
Philip Armour, Marwa AlFakhri, and Mandlenkosi Dube

Philip Armour  
RAND Corporation

Marwa AlFakhri  
RAND Corporation

Mandlenkosi Dube  
RAND Corporation

October 2023

Michigan Retirement and Disability Research Center, University of Michigan, P.O. Box 1248. Ann Arbor, MI 48104, mrdrc.isr.umich.edu, (734) 615-0422

Acknowledgements

The research reported herein was performed pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Retirement and Disability Research Consortium through the University of Michigan Retirement and Disability Research Center Award RDR18000002-05. The opinions and conclusions expressed are solely those of the author(s) and do not represent the opinions or policy of SSA or any agency of the federal government. 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.

Regents of the University of Michigan

Jordan B. Acker, Huntington Woods; Michael J. Behm, Grand Blanc; Mark J. Bernstein, Ann Arbor; Paul W. Brown, Ann Arbor; Sarah Hubbard, Okemos; Denise Ilitch, Bingham Farms; Ron Weiser, Ann Arbor; Katherine E. White, Ann Arbor; Santa J. Ono, ex officio

Abstract
The Social Security Amendments of 1983 raised the full retirement age (FRA), the age at which claimants receive an unreduced monthly benefit, from 65 to 67. However, this change was gradually implemented, with the first increase from 65 to 66 phased-in between 2001 and 2009, and the second increase to 67 currently underway. Given that Social Security benefits have an equalizing effect on the wealth distribution, the rising FRA represents a reduction in retirement wealth borne by the population most reliant on Social Security benefits. In this article, we use the Health and Retirement Study, a nationally representative panel survey of individuals 51 and older in the United States, to estimate how income and wealth varies by race and ethnicity for households facing different FRAs. In particular, we focus on how income and wealth racial/ethnic disparities changed from age 60 to 70 for households with age 65 FRA versus 66 FRAs and provide insight on how the currently rising FRA may affect disparities into retirement. Our central finding is that age 60/61 socioeconomic characteristics explain the vast majority of age 70/71 economic disparities; however, age 60/61 disparities are increasing in more recent cohorts. Social Security income lowers disparities at age 70/71 relative to other income sources, but earnings and capital income disparities remain substantial. Absent policy intervention, our findings suggest racial/ethnic disparities in retirement will widen for workers approaching retirement.

Citation
Introduction

Social Security retirement benefits provide a guarantee of a minimum standard of living for workers with few other retirement resources; retirees thus rely more heavily on these benefits as they age and decumulate other assets. For example, using the HRS, Dushi et al. (2017) estimate that in 2012, 15% of 65 to 69 year olds rely on Social Security for at least 90% of their income, while 27% of those older than 80 rely on Social Security for at least 90% of their income. Given well documented racial and ethnic disparities in individual retirement accounts savings, defined benefit pension eligibility, and defined contribution balances (Rosenthal 2021), racial/ethnic groups that face structural barriers in labor markets, housing markets, and financial services rely even more heavily on Social Security than white households. Indeed, Dushi et al. (2017) found that while 19% of white retirees rely on Social Security for 90% of their income, 36% of Black retirees rely on Social Security for 90% of their income.

Any policy changes or claiming decisions that reduce monthly benefits therefore disproportionately impact racial/ethnic groups more reliant on Social Security benefits. This study focuses on a major change in SSA benefits: the increase in the FRA, and the targeting of the Social Security Statement to just workers in their 60s. Past research has documented the effects of the FRA on the labor supply and claiming decisions of older workers and other wealth decumulation decisions (Mastrobuoni 2009, Behaghel and Blau 2012, Armour and Hung 2017), but a common finding in this literature is that those least dependent on Social Security benefits are those most likely to respond to the rising FRA, both in terms of claiming later and in working longer.
However, there is less evidence of the extent to which the ongoing increase in the FRA will exacerbate racial/ethnic disparities in retirees’ economic security. Moore et al. (2019) argue that since older Black workers are more likely to work in physically strenuous jobs in their early 60s as well as report high rates of work-limiting disabilities well into their 60s, they will be less likely to be able to stay in the labor force to counteract the rise in the FRA. Recent research with the HRS has demonstrated that, when compared to observationally similar individuals who delayed claiming, early claimants’ household liquid wealth is, on average, $100,000 less by their mid-70s (Armour and Knapp 2023). As the FRA rises, the penalty from early claiming will increase, and those who will rely most heavily on Social Security benefits, such as Black and Hispanic households, may not be able to mitigate the decrease in Social Security benefits through longer work or drawing on other forms of retirement wealth. However, evidence on disparities in economic well-being in retirement across racial and ethnic groups and across FRA cohorts is lacking.

We document how the rising FRA, in the context of changing life expectancy, leads to cross-cohort, policy- and demographic-induced differences in the present discounted value of Social Security wealth.

Background on Social Security and the rising full retirement age

Background

The Social Security Act of 1935 introduced Social Security retirement benefits, a federal workers’ insurance program providing monthly payments to eligible workers and family members to replace the income of workers exiting from the labor force in old age.
In June 2023, approximately $93 billion was paid out in Social Security benefits to 52 million retired Americans and dependents (SSA 2023).

Claiming retirement benefits is flexible in that eligible workers can begin claiming benefits at the earliest eligibility age (EEA), currently 62 years old, or delay up to age 70. However, a worker’s claiming decision has an impact on the monthly payments that they receive. Workers who begin claiming benefits before reaching full retirement age (FRA) face a penalty that actuarially adjusts downward their monthly benefits. Conversely, those who delay claiming their benefits after reaching the FRA receive Delayed Retirement Credits (DRCs), which permanently increase their monthly benefits. Workers receive the full retirement amount or primary insurance amount (PIA) if they begin claiming their benefits at the FRA.

Through the 1983 Social Security Amendment, Congress structured future increases in the FRA from 65 to 67 for workers born after 1937; the EEA, however, did not change. The FRA initially increased from 65 to 66 in the early 2000s (Purcell 2016) and is currently increasing the FRA to 67 for workers born in 1960 (62 in 2022; 67 in 2027) or later (Li 2023). Because workers have to wait longer to receive an unreduced benefit, increasing the FRA effectively reduced Social Security benefits for all worker birth cohorts born after 1937. At the current FRA of 67, a worker who begins claiming their retirement benefits at the EEA (now five years in advance of the FRA) would only receive a benefit amount equivalent to 70% of their PIA. Even if the worker delayed claiming until age 66, a year older than the previous FRA, the worker would receive only 93% of their full retirement benefit (Li 2023). Moore et al. (2019) estimate that increasing the FRA from 65 to 67 results in a 13% benefit cut for all workers born after
1937, through increased time to reaching the FRA and reduced opportunity for accruing DRCs through delayed claiming.

In the presence of a rising FRA, workers are faced with the decision to either work longer or get permanently lower monthly benefits. Prior research has shown that in response to the FRA, workers have remained employed for longer (Neumark and Song 2012) and the Social Security Administration reports that more generally the labor force participation rate and claiming age of Americans has increased (Purcell 2020).

However, there is also evidence that changes in labor force participation and claiming behavior are heterogeneous across age cohorts (Mastrobuoni 2009), demographic and socioeconomic status (Armour and Knapp 2021), and reliance on Social Security benefits (Behaghel and Blau 2012). Armour and Knapp (2021) find that the long-term outcomes associated with claiming decisions are higher monthly retirement benefits for those who delay and, for early claimers, lower wealth and $14,000 less average household income through to their 70s.

Several factors influence retirement and claiming decisions. HRS data show that in 2018 over 53% of participants had retired at an earlier age than they had indicated they would in the 1992 survey on account of health status, wealth, life expectancy, and education among others (Liu et al. 2023). This is consistent with prior research that suggests claiming decisions are associated with specific characteristics. Following the FRA increase from 65 to 66, Behaghel and Blau (2012) found that delayed benefit claiming was associated with households that were least likely to rely on Social Security benefits. Those who claim early are more likely to have lower education, lower earnings
prior to reaching age 62, work-limiting health conditions, and physically demanding jobs (Armour and Knapp 2023).

Black workers experience these factors that lead to early claiming at far higher rates than their white counterparts. In 2014, among workers between ages 65 and 69, 43% of Black men versus 32% of white men, and 51% of Black women versus 35% of white women reported on the HRS survey that they experienced health-related work limitations (Moore et al. 2019). These difference persist even though jobs increasingly have fewer physical demands (Hurd and Rohwedder 2016), Black workers are more likely to be in physically demanding jobs and are less likely to be in jobs that allow them to shift responsibilities to those requiring less physical effort (Moore et al. 2019). In 1992 and 2014, at least 50% of Black workers reported being in jobs that required "lots of physical effort at work," compared to 39% in 1992 and 32% in 2014 for white workers (Moore et al. 2019). Workers facing physically demanding jobs are less likely to remain employed compared to workers who do not (Neumark and Song 2012). If claiming early is associated with lower retirement benefits, and an increasing FRA further reduces those benefits, then we may expect Black workers to experience those outcomes at much higher rates.

The rationale for raising the FRA was that it reflected improved health and longer lives in workers (Li 2023), and with longer life expectancy there would more benefits to finance (Hurd and Rohwedder 2016). However, the average life expectancy ignores the disparities in life expectancies across racial/ethnic lines. Black Americans, and in particular Black American men have far shorter life expectancies than other groups. Black men have, on average, two years shorter life expectancy at 65 compared to white
men (CDC 2016). Claiming benefits early is associated with lower life expectancy (Armour and Knapp 2023), but leads to permanently reduced monthly benefits. Delaying up to age 67 for Black men is associated with a 5% to 7% cut in lifetime retirement benefits, because these workers often do not live long enough to receive the full expected benefits (Moore et al. 2019). Therefore, working longer also adversely affects Black workers.

Increasing the FRA disproportionately affects the retirement wealth of those most reliant on Social Security benefits (Sabelhaus and Henriques Volz, 2020). Across different estimates, over 40% of the population rely on Social Security benefits for at least 50% of their family income (Dushi et al. 2019; Dushi and Trenkamp 2021). Yet, even among those who rely on Social Security benefits, the reliance varies across subgroups, including through race/ethnicity. For example, poverty rates are highest amongst people of color (Dushi and Trenkamp 2021) and Black Americans typically have lower savings and face high risk for financial insecurity (Moore et al. 2019; Center on Budget and Policy Priorities 2023). In 2016, Black households, on average, had approximately half of the retirement wealth that the average white household had (Hou and Sanzenbacher 2020). Therefore, post-retirement, Black households rely more on Social Security benefits, which play an important role in reducing the racial wealth gap (Spriggs and Furman 2006; Hou and Sanzenbacher 2020). Estimates using 2012 Health and Retirement Study (HRS) data suggest that 36% of the Black population 65 or older relied on Social Security benefits compared to 19% of their white counterparts (Dushi et al. 2019).
The inequitable impact of a rising FRA is significant considering the role Social Security benefits play in reducing economic disparities, especially in older adults. Among older workers, there are higher rates of unemployment, and they remain in the job-seeking market for much longer than younger workers (Spriggs 2010). At retirement, consumption and wealth trajectories decline (Hurd and Rohwedder 2013; Chen and Munnell 2021; Mitchell et al. 2022). Each year during retirement, household consumption is estimated to decline approximately 0.7% to 0.8% on average (Chen and Munnell 2021). However, these changes are also found to be heterogeneous across groups, with lower-wealth households showing more declines compared to wealthier households (Hurd and Rohwedder 2013; Chen and Munnell 2021). Additionally, having certain characteristics associated with race/ethnicity, gender, education, household dynamics, and disability or health conditions can lead to worse economic outcomes in older adults (Mitchell et al. 2022). More than double the proportion of Black people 65 and older live in poverty compared to their white counterparts (Kijakazi et al. 2019; Dushi and Trenkamp 2021). Yet, while many Black people remain in poverty even after receiving Social Security benefits (Kijakazi et al. 2019), the benefits improve the economic trajectories of older Black Americans and Americans across the board. Social Security benefits are responsible for lifting at least 10 million senior adults out of poverty. Absent these benefits, nearly half of those 65 and older would be living with incomes below the poverty line (Center on Budget and Policy Priorities 2023). Further, Social Security retirement benefits also reduce the racial wealth gap. Black workers earn approximately 73% of white workers’ earnings, but on average, receive over 80% of the retirement benefits that white retirees do (Spriggs and Furman, 2006).
In this study, we examine the longitudinal experiences of non-Hispanic Black, non-Hispanic white, and Hispanic households spanning ages 60 to 70. We focus on how income and wealth differences have evolved in more recent cohorts and how pre-EEA status predicts later outcomes, indicating the role that Social Security benefits have played and may play in economic security and disparities in retirement.

Data and methods

We take our data from the RAND HRS Longitudinal File (1992 to 2020, Version) comprised of information from Core and Exit interviews of all individuals (N=42,406) who have ever completed a Core Health and Retirement Study (HRS) interview. Begun in 1992, the HRS is a biennial nationally representative panel survey of Americans 51 and older. Once they enter the HRS, respondents and their spouses are surveyed every two years until death and, every six years, younger cohorts of 51 to 61 year olds are added to ensure that survey remains nationally representative, allowing researchers to follow respondents as they leave the labor force and well into retirement. The RAND HRS data set we employ contains rich set of variables, including respondent and spouses’ demographics, health, health insurance, Social Security, pensions, family structure, retirement plans, expectations, and employment history, and imputations developed by RAND for income and assets.

Since our analysis focuses on the impact of rising Social Security full retirement ages (FRA) on welfare of and racial equity among retired households, we apply only one sample restrictions to the RAND HRS data set. Specifically, we restrict our sample to only include individuals observed in the HRS at age 60/61 and drop 24,060
individuals for a final sample size of 18,346 individuals with birth years between 1931 and 1960.¹

**Variable construction**

**Head of household indicator variable**

Our primary interest is to measure the effect of rising retirement ages on welfare of and racial equity among retired households. However, Social Security FRAs and race data are at the individual level. So, in order to operationalize our rising FRA and racial equity analysis, we constructed a head of household indicator variable to identify whether a particular HRS respondent or her spouse was the head of household, and then used the head of household’s FRA and race as the primary independent variable of our analysis. Our head of household indicator takes a value of one if the respondent is the head of household and value of zero when the respondent’s spouse is the head of household.

To construct our head of household indicator, we first assigned all unmarried respondents (i.e., those with marital statuses of never married, single, separated, 

¹ We also conducted an analysis drawing on variation in communications from SSA — specifically, staggered introduction, cessation, and reintroduction of the Social Security Statement from the mid-1990s through 2018 — to examine whether these communications differentially influenced retirement preparation and OASDI claiming across racial/ethnic groups, since prior research has found strong behavioral effects of Statement receipt on claiming (Armour 2018, Smith 2020). However, as noted by Armour (2018) in the disability claiming context and recently found by Anand and Slavov (2023) in the retirement benefit claiming context, the Statement has nonmonotonic effects depending on the disability status of recipients. As such, our analyses required separating out impacts not just by race and ethnicity, but by presence or absence of a work-limiting health condition within these groups. The resulting specifications were statistically underpowered, preventing any inference in this context.
divorced, or widowed) as head of their households. Among coupled respondents (i.e., married or partnered), we first assigned head of household status to whoever, between the respondent and their spouse, had the greater amount of Social Security wealth using the HRS’ prospective Social Security wealth measures. These measures, constructed from the employment sections of waves 1, 3, 7, 10 and 13 of the HRS, are computed based on earnings records for respondents and spouses yet to claim Social Security benefits. The measures project the Social Security wealth respondents and their spouses would have if they claimed benefits at either age 62, the early eligibility age, their full retirement age, or at age 70. Among coupled respondents who had the same amount of Social Security wealth as their spouse, we designated as the head of household the older of the couple and, in cases where the respondent and their spouse are the same age, we assigned head of household status to whomever between the two is male.

Since the HRS only projects Social Security wealth for respondents and spouses who have not claimed Social Security benefits and records the wealth of those who have claimed benefits as missing, we could assign head of household status based on Social Security wealth alone. In such instances, we assigned household head status as follows:

1. If the respondent’s spouse claimed Social Security benefits at age 60/61, then the spouse is the head of household and vice versa.
2. If the respondent has not claimed Social Security benefits while their spouse has and before age 62, then the respondent is the head of household and vice versa.
3. Among respondents whose head of household status could not be determined according claim status criteria above, the respondent is the household head if he/she reports having longer work history than his/her spouse and vice versa.

4. For those respondents and spouses with missing work histories, the respondent is head of household if he/she is older than their spouse and vice versa.

5. Regardless of gender, respondents whose head of household status could not be determined from either claim status, work history, or age are designated as household head if they were working full-time at age 60/61 while their spouse was either partly retired, disabled, unemployed, worked part-time, or was not in the labor force.

6. Finally, respondents who could not be classified using the labor force criterion above are assigned head of their households if they are men, while female respondents’ male spouses are assigned as household head.

Other variables

Our primary dependent variables of interest (liquid wealth, income, etc.) are at household-level and, for the most part, available in the RAND HRS Longitudinal File at that level. Hence, to construct those variables at ages 60/61 and older as our analysis demands, we simply identified the HRS wave in which a respondent was a given age between the ages 60/61 and 70/71, then created a variable for that age. For example, for a respondent observed in the HRS for all ages from 60/61 to 70/71, we used this process, to create household income and variables at ages 60/61, 62/64, and so on up to age 70/71. When variables were not available at the household level, as is the case with defined contribution (DC) retirement account balances, we followed a similar
process taking respondents' individual DC account balances in the HRS wave they were ages 60/61 to 70/71 and, if married or partnered, adding their spouses’ DC account balance to obtain a household-level variable.

Finally, all individual-level variables (FRA, race, health, employment history, etc.) employed in our analysis are for household heads, and thus were constructed based on our head of household indicator. For instance, to construct our FRA and race variables, we used the FRA and race of the household head. Importantly, we followed the same procedure to construct sampling weights, taking the person-level analysis weight from the HRS wave a respondent was age 60/61, 62/63, and so on to weight analyses at that age.

One limitation we face in our investigation of the effect of rising full retirement ages on the welfare of and racial equity among retired Americans is the fact of differential mortality. Black Americans, men especially, are significantly less likely than Hispanics and nonwhite Hispanics to survive to age 70/71, the end point of our analyses. Unaddressed, differential mortality among our race/ethnicity groups could confound our age 70/71 analyses and any estimates flowing from them. We address this concern using inverse mortality probability weights to achieve balance in our age 70/71 analyses. To obtain these inverse probability weights, we estimated a logit regression of age 70/71 mortality as a function of relevant age 60/61 demographic, financial, employment and health variables for each race/ethnicity-sex group in our study. We then used the predicted mortality probabilities obtained therein to produce our inverse probability weights. While we began by estimating logits using all demographic, financial, employment and health variables we considered to be
potentially predictive of mortality. We then eliminated from the models variables whose
relationship to age 70/71 mortality was not statistically significant. The result was that
our inverse probability weights are based on logit regressions of age 70/71 mortality on
respondent head of household's age 60/61 home ownership, self-reported health and
disability statuses, whether they have a balance IRA balance at age 60/61, and their
self-reported probability of living to age 75.
Table 1 shows which birth cohorts turned 61 in each HRS survey year (in the interest of clarity and brevity, we only show the birth year of those turning 61, but we include in our sample construction those turning 60 in those years as well) and their corresponding FRA.

**Table 1: Full retirement age of Health and Retirement Study birth cohorts and survey years**

<table>
<thead>
<tr>
<th>HRS Survey Year</th>
<th>Birth year of 61-Year-old in Survey</th>
<th>FRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>1931</td>
<td>65</td>
</tr>
<tr>
<td>1993</td>
<td>1932</td>
<td>65</td>
</tr>
<tr>
<td>1994</td>
<td>1933</td>
<td>65</td>
</tr>
<tr>
<td>1995</td>
<td>1934</td>
<td>65</td>
</tr>
<tr>
<td>1996</td>
<td>1935</td>
<td>65</td>
</tr>
<tr>
<td>1997</td>
<td>1936</td>
<td>65</td>
</tr>
<tr>
<td>1998</td>
<td>1937</td>
<td>65</td>
</tr>
<tr>
<td>1999</td>
<td>1938</td>
<td>65 &amp; 2 months</td>
</tr>
<tr>
<td>2000</td>
<td>1939</td>
<td>65 &amp; 4 months</td>
</tr>
<tr>
<td>2001</td>
<td>1940</td>
<td>65 &amp; 6 months</td>
</tr>
<tr>
<td>2002</td>
<td>1941</td>
<td>65 &amp; 8 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>65 &amp; 10 months</td>
</tr>
<tr>
<td>2003</td>
<td>1942</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>1943</td>
<td>66</td>
</tr>
<tr>
<td>2005</td>
<td>1944</td>
<td>66</td>
</tr>
<tr>
<td>2006</td>
<td>1945</td>
<td>66</td>
</tr>
<tr>
<td>2007</td>
<td>1946</td>
<td>66</td>
</tr>
<tr>
<td>2008</td>
<td>1947</td>
<td>66</td>
</tr>
<tr>
<td>2009</td>
<td>1948</td>
<td>66</td>
</tr>
<tr>
<td>2010</td>
<td>1949</td>
<td>66</td>
</tr>
<tr>
<td>2011</td>
<td>1950</td>
<td>66</td>
</tr>
<tr>
<td>2012</td>
<td>1951</td>
<td>66</td>
</tr>
<tr>
<td>2013</td>
<td>1952</td>
<td>66</td>
</tr>
<tr>
<td>2014</td>
<td>1953</td>
<td>66</td>
</tr>
<tr>
<td>2015</td>
<td>1954</td>
<td>66</td>
</tr>
<tr>
<td>2016</td>
<td>1955</td>
<td>66 &amp; 2 months</td>
</tr>
<tr>
<td>2017</td>
<td>1956</td>
<td>66 &amp; 4 months</td>
</tr>
<tr>
<td>2018</td>
<td>1957</td>
<td>66 &amp; 6 months</td>
</tr>
<tr>
<td>2019</td>
<td>1958</td>
<td>66 &amp; 8 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>66 &amp; 10 months</td>
</tr>
<tr>
<td>2020</td>
<td>1959</td>
<td></td>
</tr>
</tbody>
</table>
Cross-cohort differences in Social Security wealth

A well-known implication of rising FRA is that the penalty for claiming Social Security benefits early increases. For instance, while individuals with an FRA of 65 who claimed benefits at 62 faced a 20% reduction in their PIA, individuals with an FRA of 67 will face a 30% reduction. Naively, this difference in early claiming penalties translates to a 12.5% relative reduction in FRA-67 individuals’ lifetime Social Security wealth compared to that of FRA-65 individuals. However, congress’ decision to raise FRAs was in part motivated by the fact that Americans are living longer. Hence, FRA 67 individuals may partly avoid or even escape the 12.5% reduction in their Social Security wealth if they live longer and, as a result, collect benefits for longer. More importantly for our present study, racial/ethnic and sex disparities in mortality among Americans are likely to lead to disparities in the Social Security wealth of otherwise similar Black, white and Hispanic Americans, as groups with greater life expectancies collect benefits for longer.

To account for these differential mortality implications, we calculated mortality-adjusted Social Security wealth reductions for age 62 claiming by race/ethnicity and sex. We used survival probabilities from the National Center for Health Statistics’ (NCHS) 1999 to 2020 National Vital Statistics Reports to compute the following expression for Hispanic, non-Hispanic white, and non-Hispanic Black men and women:

\[
1 - \frac{P_{62,1937}}{P_{62,byear}} \times \frac{\sum_{62}^{100} PN_{FRA} \times PIA \times P_{a,byear} (1 + r)^{-(a-62)}}{\sum_{62}^{100} 0.8 \times PIA \times P_{a,1937} (1 + r)^{-(a-62)}}
\]
where \( P_{age,byear} \) is an individual’s race/ethnicity and sex-specific probability of living to age \( \alpha \) as reported in NCHS lifetables for the year that individual turned 62; \( P_{N,FRA} \) is the penalty the individual incurs for claiming early given their FRA, and \( r \) is the real interest rate. The expression compares the present discounted value of a stream SSA benefits of an individual subject to the FRA increase to that of individual with a similar work history, born in 1937, the last birth cohort with an FRA of 65, assuming a fixed 2.7% real interest and conditional on living to age 62. We also employ the same expression and assumptions to compare all race/ethnicity groups in our study to non-Hispanic, white men born in 1937.

Beyond our fixed interest rate and survival to age 62 assumptions, we made two assumptions regarding Hispanic and non-Hispanic survival probabilities. Before 2006, NCHS did not provide life tables by Hispanic origin, only providing life tables for Black and white American men and women. To address this gap in our survival probability data, we assumed that pre-2006 non-Hispanic Black and white survival probabilities for were identical to pre-2006 combined Hispanic and non-Hispanic Black and white survival probabilities. We then used ratios of Hispanic to non-Hispanic white death rates from Table 5 of the Irma T. Elo et al. paper, “Mortality Among Elderly Hispanics,” to proportionally transform pre-2006 white survival probabilities into Hispanic survival probabilities. Finally, Hispanic survival probabilities from 2006 and beyond exhibit a clear mortality advantage for Hispanic Americans over other groups while the Hispanic survival probabilities we obtained from the proportional transformation above do not. To

\[ \text{For example, survival probabilities for those born in 1958 come from the NCHS’s 2020 Vital Statistics Report.} \]
bring those probabilities into closer alignment with 2006 to 2020 Hispanic survival probabilities, we assumed that the only difference between 2006 and pre-2006 survival probabilities was the methodologies used to estimate them, calculated the proportional change between 2005 and 2006 survival probabilities, and applied that change proportionally to all pre-2006 survival probabilities.

The question arises as to how these two factors interact: To what extent does rising life expectancy offset the increase in the FRA? Because life expectancy has not changed equally across sex and racial/ethnic groups, the additional question arises as to which of these groups experienced the greatest reduction in benefits due to the FRA increases and which ones most offset this reduction due to increasing life expectancy.

Figure 1 provides evidence answering these questions. It shows that the impact of the rising FRA is generally blunted, if not completely offset, by rising life expectancies. That being said, there is substantial variation by sex and race/ethnicity; we note again that these comparisons are within sex and racial/ethnic groups but across birth cohorts. Hence, although life expectancies for women are generally longer than for men, if life expectancies increase at a faster rate for men, then more of the FRA-induced benefit reduction will be offset for men.

Indeed, this pattern holds for the cohorts turning 62 from 2000 to 2005, when the FRA increase to 66 was gradually phased in. Although the green line depicts the statutory impact of this benefit reduction, the rising life expectancy across cohorts for each group partially offsets this reduction. Since life expectancy for white, Black, and Hispanic men, as well as Black women, rose fastest across these birth cohorts, the
present discounted value of their Social Security benefits did not decline as much as it did for white and Hispanic women.

For the cohorts that faced an FRA of 66, rising life expectancies completely offset the difference in Social Security benefits due to the FRA increase for individuals turning 62 in 2010 for men and for Black women. However, both white and Hispanic women continued to experience a net reduction in their Social Security benefits throughout. Once the FRA began increasing again for those turning 62 in 2017, the present discounted value of Social Security benefits for all groups fell below that of those with an FRA of 65. Finally, the onset of COVID-19 in 2020 led to stark decreases in life expectancies, although given the current vaccines and treatments available to reduce excess mortality from COVID-19, we expect present discounted values of Social Security benefits to return to pre-2020 levels in subsequent cohorts.

The main conclusion from these calculations is that, indeed, increasing life expectancy offset the increase in the FRA. For some groups, increased life expectancy completely offset these benefit reductions, whereas for others, their expected benefits remain below what they could have expected had their FRA been 65. We also note the resulting cross-cohort differences that arise from the interaction of these two factors. However, all of these comparisons are relative to an individual of the same sex and race/ethnicity; the question arises as to whether these factors widen or narrow disparities across sex and racial/ethnic groups. To answer this question, Figure 2 depicts a similar calculation, but benchmarked to a white man born in 1937 (and hence with a FRA of 65).
Figure 1: Percentage difference in present discounted value of Social Security benefits due to FRA increase and change in life expectancy relative to 1937-born individual of same sex and race/ethnicity, assuming claiming at age 62, by year turning age 62.
Figure 2: Percentage difference in present discounted value of Social Security benefits due to FRA increase and change in life expectancy relative to 1937-born white men, assuming claiming at age 62, by year turning age 62

We first note the scale of the y axis: Given substantially different life expectancies, the differences in present discounted value of Social Security benefits are sizable, with Hispanic women with the same earnings histories having a 20% greater present discounted value than white men, and Black men having a 10% lower present discounted value than white men. We leave to future research how differences in lifetime earnings further lead to different present-discounted values, but we show here
that, although changes in life expectancy do affect these relative levels (e.g., a slight narrowing of the gap between white women and Hispanic men, and between white men and Black men), these shifts are relatively minor compared to the differences in levels.

We now turn to our analysis of disparities across FRA cohorts and racial/ethnic groups.

**Racial and ethnic disparities by full retirement age**

We first note that we display two kinds of results: comparisons of households at age 60/61 (just before the EEA) and comparisons of households at age 70/71. For the former, we are able to observe birth cohorts with FRAs from 65 to those experiencing the FRA currently increasing from 66 to 67 (as shown in Table 1). However, we cannot observe the latter cohorts at age 70/71 yet, thus those analyses are limited to respondents with FRAs of 66 or lower. All analyses reported are weighted using respondent level weights and, for the calculations at age 70/71, an additional weighting adjustment for mortality as explained in the above Data and methods section.

We conduct our analyses at the head-of-household level, given that wealth in particular is measured at the household level, with the head of household determined as described in the Data and methods section. However, household structure itself has direct implications for resources available to the head of household, as well as the responsibilities thereof, with direct implications for longitudinal well-being as well as cohort and race/ethnic comparisons. We designate four structures of households based on sex and marital status; Figure 3 shows the prevalence of each type among HRS respondents with an FRA of 65 by race and ethnicity of the head of household.
We note that at age 60, Black heads of households are substantially more likely to be female and unmarried or male and unmarried than other racial/ethnic groups. From here onward, we focus on comparisons among non-Hispanic white, non-Hispanic Black, and Hispanic heads of household, since other racial/ethnic groups have a substantially smaller sample size. Although Social Security benefits are of substantial importance to other groups, we do not have the statistical power to provide useful comparisons.
**Figure 4: Age 60/61s head of household status by race/ethnicity and FRA**

Note: Weighted calculations with 1992 to 2020 HRS. “Black” refers to non-Hispanic Black respondents, and “white” refers to non-Hispanic white respondents. FRA 65-66 is not inclusive of cohorts with FRA equal to 65 or 66. FRA 66-67 is not inclusive of cohorts with FRA equal to 66 or 67.

Figure 4 depicts these head-of-household breakdowns by FRA cohort, indicating not only that there are racial/ethnic differences within cohorts but also trends in composition over time. Namely, across these three groups, there has been a sizable decline in male, married heads of household, a slight decline in female, unmarried heads of households, and increases in male, unmarried and female, married heads of
household. These trends reflect increases in labor force participation by women (and hence a greater likelihood of being assigned as head of household in our determination process described in the Data and methods section), as well as rising rates of divorce. There remains substantial variation across racial/ethnic groups in household composition, especially with regards to the fraction of heads of household that are unmarried women.

We now turn to the financial resources available to these households. Figure 5 shows real total household income by race/ethnicity and FRA cohort, both at the average and at the median. Not only is there a substantial income disparity, with white heads of household receiving substantially more income than Hispanic and Black households, but this disparity is increasing with successive cohorts.
Figure 5: Age 60/61 household income by race/ethnicity and FRA

![Mean Household Income](image1)

![Median Household Income](image2)

Note: Weighted calculations with 1992 to 2020 HRS. All dollar figures are inflated to 2020 dollars with Consumer Price Index for All Urban Consumers Research Series (CPI-U-RS). “Black” refers to non-Hispanic Black respondents, and “white” refers to non-Hispanic white respondents. FRA 65-66 is not inclusive of cohorts with FRA equal to 65 or 66. FRA 66-67 is not inclusive of cohorts with FRA equal to 66 or 67.

Figure 6 shows household income by source of income. The clear drivers of overall household income disparities are differences in earnings, and even more dramatically, capital income. Although Black households receive more government income than white households, these differences are minor relative to the earnings and capital income differences. Furthermore, pension income at age 60/61 has been declining in more recent cohorts, especially for Black and Hispanic households.
Figure 6: Age 60/61 household income by race/ethnicity, FRA, and source of income

Note: Weighted calculations with 1992 to 2020 HRS. All dollar figures are inflated to 2020 dollars with CPI-U-RS. “Black” refers to non-Hispanic Black respondents, and “white” refers to non-Hispanic white respondents. FRA 65-66 is not inclusive of cohorts with FRA equal to 65 or 66. FRA 66-67 is not inclusive of cohorts with FRA equal to 66 or 67.
We now turn to comparing wealth across households. Figure 7 shows liquid wealth available to heads of household at age 60/61, where liquid wealth includes savings accounts, checking accounts, stocks, bonds, CDs, mutual funds, and other savings. As is frequently noted, there is a substantial racial/ethnic wealth disparity both at the mean and at the median, with median liquid wealth equal to zero for nonwhite heads of households across most FRA cohorts.

Figure 8 shows mean comparisons by other forms of wealth observed in the HRS, namely tax preferred retirement accounts (IRA and DC pension holdings), net housing wealth, and real estate, vehicle, and business wealth. There are substantial racial/ethnic disparities in these forms of wealth, although not as proportionally large as in liquid wealth (e.g., housing wealth among white heads of household is approximately twice that of Hispanic heads of household). Although retirement account balances have been increasing across all households, it has been growing fastest for white households.
Figure 8: Age 60/61 alternative wealth holdings, by race/ethnicity and FRA

Note: Weighted calculations with 1992 to 2020 HRS. All dollar figures are inflated to 2020 dollars with CPI-U-RS. “Black” refers to non-Hispanic Black respondents, and “white” refers to non-Hispanic white respondents. FRA 65-66 is not inclusive of cohorts with FRA equal to 65 or 66. FRA 66-67 is not inclusive of cohorts with FRA equal to 66 or 67.
Although housing wealth has been increasing for white and Hispanic households, it has declined for recent FRA cohorts for Black households. Both Hispanic and Black households in the most recent FRA cohorts also saw a decline in real estate, vehicle, and business wealth.

Although these gross disparities are substantial across racial and ethnic groups and persist across cohorts, Figures 3 and 4 demonstrate that household composition varies over time and by racial and ethnic groups. Additionally, although unshown, there are substantial average differences in health status (whether a head of household reports being in poor or fair health), disability status (whether a head of household reports a work-limiting health condition), and education (whether a head of household has completed at least some college). Figure 9 shows the results of Kitagawa-Oaxaca-Blinder decompositions that demonstrate how much of the age 60/61 difference in household income can be explained by differences in these factors.
Figure 9: Decomposition of age 60/61 household income disparities by race/ethnicity and FRA cohort

Note: Weighted calculations with 1992 to 2020 HRS. All dollar figures are inflated to 2020 dollars with CPI-U-RS. “Black” refers to non-Hispanic Black respondents, and “white” refers to non-Hispanic white respondents. FRA 65-66 is not inclusive of cohorts with FRA equal to 65 or 66. FRA 66-67 is not inclusive of cohorts with FRA equal to 66 or 67.

Income disparities are highest for the most recent FRA cohort, suggesting the potential for increased income disparities in Americans currently approaching retirement. Approximately half of these disparities can be accounted for by martial status, sex, disability, health, and education, but the other half persist. Additionally, sex and marital status account for a substantially larger portion of the overall observed income disparity between Black and white heads of households.

Figure 10 provides these decompositions for liquid wealth. Like income, wealth disparities have grown with more recent cohorts, although there has been some diminishment with the FRA 66 to 67 cohort. Marital status and sex explain much less of
the Black-white wealth disparity than income, and a substantial portion remains unexplained by health, disability, and education variables.
**Figure 10: Decomposition of age 60/61 household liquid wealth disparities by race/ethnicity and FRA cohort**

![Graph showing wealth disparities by race/ethnicity and FRA cohort]

**Note:** Weighted calculations with 1992 to 2020 HRS. All dollar figures are inflated to 2020 dollars with CPI-U-RS. “Black” refers to non-Hispanic Black respondents, and “white” refers to non-Hispanic white respondents. FRA 65-66 is not inclusive of cohorts with FRA equal to 65 or 66. FRA 66-67 is not inclusive of cohorts with FRA equal to 66 or 67.
We now turn to the experiences of these heads of households 10 years later, when they are observed in the HRS at age 70 or 71. We start with mortality expectations — namely, the self-reported probability that a given head of household reports of living until at least age 75. As shown in Figure 11, Black heads of household report the highest likelihood of living until at least 75, with white heads of household approximately 10 percentage points less likely. In the most recent FRA cohort, this expectation has increased for these two groups. Hispanic heads of household report the lowest likelihood of living until at least age 75, despite having the highest actual life expectancy as shown in Figure 2. Realized mortality by age 70 reflects the actuarial evidence from Figure 2: Despite self-reporting the highest likelihood of surviving until age 75, Black heads of household are the most likely to have died by age 70.

*Figure 11: Mortality expectations and realized mortality, by FRA cohort and race/ethnicity*

Note: Weighted calculations with 1992 to 2020 HRS. “Black” refers to non-Hispanic Black respondents, and “white” refers to non-Hispanic white respondents. FRA 65-66 is not inclusive of cohorts with FRA equal to 65 or 66.
Figure 12 focuses on the Black-white mortality differential and applies a Kitagawa-Oaxaca-Blinder decomposition, drawing on age 60/61 characteristics. Economic and health variables at age 60/61 increasingly explain the remaining mortality differential, suggesting that these pre-Social Security characteristics are increasingly important in life expectancy.

*Figure 12: White-Black age 70 mortality disparities, by FRA and explained by age 60/61 characteristics*

**Note:** Weighted calculations with 1992 to 2020 HRS. “Black” refers to non-Hispanic Black respondents, and “white” refers to non-Hispanic white respondents. FRA 65-66 is not inclusive of cohorts with FRA equal to 65 or 66.
We focus now on economic well-being at age 70/71 across racial/ethnic groups and FRA cohorts. Figure 13 shows income breakdowns by source of income at age 70/71. Social Security income now represents a plurality of income across all groups and cohorts, and, consistent with prior research, there is a substantially smaller racial/ethnic disparity in Social Security income than in the other forms of income shown in Figure 7. However, earnings disparities remain large and are growing for more recent cohorts, representing greater labor force attachment among white heads of household at this later age. Capital income continues to be a substantial driver of income disparities, although lessening in recent years, potentially due to delayed wealth decumulation by white households.
**Figure 13:** Age 70/71 mean household income by race/ethnicity, FRA, and source of income.

*Note:* Weighted calculations with 1992 to 2020 HRS. All dollar figures are inflated to 2020 dollars with CPI-U-RS. “Black” refers to non-Hispanic Black respondents, and “white” refers to non-Hispanic white respondents. FRA 65-66 is not inclusive of cohorts with FRA equal to 65 or 66.
Figure 14 shows mean wealth by racial/ethnic group and FRA cohort, and it demonstrates a varied story. Age 70/71 liquid wealth disparities have been declining, due to both increasing liquid wealth among Black and Hispanic heads of household and falling liquid wealth among white households. However, tax-preferred retirement account holdings have grown across all groups shown, although white heads of household still have a substantially higher level of wealth in these vehicles.

Housing wealth represents a substantial fraction of wealth holdings; indeed, the plurality for Hispanic and Black households, for whom it has been growing or remains unchanged. White household housing wealth has, on the other hand, declined with more recent cohorts, as have other forms of illiquid wealth.

Figure 15 decomposes total household income for Black-white differences and Hispanic-white differences, adding explanatory variables. Similar to the above differentials, given large differences in marital status and sex among Black heads of households compared to white heads of household, these variables explain a substantial portion of the income disparity at age 70/71. Indeed, for both FRA 65 and FRA 66 heads of household, age 70/71 Black-white income disparities are nearly entirely explained by age 60/61 demographic, health, and economic characteristics, suggesting that pre-Social Security interventions are likely most impactful for addressing disparities in retirement.

However, a substantial portion of Hispanic-white income differentials remain unexplained and, indeed, a greater portion is unexplained for the most recent cohorts, suggesting that Social Security benefits themselves may play a role in income disparities between Hispanic and white heads of household in retirement.
Figure 14: Age 70/71 mean wealth by race/ethnicity, FRA, and type of wealth

Note: Weighted calculations with 1992 to 2020 HRS. All dollar figures are inflated to 2020 dollars with CPI-U-RS. “Black” refers to non-Hispanic Black respondents, and “white” refers to non-Hispanic white respondents. FRA 65-66 is not inclusive of cohorts with FRA equal to 65 or 66.
Figure 15: Decomposition of age 70/71 household income disparities by race/ethnicity and FRA cohort

- White-Black Difference at Age 70/71
- Unexplained with Marital Status and Sex
- Unexplained with Above and Age 60/61 Health/Disability/Education
- Unexplained with Above and Age 60/61 Income Sources
- Unexplained with Above and Age 60/61 Wealth Holdings

- White-Hispanic Difference at Age 70/71
- Unexplained with Marital Status and Sex
- Unexplained with Above and Age 60/61 Health/Disability/Education
- Unexplained with Above and Age 60/61 Income Sources
- Unexplained with Above and Age 60/61 Wealth Holdings
Figure 16 shows the corresponding decomposition of age 70/71 liquid wealth. As with income, the vast majority of age 70/71 wealth disparities can be explained by marital status, sex, health, education, and economic characteristics at age 60/61. As can be seen in Figure 14, disparities in this wealth measure — liquid wealth — have been declining, although Figure 16 shows that these changes in differences can largely be explained by shifts in age 60/61 characteristics themselves, with similar amounts left unexplained, or in the case of white-Hispanic differences, more left unexplained.
We note though that although age 60/61 economic characteristics can explain age 70/71 disparities, we document growing income and wealth disparities at age 60/61 in more recent cohorts, suggesting that age 70/71 disparities are likely to grow with the FRA 67 cohort. Although Social Security benefits may play a limited historical role in addressing age 70/71 differences, these growing economic disparities at age 60/61 suggest that cohorts facing higher FRAs may face increasing economic disparities absent any policy change.

Conclusion

In this study, we compare the economic characteristics of white, Black, and Hispanic heads of households at age 60/61 and age 70/71, tracking how levels and differences in income and wealth have evolved within cohorts and across cohorts facing
different Social Security full retirement ages. Among our main findings is that age 60/61 income and wealth disparities have been increasing in more recent birth cohorts facing higher FRAs and thus a lower present discounted value of Social Security benefits. Although we also find that increases in life expectancy among men have largely offset the impact of the FRA on Social Security benefits.

We conduct decompositions to ascertain how much of these disparities can be explained by health, education, marital status, and sex of heads of household by race/ethnicity, all of which systematically vary by racial/ethnic group and by birth cohort. Although these factors can explain a fraction of the estimated disparities, a substantial unexplained fraction remains.

We then turn to how outcomes differ after 10 years, when these heads of households are age 70/71. We first document that mortality expectations among heads of households varies considerably from actual life expectancy. Specifically, Black heads of household are most optimistic about their longevity yet are least likely to live to age 70/71. These mortality differences are increasingly explained by socioeconomic characteristics at age 60/61, suggesting a role for pre-EEA policy in addressing these differentials.

We next examine how income and wealth differences arise at age 70/71, finding that white-Black and white-Hispanic disparities have been flat or falling for recent cohorts, with Social Security income representing a plurality of income in retirement. Our analyses suggest that white heads of households are indeed working longer and delaying wealth decumulation, although differences in capital income (e.g., interest and dividends) are a substantial driver of income disparities at age 60/61 and 70/71.
A primary finding is that age 60/61 socioeconomic characteristics can explain nearly all of age 70/71 economic disparities. On the one hand, this finding suggests that non-Social Security factors are driving disparities in retirement. On the other hand, economic disparities at age 60/61 are increasing with more recent cohorts, and with the still rising FRA, absent any additional policy intervention, racial and ethnic disparities may rise among cohorts approaching retirement.
References


CDC. 2016. Products - Data Briefs - Number 244 - April 2016.


44


