rates, and contribution rates among caregivers than among non-caregivers (**Table 8**). That is, there exists no evidence that families offset lower retirement balances associated with caregiving with other forms of savings. The wealth and retirement savings gaps we observe with respect to parental caregiving, though, are generally less pronounced than those for spousal caregiving. This again is consistent with the data in the prior tables, whereby spousal caregiving risks showed the starkest wealth differences.

All forms of caregiving go along with a worse gender retirement savings gap. Even without factoring in caregiving, women tend to have lower retirement balances as compared to men. Caregiving responsibilities, especially for parents and ailing spouses, are associated with lower retirement savings and ultimately less wealth, typically because caregivers are less likely to participate in and contribute to a 401(k) plan. Because women still tend to provide more such care, they are more likely to experience any negative savings effects from caregiving, thus widening the gender wealth gap.

CONCLUSION

Women's retirement outcomes are determined largely by the social and economic structures in which they live. The gender pay gap follows women during their careers and into retirement. But in other ways, different groups of women have different retirement experiences. Women in a first marriage, especially one in which both spouses work and both spouses save, have the best retirement outcomes. Older widows are more likely to fall into poverty, and all women in their 80s and above tend to have much lower retirement incomes generally.

Divorce is an experience that delivers different financial outcomes for different groups. For example, women who divorce early in life, keep their house in the divorce, and remain single for the remainder of their lives are more likely to accumulate sufficient savings to maintain their standard of living in retirement.

Caregiving impacts women much more than men throughout all phases of caregiving, and it has a highly detrimental impact on women's retirement preparedness, especially if the woman is providing care for an ailing spouse. For both men and women, when caring for a spouse, the couple's resources are utilized and eroded, which decreases retirement security for the surviving spouse. When caring for a child or a parent, at least one spouse can continue working and accumulating resources for the couple.

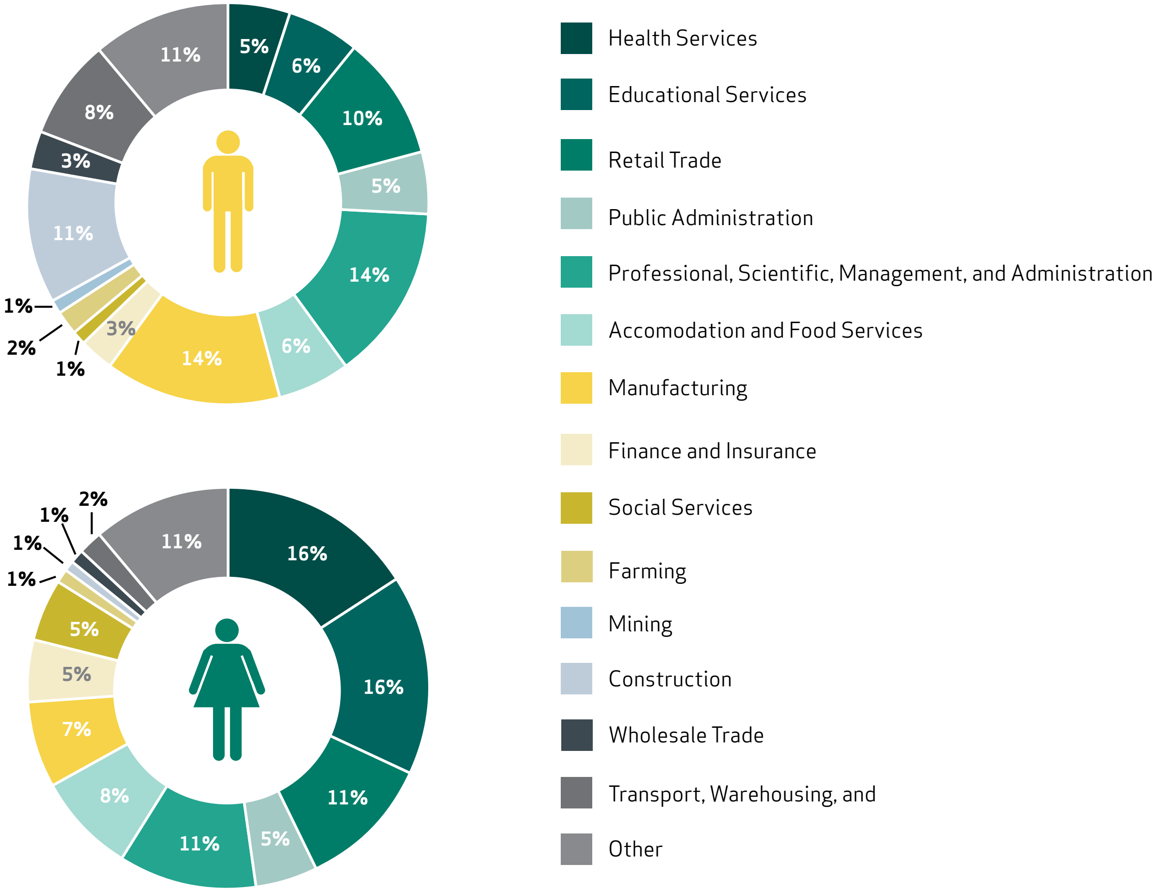
Saving adequately for retirement is a challenge for all Americans, but women face unique difficulties. Going forward, policymakers should consider how to update features of the retirement savings infrastructure to meet the needs of women in the 21st century. As Congress considers whether and how to expand Social Security, adjusting the spousal benefit and providing caregiving credits in Social Security should be priorities. States could adopt more generous family leave policies to make it less punitive for women to take time out of the labor force to provide caregiving. Congress and state legislatures could consider removing age limits on the Earned Income Tax Credit (EITC), so that low-income working people all of ages could receive this income boost. Finally, creating a universal savings vehicle for all workers, including those in caregiving roles, would give working people the opportunity to save for their retirement, even if their employer does not offer a plan.

Table 2.2: **Retirement coverage by industry, by gender**

Industry	Men				Women			
	Both DB and DC Coverage	DB Only Coverage	DC Only Coverage	No Coverage	Both DB and DC Coverage	DB Only Coverage	DC Only Coverage	No Coverage
Health Services	18%	14%	47%	21%	17%	17%	45%	21%
Educational Services	17%	25%	44%	14%	17%	27%	42%	14%
Retail Trade	10%	12%	47%	32%	9%	12%	49%	29%
Public Administration	32%	32%	29%	6%	28%	33%	30%	9%
Professional, Scientific, Management and Administration	12%	11%	41%	36%	12%	12%	41%	35%
Accomodation and Food Services	3%	9%	37%	51%	2%	8%	37%	53%
Manufacturing	16%	16%	47%	22%	16%	14%	46%	23%
Finance and Insurance	22%	17%	41%	20%	24%	17%	51%	8%
Social Services	6%	7%	39%	47%	7%	16%	38%	39%

Source: Author's calculations using data from 2014 SIPP Wave 1 merged with SSA Supplement. Sample limited to those with a job or business who are age 18-65. The reference period for SSA supplement data on pensions is the interview date. The SSA supplement data were collected September-November 2014.

Figure 5.2: **Employment, by sex and industry, in 2016**



Source: Author's tabulations based on data from the twelfth month of the SIPP 2014 Panel, Wave 4 (Reference period December 2016), for respondents ages 18-65.

Table 9: **The composition of median household income for men and women, age 65 and over, by marital status and living arrangement, in 2016**

Men								
	Married		Widowed		Divorced/Separated		Never Married	
	Living with Someone	Living Alone	Living with Someone	Living Alone	Living with Someone	Living Alone	Living With Someone	Living Alone
Median Household Income	$67,956	$50,724	$80,076	$30,468	$77,676	$33,108	$47,568	$31,788
Social Security Income	46%	46%	39%	56%	34%	54%	61%	48%
Earnings	23%	27%	37%	9%	40%	15%	18%	16%
Retirement Income	18%	9%	11%	18%	14%	15%	9%	13%
Property Income	7%	6%	9%	7%	4%	5%	6%	7%
Other Income	5%	11%	4%	9%	9%	10%	5%	13%
% of the Group	97%	3%	9%	91%	15%	85%	10%	90%

Women								
	Married		Widowed		Divorced/Separated		Never Married	
	Living with Someone	Living Alone	Living with Someone	Living Alone	Living with Someone	Living Alone	Living with Someone	Living Alone
Median Household Income	$65,292	$31,164	$90,420	$29,688	$77,964	$33,252	$80,808	$29,280
Social Security Income	50%	50%	26%	59%	32%	53%	28%	54%
Earnings	18%	24%	56%	10%	40%	20%	52%	12%
Retirement Income	19%	11%	7%	14%	16%	13%	10%	19%
Property Income	7%	2%	4%	7%	4%	5%	5%	5%
Other Income	5%	13%	6%	11%	7%	9%	5%	7%
% of the Group	97%	3%	8%	92%	8%	92%	8%	92%

Source: Author's tabulations based on data from the twelfth month of the SIPP 2014 Panel, Wave 4 (Reference period December 2016) for respondents ages 65+. Median household income denominated in nominal $2016.

ENDNOTES

1. Bureau of Labor Statistics, U.S. Department of Labor, The Economics Daily, 51 percent of private industry workers had access to only defined contribution retirement plans on the Internet at https://www.bls.gov/opub/ted/2018/51-percent-of-private-industry-workers-had-access-to-only-defined-contribution-retirement-plans-march-2018.htm (visited April 27, 2020).
2. National Committee on Pay Equity, "The Wage Gap Over Time: In Real Dollars, Women See a Continuing Gap," on the Internet at https://www.pay-equity.org/info-time.html (visited April 27, 2020).
3. The SECURE Act requires employers to allow long-term, part-time employees, those who work at least 500 hours per year for at least three consecutive 12-month periods and are at least 21 years old by the end of the last 12-month period, to participate in a 401(k) plan and make deferrals.
4. Morrissey, Monique. (2016). "The State of American Retirement: How 401(k)s Have Failed Most American Workers." Washington, DC: Economic Policy Institute. Weller, Christian and Teresa Ghilarducci. (2015). "The Inefficiencies of Existing Retirement Savings Incentives." Washington, DC: Center for American Progress.
5. Please see the Appendix for additional charts on the breakdown by industry and gender.
6. Previous NIRS research found that having more than one source of retirement income greatly reduced the likelihood of being in poverty in retirement. Bond, Tyler and Frank Porell. (2020). Examining the Nest Egg: the Sources of Retirement Income for Older Americans. Washington, DC: National Institute on Retirement Security.
7. According to the data in Figure 9.2, the greatest difference in the percentage of men and women in the different income quintiles occurs in the highest income quintile: 30% of older men fall in this category compared to just 22% of older women.
8. Specifically, retirement income includes: retirement income from a company pension/union including income from a profit sharing plan, Federal civil service pension, US Govt railroad retirement, state/local govt pension, military retirement pay, National Guard/reserve forces retirement, other retirement income.
9. Bond, Tyler and Frank Porell. (2020). Examining the Nest Egg: the Sources of Retirement Income for Older Americans. Washington, DC: National Institute on Retirement Security.
10. See "Housing America's Older Adults 2019" from the Joint Center for Housing Studies of Harvard University, available on the Internet at https://www.jchs.harvard.edu/housing-americas-older-adults-2019
11. Munnell, Alicia, Wenliang Hou, and Geoffrey T. Sanzenbacher. (2019). "Women, Marriage, and the National Retirement Risk Index." Boston, MA: Center for Retirement Research at Boston College.
12. Sanzenbacher, Geoffrey and Wenliang Hou. (2019). "Do Individuals Know When They Should Be Saving for a Spouse?" Boston, MA: Center for Retirement Research at Boston College.
13. Munnell, Alicia, Wenliang Hou, and Geoffrey T. Sanzenbacher. (2018). "How Does Divorce Affect Retirement Security?" Boston, MA: Center for Retirement Research at Boston College.
14. See Table 9 in the Appendix of this report.
15. A household with a divorce is 7 percentage points higher on the National Retirement Risk Index than households with no history of divorce.
16. Susan L. Brown, I-Fen Lin, The Gray Divorce Revolution: Rising Divorce Among Middle-Aged and Older Adults, 1990–2010, The Journals of Gerontology: Series B, Volume 67, Issue 6, November 2012, Pages 731–741, https://doi.org/10.1093/geronb/gbs089
17. It should be noted that domestic violence is another cause of divorce, and survivors of domestic violence are often economically disadvantaged because economic coercion is present in most domestic violence cases and also because abuse often interferes with women's ability to keep a job. Thus, survivors may be less able to accrue retirement savings.
18. See, for instance, Butrica, Barbara, Karen Smith, and

Howard Iams. (2012). "This Is Not Your Parents' Retirement: Comparing Retirement Income across Generations." Social Security Bulletin, 72 (1) (2012): 37–58; Glass, Jr., J. Conrad and Beverly B. Kilpatrick. (1998). "Financial Planning for Retirement: An Imperative for Baby Boomer Women." Educational Gerontology, 24 (6) (1998): 595–617; Arano, Kathleen, Carl Parker, and Rory Terry. (2010). "Gender-Based Risk Aversion and Retirement Asset Allocation." Economic Inquiry 48 (1): 147–155; Sunden, Annika and Brian J. Surette. (1998). "Gender Differences in the Allocation of Assets in Retirement Savings Plans." The American Economic Review, 88 (2): 207–211; Deere, Carmen D. and Cheryl R. Doss. (2006). "The Gender Asset Gap: What Do We Know and Why Does It Matter?" Feminist Economics, 12(1-2): 1-50.

19. Collinson, Catherine and Hector De La Torre. (2017). "The Many Faces of Caregivers: A Close-Up Look at Caregiving and Its Impacts." Baltimore, MD: Transamerica Institute.

20. The AARP advocates for a broad definition of caregiving: "Family Caregiver: Broadly defined, refers to any relative, partner, friend, or neighbor who has a significant personal relationship with, and who provides a broad range of assistance for, an older person or an adult with a chronic, disabling, or serious health condition."

21. Feinberg, Lynn F. and Rita Choula. (2012). "Understanding the Impact of Family Caregiving on Work." AARP PPI Fact Sheet No. 271. Washington, DC: AARP Public Policy Institute and NAC and AARP Public Policy Institute. (2015). "Caregiving in the U.S." Washington, DC: NAC.

22. For a detailed summary of the literature, see Weller, Christian E. and Tolson, M. (2019). Unpaid Family Caregiving and Retirement Savings. PERI Working Paper No. 490. Amherst, MA: Political Economy Research Institute, University of Massachusetts, Amherst.

23. On hours by caregiving status, see Lundberg, Shelly, and Elaina Rose. (2000). "Parenthood and the Earnings of Married Men and Women." Labour Economics, 7(6): 689–710 and Sanchez, Laura, and Elizabeth Thomson. (1997). "Becoming Mothers and Fathers: Parenthood, Gender, and the Division of Labor." Gender and Society 11(6): 747-72.) for child care. For adult care and its effect on hours, see Butrica, Barbara and Nadia Karamcheva. (2014). "The Impact of Informal Caregiving on Older Adults' Labor Supply and Economic Resources." Washington, DC: Urban Institute; Johnson, Richard W., and Anthony T. Lo Sasso. (2006). "The Impact of Elder Care on Women's Labor Supply." Inquiry 43(3): 195–210. http://www.jstor.org/stable/29773256; Pavalko, Eliza K., and Julie E. Artis. (1997). "Women's Caregiving and Paid Work: Causal Relationships in Late Midlife." The Journals of Gerontology Series B: Psychological Sciences and Social Sciences 52B(4): S170–79; Wakabayashi, Chizuko, and Katharine M. Donato. (2005). "The Consequences of Caregiving: Effects on Women's Employment and Earnings." Population Research and Policy Review 24(5): 467–88 for adult care.

24. For a link between child care and earnings see, for instance Anderson, Deborah J., Melissa Binder, and Kate Krause. (2002). "The Motherhood Wage Penalty: Which Mothers Pay It and Why?" American Economic Review, 92(2): 354–58; Budig, Michelle J., and Paula England. (2001). "The Wage Penalty for Motherhood." American Sociological Review, 66(2): 204–25; Loughran, David S, and Julie M Zissimopoulos. (2009). "Why Wait? The Effect of Marriage and Childbearing on the Wages of Men and Women." Journal of Human Resources, 44(2): 326–349; Lundberg, Shelly, and Elaina Rose. (2000). "Parenthood and the Earnings of Married Men and Women." Labour Economics, 7(6): 689–710 and Waldfogel, Jane. (1997). The Effect of Children on Women's Wages." American Sociological Review 62: 209–217. Others also find lower earnings for women when caring for parents. See, for example, Houtven, Courtney Harold Van, Norma B. Coe, and Meghan M. Skira. (2013). "The Effect of Informal Care on Work and Wages." Journal of Health Economics 32(1): 240-252. In contrast, men who care for older relatives may see no change in wages and possibly even experience an increase in wages when caring for children and older adults. See, for example, Houtven, Courtney Harold Van, Norma B. Coe, and Meghan M. Skira. (2013). "The Effect of Informal Care on Work and Wages." Journal of Health Economics 32(1): 240-252; Loughran, David S, and Julie M Zissimopoulos. (2009). "Why Wait? The Effect of Marriage and Childbearing on the Wages of Men and Women." Journal of Human Resources, 44(2): 326–349; and Lundberg, Shelly, and Elaina Rose. (2000). "Parenthood and the Earnings of Married Men and Women." Labour Economics, 7(6): 689–710.

25. Unpaid caregivers experience worse psychological and physical outcomes during caregiving and women are more likely to experience adverse health outcomes when they

are caregivers than is the case for men. See, for example, Pinquart M, and Sorensen S. 2006. Gender differences in caregiver stressors, social resources, and health: an updated meta-analysis. Journal of Gerontology B: Psychological Science and Social Sciences Vol. 61, No. 1: P33–P45.

26. We use the Federal Reserve's triennial Survey of Consumer Finances (SCF) from 2010 to 2016 to ensure sufficient sample sizes. Retirement wealth is the sum of account balances in 401(k) accounts and IRAs plus the imputed value of DB pensions. The SCF and supplemental materials contain information for thee components of retirement wealth at the individual level. We use an indicator for child care risk as living with a child, broken down by whether the child is older or younger than age 10. People face parental caregiving risk if parents or grandparents live in the respondent's household. We separately define a narrower parental caregiving risk measure when parents or grandparents who live with the respondent are also financially dependent on the respondent. Further, people face spousal caregiving risk if a spouse is sick or disabled. Finally, we calculate an overall caregiving risk indicator that takes on the value of one if somebody has child, parental or spousal care risk to capture the effect of caregiving across people's lives. The source for imputed DB pensions in the SCF is Sabelhaus, J., & Henriques Volz, A. M. (2019). Are Disappearing Employer Pensions Contributing to Rising Wealth Inequality? FEDS Notes. Board of Governors of the Federal Reserve System (US), February 1. For more details on retirement plan participation and savings behavior, please see Christian E. Weller & Michele E. Tolson (2020): The Retirement Savings Penalty Borne by Women, Challenge, DOI: 10.1080/05775132.2020.1723290.

27. We also considered SCF data to see whether married couples offset less retirement wealth for one spouse, for instance, due to a lower chance of participating in an employer-sponsored retirement plan by having the other spouse save more. The data do not show such intra-family substation effects. Similarly, we summarized household's expectations of receiving an inheritance when facing parental caregiving risks. Those with caregiving risks are less likely to expect an inheritance than those without such risks. There exists no evidence of offsetting wealth effects that compensate for negative correlation between caregiving risks and individual retirement wealth.

28. See Weller, Christian E. and Tolson, M. (2019). Unpaid Family Caregiving and Retirement Savings. PERI Working Paper No. 490. Amherst, MA: Political Economy Research Institute, University of Massachusetts, Amherst and Weller, Christian E. and Tolson, M. (2018). Do Unpaid Caregivers Save Less For Retirement? Journal of Retirement. Vol. 6, No.2: 61-73 for more details on 401(k) participation and contribution rates by caregiving risk. For more details on retirement plan participation and savings behavior, please see Christian E. Weller & Michele E. Tolson (2020): The Retirement Savings Penalty Borne by Women, Challenge, DOI: 10.1080/05775132.2020.1723290.

29. For prior studies on the link between parental and spousal care, on the one hand, and wealth on the other hand, see Butrica, Barbara and Nadia Karamcheva. (2014). "The Impact of Informal Caregiving on Older Adults' Labor Supply and Economic Resources." Washington, DC: Urban Institute and Government Accountability Office. 2019. Some Parental and Spousal Caregivers Face Financial Risks. Washington, DC: GAO.

30. We define somebody as parental caregiver if they provide personal care – help with personal needs such as dressing, eating and bathing -- to a parent or parent-in-law. We then create an indicator of whether somebody is currently a parental caregiver and a separate continuous measure of the hours of parental caregiving provided in the previous year. We also define respondents as potential parental caregivers. Those are people, whose parents do not live in an institution and need help with personal care, but either don't receive such help or receive it from somebody other than the respondent. We define spousal caregivers as those people, whose spouses need help with activities of daily living (ADL) such as bathing, eating and walking, and who provide some or all of that help to their ailing spouses. We again measure whether somebody could be a spousal caregiver, but currently does not provide such care. In this instance, a spouse needs ADL help, but the respondent does not provide such care. We do not design a measure of past spousal caregiving since the sample sizes for that definition would be too small. We report participation, contributions and 401(k) balances at the individual level. We also report all DC account balances and total wealth at the household level to see whether households offset smaller 401(k) balances for one spouse when caregiving with other savings elsewhere. Finally, because families build wealth over time, we summarize wealth data near retirement, for those aged from 55 to 69 years, who will retire in the next two waves. We thus control for age and retirement status in our summaries of HRS data.

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