# How Does Social Security Affect the Racial Wealth Gap?

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## Acknowledgements

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## Abstract

The large and persistent gap by race in U.S. household wealth is a well-established empirical fact, though the causal mechanisms for wealth differentials are still a subject of debate. Previous research on wealth inequality has shown that expanding the concept of wealth to include Social Security reduces overall wealth inequality (Sabelhaus and Volz 2022a). These two observations motivate the questions and empirical approach in this study. Focusing on individuals born between 1936 and 1965 and observed at ages 51 to 56 in two household data sets, I first study wealth ratios and wealth rankings by race using conventional household wealth measures, and then study the implications of expanding the wealth measure to include Social Security. In the wealth measures excluding Social Security, there is 23-percentage-point average wealth rank gap between Black and white individuals that falls to 13 percentage points after controlling for earnings and other observables. Adding Social Security reduces racial wealth gaps, but also draws attention to the fact that resolving expected Social Security funding shortfalls could have first order implications for wealth inequality and the racial wealth gap. Adding Social Security does not impact wealth rank gaps by race, however, which reinforces the need for further research on differences in wealth accumulation dynamics.

## Citation

# 1. Introduction

Understanding the large and persistent U.S. household wealth differentials by race and ethnicity requires answering several interconnected research questions. First, how large are the differentials in wealth by race and ethnicity? Second, how much of the racial wealth gap can be explained by factors such as earnings, marriage patterns, gender, and education? Third, is the racial wealth gap the same across the entire wealth distribution, or is the focus in the literature on average and median households obscuring smaller or larger differentials at low and high wealth levels? Finally, one specific policy issue interacts with all three questions. Do Social Security tax and benefit rules amplify or mitigate wealth differentials by race?

Answering this series of questions requires new empirical strategies and data sources. Numerous existing studies of the racial wealth gap have used the Survey of Consumer Finances (SCF), and there is overwhelming consensus that the racial wealth gap is large and persistent, if not widening (Bhutta et al. 2020b). Those studies generally focus on the narrow net worth measure captured in household surveys and are typically limited to summarizing the racial wealth gap at the mean or median of the wealth distribution. Although differences in survey-based mean and median net worth in the SCF are a good place to start, answering the questions posed above requires a more comprehensive wealth measure and a different way to think about measuring wealth differentials across and within generations.

The first empirical contribution in this study is to analyze racial wealth gaps in a new data set that can be compared to the SCF, but then used to better evaluate the effects of Social Security. Since 1992, the longitudinal Health and Retirement Study

(HRS) has followed individuals in several birth cohorts beginning when they reached age 51. I use the HRS to compute racial wealth gaps for individuals ages 51 to 56, which is conveniently near most individuals' peak earnings age, as well as the age at which claims to future Social Security benefits are largely established. The SCF has good sample coverage in the same age ranges and across the same birth cohorts, so direct comparisons between HRS and SCF are possible.

The measurement of household wealth and the sampling strategy in the HRS and SCF are different, with the SCF wealth measures generally considered more representative of actual household wealth (the reason most researchers use the SCF to study wealth). However, I show that the estimated racial wealth gaps in the HRS are generally consistent with the SCF estimates across and within birth cohorts. Indeed, the average within-cohort wealth percentile ranking for whites in the SCF is 53.2, and in the HRS the average ranking for whites is 53.3.[1] The corresponding wealth-rank averages for Black individuals is 30.4 in the SCF and 29.9 in the HRS. That consistency in raw wealth-rank gaps (roughly 23 percentage points) is important because the HRS has something the SCF does not have: direct measures of lifetime earnings from linked Social Security wage records and estimates of Social Security Wealth (SSW).[2]

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[1] See Sabelhaus and Volz (2022b) for a discussion of using wealth percentile rankings to compare retirement preparedness across birth cohorts.

[2] See Fang (2021) for a discussion of the methods used to link HRS respondents to their Social Security earnings histories, and the imputation methods applied in cases where the earnings histories are not linked. See Kapinos et al. (2016) for a description of the HRS SSW estimates. Also see Fang et al. (2016) for another example of using linked earnings estimates to project Social Security taxes and benefits.

Establishing consistency between the HRS and SCF wealth gaps makes it possible to look at the question of causal mechanisms underlying the racial wealth gap from a new perspective. The specific empirical question is whether the racial wealth gap (as measured by percentile wealth rankings) can be explained by differences in contemporaneous or lifetime earnings (again measured by percentile rankings) and a few demographic variables. The primary takeaway from this exercise is that moving from contemporaneous to life-cycle measures of earnings does help explain the racial wealth gap, but the effect is modest. Specifically, the unexplained wealth-rank gap (after controlling for observed earnings, education, marital status, and gender) falls from 16 percentage points to 13 percentage points when switching from contemporaneous to lifetime earnings as the primary explanatory variable in the HRS wealth rank regression.

The final set of questions posed above focus on the implications of incorporating Social Security in the racial wealth gap analysis. There are multiple reasons to believe that Social Security reduces the racial wealth gap. First, Social Security is progressive and, to the extent that lifetime earnings of white workers exceed lifetime earnings of Black workers, the ratio of Social Security benefits to lifetime earnings will be higher for Black workers. Second, there are (unexplained by other correlates such as lifetime earnings) higher rates of Disability Insurance (DI) and Supplemental Security Insurance (SSI) incidence among Black workers, which further boosts Social Security benefits relative to lifetime earnings.[3] On the other hand, differentials in marriage patterns and

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[3] This statement is based on a series of regressions for DI or SSI onset by age using HRS data with linked lifetime earnings, not shown, but available from the author upon request. The list of explanatory variables includes marital status, sex, education, and lifetime earnings, as in the wealth rank-percentile equations shown in Table 4. Even after controlling for the other observables, the race variable (Black=1) is positive and significant.

average mortality work in the other direction, because spousal and survivor benefits are on average higher (relative to lifetime earnings) for white workers.

The HRS provides users with prospective measures of Social Security Wealth (SSW) for preretiree respondents in Waves 1, 4, 7, and 10 (calendar years 1992, 1998, 2004, and 2010). These estimates (described in Kapinos et al. 2016) make it possible to investigate the implications of expanding the wealth measure to include the effects of Social Security on the racial wealth gap. The focus in this study on 51- to 56-year-olds is again convenient, because most of those individuals are not yet claiming benefits, and thus the prospective SSW measures are available. The SSW data are not available for the last birth cohort (born 1960 to 1965), but otherwise there is complete overlap with the age and cohort groups used to study the racial wealth gap using the conventional household wealth measure.

Expanding the wealth measure to include expected Social Security has the expected effect, as the overall ratios of white to Black wealth fall by roughly half (relative to the conventional household wealth measure) across the wealth distribution. However, mirroring a finding in Sabelhaus and Volz (2022a), adjusting measures of the racial wealth gap to account for Social Security closes gaps at every point in time, but it does not reverse the trend in wealth gaps across cohorts. That trend is amplified by the fact that expected Social Security funding shortfalls may lead to cuts in benefits, which could offset the impact the program has on differences in wealth by race.

The paper proceeds as follows. In the next section, I review the literature on racial wealth gaps, focusing on what we know from the Survey of Consumer Finances household surveys and the on-going debate about causal mechanisms underlying

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wealth differentials by race. Section 3 focuses on the data and methods used here to expand the literature, including introducing the Health and Retirement Study (HRS) with linked lifetime earnings records as the data source most appropriate for expanding the wealth concept used to study gaps by race. Section 4 compares the HRS and SCF racial wealth gaps measures and shows that lifetime earning helps but falls well short of explaining racial wealth gaps across birth cohorts as they near retirement. Section 5 introduces measures of Social Security Wealth (SSW) that allow a more expansive view of racial wealth gaps. Section 6 concludes.

## 2. What do we know about the racial wealth gap?

The goals of this paper are improving our understanding of large and persistent differentials in wealth by race as conventionally measured using household net worth, then studying how Social Security affects those estimated gaps. Available survey data show that differences in measured net worth by race are much larger than differences in incomes by race. That says a lot because the racial income gaps are themselves quite large. In addition, some evidence exists about the nature of wealth differentials by race; for example, how the differences in overall net worth by race relate to differentials in key components such as housing, retirement accounts, and owned businesses. However, there is on-going debate about how wealth differentials are related to demographic and economic fundamentals, including earnings.

Overall differences by race and ethnicity using conventionally measured household wealth are dramatic, to say the least. The 2019 Survey of Consumer Finances (SCF) showed that the net worth of Black and Hispanic families was roughly 15% to 20% of the net worth of white families, measured at either the mean or the

median (Bhutta et al. 2020). The estimated wealth differentials are much larger than income differentials, as Black and Hispanic families reported incomes that were 50% to 60% of the incomes reported by white families, again at both mean and median.[4] In addition, the SCF shows that although the exact wealth differentials fluctuate with economic conditions and asset prices, the racial wealth gap is persistent.

The SCF net worth measure is built up from underlying asset and liability components, and those components offer some clues about the nature of racial wealth gaps. The most important components of SCF net worth for families near the middle of the wealth distribution are owned housing and retirement accounts, and the overall racial wealth gap can be traced back to both participation and conditional holdings in both asset categories.[5] In particular, the white family homeownership rate in 2019 was 75%, while fewer than 50% of Black and Hispanic families owned their homes. Mean and median values of primary residences (conditional on owning a home) were some 40% or 50% higher for white families. Similarly, roughly twice as many white families versus Black or Hispanic families (60% versus 30%) owned retirement accounts in 2019, and the conditional median and mean values of retirement account balances differed by a factor of two or three.

The differences by race and ethnicity in owned housing and retirement account participation are related to differences in income, but there are other drivers as well. For example, Black families are less likely to apply for a mortgage and transition from

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[4] See Bhutta et al. (2020a) for income and other summary SCF statistics by race and ethnicity.

[5] Data here are based on the SCF Data Visualization tool, www.federalreserve.gov/econres/scf/dataviz/scf/chart/.

renting to homeownership, in part because they lack down payments from their own or family resources, but also because they fear being turned down for mortgage credit even after controlling for observables (Charles and Hurst 2002). Indeed, the SCF shows that white families are much more likely than Black or Hispanic families to enter homeownership at young ages, with Black and Hispanic families partially catching up mostly after age 40 (Sabelhaus and Clemens 2020). Also, differences in retirement account participation by race and ethnicity are due mostly to differences in access to employer-sponsored plans, with participation conditional on plan offering playing a much smaller role (Bhutta et al. 2020a).

Home ownership and retirement account participation both lead to cumulative wealth growth over time through steady mortgage principal payments, retirement account contributions, and capital gains, so lower participation by Black and Hispanic families at younger ages is part of why the gap in median net worth widens with age. This dynamic life-cycle process is well captured in the SCF data. Wealth gaps at all ages are large, but at very young ages Black and Hispanic families have little or no wealth, and thus they miss out on asset price increases and the effect of compounding returns (Bhutta et al. 2020a). This lack of dynamic wealth accumulation for Black and Hispanic families comes through clearly in longitudinal wealth panels as well (Gelrud Shiro et al. 2022). Current policy encourages participation in home ownership and retirement saving at young ages, but the latest data show (for example) that young Black and Hispanic families are not keeping up with their parents and grandparents in terms of home ownership rates (Sabelhaus and Clemens 2020).

Intergenerational wealth transfers also play a key role in wealth accumulation, and likely through multiple channels (Feiveson and Sabelhaus 2018). Observed transfers of wealth at death and *inter vivos* transfers are highly concentrated, with most wealth flowing from wealthy givers to wealthy recipients. The SCF shows that differences in wealth transfers by race and ethnicity are consistent with observations about differences in wealth levels by race and ethnicity, as Black and Hispanic parents and grandparents have much less wealth to transfer to their Black and Hispanic children, reinforcing differences in the wealth accumulation process by race (Sabelhaus and Thompson 2021). And again, there are likely multiple channels at work, including observable inheritances and *inter vivos* transfers for down payments on homes, for advanced education, or to start a business. There are also unobserved but important intergenerational linkages, such as the implicit insurance that comes from being born in families where parents and grandparents have resources that can be called upon to overcome shocks or other adverse outcomes or help make the modest investments needed to (say) become a homeowner and grow wealth.[6]

Wealth accumulation dynamics and intergenerational transfers are also clearly associated with closely held business and related types of financial wealth that dominate the very top of the wealth distribution (Bricker et al. 2016; Smith et al. 2019).

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[6] The various ways in which intergenerational wealth transfers affect wealth dynamics is an important area for future research, but the U.S. lacks high-quality administrative data on such transfers that makes separating the various channels difficult if not impossible. In countries such as Denmark and Sweden where such data are available, the impact of measured transfers has been shown to be quantitatively significant (Boserup et al. 2016; Elinder et al. 2018). The evidence for the U.S. is based on the characteristics of transfer recipients and suggests that multiple channels are indeed operative (Feiveson and Sabelhaus 2018).

Gaps in access to capital markets by race and ethnicity have been demonstrated in a variety of ways. For example, a recent study linking survey and administrative employment data showed that Black-owned firms start smaller and stay smaller, and nonparametric analysis in that study suggests Black-owned firms would be 75% larger if the owners had the same characteristics as those of comparable white-owned firms (Fairlie et al. 2020). Evidence from the Paycheck Protection Program (Howell et al. 2021) and from business banking records linked to voter registration demographics (Farrell et al. 2020) also show substantial differences in access to credit by race that suggest constraints on growth. The SCF shows higher rates of business ownership and conditional business size by race and ethnicity, and confirms that intergenerational transfers play a role in the likelihood of starting a business (Feiveson and Sabelhaus 2018).

Whether these insights about wealth dynamics and wealth holdings by asset type provide clear guidance about appropriate policy responses depends to some extent on exactly how the question is put to the data. Controlling for factors such as education, number of parents, working full versus part-time, entrepreneurship, and saving behavior one at a time does not appear to explain the racial wealth gap (Traub et al. 2017). These univariate analyses suggest the racial wealth gap cannot be easily closed through changes in public policy toward education, financial literacy, saving, or access to business credit (Darity et al. 2018).

However, there is another way to pose the same basic question to the data that suggests different public policy responses. A nonparametric decomposition of the median racial wealth gap shows that wealth determinants such as lifetime earnings,

pension generosity, and a handful of other human capital and work-related variables account for 75% of differences in wealth by race (Sabelhaus and Thompson 2021). There are also similar results from calibrated life-cycle models with heterogeneous agents, showing that lifetime income alone explains 43% of the racial wealth gap, while bequest motives and intergenerational transfers of wealth account for the rest (Ashman and Neumuller 2020).

The takeaway from those sorts of studies is that changing all the determinants of wealth accumulation for Black and Hispanic families to match those of white families would close the racial wealth gap. Of course, the idea of closing the racial wealth gap by changing initial conditions for Black and Hispanic families to match those of white families is at best incomplete and more likely misleading. To begin, gaps in income by race and ethnicity are also complicated, as recent work has shown that differences in parental marital status, education, and wealth explain little of the Black-white income gap, after conditioning on parent income (Chetty et al. 2020). Also, relative earnings changes for Black men have varied across the earnings distribution, with relative gains and losses over time depending on *where* in the earnings distribution one looks (Bayer and Charles 2018). But even if we were to close racial gaps in education and that in turn someday closes racial gaps in income, the dynamics of wealth accumulation and reinforcing feedback loop of intergenerational transfers would continue to affect racial wealth gaps.

## 3. Data and methods

There are many outstanding questions in the racial wealth gap literature, and answering all those questions will involve data, models, and policy insights that are well

beyond the scope of this research project. The narrower questions addressed here are (1) whether the wealth differentials observed in the Survey of Consumer Finances (SCF) can be replicated in the Health and Retirement Study (HRS), (2) whether the nature and magnitude of racial wealth gaps depend on how and where in the wealth distribution we are looking, (3) whether the linked administrative earnings records in the HRS improve our understanding of how observed wealth gaps are related to earnings, and (4) whether using the HRS measures of Social Security Wealth (SSW) changes estimated racial wealth gaps.

The SCF and HRS data sets have many similarities, but there are also some fundamental differences. The SCF is a triennial cross-section survey focused on household balance sheets, and collects extensive information about incomes, demographics, and labor force experiences.[7] The HRS is a biennial longitudinal survey of individuals 51 and older, with most of the same demographic, income, and labor market variables collected in the SCF. The HRS wealth modules are less detailed than the SCF wealth modules, but the HRS also provides key information not available for SCF respondents: linked administrative Social Security earnings records and estimates of SSW for preretirees.

Data from the nine SCF waves conducted between 1995 and 2019 are used in this study. Each SCF cross-section is representative of the entire population, but the analysis here involves only SCF respondents born between 1936 and 1965 observed at ages 51 to 56. For example, an individual born in 1940 is eligible for the final SCF

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[7] See Bhutta et. al. (2020a) for a discussion of the SCF and the most recent results, for survey year 2019.

sample in the 2001 and 2004 surveys, when they were 51 and 54 respectively. The HRS began collecting data in 1992 with the first group of sampled individuals ages 51 to 60 in 1992 and, thus, mostly born in the 1930s.[8] The youngest HRS cohort used in this study is the "late baby boomers" born between 1960 and 1965, who crossed the age 51 eligibility threshold between the 2012 and 2016 HRS survey waves.

The SCF and HRS have comparable measures of core demographics, incomes, and major household balance sheet components. The list of demographics used here include sex, marital status, education, and race. In both data sets race and ethnicity (where ethnicity means Hispanic versus non-Hispanic) are collected separately. There are limits (due to sample size) on the race and ethnicity breakdowns in both data sets, and the analysis here is focused on white non-Hispanic (shortened to white in what follows) versus Black. White Hispanic and other race groups are dropped from both data sets. Income types are also comparable, making it possible to separate current year earned income from other income sources. Finally, as noted, the wealth measures in the SCF are more detailed, given the focus of the SCF on household balance sheets. However, the HRS collects the same basic information about the larger assets and liabilities (housing, retirement accounts, businesses, financial asset holdings) which dominate overall wealth holdings.[9]

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[8] The analysis here relies heavily on the RAND HRS micro data file that conveniently synthesizes and reconciles all available survey years (Bugliari et al., 2021). The HRS linked administrative earnings records are described in Fang (2021). For details on the race and ethnicity coverage in the HRS see Osftedal and Weir (2011).

[9] In addition to more detailed questions, including the enumeration of multiple occurrences of various assets and liabilities, every SCF case is subject to a comprehensive review to reconcile missing values and inconsistent wealth reporting.

The relevant SCF and HRS sample sizes are also comparable and quite large, with several thousand observations in each data set on individuals in each of the five birth cohorts (1936 to 1941, 1942 to 1947, 1948 to 1953, 1954 to 1959, and 1960 to 1965) while they are in the age range 51 to 56.[10] The samples do differ in one important sense, however. The SCF sampling strategy is unique among public use household surveys, as about one-fourth of the sample is drawn from administrative data records to capture the top of the wealth distribution and thus overall aggregate wealth.[11] This oversample of high-wealth households, in addition to the increased detail and focus on household assets and liabilities, leads to the expectation that the wealth distribution in the SCF is shifted up relative to the HRS. That expectation is born out in the empirical findings below and motivates the use of wealth-rank percentiles (rather than measures like median wealth) in the regression analysis.

Finally, both data sets collect data at the household level, and for the respondent and spouse separately, which makes it possible to look at the racial wealth gap across individuals, rather than families. For the analysis here, household level incomes and wealth are divided equally between the respondent and spouse, which imposes a no-

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[10] The effective sample sizes are smaller than those reported here because the SCF includes five implicates for each respondent, and the HRS sample sizes are based on a cross-section strategy for comparability to the SCF. In the HRS that means a given individual (first observed at age 51) can show up two more times if they participate in subsequent interviews (when they are 53 and 55). The levels of statistical significance on key findings reported later in the paper are very high, and correcting for implicates (SCF) or repeated observations on the same individuals (HRS) does not change the conclusions.

[11] See Feiveson and Sabelhaus (2019), Bricker et al. (2016), and Batty et. al. (2019) for a discussion of how well the SCF captures macro aggregates over time, and how the SCF results on wealth distribution compare to other studies based on capitalization methods applied to administrative data.

economies-of-scale assumption, but also makes it possible to keep track of the specific birth cohort for both individuals. Working with per-capita values also makes it possible to directly control for racial differences in marital status and other living arrangements. The exception to the per-capita allocation rule comes when using the prospective SSW measures for preretirees, because each member of a couple will receive Social Security benefits that depend on their and the other member's mortality, through spousal and survivor benefits.

## 4. Racial wealth and income gaps in the SCF and HRS

The empirical investigation of racial wealth gaps in this study begins with several questions posed to the data sets described in the previous section. Again, the focus is on individuals ages 51 to 55, born between 1936 and 1965. First, are the racial wealth differentials in the Health and Retirement Study (HRS) comparable to those observed in the Survey of Consumer Finances (SCF)? Second, does the estimated magnitude of racial wealth gaps depend on where in the wealth distribution we are looking? Finally, do the linked administrative earnings records in the HRS improve our understanding of how racial wealth gaps are related to differentials in labor earnings? Answering these questions mostly involves looking at the sorts of Black/white wealth differentials (wealth ratios) prevalent in the literature, though it is also useful to look at differentials through the lens of wealth-rank percentiles.

*Racial wealth gaps in the SCF and HRS*

The starting point for measuring racial wealth gaps is a head-to-head comparison of net worth distributions in the SCF and HRS samples. Appendix Table A1 shows four

summary statistics for the distributions of net worth (mean, median, 75th percentile, and 90th percentile) in the five birth cohorts born between 1936 and 1965 observed at ages 51 to 56. As expected, both data sets show large and persistent gaps in white versus Black wealth distributions across birth cohorts and for all four summary wealth statistics. Also, as expected, the SCF means and the various percentile values for net worth lie above the HRS, with the largest absolute gaps in the mean and 90th percentiles, where the SCF wealthy oversample is most likely to be important.

Table 1 collapses the detailed distributional wealth statistics in the appendix into more conventional measures of racial wealth gaps. Each entry in the table is the ratio of white to Black net worth for a given birth cohort and summary statistic. Although these ratios are at the individual level (not the usual family level) and only for individuals ages 51 to 56 born between 1936 and 1965, they are consistent with results from the existing literature that generally focus on comparisons of white and Black wealth for all ages. For example, the mean white/Black wealth ratios in the SCF sample used here (first column) are centered around 5, which is roughly the same as the statement that "average Black wealth is roughly 20% of white wealth" (Bhutta et al. 2020a).

*Table 1: Ratio of white to Black net worth, SCF and HRS*

| Birth Cohort | Mean | | Median | | 75th Percentile | | 90th Percentile | |
|---|---|---|---|---|---|---|---|---|
| | SCF | HRS | SCF | HRS | SCF | HRS | SCF | HRS |
| 1936 to 1941 | 3.8 | 3.4 | 3.8 | 4.0 | 3.3 | 2.9 | 3.9 | 2.8 |
| 1942 to 1947 | 4.0 | 3.6 | 4.2 | 4.4 | 2.5 | 3.7 | 2.5 | 3.4 |
| 1948 to 1953 | 4.5 | 2.7 | 3.0 | 4.8 | 2.7 | 3.3 | 3.3 | 2.4 |
| 1954 to 1959 | 4.9 | 4.4 | 3.8 | 8.8 | 3.7 | 4.5 | 4.8 | 3.8 |
| 1960 to 1965 | 6.5 | 4.0 | 7.2 | 7.3 | 5.0 | 4.1 | 5.8 | 4.0 |

**Notes:** Ages 51 to 56, per capita, 2016 dollars, HRS wealth measure is from HRS RAND file, supplemented with DC account balances.

Although all four summary wealth statistics in Table 1 confirm the existence of large differentials between white and Black wealth in both data sets, the statistics also reveal subtle differences across the wealth distribution. In general, white/Black wealth ratios are highest at the mean and median, with some (albeit modest) convergence between white and Black wealth at the 75th and 90th percentiles. Differences in the nature of wealth holdings across the wealth distributions are at the heart of these patterns, and there is some interaction with the differences in SCF versus HRS sampling and measurement strategies described above.

Mean wealth gaps are always slightly higher in the SCF, but median gaps are higher in the HRS. These differences reflect the nature of asset holdings across the wealth distributions, with mean wealth disproportionately affected by the very wealthy and the value of narrowly-held assets like owned businesses and many types of financial assets that are better captured in the SCF. Median wealth (especially at ages 51 to 56) is more driven by the middle-class assets such as housing and retirement accounts that are likely well captured in both the SCF and HRS because they rely on relatively simple questions (Do you own your home? How much is it worth? Do you have a retirement account? How much is in the account?).

As noted, there is some decrease in the estimated racial wealth ratios when we move from the median to the 75th and 90th percentiles in both data sets, but the declines are modest and not uniform across birth cohorts. Appendix Table A1 shows that median wealth holdings for Black individuals are on the order of $20,000 to $50,000 across birth cohorts, and quite volatile. Median Black wealth holders at ages 51 to 56 generally own a highly-leveraged home or car and/or a very modest retirement account, thus changes

in house prices, participation in retirement plans, or vehicle loans will have outsized effects on the middle of the wealth distribution. The fact that wealth ratios at the 75th and 90th percentiles are slightly smaller than median wealth ratios largely reflects the sensitivity of median values as net worth gets close to zero.

The other striking takeaway from both data sets and across all four summary statistics is a general increase in white/Black wealth ratios across birth cohorts. It is well known (Smith et. al. 2019) that overall wealth inequality is rising, but Table 1 indicates that racial wealth gaps (at least for ages 51 to 56) are increasing as well. The disproportionate increase in the median white/Black wealth ratio for the youngest cohorts is (again) associated with rising gaps in the ownership of middle class assets such as housing and retirement accounts that dominate the middle of the wealth distribution (Sabelhaus and Clemens 2020; Bhutta et al. 2020b). But the more general increase in racial wealth gaps across the wealth distribution suggests an important interplay between race and underlying wealth inequality dynamics.

*Gaps in current year earnings by race*

One important question in the racial wealth gap literature is the extent to which differences in net worth are associated with differences in labor earnings. Appendix Table A2 shows percentiles of current labor earnings for both data sets, confirming the idea that some of the observed gaps in net worth by race are related to gaps in earnings by race. As with wealth, both data sets show large and persistent racial gaps in current earnings across and within birth cohorts. In addition, the gaps between HRS and SCF earnings are narrower than those for wealth, in part because the differences in sampling strategy and the effects of a more detailed SCF questionnaire are less important.

Current earnings are collected using similar questions in both data sets, so the (estimated) earnings distributions should be closer than the (estimated) net worth distributions.

Those broad observations about earnings are borne out in Table 2, which shows the white to Black ratio of current-year labor earnings, again at the individual level. As with net worth, the labor earnings of a couple are split equally to create the per-person values, and zeroes are included. The first observation in Table 2 is that racial gaps in earnings are large — with earnings of whites 30% to 90% higher than Blacks depending on which summary statistic we use and for which birth cohort—but those racial earnings gaps are much lower than racial wealth gaps. The differences between white to Black net worth and earnings ratios is a first indication that racial wealth gaps are driven by more than earnings gaps.

*Table 2: Ratio of white to Black current labor earnings, SCF and HRS*

| Birth Cohort | Mean | | Median | | 75th Percentile | | 90th Percentile | |
|---|---|---|---|---|---|---|---|---|
| | SCF | HRS | SCF | HRS | SCF | HRS | SCF | HRS |
| 1936 to 1941 | 1.8 | 1.5 | 1.5 | 1.4 | 1.6 | 1.4 | 1.6 | 1.3 |
| 1942 to 1947 | 1.7 | 1.5 | 2.0 | 1.5 | 1.5 | 1.3 | 1.2 | 1.4 |
| 1948 to 1953 | 1.6 | 1.6 | 1.3 | 1.6 | 1.4 | 1.4 | 1.6 | 1.4 |
| 1954 to 1959 | 1.9 | 1.7 | 1.5 | 1.9 | 1.4 | 1.6 | 1.7 | 1.5 |
| 1960 to 1965 | 2.0 | 1.6 | 1.5 | 1.8 | 1.5 | 1.5 | 1.6 | 1.4 |

**Notes:** Ages 51 to 56, per capita, 2016 dollars, HRS labor income measure is from HRS RAND file.

Despite differences in levels, there are similarities between racial wealth and earnings gaps as we move across the earnings distribution using the four summary statistics. Average and median white to Black earnings ratios are generally similar, and generally above the ratios at the 75th and 90th percentiles. As with net worth, the

differences at the top of the earnings differentials are large, just modestly below the mean and median. The similarity between net worth and earnings ratios as we move across the net worth and earnings distributions suggests (and will be confirmed below) that wealth differentials are strongly correlated with earnings differentials. A final observation from Table 2 works in the other direction, however. The increase in white to Black earnings ratios across birth cohorts is much more muted than the increase in net worth ratios, suggesting that something is happening to net worth differentials over time that is not correlated with earnings.

*Gaps in lifetime earnings and permanent income*

Current earnings are likely to be correlated with net worth for those ages 51 to 56, but one year of earnings should be less correlated with wealth than earnings over an entire working life. Net worth for people in their early 50s is the result of saving (compounded by asset revaluations) and net wealth transfers received over their entire working lives. This could explain why the racial wealth differentials in Table 1 are amplified versions of the earnings differentials in Table 2. Current earnings are effectively no more than a proxy for lifetime earnings.

Moving from current to lifetime earnings is a challenge when working with data sets that have limited longitudinal histories. The SCF and HRS both have earnings measures that are more expansive than current earnings, but the two measures are very different from each other. In the SCF, the more expansive income measure is based on respondent answers to the "usual" income question. At the end of the SCF income module, respondents are asked if their reported income for the past year is representative of their "usual" income. If they say "no" then they are asked what that

"usual" income would be. This usual income measure is now used as the standard income classifier variable in SCF publications because it effectively removes transitory shocks (Bhutta et al. 2020a). Indeed, the SCF usual income measure is a good measure of the well-known "permanent" income concept used in consumption-smoothing models. It falls short of comprehensively capturing lifetime earnings, but it does move us closer to that ideal.

The HRS measure of lifetime earnings is more comprehensive. HRS respondents (who agreed, when asked for permission) are linked to their administrative Social Security earnings records, and HRS researchers use those records to compute measures of total lifetime earnings received (Fang 2021). Respondents who did not agree to a direct linkage are assigned imputed lifetime earnings values based on their demographics and reported work histories using the earnings records of similar individuals. For purposes here, the lifetime earnings measure from the Social Security linked earnings records is the sum of annual earnings through age 55. In principle, this lifetime earnings measure allows us to comprehensively study how much of the racial wealth gap is associated with the racial earnings gap.

The two more expansive earnings measures are shown in Table A3. Although permanent income (SCF) and lifetime earnings (HRS) are very different orders of magnitude, the same picture of Black/white earnings differentials emerges. As with net worth (Table A1), and current year earnings (Table A2) the more expansive measures of lifetime earnings for white individuals exceed those for Black individuals in all birth cohorts and across the earnings distribution. But the correlation between lifetime earnings and wealth versus current earnings and wealth depends on the relative size of

the wealth gaps in these longer run measures. The fact that racial earnings gaps in Table 2 are high but still well below racial wealth gaps in Table 1 suggests that earnings differentials will get us part of the way toward explaining net worth differentials, but not all the way. Does switching to lifetime earnings or permanent income change that correlation?

The ratios of white to Black permanent income (SCF) and lifetime earnings (HRS) are shown in Table 3. The immediate takeaway is that racial differentials in the more comprehensive earnings measures look a lot like racial differentials in current-year earnings, with whites exceeding Blacks by 30% and 80% for most cohorts and summary statistics, still well below the racial differentials for net worth. However, the same patterns of (slightly) lower differentials at the 75th and 90th percentiles emerge, reinforcing the idea that earnings differentials are more correlated with wealth differentials than simply looking at the means or medians would suggest.

### Table 3: Ratio of white to Black permanent income/lifetime earnings, SCF and HRS

| | Mean | | Median | | 75th Percentile | | 90th Percentile | |
|---|---|---|---|---|---|---|---|---|
| Birth Cohort | SCF | HRS | SCF | HRS | SCF | HRS | SCF | HRS |
| 1936 to 1941 | 1.9 | 1.5 | 1.5 | 1.5 | 1.7 | 1.3 | 1.7 | 1.2 |
| 1942 to 1947 | 1.7 | 1.5 | 1.7 | 1.4 | 1.5 | 1.3 | 1.2 | 1.2 |
| 1948 to 1953 | 1.8 | 1.5 | 1.4 | 1.6 | 1.5 | 1.4 | 1.6 | 1.3 |
| 1954 to 1959 | 1.9 | 1.7 | 1.4 | 1.9 | 1.5 | 1.5 | 1.9 | 1.4 |
| 1960 to 1965 | 2.1 | 1.8 | 1.4 | 1.8 | 1.5 | 1.7 | 1.7 | 1.6 |

**Notes:** Ages 51 to 56, per capita, 2016 dollars. HRS measures is lifetime earnings at age 55 from linked administrative records, SCF measure is respondent-reported "usual" income.

*Rank-percentile gaps by race*

The summary statistics on differences in net worth, current labor earnings, and more comprehensive (permanent or lifetime) earnings by race help inform the question about the relationship between earnings and wealth differentials, but moving toward a more direct answer involves a key data transformation. Studying the relationship between wealth and earnings (conditioned on race) across the wealth distribution is sensitive to how those relationships are parameterized, so a nonparametric approach is preferable. Working with levels of net worth and earnings by race is even more problematic when comparing the results from two data sets with different sampling, questionnaire design, and earnings measures.

The key data transformation implemented here is to create rank-percentile measures for each of the key variables, and test for correlations between those transformed measures. For example, if the rank ordering of individuals by net worth exactly matches the rank ordering of individuals by earnings (current or lifetime) then we can say that earnings differentials perfectly explain net worth differentials, and race does not play an incremental role. The specific rank-percentile measures used here are cohort-specific to eliminate time effects.[12]

How do rank-percentiles by race relate to observed racial wealth differentials across the two data sets? Comparing the HRS and SCF unadjusted rank-percentiles shows why the rank-percentile approach is preferable to trying to explain wealth levels (conditioned on race) across the wealth distribution using earnings levels across the

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[12] See Sabelhaus and Volz (2022b) for a discussion of using wealth percentile rankings to compare retirement preparedness across birth cohorts.

wealth distribution. The average within-cohort wealth percentile ranking for whites in the SCF is 53.2, and in the HRS the average ranking for whites is 53.3. The corresponding wealth-rank averages for Black individuals is 30.4 in the SCF and 29.9 in the HRS. That consistency in raw wealth-rank gaps (roughly 23 percentage points) affirms that both data sets are telling the same story about racial wealth gaps, albeit with different sampling strategies, data collection, and measures.

*Can income explain racial wealth gaps?*

Does using the rank-percentile approach change the consensus in the literature about how much of the racial wealth gap is attributable to earnings? Does the answer depend on which data set and which measure of earnings is used? Various empirical and modeling strategies have suggested that earnings differentials explain much of the average wealth differentials, but far from 100%. The literature also suggests that allowing for the cumulative effect of moving from current to a more comprehensive (empirical or model-based) earnings measure closes more of the gap between wealth and earnings differentials. The percentile rank-gap approach applied here confirms those findings, and with consistent results across the two data sets.

The relationship between net worth and earnings racial wealth gaps is drawn out in a series of regressions for each data set and earnings measure. The percentile rank regressions applied to the HRS are shown in Table 4, and for the SCF in Table 5. In all cases, the dependent variable is the net worth rank-percentile for every individual in the data set. The first regression in each set of three regresses net worth rank-percentile on the relevant earnings measure. The second regression adds a dummy variable for Black to capture any differences in wealth rank-percentile that are not explained by

earnings rank-percentile. The third regression adds measures of education, marital status, and gender.[13]

*Table 4: Wealth rank regressions, ages 51 to 56, HRS*

| Explanatory Variable | Contemporaneous Labor Income | | | Lifetime Income | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Income Measure (Percentile Rank) | 0.346*** | 0.316*** | 0.244*** | 0.475*** | 0.438*** | 0.369*** |
| | (0.00501) | (0.00493) | (0.00499) | (0.00500) | (0.00504) | (0.00523) |
| Black | | -19.11*** | -16.37*** | | -14.76*** | -13.20*** |
| | | (0.460) | (0.449) | | (0.445) | (0.437) |
| Education > High School | | | 12.55*** | | | 10.80*** |
| | | | (0.303) | | | (0.292) |
| Married | | | 8.411*** | | | 6.275*** |
| | | | (0.323) | | | (0.314) |
| Female | | | 1.470*** | | | 2.468*** |
| | | | (0.289) | | | (0.279) |
| Constant | 33.36*** | 37.17*** | 26.33*** | 26.45*** | 30.14*** | 21.30*** |
| | (0.291) | (0.298) | (0.408) | (0.291) | (0.307) | (0.403) |
| | | | | | | |
| Observations | 31,007 | 31,007 | 31,007 | 31,007 | 31,007 | 31,007 |
| R-squared | 0.133 | 0.179 | 0.238 | 0.226 | 0.252 | 0.294 |

**Notes:** Sample is individuals born between 1936 and 1965, observed at ages 51 to 56. Dependent variable is percentile of wealth per capita, 2016 dollars. Lifetime income measure is sum of lifetime earnings at age 55 from linked administrative earnings records. Observation count includes multiple observations on individuals observed in multiple survey waves .Standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$

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[13] Pursuant to the discussion of the literature in Section 2, it is important not to add explanatory variables that are co-determined with wealth. A simple example would be something like a "homeownership" dummy. Including such a variable is circular. Differences education, marital status, and gender are more exogenous with respect to the (gap between) wealth and earnings differentials by race, but even if one makes the case that they are not, one can choose between the coefficients on Black in the second and third columns within each set of three regressions.

The first column in each set of three regressions shows the raw correlation between wealth rank-percentiles and earnings rank-percentiles. A coefficient of 1 on the earnings variables would imply that everything to know about wealth differentials can be gleaned from earnings differentials, and there is no room for race or any other variable to add explanatory power. The earnings coefficients (absent other controls) range from 0.346 (HRS using contemporaneous earnings) to 0.663 (SCF using permanent income), so there is much left to explain.

### Table 5: Wealth rank regressions, ages 51 to 56, SCF

| Explanatory Variable | Contemporaneous Labor Income | | | Permanent Income | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Income Measure (Percentile Rank) | 0.548*** | 0.519*** | 0.462*** | 0.663*** | 0.634*** | 0.603*** |
| | (0.00365) | (0.00360) | (0.00385) | (0.00337) | (0.00335) | (0.00368) |
| Black | | -16.17*** | -15.06*** | | -13.48*** | -12.42*** |
| | | (0.311) | (0.311) | | (0.283) | (0.286) |
| Education > High School | | | 8.388*** | | | 3.469*** |
| | | | (0.226) | | | (0.213) |
| Married | | | 3.671*** | | | 4.947*** |
| | | | (0.249) | | | (0.225) |
| Female | | | 1.587*** | | | 1.656*** |
| | | | (0.208) | | | (0.191) |
| Constant | 23.11*** | 26.74*** | 20.88*** | 17.12*** | 20.38*** | 15.11*** |
| | (0.212) | (0.218) | (0.311) | (0.195) | (0.203) | (0.290) |
| | | | | | | |
| Observations | 49,297 | 49,297 | 49,297 | 49,297 | 49,297 | 49,297 |
| R-squared | 0.314 | 0.350 | 0.370 | 0.440 | 0.465 | 0.473 |

**Notes:** Sample is individuals born between 1936 and 1965, observed at ages 51 to 56. Dependent variable is percentile of wealth per capita, 2016 dollars. Lifetime income measure is respondent reported "usual" income. Observation counts includes five SCF implicates. Standard errors in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$

The second regression in each group of three adds a dummy variable for Black. These coefficients are the first indicator of "how much" of the racial wealth gap (in rank-percentile terms) remains after controlling for earnings. Recall that the raw racial wealth gaps in both the HRS and SCF are about 23 rank-percentile points. A coefficient value of -19.11 (HRS using current year labor income) implies that most of the racial wealth gap (19.11 out of 23 rank-percentage points) remains unexplained by current year earnings. Moving across data sets, the SCF using current-year labor earnings is modestly better, with 16.17 wealth rank-percentile points remaining unexplained (out of the 23 rank-percentile point gaps in the raw data). Again, differences in sampling and data collection strategy are likely responsible for differences in the higher correlation between earnings and wealth and, thus, the unexplained residual, so the two data sets are effectively telling the same story about unexplained racial wealth gaps.

The similarities between the two data sets carries forward into the regressions in which the current-year labor earnings measure is replaced by a more comprehensive earnings measure. The coefficients on lifetime earnings (HRS) and permanent income (SCF) are shown in the first row of Columns 4 to 6 in Tables 5 and 6. In every case, and as expected, the more comprehensive measure shows a stronger correlation between earnings and wealth rank-percentiles, but all the coefficients are still well below 1. That suggests (and the coefficients in Row 2 bear out) that the residual racial wealth gaps will be lower as we move from current year earnings (Columns 1 to 3) to lifetime earnings/permanent income (Columns 4 to 6). The decline in unexplained racial wealth gaps is certainly noticeable, falling from 19.11 to 14.76 rank-percentile points in the HRS and from 16.17 to 13.48 percentile points in the SCF.

The regressions in Columns 2 and 5 of Tables 4 and 5 answer the following hypothetical question. If we could eliminate all racial earnings differentials (meaning the distributions of white and Black earnings become identical), how much of the racial wealth gap would remain? The answer is generally consistent across the two data sets. Equalizing earnings would close a little less than half the racial wealth gap, measured in rank-percentile terms. This has a straight-forward interpretation. Closing earnings differentials would certainly have a positive effect in terms of closing the racial wealth gap, but there is much more to the story.

The final columns in each set of three racial wealth gap regressions take this one step further, but at the risk of introducing reverse causation. These regressions add dummy variables for education (more than high school=1), marital status (married=1), and gender (female==1). All three additional control variables absorb some of the differentials in wealth by race not explained by the earnings measures, with education, marital status, and female all positively associated with percentile wealth rank. The questions then focus on why educational attainment and marital status vary by race, but the coefficients on the race variable reflect that fact that these additional wealth determinants do help explain some of the racial wealth gap.

In all four sets of regressions the coefficients on Black=1 fall notably as we add the additional controls. In the two regressions using more comprehensive earnings measures, the unexplained wealth rank-percentile gap falls from 14.76 to 13.20 (HRS) and 13.48 to 12.42 (SCF). The additional reduction in unexplained racial wealth gaps is modest when compared to the effect of moving from current to more comprehensive earnings measures. Together, controlling for earnings and the other controls suggests

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that about half (12 to 13 percentile-points) of the total raw 23 percentile rank-point gap is not explained by earnings, education, marital status, and gender. This conclusion in turn seems consistent with previous empirical and modeling efforts focused on understanding racial wealth gaps.

## 5. Does Social Security explain the racial wealth gap?

The final part of this study focuses on the question of how considering Social Security Wealth (SSW) affects our understanding of the racial wealth gap. The HRS provides users with prospective estimates of SSW for respondents who are not yet claiming benefits, which includes most of the population ages 51 to 56 analyzed here.[14] Thus, this final section considers how adding those estimates of SSW to the conventional measure of household wealth — the sum is referred to here as "expanded" wealth — changes the absolute racial wealth gaps and the wealth rank percentile analysis in the previous section.

Social Security is a progressive program, meaning the ratio of benefits received to lifetime earnings decreases as lifetime earnings rise. Benefit levels rise with lifetime earnings, but at a decreasing rate. Thus, as shown in Sabelhaus and Volz (2022a), the expanded wealth measure that includes SSW will show less inequality than the conventional measure of household net worth that ignores Social Security. Given that lifetime earnings of whites exceed lifetime earnings of Blacks on average, we would

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[14] The SSW measures are available only for HRS waves 1, 4, 7, and 10 (calendar years 1992, 1998, 2004, and 2010). As such, the sample sizes here are roughly half of those in the previous section, which used all HRS waves. There are no observations in the late baby boomer cohort (1960 to 1965) because none of them entered the HRS sample frame until after 2010.

expect the same impact on the racial wealth gap. That is, adding SSW increases total

wealth for both whites and Blacks, but the effect will be proportionately higher for

Blacks.

The predicted effects on traditional measures of racial wealth gaps are borne out

in Table 6. This table mirrors the analysis in Table 1 above, showing the ratio of white to

Black wealth at the mean, median, 75th, and 90th percentiles, but now applied to SSW

and the expanded wealth measure that combines conventional household wealth and

SSW. The ratio of white to Black SSW shows even less of a racial gap than the current

or lifetime earnings measures in Tables 2 and 3. The ratio of white to Black expanded

wealth falls in between the SSW ratios and the conventional racial wealth gap measures

in Table 1. As such, the answer to the first question is, yes, adding SSW does close a

substantial fraction of the absolute racial wealth gaps typically reported in the literature.

### *Table 6: Ratio of white to Black Social Security wealth (SSW) and expanded wealth*

| | Mean | | Median | | 75th Percentile | | 90th Percentile | |
|---|---|---|---|---|---|---|---|---|
| Birth Cohort | SSW | Expanded Wealth | SSW | Expanded Wealth | SSW | Expanded Wealth | SSW | Expanded Wealth |
| **1936 to 1941** | 1.2 | 2.2 | 1.2 | 1.8 | 1.2 | 1.8 | 1.1 | 2.1 |
| **1942 to 1947** | 1.2 | 2.2 | 1.3 | 2.0 | 1.2 | 2.1 | 1.1 | 2.4 |
| **1948 to 1953** | 1.3 | 2.1 | 1.3 | 2.1 | 1.3 | 2.1 | 1.1 | 1.9 |
| **1954 to 1959** | 1.3 | 2.4 | 1.3 | 2.0 | 1.3 | 2.0 | 1.1 | 2.5 |

**Notes:** Sample is HRS individuals ages 51 to 56. Social Security Wealth (SSW) is described in Kapinos et al. 2016. Expanded wealth is household wealth (see Table 1) plus SSW.

The gaps by race in SSW and expanded wealth are consistent with priors. Social

Security is progressive and thus the differentials in lifetime earnings by race (Table 3)

show up (in compressed form) as differentials in SSW by race. The compression in

differentials as one moves from the mean/median to 75th and 90th percentiles is consistent with that progressivity and the lower differentials in lifetime earnings by race shown in Table 3. Mean and median lifetime earnings differentials by race are on the order of 1.5 to 1.6 in the HRS (Table 3), and that maps into SSW differentials of 1.2 to 1.3 (Table 6). At the higher percentiles, white to Black lifetime earnings ratios of 1.3 to 1.4 map into SSW ratios of 1.1 to 1.2.

SSW is a large component of expanded wealth for individuals approaching retirement, and that is reflected in the expanded wealth differentials shown in Table 6. The ratio of mean white to Black conventionally-measured wealth in the HRS hovers around 4 (Table 1), while the expanded wealth ratio is just above 2 (Table 6). Again, adding SSW raises wealth for both white and Black individuals, but the effect is disproportionately larger for Blacks. The effect is also disproportionately larger at the median, because (as discussed above) median wealth of Blacks at ages 51 to 56 is close to zero (a highly-leveraged home and a small retirement account) and thus more volatile and subject to economic conditions (house prices). Adding the substantial SSW to the median individual therefore has a disproportional effect.

One aspect of racial wealth gaps is not reversed when moving from conventionally-measured to expanded wealth. Both measures show an increase across birth cohorts in the ratio of white to Black wealth at all points in the distribution. This closely mirrors the findings in Sabelhaus and Volz (2022a, 2022b). Basically, adding SSW to conventional wealth measures changes our perception of wealth inequality at every point in time because Social Security is a great wealth equalizer. However, adding Social Security does not change our understanding of what is happening to

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inequality over time. Indeed, the (albeit small) increases in white to Black ratios of SSW at most points in the SSW distribution suggests that widening lifetime earnings differentials are contributing (albeit slightly) to increased expanded wealth differentials.

These cautionary observations about Social Security as the great wealth equalizer are reinforced when using the nonparametric wealth rank percentile analysis introduced in the previous section. As with the conventional wealth measure, the approach is to sort individuals by their expanded wealth, then assign and study determinants of those wealth rank percentiles. Adding SSW does very little to the raw wealth rank percentiles, which remain on average near 53 for whites and 30 for Blacks — a wealth raank gap of 23 percentage points. Again, we are increasing wealth for all individuals, and compressing the wealth distributions (the lower percentiles are raised relative to the higher percentiles), but the rank-orders are not greatly affected.

Analyzing the determinants of wealth-rank percentiles using the regression framework introduced above also does little to change our perception of the racial wealth gap. Table 7 shows the same six regressions applied to conventionally measured household wealth in Table 4. The takeaways are largely the same. The percentile rank of lifetime income is more highly correlated with the percentile rank of expanded wealth than contemporaneous labor income. The "unexplained" wealth rank percentile for Blacks falls as we introduce education, marital status, and sex as explanatory variables, even while acknowledging those may come with some reverse causation. Still, much of the 23-percentage point average wealth rank gap between whites and Blacks remains as we move across the columns. In the final regression we are left with the same basic conclusion: Roughly half of the wealth percentile rank gap

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in the expanded wealth measure remains, even after including SSW and controlling for lifetime earnings, education, marital status, and sex.

*Table 7. Expanded wealth rank regressions, ages 51 to 56, HRS*

| Explanatory Variable | Contemporaneous Labor Income | | | Lifetime Income | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Income Measure (Percentile Rank) | 0.394*** | 0.368*** | 0.300*** | 0.527*** | 0.495*** | 0.435*** |
| | -0.00782 | -0.00769 | -0.00777 | -0.0075 | -0.00757 | -0.00782 |
| Black | | -18.70*** | -16.32*** | | -13.51*** | -12.45*** |
| | | -0.726 | -0.713 | | -0.692 | -0.682 |
| Education > High School | | | 12.61*** | | | 11.12*** |
| | | | -0.465 | | | -0.439 |
| Married | | | 5.159*** | | | 2.663*** |
| | | | -0.473 | | | -0.472 |
| Female | | | -2.660*** | | | -0.798* |
| | | | -0.443 | | | -0.422 |
| Constant | 30.45*** | 33.89*** | 27.62*** | 22.95*** | 26.14*** | 21.30*** |
| | -0.461 | -0.469 | -0.64 | -0.448 | -0.471 | -0.618 |
| | | | | | | |
| Observations | 12,664 | 12,664 | 12,664 | 12,664 | 12,664 | 12,664 |
| R-squared | 0.167 | 0.209 | 0.261 | 0.28 | 0.302 | 0.337 |

**Notes:** Sample is individuals born between 1936 and 1965, observed at ages 51 to 56. Dependent variable is percentile of expanded wealth per capita (see Table 5), 2016 dollars. Lifetime income measure is the sum of lifetime earnings at age 55 from linked administrative earnings records. Observation count includes multiple observations on individuals observed in multiple survey waves. Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

The conclusions based on applying the traditional racial wealth gap measures (ratios of white to Black wealth, Table 5) and the wealth rank percentile approach (Table 6) to the expanded wealth concept seem at odds. The first shows that adding SSW to conventionally measured wealth helps to close racial wealth gaps, while the second shows that the conclusions are little different from those based on using conventionally

measured household wealth. The reason is that the two measures are asking different questions.

The traditional wealth ratios approach is about absolute measures of wealth. The median white individual has about twice the expanded wealth as the median Black individual, instead of four to five times as the conventional household wealth measure suggests. The wealth rank percentiles approach gets us closer to understanding racial wealth gaps from a deterministic perspective. Why does a white individual with the same earnings and demographic characteristics end up much higher in the wealth distribution as they approach retirement? And why is that differential increasing over time?

## 5. Conclusions

Racial wealth gaps in the U.S. are large and persistent, and the mechanisms driving those differentials are not well understood. The analysis here uses two household survey data sets (SCF and HRS) and two approaches (traditional white to Black wealth ratios across the wealth distribution and wealth-rank percentile comparisons) to show there is consistency in terms of basic facts about racial wealth gaps using conventionally measured household wealth. The HRS data also makes it possible to expand the wealth measure to include Social Security Wealth (SSW). Adding SSW closes much of the racial wealth gap in an absolute sense, because Black wealth increases more than white wealth at all points in the distribution. However, adding SSW does not change conclusions about wealth-rank percentiles.

The apparent differences in takeaways between standard wealth ratio and wealth-rank percentiles is really about what question is being asked. SSW is an

important component of lifetime wealth for most individuals, and ignoring Social Security gives us a biased view of the resources individuals have as they approach retirement. At the same time, the importance of SSW in overall wealth for most individuals draws our attention to the implications of various approaches to resolving expected Social Security funding shortfalls. SSW is a key component of retirement wealth for many individuals, and disproportionately for Black individuals, and resolving expected Social Security funding shortfalls could have first order implications for wealth inequality and the racial wealth gap.

The wealth rank percentile approach is more focused on helping us understand differences in wealth accumulation dynamics by race. Why do white and Black individuals with similar life-cycle earnings and demographics have very different wealth accumulation profiles? We can look at differences in owned-housing, retirement account, and business ownership by race, but what drives those differences?

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# Appendix: Percentiles of wealth and income in the SCF and HRS

*Table A.1: Net worth percentiles by birth cohort and race, SCF and HRS*

| Birth Cohort | Race Group | Mean SCF | Mean HRS | Median SCF | Median HRS | 75th Percentile SCF | 75th Percentile HRS | 90th Percentile SCF | 90th Percentile HRS |
|---|---|---|---|---|---|---|---|---|---|
| 1936 to 1941 | White | 366,827 | 293,141 | 151,903 | 130,769 | 309,677 | 285,765 | 719,901 | 582,186 |
| | Black | 97,007 | 85,678 | 39,677 | 32,502 | 94,839 | 100,071 | 182,865 | 206,114 |
| 1942 to 1947 | White | 511,389 | 325,501 | 167,801 | 154,352 | 365,809 | 357,065 | 839,448 | 738,837 |
| | Black | 127,940 | 90,818 | 39,961 | 34,886 | 148,504 | 96,720 | 333,843 | 216,028 |
| 1948 to 1953 | White | 657,858 | 378,698 | 196,431 | 174,405 | 500,998 | 404,645 | 1,172,493 | 866,490 |
| | Black | 146,495 | 138,102 | 65,997 | 35,994 | 187,274 | 123,810 | 351,014 | 360,954 |
| 1954 to 1959 | White | 582,853 | 356,599 | 165,524 | 140,431 | 457,100 | 350,536 | 1,249,993 | 818,207 |
| | Black | 118,119 | 81,045 | 43,221 | 15,890 | 124,427 | 77,567 | 257,794 | 213,260 |
| 1960 to 1965 | White | 729,500 | 397,053 | 161,273 | 140,070 | 464,186 | 392,500 | 1,262,963 | 937,000 |
| | Black | 111,947 | 99,656 | 22,438 | 19,116 | 92,817 | 95,122 | 216,503 | 237,037 |

**Notes:** Ages 51 to 56, per capita, 2016 dollars, HRS wealth measure is from HRS RAND file, supplemented with DC account balances.

### Table A.2: Current labor income percentiles by birth cohort and race, SCF and HRS

| Birth Cohort | Race Group | Mean SCF | Mean HRS | Median SCF | Median HRS | 75th Percentile SCF | 75th Percentile HRS | 90th Percentile SCF | 90th Percentile HRS |
|---|---|---|---|---|---|---|---|---|---|
| 1936 to 1941 | White | 55,439 | 42,012 | 41,055 | 34,417 | 62,903 | 55,061 | 102,637 | 82,452 |
| | Black | 31,466 | 28,026 | 26,515 | 23,949 | 40,200 | 40,486 | 63,293 | 63,968 |
| 1942 to 1947 | White | 64,662 | 45,122 | 44,172 | 36,934 | 69,939 | 60,033 | 110,236 | 90,592 |
| | Black | 37,081 | 30,790 | 22,047 | 24,294 | 45,644 | 46,693 | 91,288 | 66,899 |
| 1948 to 1953 | White | 67,191 | 48,992 | 46,300 | 38,355 | 76,231 | 63,526 | 120,064 | 97,808 |
| | Black | 41,326 | 31,174 | 34,725 | 23,505 | 53,824 | 44,643 | 77,244 | 67,596 |
| 1954 to 1959 | White | 64,008 | 50,258 | 41,824 | 38,514 | 69,682 | 66,071 | 115,751 | 101,898 |
| | Black | 33,607 | 29,028 | 27,516 | 20,623 | 48,978 | 41,816 | 69,340 | 69,512 |
| 1960 to 1965 | White | 66,165 | 54,548 | 41,999 | 40,500 | 70,998 | 70,469 | 117,345 | 110,540 |
| | Black | 33,061 | 34,307 | 28,499 | 22,939 | 46,938 | 45,500 | 74,692 | 76,464 |

**Notes:** Ages 51 to 56, per capita, 2016 dollars, HRS labor income measure is from HRS RAND file.

**Table A.3: Lifetime income percentiles by birth cohort and race, SCF and HRS**

| Birth Cohort | Race Group | Mean SCF | Mean HRS | Median SCF | Median HRS | 75th Percentile SCF | 75th Percentile HRS | 90th Percentile SCF | 90th Percentile HRS |
|---|---|---|---|---|---|---|---|---|---|
| 1936 to 1941 | White | 63,519 | 2,561,022 | 44,705 | 2,418,817 | 69,348 | 3,220,243 | 113,079 | 4,096,935 |
| | Black | 34,068 | 1,763,821 | 29,029 | 1,599,430 | 40,402 | 2,473,684 | 68,373 | 3,462,295 |
| 1942 to 1947 | White | 71,760 | 2,409,221 | 49,247 | 2,245,993 | 75,262 | 3,063,313 | 120,956 | 3,898,833 |
| | Black | 41,412 | 1,651,216 | 28,223 | 1,551,529 | 51,608 | 2,331,534 | 99,986 | 3,141,109 |
| 1948 to 1953 | White | 85,980 | 2,124,831 | 54,803 | 1,943,554 | 89,275 | 2,655,952 | 139,618 | 3,448,174 |
| | Black | 48,810 | 1,371,968 | 40,419 | 1,188,565 | 59,370 | 1,948,537 | 87,424 | 2,708,221 |
| 1954 to 1959 | White | 85,116 | 1,948,091 | 52,260 | 1,737,001 | 83,883 | 2,408,885 | 145,816 | 3,203,301 |
| | Black | 44,968 | 1,117,242 | 38,672 | 916,202 | 56,541 | 1,586,795 | 74,936 | 2,296,561 |
| 1960 to 1965 | White | 92,328 | 1,541,876 | 50,630 | 1,325,436 | 85,059 | 2,001,500 | 145,276 | 2,830,418 |
| | Black | 44,062 | 869,266 | 35,441 | 721,000 | 57,346 | 1,173,868 | 86,072 | 1,800,239 |

**Notes:** Ages 51 to 56, per capita, 2016 dollars, HRS measure is lifetime earnings at age 55 from linked administrative records, SCF measure is respondent-reported "usual" income.