# Women, marriage, and the National Retirement Risk Index

Authors: Alicia Haydock Munnell, Wenliang Hou, Geoffrey Sanzenbacher

Persistent link: http://hdl.handle.net/2345/bc-ir:108511

This work is posted on eScholarship@BC, Boston College University Libraries.

Chestnut Hill, Mass.: Center for Retirement Research at Boston College, June 2019

These materials are made available for use in research, teaching and private study, pursuant to U.S. Copyright Law. The user must assume full responsibility for any use of the materials, including but not limited to, infringement of copyright and publication rights of reproduced materials. Any materials used for academic research or otherwise should be fully credited with the source. The publisher or original authors may retain copyright to the materials.

## WOMEN, MARRIAGE, AND THE NATIONAL RETIREMENT RISK INDEX

By Alicia H. Munnell, Wenliang Hou, and Geoffrey T. Sanzenbacher\*

### Introduction

In the past, it made sense to think of women's retirement risk mainly in the context of households, as women spent the vast majority of their lives married. Today, though, women spend more time single than they used to – for example, women approaching retirement will spend just about half their adult lives married.<sup>1</sup> Therefore, thinking about the differential risk that women face based on their marital histories is more important than ever.

This *brief* uses the National Retirement Risk Index (NRRI) to assess the retirement security of women in their 50s. The NRRI is calculated by comparing households' projected replacement rates – retirement income as a percentage of pre-retirement income – with target replacement rates that would allow them to maintain their standard of living. These calculations are based on the Federal Reserve's *Survey of Consumer Finances*, a triennial survey of a nationally representative sample of U.S. households. As of 2016, the NRRI showed that half of households were at risk of falling short in retirement, even if they worked to age 65 and annuitized all their financial assets (including the receipts from reverse mortgages on their homes).

The discussion proceeds as follows. The first section briefly summarizes the construction of the NRRI. The second section describes the increasing independence of women and how this trend would be expected to impact their financial security in retirement. The third section reports the NRRI for women with different marital histories, showing the surprising result that two-earner married couples are most at risk and then explaining this counter-intuitive finding. The final section concludes that two-earner married couples could benefit from more education and broader access to workplace retirement plans. For single women, the findings highlight the value of Social Security in boosting the retirement resources of those with lower incomes.

### Structure of the NRRI

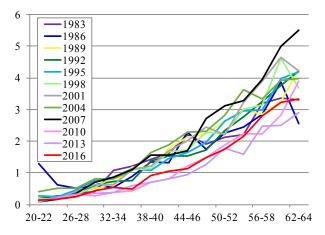
The NRRI is designed to assess the retirement risk of working-age households based on the assumption that they seek to smooth their consumption over their lifetime. Constructing the NRRI involves three

<sup>\*</sup> Alicia H. Munnell is director of the Center for Retirement Research at Boston College (CRR) and the Peter F. Drucker Professor of Management Sciences at Boston College's Carroll School of Management. Wenliang Hou is a senior research advisor at the CRR. Geoffrey T. Sanzenbacher is associate director of research at the CRR. The CRR gratefully acknowledges Prudential Financial for its sponsorship of the National Retirement Risk Index.

steps: 1) projecting a replacement rate – retirement income as a share of pre-retirement income – for each household; 2) constructing a target replacement rate that would allow each household to maintain its pre-retirement standard of living in retirement; and 3) comparing the projected and target replacement rates to find the percentage of households "at risk."

Retirement income at age 65, which is defined broadly to include all of the usual suspects plus housing, is derived by projecting the assets that households will hold at retirement, based on the stable relationship between age and wealth-to-income ratios evident in the 1983-2016 *Surveys of Consumer Finances* (SCFs). As shown in Figure 1, the wealth-to-income lines from each survey rest virtually on top of one another, bracketed by 2007 values on the high side and 2013 values on the low side.

Figure 1. Ratio of Wealth to Income by Age from the *Survey of Consumer Finances*, 1983-2016



*Sources:* Authors' calculations based on U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (SCF) (1983-2016).

Sources of retirement income that are not derived from SCF-reported wealth are estimated directly. For defined benefit pension income, the projections are based on the amounts reported by survey respondents who have already retired. For Social Security, benefits are calculated directly based on estimated earnings histories for each member of the household. A calculation of projected replacement rates also requires income *prior to* retirement. The items that comprise pre-retirement income include earnings, the return on 401(k) plans and other financial assets, and imputed rent from housing. In essence, with regard to wealth, income in retirement equals the annuitized value of all financial and housing assets; income before retirement is simply the return on those same assets.<sup>2</sup> Average lifetime income then serves as the denominator for each household's replacement rate.

Determining the share of the population at risk requires comparing projected replacement rates with the appropriate target rates. Target replacement rates are estimated for different types of households assuming that households spread their income so as to have the same level of consumption in retirement as they had before they retired. Households whose projected replacement rates are more than 10 percent below the target are deemed to be at risk of having insufficient income to maintain their pre-retirement standard of living. The NRRI is simply the percentage of *all* households that fall more than 10 percent short of their target.

In 2016, the year of the most recent SCF, the overall share at risk was 50 percent. Since the following analysis focuses on households with women in their 50s, Table 1 shows the NRRI by age group. The smaller percentage at risk for this older group reflects, in order of importance, four main factors: a greater percentage with a defined benefit plan, an earlier Social Security Full Retirement Age, shorter life expectancy, and slightly more homeownership. The question then becomes the extent to which the risk status of women in their 50s fluctuates around the average of 44 percent depending on their marital status and the implications for the future.

Table 1. Percentage of Households "At Risk" by Age Group, 2016

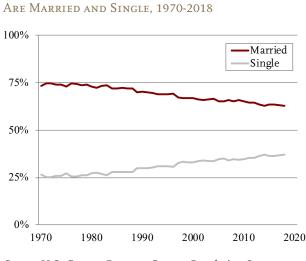
Age group	2016
All	50%
30-39	56
40-49	52
50-59	44

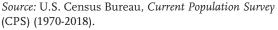
Source: Munnell, Hou, and Sanzenbacher (2018a).

## Marriage Patterns and Financial Status of Women

The percentage of women in their 50s who report being married has been declining steadily over the last 40 years (see Figure 2).<sup>3</sup> The main reasons for the declining marriage rate among women in their

FIGURE 2. PERCENTAGE OF WOMEN AGES 50-59 WHO





50s are shown in Figure 3. Divorce, which increased dramatically from 1980-2004 and has since declined slightly, is the main factor. A second important development is the growing share of women who have never married.<sup>4</sup>

As expected, married women are better off than single women.5 Their households have higher earnings, greater financial assets, more home equity, greater assets in a defined contribution (DC) plan, and are more likely to be covered by a defined benefit (DB) plan (see Table 2).<sup>6</sup> Yes, married households have the advantage of two potential earners and savers, but - for each measure - single women have much less than half the resources of married couples. For example, household earnings for married couples, at \$125,000, are nearly four times the earnings of single women and the wealth gap between the two household types is much larger. Given the much stronger economic position of married women, one might expect that they are less likely to be at risk in retirement than single women.

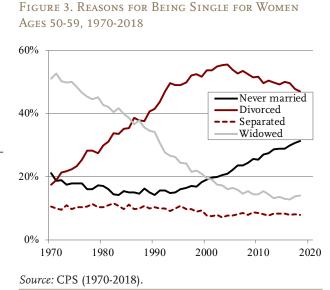


TABLE 2. ECONOMIC CHARACTERISTICS OF WOMEN AGES50-59 by Household Type, 2016

Туре	Earnings	Net financial wealth	Net home equity	DC wealth	% with DB plan
Married	\$124,700	\$320,100	\$194,900	\$262,800	38%
Single	31,500	25,900	65,700	35,500	22
Divorced	34,200	23,000	62,000	33,300	18
Never married	30,200	22,600	68,700	46,500	21
Widowed	21,600	47,000	76,100	21,400	43

Source: SCF (2016).

#### NRRI by Type of Household

Despite the greater resources of married households, it turns out that the NRRI is higher – that is, a greater percentage of households are at risk – for married women than for single women (see Figure 4 on the next page). Married women show 46 percent at risk compared to about 39 percent, on average, for all single women. Three factors appear to explain this counterintuitive outcome.

An initial hint is the stark difference in outcomes between one-earner and two-earner married couples. For this analysis, two-earner couples are defined as those in which both spouses are projected to have a

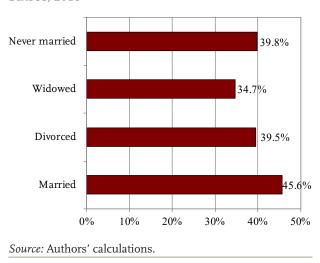
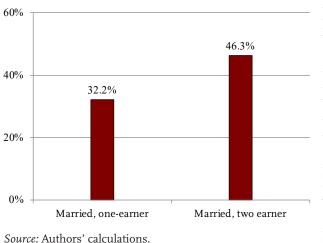


Figure 4. NRRI for Women Ages 50-59, by Marital Status, 2016

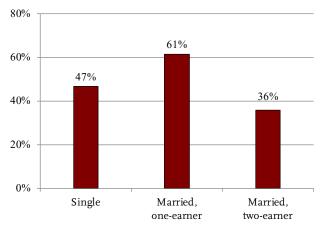
work history of at least 10 years.<sup>7</sup> All other married couples are classified as one-earner couples. This breakdown shows that the NRRI for a one-earner couple is only 32 percent compared to 46 percent for a two-earner couple (see Figure 5).<sup>8</sup> The number of earners in a household affects the outcome in two ways. The first is through the Social Security system. Social Security provides a non-working spouse a benefit equal to 50 percent of the worker's benefit. If the second spouse goes to work, the spousal benefit gradually declines and disappears completely when the second spouse's worker benefit matches or

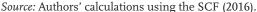


## Figure 5. NRRI for Married Women Ages 50-59, by Number of Earners, 2016

exceeds the level of the spousal benefit. In addition, Social Security has a progressive benefit formula that provides a higher benefit relative to earnings for lower earners. Given that one-earner couples are less educated and earn less than two-earner couples, they gain from this progressivity. The net result, as shown in Figure 6, is that the average two-earner couple has a Social Security replacement rate not only considerably lower than the one-earner couple but also significantly below the rate for single women, who, as noted, also have lower earnings.

FIGURE 6. SOCIAL SECURITY REPLACEMENT RATES FOR Women Ages 50-59, by Marital Status and Number of Earners, 2016





The second way in which two-earner couples get in trouble is that they tend to undersave in their retirement plans. The problem arises because, in about half of two-earner couples, only one earner is covered by an employer retirement plan.<sup>9</sup> A recent study showed that the covered workers in this situation do not increase their contributions to compensate for the fact that their spouse is not saving, so that the contribution rate for couples with a single saver was half of that for two-earner, two-saver couples (see Figure 7 on the next page).<sup>10</sup>

A third headwind facing all couples is that 30 percent of the women had been married before.<sup>11</sup> An earlier NRRI study showed that being previously divorced had an adverse effect on the couple's economic status, increasing the percentage at risk by almost 10 percentage points.<sup>12</sup> Indeed, among those in their

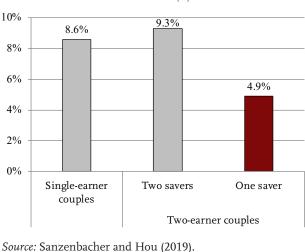
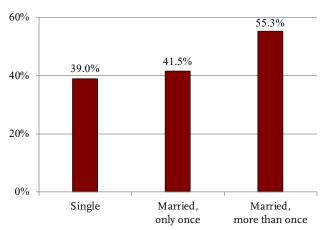


Figure 7. Average Contribution Rate as Share of Household Earnings for 401(k) Participants

50s, a couple in which the woman had previously divorced had an NRRI of 55 percent compared to 42 percent for a couple in which the woman had only been married once (see Figure 8).

Figure 8. NRRI for Women Ages 50-59 by Marital History, 2016



Note: The single group includes those who are never married, divorced, separated, and widowed. *Source:* Authors' calculations.

## Conclusion

Women are spending an increasing proportion of their lives single, which makes it useful to consider how their marital history affects the differential risk they will face as they approach retirement. Not surprisingly, women in their 50s who are married appear to be much better off than single women by all of the standard economic measures of earnings and wealth. However, this situation does not translate into better retirement preparedness – in fact, married women are more likely to be at risk for retirement than single women.

The reasons for this counterintuitive result are threefold. First, married couples with two earners – the majority of married couples in their 50s – are receiving lower Social Security benefits relative to their household earnings due to the declining relevance of the spousal benefit and the program's progressive benefit design. Second, two-earner couples with just one person saving for retirement tend to undersave because the saver often does not take into account the need to save for his spouse. And, finally, almost a third of the married women in the analysis had been through a previous divorce, and the financial scars left by divorce often linger.

These findings highlight the need for two-earner couples to save more, and the best way to address this issue would be to broaden access to retirement savings plans in the workplace. In addition, plan sponsors could help educate their married workers about the potential need to save for two. For single women, expanding coverage is also very important, because they are even less likely to have a retirement plan. The findings also underscore the importance of Social Security for single women due to their lower earnings, suggesting the value of maintaining currently scheduled benefits.

### Endnotes

1 Munnell, Sanzenbacher, and King (2017).

2 For the measures of retirement income and preretirement income, both mortgage debt and nonmortgage debt are subtracted from the appropriate income components.

3 Schoen and Cheng (2006) analyze the "retreat from marriage" and how it differs by race and socioeco-nomic status.

4 For example, see Lee and Payne (2010) and Wang and Parker (2014).

5 See, for example, Wilmoth and Koso (2002) and Yamokoski and Keister (2006).

6 The comparable numbers for single men are \$48,700 (earnings), \$84,700 (net financial wealth), \$82,800 (net home equity), \$89,600 (DC wealth), and 24 percent (share with a DB plan).

7 This threshold is needed for an individual to be eligible for a Social Security worker's benefit.

8 The "at risk" result for the two-earner couples is very close to that for all married couples in the previous figure, because two-earner couples now make up the vast majority of all couples in their 50s in the NRRI sample.

9 Angel, Prickett, and Angel (2014) find that married women are at the highest risk of lacking coverage. See Knoll, Tamborini, and Whitman (2012) for more on marriage and retirement saving, especially for young adults.

10 Sanzenbacher and Hou (2019).

11 Livingston, Parker, and Rohal (2014) document the growing number of U.S. adults who have remarried.

12 Munnell, Hou, and Sanzenbacher (2018b).

### References

- Angel, Jacqueline L., Kate C. Prickett, and Ronald J. Angel. 2014. "Retirement Security for Black, Non-Hispanic White, and Mexican-Origin Women: The Changing Roles of Marriage and Work." *Journal of Women, Politics & Policy* 35(3): 222-241.
- Knoll, Melissa A. Z., Christopher R. Tamborini, and Kevin Whitman. 2012. "I Do... Want to Save: Marriage and Retirement Savings in Young Households." *Journal of Marriage and Family* 74(1): 86-100.
- Lee, Gary R. and Krista K. Payne. 2010. "Changing Marriage Patterns Since 1970: What's Going On, and Why?" *Journal of Comparative Family Studies* 41(4): 537-555.
- Livingston, Gretchen, Kim Parker, and Molly Rohal. 2014. "Four-in-Ten Couples Are Saying 'I Do,' Again: Growing Number of Adults Have Remarried." Washington, DC: Pew Research Center.
- Munnell, Alicia H., Geoffrey T. Sanzenbacher, and Sara Ellen King. 2017. "Do Women Still Spend Most of Their Lives Married?" *Issue in Brief* 17-14. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Munnell, Alicia H., Wenliang Hou, and Geoffrey T. Sanzenbacher. 2018a. "National Retirement Risk Index Shows Modest Improvement in 2016." *Issue in Brief* 18-1. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Munnell, Alicia H., Wenliang Hou, and Geoffrey T. Sanzenbacher. 2018b. "How Does Divorce Affect Retirement Security?" *Issue in Brief* 18-12. Chestnut Hill, MA: Center for Retirement Research at Boston College.

- Sanzenbacher, Geoffrey T. and Wenliang Hou. 2019. "Do Individuals Know When They Should Be Saving for A Spouse?" *Issue in Brief* 19-5. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Schoen, Robert and Yen-hsin Alice Cheng. 2006. "Partner Choice and the Differential Retreat from Marriage." *Journal of Marriage and Family* 68 (February): 1-10.
- U.S. Board of Governors of the Federal Reserve System. *Survey of Consumer Finances*, 1983-2016. Washington, DC.
- U.S. Census Bureau. *Current Population Survey*, 1970-2018. Washington, DC.
- Wang, Wendy and Kim Parker. 2014. "Record Share of Americans Have Never Married." Washington, DC: Pew Research Center.
- Wilmoth, Janet and Gregor Koso. 2002. "Does Marital History Matter? Marital Status and Wealth Outcomes among Preretirement Adults." *Journal of Marriage and Family* 64(1): 254-268.
- Yamokoski, Alexis and Lisa A. Keister. 2006. "The Wealth of Single Women: Marital Status and Parenthood in the Asset Accumulation of Young Baby Boomers in the United States." *Feminist Economics* 12(1-2): 167-194.

#### C E N T E R for RETIREMENT R E S E A R C H at boston college

#### 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 Mathematica – Center for Studying Disability Policy 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: https://crr.bc.edu

© 2019, 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 authors are identified and full credit, including copyright notice, is given to Trustees of Boston College, Center for Retirement Research.

The research reported herein was supported by Prudential Financial. The findings and conclusions expressed are solely those of the authors and do not represent the opinions or policy of Prudential Financial or the Center for Retirement Research at Boston College.