



Unpaid Family Caregiving and Retirement Savings

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Unpaid Family Caregiving and Retirement Savings

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Abstract

Workers face regular economic challenges from caring for children and adult relatives and friends. These challenges pose additional demand on their time and finances. As a result, many caregivers, especially women could end up with fewer retirement savings. They earn less, work fewer hours, and face greater emotional and physical demands from care. All of these factors can translate into a lower likelihood of participating in a 401(k) plan, contributing to such a plan and saving for one's own retirement. We use nationally representative data from the Federal Reserve's Survey of Consumer Finances to estimate the impact of potentially caring for children, parents and sick spouses on 401(k) participation. Our results suggest that caregiving risk – both related to child care and adult care – lower 401(k) participation and contributions for women. Among single women and men, caregiving risk widens the savings gap by more than 10 percent.

Keywords

Family caregiving, 401(k) participation, 401(k) contributions

JEL codes: D14, D31, J16, J26

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I. Introduction

People increasingly save for their retirement through employer-sponsored retirement accounts, such as 401(k)s plans . They then can and often do adjust their savings in such accounts to suit their individual circumstances. Unpaid family caregiving for children and older adults can impact people's labor market situations and thus their ability to save for their retirement with a 401(k)-type plan.²

The possibility of having to take on caregiving responsibilities poses an economic risk. Parents of young children, those living with older relatives or sick and disabled spouses often quickly need to take on additional care duties. Many caregivers, especially single women, experience a decline in hours, a drop in earnings, and increasing earnings volatility. Fewer hours at work, in turn, could make it harder for people to qualify for an employers' 401(k) plan. Lower earnings could also reduce 401(k) contributions. Moreover, greater earnings instability could increase the demand on people's incomes and savings to cover their spending and thus reduce their ability to save. Caregivers may also financially support care recipients. Both labor market effects as well as additional financial responsibilities could make it harder for caregivers to save for their own retirement. People who live with somebody who may need care, such a child, sick spouse, or aging parent, are particularly likely to have unpaid caregiving responsibilities and therefore may also be especially prone to experiencing diminished 401(k) savings as a result of caregiving.

The challenges associated with unpaid care for children and older adults could grow over time. Demand for care could expand, partially due to more single parents needing child care, increasing work demands on dual-earner couples, grandparents caring for grandchildren, and an aging population needing elder care. Unpaid caregivers may increasingly meet that demand, for instance, due to emotional attachments and social arrangements, such as people having their aging parents live with them to help them avoid institutionalized care.

The possible impediments to saving for retirement from unpaid care may disproportionately fall on women. Women are more likely to be unpaid caregivers than men and tend to spend more time providing such care when they do so. Care could then exacerbate the existing gender gap in retirement savings.

It is theoretically possible, though, that unpaid caregiving may not lead people to save less in a 401(k) plan. Caregivers may anticipate the financial challenges of caregiving, cut back on other consumption, pay off debt and increase savings to prepare themselves for eventual extra demands from caregiving. They may then end up participating in a 401(k) plan and contribute to it at similar rates as is the case for non-caregivers, even if caregiving leads to earnings or hours declines or increases earnings volatility.

² We use the term unpaid care here, although some caregivers receive some pay. There is no single term that adequately captures all caregiving arrangements. The literature also uses the term family caregiving and informal care, even if care is provided by non-family members and care arrangements can be regular and regulated.

These two alternative perspectives on the link between caregiving and retirement savings assume two separate motivations for the decision to become caregivers. Caregiving may have an adverse effect on caregivers' retirement savings if the decision to become a caregiver is primarily non-economic. People may decide to take on the additional responsibilities due to emotional attachments and social arrangements. Their own finances may then become secondary to this decision and caregiving could potentially have adverse effects on caregivers' retirement savings. Alternatively, caregivers may weigh the financial demands from caregiving against other economic factors. They may then provide care only if they can afford the potential economic downsides of caregiving without it impacting their ability to save for retirement.

The rest of this paper is organized as follows. We discuss the relevant literature on the impact of unpaid care on the caregivers' employment outcomes and savings in section II. Section III shows our data and methodology, followed by our empirical results in section IV. Section V concludes.

II. Literature review

Unpaid care is widespread, with children, spouses, parents and grandparents as the most common care recipients (Collinson and De La Torre, 2017). Caregivers support care recipients in a variety of ways, for instance, by helping children with daily activities, including dressing and feeding, assisting spouses with health care, but also tasks of daily living such as bathing and toileting, and providing parents with transportation and companionship (Collinson and De La Torre, 2017).

The demand for caregiving is increasing in several key areas. First, a growing number of single parents need help raising their children (Hernandez, 1995). Second, increasing work demands on two-earner couples raises their demand for child care (Hernandez, 1995). Third, grandparents need to step in when parents are absent, ill or have to work a lot (Hayslip and Kaminski, 2005). Fourth, an aging population needs more assistance with tasks ranging from transportation to and from doctors' visits to nursing care (NASEM, 2016). If such increasing demands for care increase the overall demand for unpaid caregiving, then it could be harder for a growing number of people to save for retirement due to caregiving.

Adverse effects of caregiving on retirement savings in 401(k) plans may disproportionately fall on women. Women may be more likely to work fewer hours and earn less when they provide care than men (Pavalko and Artis, 1997). Single women tend to be more likely to care for children and others than is the case for single men (Feinberg and Choula, 2012). Married women are also more likely to undertake caregiving tasks than married men (NAC, 2015). Women then could end up with fewer retirement savings because, first, they are more likely to provide care, second, they are more likely to experience adverse labor market outcomes as caregivers, and third, they typically provide more intensive care than is the case for men.

Caregiving could thus widen a gender gap in retirement savings. Women typically have less wealth than men (Wolff, 2017; Butrica, Smith and Iams, 2012; Glass and Kilpatrick, 1998; Arano, Parker and Terry, 2010; Sunden and Surette, 1998; Deere and Doss, 2006). Differences in caregiving could be contributing to this gap.

Caregiving and savings

People's employment situations critically impact their ability to build wealth, particularly their ability to do so via 401(k) plans. Having a full-time job can give employees access to retirement benefits at work, higher earnings allow households to contribute more to a 401(k) plan, and stable employment allows people to save and invest over longer time periods, leading to higher returns and more savings (Weller and Wenger, 2009; Weller 2015).

The adverse employment-related outcomes associated with unpaid caregiving that we discuss below could then lead to lower 401(k) savings. Fewer hours at work may exclude people from their employers' retirement benefits. Retirement plans typically require that people work for a minimum number of hours to qualify for a retirement benefit, like a 401(k) plan. Moreover, lower earnings could translate into lower contribution rates to a 401(k) plan (Vanguard, 2017). Also, increasing employment volatility could lead to a lower willingness to save (Orel, Ford and Brock, 2004; Benito, 2006; Hogarth, Hilgert and Schuchard, 2002; Gonyea, 2007). Contribution rates to 401(k)s, for instance, tend to be lower for people with shorter job tenures (Vanguard, 2017).

Caregiving could also directly affect people's ability to save due to higher costs, for example, for children and direct financial support for adult care recipients. Collinson and De La Torre (2017), for example, indicate that the average amount that caregivers contribute to care recipients amounts to \$150 per month. Koenig, Trawinski and Costle (2015) put the financial contribution from caregivers to care recipients even higher, at about \$583 per month.

Some caregivers, especially for adult care recipients, may forego savings in expectation of future inheritances. Caputo (2002), though, finds no systematic link between inheritances and adult care provided by daughters. That is, the key correlation between caregiving and savings appears to run through individual savings decisions as well as labor market outcomes, as we discuss below.

It is possible that people may decide to save more during caregiving if they know the associated financial challenges and plan accordingly. Butrica and Karacheva (2014), for example, conclude that parent caregivers have more assets than non-caregivers, but they also find that those providing intensive care to parents and for a sick or disabled older spouse have less wealth than non-caregivers. But, only a minority of caregivers simultaneously plan their finances and caregiving (Collinson and De La Torre, 2017). We will thus consider the direct link between caregiving and 401(k) participation, contributions and balances in our analyses as well as indirect effects of caregiving on retirement savings through earnings, hours and earnings volatility.

Caregiving and employment hours

Unpaid caregiving may lead to fewer hours in paid employment. The literature on both child care and other types tends to find similar results when examining the impact of caregiving on women's employment hours. For instance, multiple studies find that married women's hours decline following the birth of a child and, presumably, the caregiving responsibilities associated with that (Lundberg and Rose, 2000; Sanchez and Thompson). Separate studies on care for older,

disabled and/or sick people also find that beginning care leads to a reduction in average work hours among women (Pavalko and Artis, 1997; Wakabayashi and Donato, 2005) and that caregiving women work fewer hours than similarly situated non-caregiving women (Johnson and Sasso, 2006). These results may be driven by findings for married women, as studies that analyze single women separately find no significant association between initiating caregiving and single women's employment hours (Pavalko and Artis, 1997; Wakabayashi and Donato, 2005). The studies that include men have mixed results, sometimes suggesting that men increase or keep their hours constant after initiating caregiving (Sanchez and Thompson, 1997; Lundberg and Rose, 2000) and, in another instance, finding that caregiving is associated with fewer hours for men (Butrica and Karamcheva, 2014). In general, the research suggests that care contributes to fewer hours at work, especially for women.

Caregiving and earnings

Caregiving is also often associated with lower earnings for women caregivers. Caregiving women tend to earn less, on average, than non-caregiving women, with mothers earning less per hour than non-mothers (Anderson, Binder, and Krause, 2002; Budig and England, 2001; Loughran and Zissimopoulos, 2009; Lundberg and Rose, 2000; Waldfogel, 1997) and women caregiving for parents receiving lower hourly pay than similarly situated non-caregiving women (Houtven, Coe, and Skira, 2013). Considering total earnings, there appears to be negative effect of caregiving for parents or other friends and family on total earnings for women (Johnson and Sasso, 2006; Wakabayashi and Donato, 2005).

In contrast, caregiving among men may not impact wages (Houtven, Coe, and Skira, 2013) or may even lead to wage increases (Loughran and Zissimopoulos, 2009; Lundberg and Rose, 2000).

Caregiving and employment volatility

Caregiving could result in more earnings volatility, as people trying to balance caregiving and job responsibilities handle unavoidable and unexpected demands from caregiving. Private surveys of all caregivers – not broken down by care recipients – indicate that about 60 percent of caregivers have a job while providing care and that substantial shares of these caregivers report that caregiving had adverse effects on their employment (Collinson and De La Torre, 2017; NAC and AARP, 2015). For instance, about half of working caregivers included in a NAC/AARP Public Policy Institute (2015) survey reported that their caregiving responsibilities led them to take time off from work, arrive at work late, or leave work early. Likewise, more than a quarter of working caregivers in a Transamerica Institute survey indicated that they had missed days of work to provide care and caregiving led many people to reduce their hours, reduce job responsibilities, or switch to a less demanding job (Collinson and De La Torre, 2017).

As caregivers make job-related adjustments to accommodate caregiving, their earnings may become more volatile. Almost half of working primary caregivers from the Transamerica Institute's survey reported that caregiving had strained their relationships with their employers and about a third of them indicated that their caregiving resulted in adverse actions by their

employers, such as being given less attractive assignments, being written up, forcibly having duties reduced, or even being fired (Collinson and De La Torre, 2017). All of these consequences could translate into unpredictable and negative earnings fluctuations. Metlife (2006) in fact estimates that 60 percent of caregivers lose about three days of work and associated pay a year just due to unforeseen caregiving events.

III. Data and variables

We use cross-sectional data from the Federal Reserve's triennial Survey of Consumer Finances (SCF) from 1989 to 2016 for our analysis. The SCF is a nationally representative household survey on wealth, including retirement savings for each spouse in a married couple. It also includes information on sources and amounts of income and employment status for all individuals. These data are in addition to details on each household's wealth, broken down by financial and non-financial wealth, retirement and non-retirement assets, and all forms of debt. The SCF also contains information on a range of financial outcomes such as having experienced a negative income shock at the household level. We apply these variables to both spouses in a married couple. Moreover, the SCF contains several demographic characteristics for the head of household and their spouses, where applicable, such as age, education, and marital status. The SCF, though, collects the racial and ethnic self-identification only for the head of households, so that we do not have that information for spouses in married couples. We use this information for single people in our decompositions, but not in our other analyses since we combine the information for single and married people. Our decomposition results below suggest that our overall conclusions are not affected by omitting this information from the regressions.³ All variables are available from 1989 to 2016, leaving us with ten cross-sectional survey years.

The SCF contains some information to estimate whether households have caregiving responsibilities for children and for other care recipients. We combine child care and elder care for our core analysis, but provide robustness tests that separately consider child and adult care.

We assume that people who are living with a potential care recipient have some level of caregiving responsibilities, specifically we consider heads of households and spouses as having caregiving responsibilities if they live with children ten years old and younger, disabled and sick spouses, parents and/or grandparents.

Our definition of caregiving thus uses an objective, common standard of caregiving. It resembles the one used in child care studies and applies it to other care situations, as several recent studies based outside the U.S. have done (e.g. Aragón, Miranda, & Oliva, 2017; Geyer, Haan, and Korfhage, 2017). The literature has no common standard for elder care, which can rely on self-identification, hours of care, intensity of care and care activities. Our definition captures common caregiving situations, as most primary caregivers live with care recipients (Collinson and De La Torre, 2017). Also, caring for a spouse or parent are the most common caregiving situations for older caregivers (Collinson and De La Torre, 2017).

³ We conducted separate analyses for single headed households that control for race and ethnicity and the results indicate that our conclusions on the effect of caregiving on retirement savings are not materially affected by combining data and excluding race and ethnicity from the regressions.

Since our definition, though, cannot fully capture whether somebody is indeed a caregiver for an adult living with them, our measure is better understood as an indicator for the potential risk of caring for somebody else. Caregiving risk is thus akin to other economic risk exposure such as investing in stocks, real estate and a privately owned business. Our definition of caregiving risk includes people who are not providing regular care, but may have unexpected caregiving responsibilities arise, due to living with somebody who may need care. Therefore, our results may reflect both the impact of caregiving itself and the adjustments that people make to accommodate potential caregiving during periods of time when it is particularly likely to arise.

For our core analysis, we use an indicator of whether people had caregiving risk. Because the economic effects of caregiving can vary by gender and marital status, we include two interactive terms. One interacts caregiving risk with an indicator for women and the other interacts caregiving risk with an indicator for being married. The combination of the caregiving risk indicator and the two interactive terms allows us to see the direct effect of caregiving risk on our key outcome variables – 401(k) participation and contributions as well as labor market impacts separately for single women, single men, married women and married men. We capture these direct effects of caregiving risk as follows. For single men, the caregiving risk indicator itself shows the full effect. For married men, the combined effect of the caregiving risk indicator plus the interactive term for married caregivers captures the impact of caregiving. For single women, the combination of the caregiving risk indicator and the interactive term between caregiving and women caregivers serves to show the effect of caregiving. Finally, our regressions show the effect of caregiving for married women through the combined parameter estimates for the caregiving risk indicator, the interactive term between care and married people and the interactive term for women caregivers.

We conducted some robustness tests using alternative definitions of caregiving risk. For one, we use a broader definition of caregiving risk that, like our primary definition of caregiving risk, counts people as having caregiving risk if a potential care recipient lives with them, but also counts people as having caregiving risk if they support family members outside the household, other than adult children or alimony payments, and/or if they plan for the future medical expenses of an adult family member not living in the household. As a second robustness test, we use separate indicators for child and adult caregiving risk.⁴

We use 401(k) plan participation, combined employer and employee 401(k) plan contributions, as well as total 401(k) account balances as our primary dependent variables. For our decomposition analyses of 401(k) account balances, we use the inverted hyperbolic sine as the dependent variable. This reduces the skewness of the data. Also, the inverted hyperbolic sine is defined at zero.

We consider hourly earnings, hours and income volatility as additional dependent variables. These capture potential caregivers' labor market outcomes and thus the intermediating variables that could be affected by caregiving risk and could impact retirement savings. We specifically

⁴ To keep the discussion manageable, we use caregiving and caregiving risk exposure interchangeably.

use the log of hourly earnings, total annual hours worked in wage or salary employment as well as in self-employment and an indicator of having experienced a negative income shock in the previous year as dependent variables.

Our analyses use the following sample. We include all employees to study hours, earnings, and earnings volatility, 401(k) participation, and 401(k) account balances. We limit our sample to 401(k) plan participants when we consider combined contribution rates. In our descriptive statistics, we separate our sample by gender, marital status, and age (younger than 50 years and older). And, to capture time trends in our summary data, we group data by years, specifically 1989 to 1998, 2001 to 2007 and 2010 to 2016. The breaks in these data coincide with the last two recessions and periods of financial market turmoil.

Empirical strategy

In our analysis, we proceed as follows. We first summarize the relevant variables for retirement savings by caregiving risk status, broken down by age, gender and marital status. Next, we provide multivariate regression results for the link between caregiving, 401(k) participation and 401(k) contributions. We specifically use logit regressions for the likelihood of participating in a 401(k) at work and tobit regressions for the combined contributions to 401(k) plans as share of earnings. All of these regressions control for labor market outcomes such as earnings, hours and earnings volatility, which account for indirect effects of caregiving. The regressions further include caregiving indicators that account for the direct impact of caregiving risk on 401(k) participation and contributions due to other factors related to caregiving, such as intensity of care and additional costs.

We subsequently estimate regressions for the effect of caregiving risk on labor market outcomes – earnings and hours worked – to illustrate the indirect effects of caregiving. These regressions illustrate the indirect impact of caregiving risk on 401(k) participation and 401(k) contributions. In particular, we use a linear regression (“Mincer regression”) for the natural log of hourly earnings and a tobit regression for annual hours. We cannot estimate the determinants of having experienced a negative income shock since it is a backward looking variable. The key variables of interest are again an indicator for caregiving risk and the aforementioned interactive terms.

We follow these regressions on 401(k) savings behavior with summary data on potential substitute savings. We specifically show the likelihood of having IRAs and the median amount in those accounts, the chance and amount of liquid savings and the probability and median amount of expected inheritances by caregiving status. People may save for retirement in IRAs if they don’t qualify for a 401(k) plan at work. They may also build up more liquid savings instead of retirement savings to protect against the vagaries of potential caregiving. And, they may decide to save less for their own future during periods of caregiving risk because they are more likely to expect an inheritance.

Our regressions linking caregiving risk directly and indirectly – through labor market outcomes - with 401(k) participation and 401(k) contributions show whether caregiving impacts savings behavior. We are also interested in understanding how caregiving may affect 401(k) balances

over time. 401(k) have grown since the 1980s, but did not become a widespread retirement saving vehicle until the 1990s and later. That is, our data cannot show the full career experience of saving for retirement with a 401(k) plan for an entire cohort. We thus simulate the likely direct and indirect effects of caregiving risk on 401(k) balances over an entire career, based on our regression estimates, as we discuss below.

We break our simulations down by gender and marital status. They then illustrate the likely effect of caregiving risk on 401(k) balances for single women, single men, married women and married men separately. Importantly, the simulations hold the likelihood of caregiving constant in each group and do not control for the likelihood of being a caregiver. But, women are more likely to be caregivers than men. Therefore, even if the simulations show that the potential adverse effects of caregiving on women's retirement savings mirror those for men, women will see a greater drop in their retirement savings since they are more likely to care for somebody else.

We provide Oaxaca-Blinder decompositions to capture the complete contribution of unpaid potential caregiving on the gender gap in 401(k) account balances. We specifically compare 401(k) account balances for single women and single men and separately for married women and married men. We consider single and married people separately as the effect of caregiving varies not only by gender, but also by marital status, as both the literature and our results below demonstrate. The share of the gender gap in 401(k) balances that is explained by caregiving risk – our key measure of interest – shows a population average effect of the direct impact of caregiving. Caregiving risk can on average directly contribute to the gender gap in 401(k) balances because caregiving intensity and costs are greater for women and because women are more likely to be caregivers.

In the decompositions, we show the importance of caregiving risk in contributing to the gender gap in 401(k) balances for three time periods – 1989 to 1998, 2001 to 2007, and 2010 to 2016. Our decomposition results then show whether potential caregiving has become more or less important as a contributing factor to gender inequality in 401(k) balances.

IV. Empirical results

We first present summary data on caregiving risk and retirement savings, followed by multivariate regressions. We then show our simulations and decompositions to put the regression results in context. While our measure of caregiving is best understood as capturing caregiving risk that arises due to living with a child or adult who may need care, we often use the terms caregiver, non-caregiver and caregiving in this section, to keep our discussion concise.

Caregiving and retirement savings

Table 1 shows our data on caregiving and retirement savings, broken down by gender, marital status and age for the years from 2010 to 2016. Caregivers are less likely to participate in a 401(k) plan at work (Table 1). Among younger single women, for example, 41.2 percent participate in a retirement plan at work, while only 24.5 percent of those with caregiving responsibilities do. Moreover, among single caregivers, median 401(k) contribution rates relative

to earnings for those who have such plans tend to be lower than is the case for non-caregivers. In comparison, there is no difference in contribution rates by caregiving status among married people (Table 1). There may still be a negative correlation between caregiving and 401(k) contributions since caregiving goes along with lower earnings, especially for women, as the literature review and our results below show.

Lower 401(k) participation and contributions correlate with lower 401(k) account balances for caregivers, especially single women. Single younger women who are caregivers, for example, had a median account balance of \$6,632 from 2010 to 2016 compared to \$13,264 for non-caregivers (Table 1).

XXX INSERT TABLE 1 ABOUT HERE XXX

Caregiving and labor market outcomes

Caregiving may also have an indirect effect on retirement savings, if it correlates with fewer hours, lower earnings and greater income instability. Table 2 summarizes the relevant data on hours, earnings and income volatility, again broken down by caregiving status, marital status, gender and age for the years from 2010 to 2016. Earnings tend to be lower for caregivers than for non-caregivers (Table 2). The exceptions are younger, single men who are caregivers than non-caregivers, which is broadly consistent with the literature. But, somewhat unexpectedly, earnings are also slightly higher among older, married female caregivers than non-caregivers (Table 2). Moreover, Table 2 shows no clear pattern for the correlation between caregiving and hours at work, as it varies by gender and age. Younger women work fewer average hours as caregivers than as non-caregivers, reflecting findings in the literature, but older women work similar or more hours as caregivers (Table 2). Caregiving men also work more or similar hours as non-caregiving men (Table 2), which is consistent with the literature. Finally, the summary data show that caregivers have a somewhat higher chance of having experienced negative income shock in the previous year than is the case for non-caregivers, with the exception of older single men (Table 2). The summary data indicate that generally speaking caregiving is associated with worse labor market outcomes, which could contribute to less retirement plan participation and lower 401(k) contributions.

XXX INSERT TABLE 2 ABOUT HERE XXX

Multivariate regressions for retirement plan participation and contributions

Our multivariate regressions of the determinants of 401(k) participation and contributions allow us to better identify the correlation between caregiving and retirement savings, either directly or indirectly through labor market outcomes.

Our regressions include controls for age, age squared, marital status, gender and education in addition to the relevant labor market outcomes – earnings, hours and earnings volatility.⁵ In the regression for 401(k) contributions, earnings is included in the contribution rate and thus does not separately appear as an explanatory variable. By including labor market variables, the caregiving variables in these regressions then capture other, unobserved influences from caregiving on 401(k) plan participation and contributions. Such factors can include intensity of care and emotional stresses associated with caregiving.

Table 3 first shows our three results – baseline and two robustness tests -- for the determinants of 401(k) participation. The caregiving indicators are our primary explanatory variables of interest. Our baseline results show that caregiving has a negative direct effect on 401(k) participation for single women, single men and married women. The odds ratio of 401(k) participation for single men, for example, is 0.811, which means that they are 19 percent less likely to have a 401(k) plan when they are caregivers than when they are not caregivers. The effect is even more pronounced for single women, who have a calculated odds ratio of 0.760, which is the product of the two odds ratio for caregiving and for women caregivers (Table 3). Single women as caregivers are then 24 percent less likely to have a 401(k) account than single women who are not caregivers.⁶ Caregiving, in comparison, has a direct positive correlation with 401(k) participation for married men (Table 3), which is in line with the literature. One interpretation may be that married women take on more caregiving responsibilities within a household and save less as a result, for instance due to the stress of caregiving, while married men save more to compensate for their spouses' loss of savings.

The key two labor market variables – earnings and hours – that capture the indirect effect of caregiving are both statistically significant and have the expected signs. Higher earnings and more hours go along with a higher likelihood of somebody participating in a 401(k) plan (Table 3). As we show below, caregiving negatively affects hours and earnings for many caregivers (Table 4). Furthermore, we also find that experiencing a negative income shock correlates with a diminished likelihood of 401(k) participation (Table 3). But, because the SCF is a cross-sectional data set and the income volatility variable is backward looking, we cannot estimate whether caregiving correlates with income volatility to use in the simulations. If caregiving also increases the likelihood of negative income shocks, as nationally representative surveys suggest it does, then this could further exacerbate the negative effects of caregiving on 401(k) contributions.

XXX INSERT TABLE 3 ABOUT HERE XXX

The additional two regressions show two key results. First, our results are generally robust. Caregiving has typically a direct negative effect on 401(k) participation. In comparison, earnings and hours positively correlate with 401(k) participation. Second, the direct negative effects of caregiving correlate with child care, but not necessarily adult care.

⁵ We estimated our regressions with an alternative measure for instability, specifically the tenure with the current employer. Our regression results for 401(k) participation and contributions are robust. We prefer to use income instability as a control variable in our key models since tenure also captures eligibility for 401(k) participation and contributions, similar to what hours at work do.

⁶ The relevant two parameter estimates are jointly different from zero at the one percent level.

Table 3 also shows our estimates for 401(k) contributions, again with three different caregiving definitions. Caregiving has no direct impact on 401(k) contributions. In comparison, hours positively correlate and experiencing negative income shocks, a form of income volatility, negatively correlates with combined contributions. In this case, the individual parameter estimates for caregiving are not statistically significant. But, we cannot reject the hypotheses that the combinations of caregiving indicators in the first model are jointly zero. That is, caregiving has no direct effect for single men, but it may correlate with lower contributions for single women, married women and married men. The negative effect of caregiving on contribution rates appears to be largest for single women and smallest for married men.

Our analyses suggest that caregiving negatively correlates with 401(k) participation and possibly 401(k) contributions for many potential caregivers. We provide simulations and decompositions below to estimate the likely effect of caregiving on account balances. Those results show that caregiving goes along with lower balances.

Multivariate regressions for labor market outcomes

Caregiving could indirectly impact retirement savings through adverse labor market outcomes – lower earnings and fewer hours.

Table 4 shows our multivariate regression analyses for these labor market outcomes. They include controls for age, age squared, education, marital status, gender and caregiving. We use experience and experience squared in our Mincer earnings regressions, instead of age, age squared and education. We also add union status as a determinant of earnings, in line with the literature. Finally, we control for industry and occupation in our regressions of earnings.

Table 4 has our regression estimates for both labor market outcomes. Caregiving has a mixed correlation with hours worked in line with the literature (Table 4). We find that, regardless of marital status, men tend to work more hours as caregivers and women tend to work fewer hours as caregivers. Single men who are caregivers work an extra 80 hours a year, while married men as caregivers work an extra 21 hours each year (Table 4). In comparison, single women work 77 hours less as caregivers than is the case for non-caregivers and married women work 136 hours less as caregivers than is the case for non-caregivers (Table 4). These results are consistent with the literature, except for the result that single women work fewer hours as caregivers. The difference may be explained by the fact that we consider caregivers at any point during caregiving, not just at the start of caregiving, as is typical in much of the literature. Single women may adjust their hours downward as caregiving continues, although we are unable to confirm this with our cross-sectional data.

XXX INSERT TABLE 4 ABOUT HERE XXX

Our Mincer earnings regression shows that caregiving is also associated with lower hourly earnings for some caregivers, specifically single men and single women (Table 4). Single men caregivers have hourly earnings that are on average 11.1 percent lower than those of non-

caregivers, while single women caregivers have hourly earnings that are 5.0 percent lower than those of non-caregivers (Table 4). Single men tend to be caregivers less often than other groups (Feinberg and Choula, 2012) and, to our knowledge, are not the focus of studies on earnings and caregiving in the existing literature. But our findings for single women roughly align with what we would expect from the existing literature. Among non-caregivers, women earn 21.1 percent less per hour than men and the decline in hourly earnings for single women caregivers, compared to non-caregivers, widens this gender wage gap by another quarter (Table 4). Surprisingly, married women caregivers have hourly earnings that are 6.5 percent greater than is the case for non-caregivers and married men caregivers have earnings that are only 0.4 percent greater than for non-caregivers (Table 4). The result for married women may reflect a decision to work fewer hours at somewhat higher wages for many women in this situation as caregivers.

The results on labor market outcomes related to caregiving thus show a clear gender division that could adversely affect women's retirement savings during caregiving. While men work more hours as caregivers, women caregivers work fewer hours, which could result in less access to 401(k) plans for women and greater access to such plans for men. Single caregivers, who are more likely to be women than men (Feinberg and Choula, 2012), also have lower hourly earnings than non-caregivers, which could make it harder for them to contribute to a retirement plan. That is, caregivers can face both direct and indirect negative consequences from caregiving with respect to 401(k) participation and contributions.

Simulating the impact of caregiving on 401(k) balances

To estimate the impact of caregiving on retirement savings, we simulate the potential long-term consequences of caregiving on 401(k) account balances. We separately consider the effect of caregiving on 401(k) account balances at age 65 for single women, single men, married women and married men.

We first make a few assumptions for our baseline scenario, which shows the 401(k) account balances at age 65 for non-caregivers in each group. We then compare account balances of caregivers against these baseline outcomes. We assume that people make continuous DC plan contributions from age 25 to age 64, which likely overstates total account balances, but does not necessarily affect the comparison of account balances by caregiving. We also assume that accumulations grow at a real rate of return equal to five percent. In our baseline calculations, earnings, hours, 401(k) participation and contributions vary with gender, marital status, age and experience based on our baseline regression results in Table 3.⁷

Next, we simulate the average population effect of caregiving, based on the age at which caregiving started. To do so, we start with average 401(k) participation rates for the four population groups, which are equal to 33.4 percent of single women, 36.7 percent for single men, 33.2 percent for married women and 35.5 percent for married men between the ages of 25 and 34

⁷ We assume that earnings also grow each year at an additional one percent to capture productivity gains.

years during the years from 2010 to 2016.⁸ The simulated participation rate then increases with age, based on the estimates in Table 3.

We then calculate average contributions to 401(k) plans. To do so, we start by estimating hourly earnings using average age-adjusted earnings and average age-adjusted hours, based on the estimates in Table 4. We next multiply hourly earnings times hours times the age-adjusted combined contribution rate relative to earnings, based on our Table 4 findings.

After generating our baseline simulated 401(k) account balances, using the steps outlined above, we then compare simulated account balances for caregivers to the baseline account balance. To model the impact of caregiving on 401(k) savings, we assume that caregiving lasts for five years. We create four different simulations for each group, by gender and marital status, based on four different assumptions about what age caregiving starts. Specifically, we assume that caregiving starts at the ages of 30 years, 35 years, 40 years and 45 years. During those five years, we adjust 401(k) participation and contributions, earnings and hours according to the regression estimates in Table 3.

Table 5 summarizes the account balances at age 65 with and without caregiving, showing population average outcomes for single women, single men, married women and married men. These simulations show several key results.⁹ First, account balances are smaller for women than for men and, by gender, they are smaller for singles than for married people. The baseline account balance for non-caregivers is \$183,187 for single women, \$256,885 for single men, \$185,873 for married women and \$304,006 for married men (Table 5).

XXX INSERT TABLE 5 ABOUT HERE XXX

Second, caregiving impacts account balances differently by marital status and gender. Single women, for instance, see a decline in their account balances between six and eight percent, depending on when caregiving starts (Table 5). Single men also see declines in their account balances, although these declines are smaller than those of single women (Table 5). In comparison, account balances for married men increase by about three percent, while married women's account balances are basically unchanged (Table 5). Married women see a drop in hours and a decline in contribution rates, but an increase in hourly earnings (Tables 3 and 4), so that these effects offset each other. These differences reflect the direct impact of caregiving on retirement savings as well as differences in earnings and hours during caregiving (Tables 3 and 4).

⁸ These participation rates reflect the averages for people between the ages of 25 and 34 in the respective population groups for the years 2010 to 2016. Authors' calculations based on Fed (various years). We anchor our simulations to the most recent data to capture a time period when 401(k) plan participation was more widespread than 30 years earlier. This ensures some robustness of our calculations. Our simulations then suggest the effect of caregiving on retirement savings of current and future caregivers.

⁹ We should note that our simulations show population averages and thus do not capture likely larger effects that individual caregivers face. Individuals, for instance, may decide to leave the labor force during caregiving and thus go from participating in a 401(k) plan to not participating, which will likely have much larger effects on their account balances than our averages show.

Third, the adverse effect of caregiving on 401(k) balances is greater when caregiving happens earlier in a career (Table 5). The simulated effects on 401(k) account balances suggest that caregiving can widen gender wealth inequality, especially as the share of single women is increasing in the population and caregiving has the largest negative effect on their retirement savings.

The relative contribution of caregiving to the gender gap in retirement savings

Our results so far have shown that single women in particular may lose retirement savings relative to both non-caregivers and married women and men who face caregiving risks. Moreover, this gap by gender and marital status in the impact of caregiving on 401(k) savings may have gotten worse over time. More people now rely on 401(k) than in the past. Because people can decide when and how much to save in their 401(k)s, among other things, caregiving could result in less fewer savings for a larger share of the population than in the past. Since negative effects of caregiving on savings – hours, earnings and intensity of care – tend to fall disproportionately on women, caregiving could widen the gender savings gap.

We use Oaxaca-Blinder decompositions to estimate the effect of caregiving on gender inequalities in 401(k) balances over time. We use the inverted hyperbolic sine (IHS) as the dependent variable. We then estimate the relative importance of various factors, including caregiving, on gaps in 401(k) balances by gender, using the baseline model for 401(k) participation in Table 3. We estimate the effect of caregiving on the gender gap in 401(k) balances separately for single people and married people, since our results so far indicate that the effect of caregiving varies by marital status. We thus provide two decomposition estimates, one for single people and one for married people.

Table 7 summarizes the results of our decompositions for three time periods – 1989 to 1998, 2001 to 2007 and 2010 to 2016 in addition for one estimate for all years combined. The estimates show that caregiving is an increasing contributor to the gender gap in 401(k) retirement accounts between single women and men. For the period from 2010 to 2016, for instance, caregiving directly accounts for 14.7 percent of the explained gender inequality in 401(k) account balances during that time. In earlier periods, caregiving’s contribution to this gender gap in 401(k) balances for singles was smaller and not statistically significant (Table 6).

XXX INSERT TABLE 6 ABOUT HERE XXX

It is possible that caregiving also indirectly affects the gender differences in 401(k) accounts for single women and men. Wages are a consistent explanatory factor for the gender gap in 401(k) balances, while hours are not.¹⁰ Single women have lower retirement account balances than single men both because of direct and indirect effects from caregiving.

The decomposition estimates for married people, in comparison, indicate that caregiving directly contributes little to the gender difference in 401(k) account balances between married women

¹⁰ Details not shown here, but available from authors upon request.

and men. Caregiving may indirectly shrink the retirement savings gap among married women and men, as there appears to be a slight positive boost in earnings for married men (Table 4) and wages are key in explaining the retirement savings gap for married women and men.¹¹

Evidence on substitute assets

Our results so far show that caregivers, especially single ones, end up with lower retirement savings because they are less likely to participate in 401(k) plan and because their earnings tend to be lower alongside caregiving, translating into lower 401(k) contributions.

It is possible, though, that caregivers may substitute less 401(k) assets with other savings. For instance, they may save more in IRAs if they have less access to a retirement plan at work. They may also decide to hold more liquid assets in preparation for unexpected events. Furthermore, they may feel comfortable with lower retirement savings if they are more likely to expect an inheritance.

XXX INSERT TABLE 7 ABOUT HERE XXX

Table 7 summarizes our data on IRAs, liquid assets and expected inheritances by caregiving status. We again breakdown the data by marital status, gender and age. The summary data show that caregivers consistently are less likely to have IRAs, to have liquid assets and to expect an inheritance (Table 7). Moreover, the median amounts of IRAs, liquid assets and expected inheritances are generally lower for caregivers than non-caregivers (Table 7). The summary data hence lend no support to the argument that caregivers may have other savings to substitute for lower 401(k) account balances.

V. Conclusion

Unpaid caregiving for family and friends is widespread and can adversely impact people's retirement savings. Most importantly, caregiving risk that arises from living with somebody who may need care goes along with a lower chance of people participating in a 401(k) plan and possibly with lower 401(k) contributions. Moreover, such caregiving risk goes along with lower earnings and fewer hours for some caregivers, which can again translate into lower 401(k) participation and fewer contributions. These results hold especially for single women and men, while they are less pronounced or non-existent among married women and men.

Caregiving thus directly widens gender differences in 401(k) balances among single headed households, but not among married women and married men. Our results indicate that caregiving risk directly contributed 14.6 percent of the gender difference in 401(k) balances among single women and men from 2010 to 2016, for instance (Table 7). This difference may occur because caregiving is more widespread among women and because women provide more intense care than men do.

¹¹ Details not shown here, but available from the authors.

Because single women, in particular, experience more adverse retirement savings effects of caregiving than men do, they then presumably stand to disproportionately benefit from policy changes. Such interventions would need to address the adverse labor market effects, but also other costs associated with caregiving. Other employer support could help stabilize career earnings and hours at work. Public policies, such as easier access to child care and financial support for family caregivers, could reduce the personal costs of caregiving.

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Table 1: Retirement Savings by Caregiving Status, Gender, Age and Marital Status, 2010 to 2016

Variables	Caregiving status	Single				Married			
		Women		Men		Women		Men	
		Younger than 50 years	50 years and older	Younger than 50 years	50 years and older	Younger than 50 years	50 years and older	Younger than 50 years	50 years and older
Share that participates in 401(k) plan at work	Non-caregivers	41.2%	43.7%	36.6%	28.9%	34.8%	38.8%	40.1%	40.2%
	Caregivers	24.5%	35.8%	19.3%	23.0%	33.6%	37.6%	39.2%	37.6%
Median combined 401(k) contributions relative to pay	Non-caregivers	8.0%	10.0%	10.0%	10.0%	10.0%	12.0%	10.0%	12.0%
	Caregivers	6.0%	8.0%	10.0%	4.0%	10.0%	12.0%	10.0%	12.0%
Median 401(k) account balances (conditional)	Non-caregivers	13,264	30,933	16,580	60,793	17,685	51,950	34,265	100,000
	Caregivers	6,632	21,653	5,527	33,160	15,000	43,000	24,747	67,022

Notes: Authors' calculations based on Board of Governors. Federal Reserve System. Various years. Survey of Consumer Finances. Washington, DC: Fed. 401(k) plan participation and retirement plan coverage only calculated for employees. Combined 401(k) contributions only calculated for people with a 401(k) plan. Caregiving defined as living with somebody else who needs care. All dollar values expressed in real 2016 dollars, summarized for years from 2010 to 2016. Deflation done by CPI-U-RS. Median 401(k) balances calculated only for people with such balances. Retirement assets include 401(k) type plans as well as Individual Retirement Accounts (IRA). Median retirement assets calculated only for people with retirement assets.

Table 2: Labor Market Outcomes by Caregiving Status, Gender, Marital Status and Age, 2010 to 2016

Variables	Caregiving status	Single				Married			
		Women		Men		Women		Men	
		Younger than 50 years	50 years and older	Younger than 50 years	50 years and older	Younger than 50 years	50 years and older	Younger than 50 years	50 years and older
Median earnings of wage and salary workers	Non-caregivers	\$ 26,809	\$ 31,833	\$ 50,000	\$ 34,315	\$ 30,933	\$ 32,400	\$ 53,617	\$ 69,636
	Caregivers	\$ 9,771	\$ 14,369	\$ 77,333	\$ 21,001	\$ 28,739	\$ 36,089	\$ 50,000	\$ 41,384
Annual hours	Non-caregivers	1919.1	1768.9	2083.5	1945.8	1882.9	1786.8	2243.0	2101.3
	Caregivers	1858.3	1781.7	2059.3	1940.1	1784.3	1878.7	2262.3	2087.8
Chance of having experienced a negative income shock in the previous year	Non-caregivers	23.4%	21.0%	26.6%	24.8%	20.6%	17.0%	21.5%	17.7%
	Caregivers	27.6%	22.3%	26.6%	20.4%	21.0%	19.6%	21.1%	20.8%

Notes: Authors' calculations based on Board of Governors. Federal Reserve System. Various years. Survey of Consumer Finances. Washington, DC: Fed. Caregiving defined as living with somebody else who needs care. Median earnings expressed in real dollars. Deflation done by CPI-U-RS. Probability of being out of the labor force calculated for all adults. Median earnings only calculated for those who have such earnings. Hours only calculated for those who work for somebody else or who are self-employed.

Dependent variable	401(k) participation with caregiving risk indicator	401(k) participation with separate risk indicators for child and adult caregiving	401(k) participation with broad caregiving risk indicator	401(k) contribution with caregiving risk indicator	401(k) contribution with separate indicators for child and adult caregiving risks	401(k) contribution with broad caregiving risk indicator
Regression type	Logit (odds ratios)	Logit (odds ratios)	Logit (odds ratios)	Tobit	Tobit	Tobit
Sample	Employees and self-employed, all years	Employees and self-employed, all years	Employees and self- employed, all years	People with 401(k) plans	People with 401(k) plans	People with 401(k) plans
Hourly earnings (natural log)	2.058*** (0.051)	2.059*** (0.052)	2.061*** (0.051)			
Age	1.118*** (0.009)	1.118*** (0.009)	1.118*** (0.009)	0.3657*** (0.0894)	0.3646*** (0.0901)	0.3732*** (0.0892)
Age squared	0.999*** (0.00008)	0.999*** (0.00008)	0.999*** (0.00008)	-0.0026** (0.0010)	-0.0026** (0.0010)	-0.0027** (0.0010)
Education	1.148*** (0.017)	1.148*** (0.171)	1.148*** (0.017)	1.2891*** (0.1690)	1.2875*** (0.1674)	1.2991*** (0.1690)
Married	0.897** (0.034)	0.926** (0.033)	0.885** (0.036)	0.9259** (0.3605)	0.7814** (0.3485)	1.0424*** (0.3819)
Women	1.212*** (0.046)	1.190*** (0.042)	1.224*** (0.048)	0.1941 (0.3511)	0.3508 (0.3294)	0.1752 (0.3595)
Has caregiver risk (narrow/broad)	0.811 (0.686)		0.846** (0.064)	-1.4022 (0.8779)		-0.0553 (0.7232)
Women with caregiver risk (narrow/broad)	0.937 (0.055)		0.922 (0.051)	-0.5934 (0.5999)		-0.4438 (0.5459)
Married with caregiver risk (narrow/broad)	1.328*** (0.109)		1.273*** (0.094)	0.8178 (0.8079)		-0.2668 (0.6918)
Hours	1.001*** (0.00002)	1.0008*** (0.00002)	1.0008*** (0.00002)			

Has child caregiver risk		0.683*		-2.6900		
		(0.143)		(1.6850)		
Women with child caregiver risk		1.178		-0.4335		
		(0.265)		(1.8373)		
Married with child caregiver risk		1.237*		2.2020**		
		(0.132)		(0.9624)		
Has adult caregiver risk		0.978		1.1529		
		(0.150)		(1.8645)		
Women with adult caregiver risk		0.887		-1.8805		
		(0.124)		(1.7555)		
Married with adult caregiver risk		1.009		-0.8091		
		(0.157)		(1.6700)		
Has experienced a negative income shock in the previous year	0.606***	0.606***	0.606***	-1.5544***	-1.5281***	-1.5477***
	(0.026)	(0.026)	(0.026)	(0.4072)	(0.4069)	(0.4079)
Constant	0.0002***	0.0002***	0.0002***	-1.5146	-1.7108	-2.0710
	(0.00005)	(0.00005)	(0.00005)	(2.7465)	(2.7589)	(2.7556)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry controls	Yes	Yes	Yes	Yes	Yes	Yes
Occupational controls	Yes	Yes	Yes	Yes	Yes	Yes
N	41,523	41,523	41,523	16,327	16,327	16,327
F-statistic	128.13	117.12	127.71	15.25	13.91	14.94
p-value	0.000	0.000	0.000	0.000	0.000	0.000

Notes: The sample for estimates of the determinants of 401(k) type plan participation includes all wage and salary employees as well as self-employed. The sample for estimates of the determinants of combined 401(k) contributions only includes those with such plans. Logit estimates for 401(k) plan participation shown as odds ratios. "*" indicates significance at the 10% level, "***" indicates significance at the 5% level, "****" indicates at the 1% level.

Table 4: Multivariate regression results for labor market outcomes

Dependent variable	Annual hours	Hourly earnings (natural log)
Regression type	Tobit	OLS
Sample	Only employed	Only wage and salary employees
Age	59.3569*** (1.9095)	
Age squared	-0.7360*** (0.0213)	
Education	6.7929 (4.2290)	0.1742*** (0.0044)
Experience		0.0220*** (0.0012)
Experience squared		-0.0003*** (0.0000)
Married	-20.0395* (10.3734)	0.0827*** (0.0108)
Women	-306.0879*** (9.6820)	-0.2105*** (0.0098)
Caregivers	80.5228*** (22.8042)	-0.1107*** (0.0219)
Married caregivers	-59.3495*** (21.9050)	0.1151*** (0.0222)
Women caregivers	-157.1467*** (16.2543)	0.0608*** (0.0160)
Union members		0.1296*** (0.0090)
Constant	1210.1114*** (59.4360)	2.3290*** (0.0499)
Year fixed effects	Yes	Yes
Industry controls	Yes	Yes
Occupational controls	Yes	Yes
N	49,098	35,029
F-statistic	174.86	325.12
p-value	0.000	0.000

Notes: Authors' calculations based on Board of Governors. Federal Reserve System. Various years. Survey of Consumer Finances. Washington, DC: Fed. See text for detailed descriptions.

Table 6: Simulated account balances at age 65 without and with caregiving for four population groups

		Single women	Single men	Married women	Married men
Baseline accumulation		\$ 183,187	\$ 256,885	\$ 185,873	\$ 304,006
Caregiving starts at age...					
30 years	Account balance with caregiving	\$ 172,616	\$ 244,505	\$ 189,918	\$ 313,287
	Difference to baseline balance	-5.8%	-4.8%	2.2%	3.1%
35 years	Account balance with caregiving	\$ 172,104	\$ 243,961	\$ 190,093	\$ 313,731
	Difference to baseline balance	-6.0%	-5.0%	2.3%	3.2%
40 years	Account balance with caregiving	\$ 172,976	\$ 245,026	\$ 189,741	\$ 312,980
	Difference to baseline balance	-5.6%	-4.6%	2.1%	3.0%
45 years	Account balance with caregiving	\$ 174,885	\$ 247,282	\$ 189,001	\$ 311,329
	Difference to baseline balance	-4.5%	-3.7%	1.7%	2.4%

Notes: See text for detailed descriptions.

Table 6: Summary results of Oaxaca-Blinder decompositions showing relative contribution of caregiving to differences in 401(k) account balances, by time period

		1989 to 1998	2001 to 2007	2010 to 2016	All years
Single	Share of difference explained	33.5%	78.5%**	117.5%***	64.7%***
	Explained difference from caregiving	0.4%	4.6%	12.1%**	4.7%*
Single (with controls for race/ethnicity)	Share of difference explained	35.6%	84.5%**	122.1%*	68.6%***
	Explained difference from caregiving	-1.1%	3.5%	11.1%**	5.9%
Married	Share of difference explained	88.4%***	87.8%***	103.0%***	93.6%***
	Explained difference from caregiving	1.7%**	0.4%	0.7%	1.0%**

Notes: All results derived from Oaxaca-Blinder decompositions. Explanatory variables are the same as those used for estimating 401(k) plan participation, unless otherwise stated. "*" indicates significance at the 10% level, "***" indicates significance at the 5% level, "****" indicates significance at the 1% level.

Table 7: Potential Substitute Assets by Caregiving Status, Gender, Marital Status and Age, 2010 to 2016

Variables	Caregiving status	Single				Married			
		Women		Men		Women		Men	
		Younger than 50 years	50 years and older	Younger than 50 years	50 years and older	Younger than 50 years	50 years and older	Younger than 50 years	50 years and older
Share of people with IRAs	Non-caregivers	14.8%	25.0%	16.3%	27.3%	18.4%	32.8%	19.6%	38.4%
	Caregivers	7.1%	15.3%	8.1%	20.5%	15.8%	20.1%	18.2%	19.2%
Median value of IRAs	Non-caregivers	\$ 13,404	\$ 30,933	\$ 15,467	\$ 55,266	\$ 20,622	\$ 40,000	\$ 24,747	\$ 82,900
	Caregivers	\$ 6,632	\$ 20,000	\$ 12,159	\$ 12,373	\$ 13,000	\$ 21,138	\$ 20,000	\$ 30,933
Share of people with liquid assets	Non-caregivers	88.1%	89.6%	89.9%	86.8%	88.9%	93.7%	89.3%	93.6%
	Caregivers	74.0%	85.5%	77.8%	77.6%	83.7%	88.4%	86.1%	86.6%
Median value of liquid assets	Non-caregivers	\$ 1,769	\$ 2,310	\$ 2,578	\$ 3,150	\$ 2,555	\$ 4,670	\$ 2,874	\$ 4,877
	Caregivers	\$ 700	\$ 1,134	\$ 1,598	\$ 1,105	\$ 2,100	\$ 1,945	\$ 2,320	\$ 1,800
Share of people expecting an inheritance	Non-caregivers	14.7%	7.7%	22.2%	10.0%	17.1%	11.9%	17.0%	13.4%
	Caregivers	6.7%	6.9%	10.7%	8.4%	17.4%	10.6%	17.8%	10.8%
Median value of expected inheritance	Non-caregivers	\$ 111,638	\$ 103,111	\$ 154,746	\$ 123,797	\$ 200,000	\$ 194,538	\$ 200,000	\$ 206,221
	Caregivers	\$ 46,400	\$ 206,221	\$ 117,165	\$ 103,000	\$ 200,000	\$ 110,533	\$ 200,000	\$ 100,000

Notes: Authors' calculations based on Board of Governors. Federal Reserve System. Various years. Survey of Consumer Finances. Washington, DC: Fed. Caregiving defined as living with somebody else who needs care. Assets only calculated for those who have those assets or expected inheritances.