Will the financial fragility of retirees increase?

Author: Steven A. Sass
WILL THE FINANCIAL FRAGILITY OF RETIREES INCREASE?

By Steven A. Sass*

Introduction

The elderly have long been seen as financially fragile, meaning that they may be ill-equipped to absorb a financial shock. The key reason is that, once retired, they have little ability to increase their income compared to working households. Going forward, retirees will get less of their income from Social Security and traditional pensions and more from financial savings in 401(k)s. Having these savings gives them greater flexibility to respond to shocks. But tapping the nest egg comes at the cost of having less to cover ongoing expenses. The increased dependence on financial assets also introduces new sources of risk— that households accumulate too little and draw out too little to cushion shocks and that their finances are increasingly exposed to market downturns. This brief reviews studies by the Social Security Administration’s Retirement Research Consortium and others that address how the growing dependence on household savings affects the financial fragility of the elderly.

The discussion proceeds as follows. The first section examines the share of expenditures that a typical elderly household devotes to basic needs. The second section reviews evidence on the ability of today’s elderly to absorb two major shocks: a spike in medical expenses and a decline in income when widowed. The third section addresses the increased dependence of tomorrow’s elderly on financial assets, the sufficiency of these assets, and the effects on their ability to absorb shocks. The final section concludes that most current retirees can absorb a shock. However, future retirees are more likely to experience financial fragility unless they reduce their fixed expenses or draw increased income from their assets.

How High Are Retiree Fixed Expenses?

A study by Butrica, Goldwyn, and Johnson, using data from the Consumption and Activities Survey (CAMS) supplement to the Health and Retirement Study (HRS), examines the allocation of household spending by the elderly, sorted by total household expenditures. It finds that nearly 80 percent of the spending of a typical elderly household is used to secure five “basic” needs: housing, health care, food, clothing, and transportation (see Figure 1 on the next page). These needs account for an even greater share of the expenditures of lower-income households, single individuals, and households that rent or have a mortgage.1

---

* Steven A. Sass is a research fellow at the Center for Retirement Research at Boston College.
and employer pension plans provide significantly less. A study by Gillen and Kim found that women widowed between 2002 and 2004 typically got 62 percent of the couple’s Social Security benefit and only half its employer pension benefit. A study by Weaver, using the Modeling Income in the Near Term (MINT) simulation model, projects similar reductions for married women entering retirement over the next quarter century: half will have 62 percent of the couple’s income or less when widowed; one in four will have 55 percent or less. The question is whether reductions this large will leave widows with insufficient income to cover their basic expenses.

If necessary, households could cut back on entertainment, gifts, and other “non-basic” items, which include cable TV or a cell phone. Spending on basic needs could also be trimmed. These figures nevertheless suggest that typical retirees cannot cut expenditures by more than about 20 percent without experiencing hardship. Lower-income households, single individuals, and households that rent or have a mortgage are even less able to cut back.

The Big Financial Shocks

The two major shocks that hit the elderly today are a spike in medical expenses and a sharp drop in income upon becoming a widow. Medical expenditures are the one item that can suddenly jump much higher, particularly for the elderly who are more susceptible to health shocks and more likely to develop conditions that require expensive care (see Figure 2). Given the importance of care to those who need it, the question is whether medical expenditures crowd out spending on other basic items.

The other main shock is a sharp drop in income upon becoming a widow. Most Americans enter retirement as married couples, and the wife typically outlives her husband. Federal poverty thresholds say widows need 79 percent of the couple’s income to maintain their standard of living. But Social Security

and employer pension plans provide significantly less. A study by Gillen and Kim found that women widowed between 2002 and 2004 typically got 62 percent of the couple’s Social Security benefit and only half its employer pension benefit. A study by Weaver, using the Modeling Income in the Near Term (MINT) simulation model, projects similar reductions for married women entering retirement over the next quarter century: half will have 62 percent of the couple’s income or less when widowed; one in four will have 55 percent or less. The question is whether reductions this large will leave widows with insufficient income to cover their basic expenses.

If necessary, households could cut back on entertainment, gifts, and other “non-basic” items, which include cable TV or a cell phone. Spending on basic needs could also be trimmed. These figures nevertheless suggest that typical retirees cannot cut expenditures by more than about 20 percent without experiencing hardship. Lower-income households, single individuals, and households that rent or have a mortgage are even less able to cut back.

The Big Financial Shocks

The two major shocks that hit the elderly today are a spike in medical expenses and a sharp drop in income upon becoming a widow. Medical expenditures are the one item that can suddenly jump much higher, particularly for the elderly who are more susceptible to health shocks and more likely to develop conditions that require expensive care (see Figure 2). Given the importance of care to those who need it, the question is whether medical expenditures crowd out spending on other basic items.

The other main shock is a sharp drop in income upon becoming a widow. Most Americans enter retirement as married couples, and the wife typically outlives her husband. Federal poverty thresholds say widows need 79 percent of the couple’s income to maintain their standard of living. But Social Security

and employer pension plans provide significantly less. A study by Gillen and Kim found that women widowed between 2002 and 2004 typically got 62 percent of the couple’s Social Security benefit and only half its employer pension benefit. A study by Weaver, using the Modeling Income in the Near Term (MINT) simulation model, projects similar reductions for married women entering retirement over the next quarter century: half will have 62 percent of the couple’s income or less when widowed; one in four will have 55 percent or less. The question is whether reductions this large will leave widows with insufficient income to cover their basic expenses.

If necessary, households could cut back on entertainment, gifts, and other “non-basic” items, which include cable TV or a cell phone. Spending on basic needs could also be trimmed. These figures nevertheless suggest that typical retirees cannot cut expenditures by more than about 20 percent without experiencing hardship. Lower-income households, single individuals, and households that rent or have a mortgage are even less able to cut back.

The Big Financial Shocks

The two major shocks that hit the elderly today are a spike in medical expenses and a sharp drop in income upon becoming a widow. Medical expenditures are the one item that can suddenly jump much higher, particularly for the elderly who are more susceptible to health shocks and more likely to develop conditions that require expensive care (see Figure 2). Given the importance of care to those who need it, the question is whether medical expenditures crowd out spending on other basic items.

The other main shock is a sharp drop in income upon becoming a widow. Most Americans enter retirement as married couples, and the wife typically outlives her husband. Federal poverty thresholds say widows need 79 percent of the couple’s income to maintain their standard of living. But Social Security

and employer pension plans provide significantly less. A study by Gillen and Kim found that women widowed between 2002 and 2004 typically got 62 percent of the couple’s Social Security benefit and only half its employer pension benefit. A study by Weaver, using the Modeling Income in the Near Term (MINT) simulation model, projects similar reductions for married women entering retirement over the next quarter century: half will have 62 percent of the couple’s income or less when widowed; one in four will have 55 percent or less. The question is whether reductions this large will leave widows with insufficient income to cover their basic expenses.

If necessary, households could cut back on entertainment, gifts, and other “non-basic” items, which include cable TV or a cell phone. Spending on basic needs could also be trimmed. These figures nevertheless suggest that typical retirees cannot cut expenditures by more than about 20 percent without experiencing hardship. Lower-income households, single individuals, and households that rent or have a mortgage are even less able to cut back.

The Big Financial Shocks

The two major shocks that hit the elderly today are a spike in medical expenses and a sharp drop in income upon becoming a widow. Medical expenditures are the one item that can suddenly jump much higher, particularly for the elderly who are more susceptible to health shocks and more likely to develop conditions that require expensive care (see Figure 2). Given the importance of care to those who need it, the question is whether medical expenditures crowd out spending on other basic items.

The other main shock is a sharp drop in income upon becoming a widow. Most Americans enter retirement as married couples, and the wife typically outlives her husband. Federal poverty thresholds say widows need 79 percent of the couple’s income to maintain their standard of living. But Social Security

and employer pension plans provide significantly less. A study by Gillen and Kim found that women widowed between 2002 and 2004 typically got 62 percent of the couple’s Social Security benefit and only half its employer pension benefit. A study by Weaver, using the Modeling Income in the Near Term (MINT) simulation model, projects similar reductions for married women entering retirement over the next quarter century: half will have 62 percent of the couple’s income or less when widowed; one in four will have 55 percent or less. The question is whether reductions this large will leave widows with insufficient income to cover their basic expenses.

If necessary, households could cut back on entertainment, gifts, and other “non-basic” items, which include cable TV or a cell phone. Spending on basic needs could also be trimmed. These figures nevertheless suggest that typical retirees cannot cut expenditures by more than about 20 percent without experiencing hardship. Lower-income households, single individuals, and households that rent or have a mortgage are even less able to cut back.

The Big Financial Shocks

The two major shocks that hit the elderly today are a spike in medical expenses and a sharp drop in income upon becoming a widow. Medical expenditures are the one item that can suddenly jump much higher, particularly for the elderly who are more susceptible to health shocks and more likely to develop conditions that require expensive care (see Figure 2). Given the importance of care to those who need it, the question is whether medical expenditures crowd out spending on other basic items.

The other main shock is a sharp drop in income upon becoming a widow. Most Americans enter retirement as married couples, and the wife typically outlives her husband. Federal poverty thresholds say widows need 79 percent of the couple’s income to maintain their standard of living. But Social Security

and employer pension plans provide significantly less. A study by Gillen and Kim found that women widowed between 2002 and 2004 typically got 62 percent of the couple’s Social Security benefit and only half its employer pension benefit. A study by Weaver, using the Modeling Income in the Near Term (MINT) simulation model, projects similar reductions for married women entering retirement over the next quarter century: half will have 62 percent of the couple’s income or less when widowed; one in four will have 55 percent or less. The question is whether reductions this large will leave widows with insufficient income to cover their basic expenses.

If necessary, households could cut back on entertainment, gifts, and other “non-basic” items, which include cable TV or a cell phone. Spending on basic needs could also be trimmed. These figures nevertheless suggest that typical retirees cannot cut expenditures by more than about 20 percent without experiencing hardship. Lower-income households, single individuals, and households that rent or have a mortgage are even less able to cut back.

The Big Financial Shocks

The two major shocks that hit the elderly today are a spike in medical expenses and a sharp drop in income upon becoming a widow. Medical expenditures are the one item that can suddenly jump much higher, particularly for the elderly who are more susceptible to health shocks and more likely to develop conditions that require expensive care (see Figure 2). Given the importance of care to those who need it, the question is whether medical expenditures crowd out spending on other basic items.

The other main shock is a sharp drop in income upon becoming a widow. Most Americans enter retirement as married couples, and the wife typically outlives her husband. Federal poverty thresholds say widows need 79 percent of the couple’s income to maintain their standard of living. But Social Security

and employer pension plans provide significantly less. A study by Gillen and Kim found that women widowed between 2002 and 2004 typically got 62 percent of the couple’s Social Security benefit and only half its employer pension benefit. A study by Weaver, using the Modeling Income in the Near Term (MINT) simulation model, projects similar reductions for married women entering retirement over the next quarter century: half will have 62 percent of the couple’s income or less when widowed; one in four will have 55 percent or less. The question is whether reductions this large will leave widows with insufficient income to cover their basic expenses.
of the elderly reported such cutbacks. Interestingly, though, even among households well above the poverty line, 5 percent reported cutbacks (see Figure 3). 6

![Figure 3. Percentage of Households Ages 65 and Over Experiencing Hardship, by Family Income Relative to the Poverty Line](image)

The study found that health declines were a clear predictor of hardship. Each 1-point decline in self-reported health from the previous 2004 interview, on a 5-point scale from “excellent” to “poor,” was associated with a 1-percentage-point increase in the incidence of hardship.

The study also found evidence that becoming a widow increased hardship. The incidence of cutbacks due to a lack of funds was 3.5 percentage points higher among single women, most of whom were widows, than among married women. Losing one’s husband since the previous interview is associated with a similar increase in hardship, but the relationship is not statistically significant. Levy suggests that this lack of statistical significance could be due to the limited number of women becoming widowed and experiencing hardship over the survey’s two-year window. A study by Sevak, Weir, and Willis, which finds that a significant number of women with incomes above poverty when their husbands are alive ended up with incomes below poverty when widowed, supports the notion that widowhood increases the risk of hardship. 7

While health shocks and widowhood do create hardship for a modest share of elderly households, a study by Shapiro finds that these shocks do not generally result in sharp declines in living standards – at least not immediately. 8 The study examines how household expenditures change up to four years following a health shock or the loss of a spouse, using data from five HRS surveys and four CAMS supplements. It finds that health shocks that increase medical spending are typically associated with an increase, not a decrease, in non-medical expenditures. Rather than “crowding out” other types of consumption, spending typically rises on items such as home maintenance, food preparation, and transportation occasioned by the decline in health. 9 Most households thus appear to have sufficient public and private insurance and/or savings to buffer medical expenditure shocks.

The study also finds that the consumption expenditures of widows are generally about 75 percent of what the couple had spent, which is about what is needed to maintain their standard of living. Consistent with Gillen and Kim’s results, the study finds that widows generally experience a decline in household income that exceeds the decline in consumption. Together, these findings indicate that most widows have sufficient reserves they can tap to maintain their standard of living. That they tap these resources, despite the decline in income, supports the notion that the expenditures of the elderly, even for non-basic items, are relatively fixed.

The results of these studies indicate that the vast majority of elderly households are able to absorb shocks without incurring severe hardship. Public and private health insurance, family contributions, and the savings of the elderly seem sufficient to allow most to avoid a significant reduction in living standards.

Weathering Shocks Tomorrow

While most of today’s elderly seem able to withstand shocks, changes in the retirement landscape suggest that future retirees will face more difficulty. First, to maintain their standard of living, they will increasingly rely on income drawn from financial assets accumulated over their working careers. This transition in the form of retirement income is largely due to the shift from traditional employer pensions to 401(k)s.

Second, not only is the form of income changing, but its overall level – relative to pre-retirement earnings – is declining. Social Security will replace a smaller share of earnings at any given claiming age. 10
And the shift to 401(k)s suggests that many households could also receive somewhat lower replacement rates from employer plans. In this changing environment, retirees will face challenges in drawing an income from their nest egg that is both sufficient and dependable and, thus, could end up experiencing greater financial fragility.

**Growing Reliance on Savings**

A study by Butrica, Smith, and Iams quantifies the growing importance of financial assets using the MINT simulation model. The study estimates the change over time in household incomes at age 67, when most individuals have retired, assuming that households annuitize 80 percent of their financial assets. Figure 4 shows the rising contribution of financial assets to retirement income (excluding earnings from work and imputed rent). The increased dependence on financial assets is especially striking for low- and middle-income households, which currently rely primarily on Social Security and (for the middle income) employer pension benefits.

**Declining Replacement Rates**

The increased dependence on financial assets would increase fragility if retirees fail to accumulate enough savings over the course of their working careers to support the standard of living they carry into retirement. And many households retiring over the next quarter century could lack sufficient savings. According to the MINT projections, retirement incomes going forward will replace a smaller share of preretirement incomes than they do today. Figure 5 shows the projected decline in replacement rates for Baby Boomers and Gen-Xers at age 67, compared to the replacement rates of recent retirees, who are now in their 70s and older. The projected declines are significant; for Gen-Xers, they range from 6 percent to 21 percent. And these projections may understate the likely decline in replacement rates because they assume that households annuitize most of their savings at an actuarially fair rate, which provides more income per dollar than a “safe” withdrawal strategy aimed at minimizing the chances of running out of money. In reality, very few retirees annuitize and even those who do cannot get actuarially fair rates.

---

**Figure 4. Potential Share of Retirement Income from Financial Assets at Age 67, by Cohort and Income Quintile**

<table>
<thead>
<tr>
<th></th>
<th>Depression Babies</th>
<th>War Babies</th>
<th>Leading Boomers</th>
<th>Trailing Boomers</th>
<th>Gen-Xers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest</td>
<td>14%</td>
<td>27%</td>
<td>27%</td>
<td>42%</td>
<td>73%</td>
</tr>
<tr>
<td>Middle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>86%</td>
</tr>
<tr>
<td>Highest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Retirement income excludes income from work and imputed rent. Per capita family income, used to sort households into quintiles, includes such income. See endnote 13. Source: Author’s calculations based on Butrica, Smith, and Iams (2012).

**Figure 5. Projected Percentage Decline in Replacement Rates at Age 67 for Boomers and Gen-Xers Relative to Recent Retirees, by Income Quintile**

<table>
<thead>
<tr>
<th></th>
<th>Lowest</th>
<th>Middle</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression Babies</td>
<td>-5%</td>
<td>-5%</td>
<td>-10%</td>
</tr>
<tr>
<td>War Babies</td>
<td>-6%</td>
<td>-8%</td>
<td>-14%</td>
</tr>
<tr>
<td>Leading Boomers</td>
<td>-9%</td>
<td>-9%</td>
<td>-16%</td>
</tr>
<tr>
<td>Trailing Boomers</td>
<td>-18%</td>
<td>-19%</td>
<td>-21%</td>
</tr>
<tr>
<td>Gen-Xers</td>
<td>-20%</td>
<td>-20%</td>
<td>-20%</td>
</tr>
</tbody>
</table>

Note: In this case, “retirement income” includes income from work and imputed rent as complete data on individual income components were unavailable. Households are sorted into quintiles based on per-capita family income. Source: Author’s calculations based on Butrica, Smith, and Iams (2012).
If nearly 80 percent of the expenditures that middle-income households carry into retirement are for basic necessities, these households would clearly be more financially fragile—more vulnerable to hardship if hit by a spike in medical expenses, a decline in income when widowed, or some other financial shock.

The Drawdown Challenge and Fragility

With the growing reliance on financial assets, deciding how best to draw down these assets becomes a more critical decision for retirees. Given that very few purchase annuities, the income that retirees can get largely depends on how they invest, their investment returns, and the pace at which they draw down their savings. The 4-percent drawdown rule, traditionally considered “best practice,” says that retirees have little chance of running out of money if they invest about half their savings in stocks and at age 65 draw out 4 percent of their savings, with the amount thereafter rising in line with inflation. Many experts now think that a 4-percent drawdown rate is too high, given rising longevity and potential declines in investment returns. Whatever the safe withdrawal rate and asset allocation, the risk of running out of money rises if retirees draw out more or invest a different amount in equities.16

The drawdown strategy that households choose affects their ability to respond to financial shocks. In general, having a substantial portion of retirement wealth in the form of financial assets improves a household’s flexibility by allowing it to easily tap its assets if hit by a shock. But this choice involves a tradeoff: for example, using savings to cushion a spike in medical expenses leaves less to provide for the household’s ongoing consumption needs. Income from savings does not decline when widowed, unlike employer pension benefits. But increasing the withdrawal rate from financial assets to offset a decline in Social Security or employer pension benefits raises the widow’s risk of outliving her savings.

Using savings to offset a shock is less of a problem toward the end of life. A safe withdrawal rate usually, but not always, results in the household retaining a relatively large amount of its savings to advanced ages, and medical expenditure shocks and the loss of a spouse that absorb such savings often come at those ages. But retirees hit by a shock early in retirement face a serious problem.17 Given the limited ability of households retiring over the next quarter century to reduce expenditures, they face hardship if they fail to tap their savings to cover basic expenses. But if they tap their savings, they increase the risk of hardship later on. And given the volatility of financial markets, it is all but certain that some cohorts will be hit by a sharp financial downturn early in retirement, making this difficult choice even harder.

Overall, then, the increased dependence on financial assets is likely to increase the fragility of the nation’s retirement income system given inadequate retirement savings, the limited income households are likely to get from their savings, and the greater exposure to market downturns.

Conclusion

The research reviewed in this brief suggests that while a small share of today’s retirees are financially fragile, most appear able to absorb a financial shock, at least for a time, without a substantial reduction in their standard of living. For future retirees, however, retirement income replacement rates are projected to decline due to inadequate savings and the limited income that safe withdrawal rates provide, reducing the cushion between their incomes and fixed expenses. If households choose to hold a significant portion of their savings in equities to increase the income their savings provide, they will be more exposed to sharp market downturns that arrive early in retirement.

The most effective response for households approaching retirement is to increase their retirement income and reduce their fixed expenses. Working longer, annuitizing wealth, and taking out a reverse mortgage would increase retirement income. Downsizing is the most effective way to reduce fixed expenses and could also increase the household’s financial assets. While many individuals are already working somewhat longer, retirees rarely annuitize, downsize, or take out a reverse mortgage. Whether the prospect of increased financial fragility leads them to change their behavior remains to be seen.
Endnotes

1 Butrica, Goldwyn, and Johnson (2005). Foster (2016) reports a similar pattern of average (not median) expenditures using the 2014 Consumer Expenditure Survey.

2 This figure would be lower using the alternative Supplemental Poverty Measure developed by the Census Bureau. For example, see the influential study edited by Citro and Michael (1995), which contended that a widow would need a lower percentage of the couple’s income because the official federal poverty thresholds build in too much economy of scale.


4 Weaver (2010) and Butrica, Smith, and Iams (2012). Widows’ income from “all sources” excludes the annuitized value of financial assets.

5 Levy (2009). Hardship is identified based on responses to: “(Since your last interview/in the last two years), have you always had enough money to buy the food you need?” and “At any time (since your last interview/in the last two years) have you ended up taking less medication than was prescribed for you because of the cost?”

6 Many households of working age are also financially fragile, with one in four unable to come up with $2,000 to cover an unexpected expense (Lusardi, Schneider, and Tufano 2011). In contrast to workers, though, the elderly have little ability to improve their finances through borrowing or working and are especially vulnerable to the two major shocks identified in this section.

7 Sevak, Weir, and Willis (2003). The greater incidence of hardship among single women in Levy’s study is to a large extent due to their lower incomes adjusted for household size. Controlling for income, the incidence of hardship among single women is just 1.4 percentage points higher than for married women. This finding is consistent with the notion that the reduction in income that widows experience increases the incidence of hardship. But as widows were disproportionately in lower-income households when married (Sevak, Weir, and Willis 2003), the finding that does not control for income could overstate the relationship between widowhood and hardship.

8 Shapiro (2009).

9 Butrica, Johnson, and Mermin (2009), also using CAMS data, similarly find little or no reduction in non-health spending.

10 The factors affecting Social Security replacement rates are a rise in the program’s Full Retirement Age, increasing Medicare premiums, more beneficiaries subject to income tax on a portion of their benefits, and the increased employment of married women. For details, see Ellis, Munnell, and Eschtruth (2014) and Wu et al. (2013).

11 401(k)s tend to have modest balances; the typical working household ages 55-64 with a 401(k) had combined 401(k)/IRA wealth in 2016 of $134,000 (Munnell and Chen 2017). In addition, Munnell et al. (2016) find that each dollar of 401(k) wealth yields less retirement income than a dollar of wealth from a defined benefit plan.

12 Butrica, Smith, and Iams (2012).

13 Depression Babies turned age 67 between 1993 and 2002; War Babies between 2003 and 2012; Leading Boomers between 2013 and 2022; Trailing Boomers between 2023 and 2032; and Gen-Xers between 2033 and 2042.

14 Leading Boomers turn age 67 between 2013 and 2022; Trailing Boomers between 2023 and 2032; and Gen-Xers between 2033 and 2042. Recent retirees are households that turned 67 between 1993 and 2012.

15 For a discussion of the impediments to annuitization, see Sass (2016). “Actuarially fair” annuity rates ignore insurance company costs and adverse selection and produce about 20 percent more income than commercially available annuities (Mitchell et al. 1999).

16 Finke, Pfau, and Blanchett (2013); Finke and Blanchett (2016).

References


About the Center
The mission of the Center for Retirement Research at Boston College is to produce first-class research and educational tools and forge a strong link between the academic community and decision-makers in the public and private sectors around an issue of critical importance to the nation’s future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception in 1998, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

Affiliated Institutions
The Brookings Institution
Syracuse University
Urban Institute

Contact Information
Center for Retirement Research
Boston College
Hovey House
140 Commonwealth Avenue
Chestnut Hill, MA 02467-3808
Phone: (617) 552-1762
Fax: (617) 552-0191
E-mail: crr@bc.edu
Website: http://crr.bc.edu

© 2018, by Trustees of Boston College, Center for Retirement Research. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that the author is identified and full credit, including copyright notice, is given to Trustees of Boston College, Center for Retirement Research.

The research reported herein was performed pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Retirement Research Consortium. The opinions and conclusions expressed are solely those of the author and do not represent the opinions or policy of SSA, any agency of the federal government, Boston College, or the Center for Retirement Research. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of the contents of this report. Reference herein to any specific commercial product, process or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply endorsement, recommendation or favoring by the United States Government or any agency thereof.