

AFTER 50 YEARS OF PROGRESS, HOW PREPARED ARE WOMEN FOR RETIREMENT?

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Introduction

Title IX of the Education Amendments of 1972 prohibits sex discrimination (including pregnancy, sexual orientation, and gender identity) in any education program or activity receiving federal financial assistance.

In the 50 years since the enactment of Title IX, women have made enormous strides in terms of educational attainment, work, and earnings. Although a wage gap by gender persists, women's progress in the workforce has clearly enhanced their economic status as individuals. On the other hand, women have chosen to spend less of their adult life married, and the decision to eschew the potential support of a spouse could have put them more at risk economically.

This *brief*, based on a recent study, uses the *Health and Retirement Study* to document the economic gains and the changing demographic profiles of women and then assesses the extent to which they are prepared for retirement.¹ Since the trends in both economic gains and marriage have differed for Black and White women, the results are reported by race as well as for all women.

The discussion proceeds as follows. The first section summarizes the progress women have made in terms of education, labor force participation, and

earnings. The second section describes the decline in marriage over the last 50 years. The third section describes the changes in wealth accumulation and retirement preparedness of women. The final section concludes that women have gained in educational attainment, work force activity, and earnings, and this progress has translated into wealth. Moreover, women do not appear to have undone their economic gains since Title IX's passage by opting to spend more time on their own – those who spend the majority of their adult life single are as well prepared for retirement as married couples.

Progress Since the 1970s

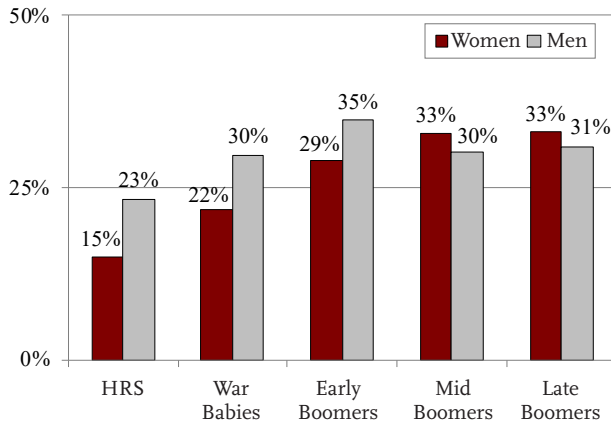
The data come from the *Health and Retirement Study* (HRS), a longitudinal nationally representative survey that has interviewed people over age 50 every two years since 1992 (most recently 2020). The survey contains information on five cohorts of respondents. The original HRS cohort (born 1931-41) and the War Babies (1942-47), who reached age 20 in the 1950s and the 1960s, serve as a base of comparison. The

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Early Boomers (1948-53), Mid Boomers (1954-59), and Late Boomers (1960-65), who reached age 20 in the 1970s and 1980s, show the economic gains since the passage of Title IX.

To provide a sense of progress on the educational front, Figure 1 shows the percentage of women and men who ended up with a college degree. Two facts stand out. First, the share of women with a degree has increased enormously, from 15 percent for those born in the 1930s to one third for Late Boomers, born in the early 1960s. Second, for recent cohorts, a greater percentage of women than men ended up with a college degree.

FIGURE 1. PERCENTAGE OF WOMEN AND MEN WITH A COLLEGE DEGREE, BY COHORT

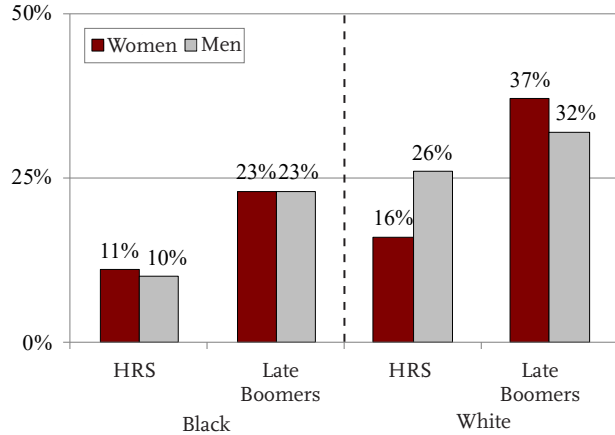


Source: Authors' calculations from the University of Michigan, *Health and Retirement Study* (HRS) (1992-2020).

That pattern by gender reflects the outcome for Whites, where the percentage with a college degree is five percentage points higher for women than for men (see Figure 2). For Blacks, the percentages for the two genders are equal. Figure 2 also shows that, while the outcomes for both Black and White women have improved markedly, educational progress for Black women has lagged behind that of their White counterparts.

The next two figures repeat the same exercise for labor force activity. Although the HRS does not interview people until age 50, administrative data on lifetime earnings are available for a large subsample.² Figure 3 shows the labor force participation rate for women and men between ages 35-44 for the five cohorts. The percentage of prime-age women in the

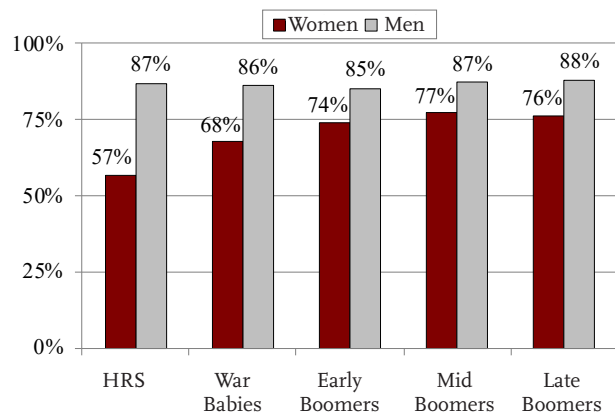
FIGURE 2. PERCENTAGE OF WOMEN AND MEN WITH A COLLEGE DEGREE FOR HRS AND LATE BOOMER COHORTS, BY RACE



Source: Authors' calculations from the HRS (1992-2020).

labor force increased from 57 percent for the earliest cohort to 76 percent for the Late Boomers. The increase has markedly reduced the differential between women and their male counterparts for whom labor force participation rates have remained relatively constant between 85 percent and 88 percent.

FIGURE 3. LABOR FORCE PARTICIPATION RATE OF INDIVIDUALS AGES 35-44, BY COHORT

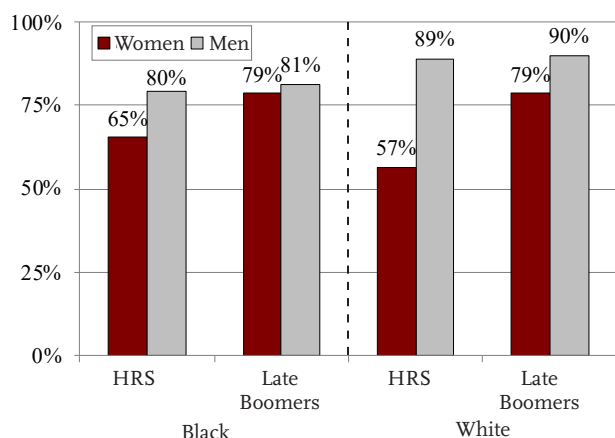


Source: Authors' calculations from the HRS (1992-2020).

The pattern by race is interesting. As expected, in both cases, women's increased participation has narrowed the gender gap. But because historically

more Black than White women worked – almost certainly out of necessity – the gains for White women have exceeded those for their Black counterparts (see Figure 4). This more rapid increase for White women, combined with a lower starting point, has produced an equal labor force participation rate for prime-age Black and White women. Finally, because the participation rate for Black men is about 10 percentage points lower than for White men, the gender gap has virtually disappeared for Blacks but remains for Whites.

FIGURE 4. LABOR FORCE PARTICIPATION RATE OF INDIVIDUALS AGES 35-44 FOR HRS AND LATE BOOMER COHORTS, BY RACE

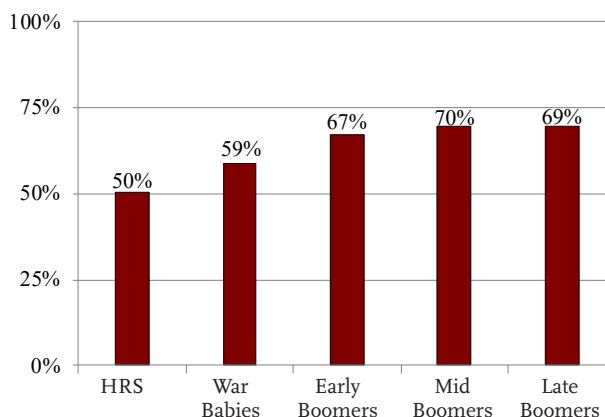


Source: Authors' calculations from the HRS (1992-2020).

Not surprisingly, the increased educational attainment and greater labor force activity of women have led to higher earnings. Unfortunately, the HRS administrative earnings data do not have information on hours worked, so in order to identify full-time workers it is necessary to turn to the *Current Population Survey*. For this exercise, we assigned workers to cohorts based on their year of birth and then observed them at ages 35-44. The results, reported in Figure 5, show that women's earnings have increased from 50 percent of men's to about 70 percent for the Boomers.

Repeating the exercise by race shows that Black women, too, have gained relative to men (see Figure 6). Interestingly, both historic and current ratios are higher for Black than for White women. This pattern, however, says more about the low earnings of Black men, as the earnings of full-time Black women are quite similar to those for their White counterparts.

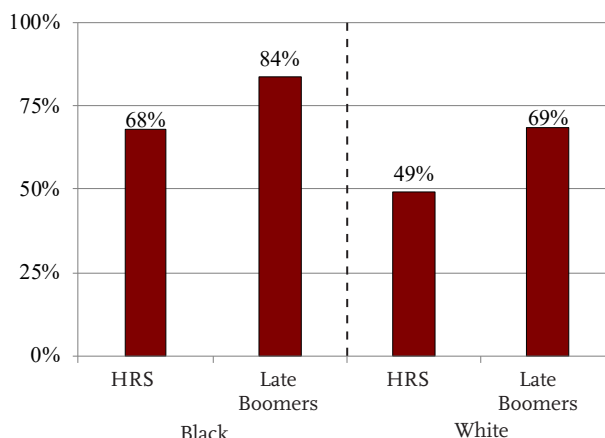
FIGURE 5. WOMEN'S EARNINGS AS A PERCENTAGE OF MEN'S, FULL-TIME INDIVIDUALS AGES 35-44



Source: Authors' calculations from the U.S. Census Bureau, *Current Population Survey (CPS)* (1967-2009).

In summary, the economic life of women has changed dramatically. The question, however, is the extent to which women are prepared for retirement. That answer depends not only on the economics of women as individuals but also their living arrangements. To the extent that women have moved away from marriage and eschewed the potential support of a spouse, they could have put themselves more at risk economically.

FIGURE 6. WOMEN'S EARNINGS AS A PERCENTAGE OF MEN'S, FULL-TIME INDIVIDUALS AGES 35-44 FOR HRS AND LATE BOOMER COHORTS, BY RACE



Source: Authors' calculations from the CPS (1967-2009).

The Decline of Marriage

To quantify the extent to which marriage patterns have changed, we once again turn to the HRS to calculate the percentage of each woman's adult life (ages 20+) spent in marriage.³ For comparisons across cohorts, one would like to include in the calculation all years between age 20 and the death of the respondent. Such a broad span is not possible, however, as women added to the sample in recent years are still quite young. As a result, the analysis includes three sets of calculations to demonstrate that the assessment is not particularly sensitive to the approach taken.

The starting point, requiring no estimates, is marriage patterns between age 20 and the most recent interview. The number of years over this span is totaled for each woman and then added across all women to get "total woman years." The number of years married during this span is then totaled for each woman and added over all women to get "years married." Dividing "years married" by "total woman years" yields the percentage of years married.

One concern with using age 20 to the last interview is that the Late Boomers in 2020 were 54-60, while the original HRS cohort in 2020 were 79-89. Thus, the "last-interview" results could understate the decline, since the most recent cohorts have spent virtually no years as widows. To address this concern, a second approach uses a standard age for each cohort.⁴

The final approach takes advantage of all the available data and makes an estimate for potential widowhood for younger women.⁵

Regardless of the approach, the share of women's adult years spent married has declined sharply from over 70 percent for the HRS cohort to less than 50 percent for the Late Boomers (see Table 1).

TABLE 1. PERCENTAGE OF YEARS THAT WOMEN SPEND MARRIED, BY COHORT, 2020

Age span	HRS Cohort	War Babies	Early Boomers	Mid Boomers	Late Boomers
Ages 20 to last interview	71.0%	71.2%	59.3%	54.5%	48.1%
Ages 20 to 54-60	77.1	73.2	60.0	54.0	48.1
Ages 20 to 79-89 (est.)	71.0	67.5	55.3	49.7	44.3

Source: Authors' calculations from the HRS (1992-2020).

How did this dramatic change come about?⁶ First, the average age of first marriage rose by about four years between the HRS cohort and the Late Boomers (see Table 2).⁷ Second, a greater proportion of women never marry, rising from 4 percent in the HRS cohort to 15 percent for Late Boomers. And third, more women get divorced.⁸

TABLE 2. WOMEN'S MARRIAGE PATTERNS, BY COHORT, 2020

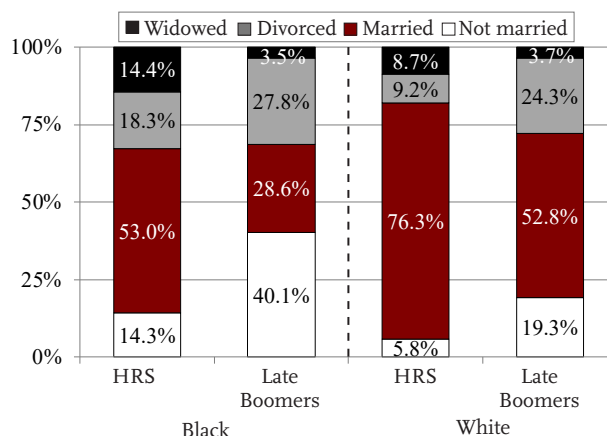
Marriage pattern	HRS Cohort	War Babies	Early Boomers	Mid Boomers	Late Boomers
Age of first marriage	21.4	21.6	22.8	24.3	25.3
% never married	3.9%	4.2%	8.7%	11.9%	14.6%
% divorced*	34.1	38.7	49.2	48.3	49.7

* Includes any woman who was ever divorced.

Source: Authors' calculations from the HRS (1992-2020).

While women in the aggregate are spending less and less time in marriage, a separate question is how this pattern varied by race. For simplicity, we compare only the HRS cohort with the Late Boomers. Three differences are worth noting (see Figure 7). First, Black women have always spent a smaller percentage of years married than White women. Second, the de-

FIGURE 7. PERCENTAGE OF YEARS WIDOWED, DIVORCED, MARRIED, AND NOT MARRIED, BY COHORT AND RACE



Source: Authors' calculations from the HRS (1992-2020).

cline in the percentage of years married is greater for Black women than White women.⁹ Third, the reasons for the decline are different. Whereas White women saw a more than doubling of years spent divorced, Black women did not. In contrast, Black women experienced a much larger increase in the percentage of years not married, making it the single largest category for them.

The bottom line is that women as a group have moved from a situation where they spend most of their adult life married to one where they spend less than half of their adult life as part of a couple. Thus, to assess retirement preparedness of women, it is necessary to consider changes in family structure as well as patterns of wealth accumulation by cohort.

Changes in Wealth and Retirement Preparedness

Preparation for retirement is measured in two ways. The first is household wealth, which includes the present discounted value of Social Security and defined benefit pensions, as well as the net value of financial and real estate assets.

While wealth measures provide useful insights into trends across cohorts, the ultimate purpose of that wealth is to allow households to maintain their standard of living in retirement. Therefore, preparation for retirement is also measured in terms of replacement rates – the ratio of the retirement income that could be generated by a household's retirement resources divided by its pre-retirement income.

Table 3 shows how wealth has changed across cohorts for women and men. One decision is how to characterize the wealth of one member of a married household. This analysis assigns the couple's full value to the woman and to the man. Although this approach clearly overstates the holdings of married people, it provides a clear benchmark against which to compare trends over time. The numbers are presented in 2020 dollars and represent the average for the middle quintile of the wealth distribution.

Two patterns are evident in Table 3. First, wealth has been declining across cohorts for both men and women at ages 59-60. This decline is largely due to two factors: 1) lower Social Security wealth as the increase in the Full Retirement Age reduced benefits for all; and 2) fewer assets in retirement plans because of adverse labor market experiences during the Great Recession. The second, and for the purpose of this study, more in-

TABLE 3. MEDIAN RETIREMENT WEALTH AT AGES 59-60 FOR HOUSEHOLDS, BY GENDER AND COHORT, THOUSANDS OF 2020 DOLLARS

Gender	HRS Cohort	War Babies	Early Boomers	Mid Boomers	Late Boomers
All women	\$481	\$544	\$445	\$380	\$335
All men	589	639	480	420	373
Women's wealth as a % of men's	82%	85%	93%	90%	90%

Note: Median is measured as the average for the middle quintile of the wealth distribution.

Source: Authors' calculations from the HRS (1992-2020).

teresting result is the ratio of women's wealth to men's wealth. For the earlier cohorts, the women's wealth equaled 82-85 percent of men's; for the later cohorts, the comparable figures were 90-93 percent. Boomer men, who did not enjoy gains in education or earnings over time, appear to have been hit much harder than their female counterparts by the Great Recession.

The question is the extent to which the overall improvement in women's wealth relates to their marital status. Table 4 presents the wealth holdings for three

TABLE 4. MEDIAN WEALTH AT AGES 59-60 FOR WOMEN, BY LIFETIME MARITAL STATUS AND COHORT, THOUSANDS OF 2020 DOLLARS

Lifetime marital status	HRS Cohort	War Babies	Early Boomers	Mid Boomers	Late Boomers
Mostly married	\$579	\$731	\$646	\$531	\$446
Mostly single	227	334	286	260	290
Never married	297	226	233	223	216
As a % of mostly married;					
Mostly single	39%	46%	44%	49%	65%
Never married	51*	31	36	42	48

* This number appears to reflect noise from a small sample size rather than the wealth of never-married women.

Note: Median is measured as the average for the middle quintile of the wealth distribution.

Source: Authors' calculations from the HRS (1992-2020).

groups of women: 1) never married; 2) mostly single (less than 50 percent of adult years married); and 3) mostly married (more than 50 percent of adult years married). The large decline in median wealth for women who spend their lives mostly married largely reflects declining fortunes for their husbands, as discussed above. Since the wealth of the mostly-single and never-married women has remained relatively stable, their holdings have increased sharply relative to the mostly married.

Table 5 repeats the same calculations for only Black women. Because the sample sizes by cohort, race, and marital status are relatively small, the calculations collapse the pre-Title IX cohorts – the HRS and the War Babies – and those who mainly entered their 20s after Title IX – namely, the Early, Mid, and Late Boomers. Although the wealth levels are lower for Black women than for women in general, the pattern of mostly-single and never-married women gaining on the mostly married is similar to that of women generally.

TABLE 5. MEDIAN WEALTH AT AGES 59-60 FOR BLACK WOMEN, BY LIFETIME MARITAL STATUS AND COHORT, THOUSANDS OF 2020 DOLLARS

Lifetime marital status	HRS and War Babies	Early, Mid, and Late Boomers
Mostly married	\$335	\$343
Mostly single	181	200
Never married	102	153
As a % of mostly married:		
Mostly single	54%	58%
Never married	30	44

Source: Authors' calculations from the HRS (1992-2020).

The following repeats the exercise for replacement rates.¹⁰ The pattern of replacement rates across cohorts mirrors the pattern of wealth in that mostly-single and never-married women have gained relative to the mostly married (see Table 6).¹¹ Again, the conclusion is that women forgoing marriage for some or all of their life have not sacrificed economic security. Just as their wealth has increased relative to their married counterparts, so too have their replacement rates become more equal.

TABLE 6. MEDIAN REPLACEMENT RATE AT AGE 59-60 FOR WOMEN, BY LIFETIME MARITAL STATUS AND COHORT

Lifetime marital status	HRS Cohort	War Babies	Early Boomers	Mid Boomers	Late Boomers
Mostly married	44%	47%	44%	38%	35%
Mostly single	36	36	36	33	33
Never married	43*	24	37	34	34

* This number appears to reflect small sample size rather than the earnings of never-married women.

Note: Median is measured as the average for the middle quintile of the wealth distribution.

Source: Authors' calculations from the HRS (1992-2020).

Finally, Table 7 reports replacement rates for solely Black women – again comparing the HRS/War Babies and the Boomers. Because of the progressive nature of Social Security, despite having less wealth, Black women have replacement rates roughly equal to those for women as a group. And the pattern over time is similar. Women who spend most of their life married have experienced a decline in replacement rates, while the mostly single and never married have seen increases. Like the story for women as a group, the replacement rates for mostly-single and never-married women have reached and now even exceed those for women who spend their lives mostly married.

TABLE 7. MEDIAN REPLACEMENT RATE AT AGE 59-60 FOR BLACK WOMEN, BY LIFETIME MARITAL STATUS AND COHORT

Lifetime marital status	HRS and War Babies	Early, Mid, and Late Boomers
Mostly married	37%	33%
Mostly single	32	34
Never married	26	38

Source: Authors' calculations from the HRS (1992-2020).

Conclusion

In the half century since Title IX's passage, women have made substantial economic progress. One factor that could potentially undermine women's economic gains during their working lives is a change in their living arrangements. In recent decades, women have become much more independent, with the Late Boomers spending less than half of their adult lives married compared to over 70 percent for the oldest cohorts. This movement away from marriage, by reducing the potential support of a spouse, could have put women more at risk economically.

Strikingly, though, the results show that it is the women who have spent most of their lives married who look worse off in terms of retirement preparedness. In contrast, at the median, mostly-single and never-married women have gained ground on those who are mostly-married. These overall patterns are similar for both White and Black women. The conclusion, then, is that women do not appear to have undone their economic gains since Title IX's passage by opting to spend more time on their own. They have gained both income and wealth, and are as well prepared for retirement as married couples.

Endnotes

- 1 Munnell, Liu, and Quinby (2022).
- 2 Around 60 percent of HRS respondents agree to link their survey data with administrative earnings records from the Social Security Administration. The HRS is not typically used to measure labor force participation at younger ages because the sample does not include incarcerated individuals or those who died before age 50. However, it is useful in this instance to maintain consistency with the wealth comparisons to follow. Moreover, the HRS tells a similar story to other datasets such as the *Current Population Survey*.
- 3 This analysis relies on retrospective questions in the HRS about marital history. See Munnell, Sanzenbacher, and King (2017) for a description of the methodology.
- 4 Calculations using the standard age only consider responses on marital status by the HRS wave in which each cohort turns 54-60. This approach takes advantage of the full sample of Late Boomers and generates comparable estimates across cohorts.
- 5 This estimate starts with the ratio of the percentage of years spent married for the HRS cohort as of last interview (ages 79-89) to the percentage for this same cohort at ages 54-60 ($71/77 = .92$). This ratio, which shows how the percentage of years married is reduced when more years are included, is applied to the reported percentages at ages 54-60 for the younger cohorts.
- 6 This stage of the analysis relies on our estimates of the potential time spent widowed as described in endnote 3.
- 7 Haines (1996) documents an increase in the age at first marriage for women that began in 1950 and continued through 1990. Loughran (2002) attributes some of this increase to rising male wage inequality over the same time period. Goldin and Katz (2002) attribute some of the increase to the introduction of the birth control pill in the 1960s.

8 As Stevenson and Wolfers (2007) note, divorce rates actually peaked in the early 1980s and have fallen slightly since. In this context, the sharp increase in the share of women divorced between the HRS cohort and Early Boomers (who would have been in their 30s around the time of the peak) makes sense, followed by the slight decline seen for the Mid Boomers.

9 Both the lower level of marriage among Blacks and the widening marriage gap have been documented elsewhere, for example in Raley, Sweeney, and Wondra (2015).

10 In this exercise, retirement income is based on annuitizing non-housing wealth at ages 59-60 and pre-retirement income is set at the five years of highest earnings before age 55. Housing is excluded because, as much as experts urge them to do so, homeowners rarely tap their equity to support themselves in retirement. The level of reported replacement rates is lower than they will be ultimately, because these households are 59-60 and still have several years more to work and save before they retire.

11 The relative advancement of mostly-single and never-married women is largely due to the declining fortunes of mostly-married women, who have seen a sharp drop in replacement rates because of two factors. First, the increase in Social Security's Full Retirement Age reduced benefits for all, while the Great Recession depressed wealth in employer-sponsored retirement plans. Whereas women's improved economic success acted as a countervailing force, men had no offsetting gains and therefore absorbed the full impact of these events. Second, replacement rates have further declined for married couples as the increased labor force participation of married women has led to a dramatic decline in the prevalence of the 50-percent Social Security spousal benefit, which is only applied when one spouse's benefit is less than half of the other spouse's benefit. In contrast, never-married Boomers have seen higher replacement rates than the earlier cohorts, while replacement rates for the mostly-single women have declined only slightly.

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