

Wealth of two nations: The US racial wealth gap, 1860-2020*

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Abstract

The racial wealth gap is the largest of the economic disparities between Black and white Americans, with a white-to-Black per capita wealth ratio of 6 to 1. It is also among the most persistent. In this paper, we provide a new long-run series on white-to-Black per capita wealth ratios from 1860 to 2020, using data from the US Census, historical state tax records, and a newly harmonized version of the Survey of Consumer Finances (1949-2019), among other sources. We combine these data with a parsimonious framework of wealth accumulation by each racial group to show, given vastly unequal starting conditions under slavery, racial wealth convergence is an extremely distant scenario even if wealth-accumulating conditions were equal for the two groups post-Emancipation. Observed convergence has followed a slower path relative to this equal conditions benchmark, and today's wealth gap is on track to diverge, rather than converge, due to rising wealth inequality. Our framework sheds light on the implications of policies like reparations, which address the historical origins of today's gap, versus overall redistributive policies for the future evolution of the wealth gap.

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1 Introduction

The racial wealth gap is the largest of the economic gaps between Black and white Americans, with a white-to-Black average wealth ratio of 6 to 1 in 2019. Further, the gap has shown remarkable stability over the last several decades. Although there is a large literature focusing on the racial wealth gap in recent years, less is known about the full historical evolution of the wealth gap. In this project, we use historical Census data, state tax records, the historical and modern Survey of Consumer Finances (“SCF+”), as well as additional data sources to document the evolution of the racial wealth gap over the last 160 years. A key contribution of this work will be a harmonized series of Black wealth and white-to-Black per capita wealth ratios in the US from 1860 to 2020, which we will make publicly available.¹

Our paper addresses the following questions: What has been the long-run evolution of the racial wealth gap? What framework for wealth accumulation can rationalize the observed shape of convergence? What forces have determined the speed and degree of convergence? We believe our findings have implications for policies aimed at addressing racial wealth disparities.

We begin with an idealistic benchmark for racial wealth convergence over the last 150 years that assumes equal conditions for wealth accumulation (equal capital gains and savings rates) for each racial group. We take income convergence from the data, annualizing income growth rates for the two populations since 1870. Higher average income growth rates for Black Americans reflect racial income convergence over this period. Our simulation exercise reveals that even under these idealized conditions, the racial wealth gap would nevertheless be 3 to 1 today and decline to 1.4 to 1 in the year 2230, by which time Black and white incomes would have fully converged under our framework. We then turn to building a historical series for the actual evolution of the wealth gap since the 1860s.

Despite substantial scholarship on the contemporary racial wealth gap and its determinants, and a smaller literature documenting Black wealth gaps in the immediate decades after Emancipation, there is little empirical work to date on the evolution of the racial wealth gap over the full post-Emancipation period. Through a large-scale data collection and harmonizing effort drawing on several sources, we fill in this missing time series, particularly the 100 years from the 1880s to the 1980s, when most modern wealth surveys with information on race begin. To do this, we draw on information from historical southern state tax records, the Census of the Population, the Census of Agriculture, data on Black banks, and a newly constructed version of the Survey of Consumer Finances spanning 1949 to 2019 (see [Kuhn et al. \(2020\)](#)).

We observe three distinct phases in our long-run series on the racial wealth gap. First, given very low levels of initial wealth for Black Americans, the decades after Civil War are characterized

¹Note, we define white wealth as the difference between total wealth and our estimates of Black wealth. For simplicity, we refer to this non-Black-to-Black wealth gap as the racial gap or the gap between white and Black Americans. Furthermore, our estimates only refer to marketable wealth that can be priced, or net wealth defined as marketable wealth minus debt.

by rapid convergence. Beginning in the 1910s, convergence slows considerably but continues for another 60 to 70 years. The last four decades, from the 1980s onwards, are characterized by complete stagnation of the racial wealth gap. Indeed, if the most recent trends in the data continue, the racial wealth gap will worsen, not improve, in coming years. Another important observation is that observed convergence is slower than the ideal benchmark described above. In our model, this is consistent with Black Americans having lower capital gains or opportunities for saving throughout the historical period. This is line with a large literature documenting the persistent disadvantages and barriers faced by Black Americans in capital and labor markets.

We are able to shed light on some of the long-run mechanisms behind slow convergence using the SCF+, which covers the last 70 years. For example, Black households tend to hold more wealth in housing and less in stocks relative to white households. While housing wealth has appreciated since 1950, stock equity has appreciated by five times as much, leading white households to have enjoyed far greater capital gains over this period. Savings rates also differ by racial group although these differences have decreased over time. These patterns point to potential mechanisms through which trends in the gap are set to continue or change course.

Nevertheless, policies targeting savings and capital gains for Black Americans are unlikely to be sufficient for closing the racial wealth gap. We discuss this in a final section on the policy implications of our data and framework. The wealth gap has largely followed a pattern of convergence in line with simple models of wealth accumulation given starting conditions under slavery. In this light, policies such as reparations may be most effective at hastening convergence. Once the level of the gap has been addressed, changes in the wealth accumulation parameters for each group have the power to shape the future of racial wealth differences.

Our paper contributes to several strands of research on racial wealth differences—both historical and contemporary. A number of papers study the racial wealth gap in the post-Emancipation years using state-level tax records and historical Census data, which we summarize in detail in Section 2. A large literature focuses on the racial wealth gap and its determinants in the modern era.² This work has focused on the role of marriage and family structure, income and demographics, differences in permanent income, inheritance, life cycle effects, the role of the Great Recession in shaping the racial wealth gap. Our paper contributes to this literature by providing a historical and long-run perspective. Even in a frictionless environment, closing the post-slavery racial wealth gap would take hundreds of years. From today’s vantage point, which reflects both these initial conditions as well as decades-long disadvantages in wealth accumulation for Black Americans, only extreme distortions of savings rates, income growth, and capital gains can overcome the slow rate of convergence, whereas even a slight worsening of current conditions can set the racial wealth gap on a diverging path. Policies aimed only at savings and financial behavior and even income may therefore be insufficient for bringing about wealth convergence.

²An incomplete list of such works include Pfeffer and Killewald (2019); Altonji et al. (2000); Altonji and Doraszelski (2005); Barsky et al. (2002); Charles and Hurst (2002); Chiteji and Stafford (1999); Gittleman and Wolff (2004); Wolff (2001).

Our findings also contribute to a robust discussion of what policies can close the racial wealth gap. For instance, many studies have emphasized the importance of racial income convergence (Aliprantis et al., 2021) and financial inclusion (Boerma and Karabarbounis, 2021) in closing the racial wealth gap. In particular, Boerma and Karabarbounis (2021) conclude that entrepreneurship subsidies are more effective than reparations because of risk aversion caused by historical discrimination in the financial sector. Kermani and Wong (2021) document substantial racial disparities in housing returns arising from distressed home sales, such as foreclosures, which particular forms of loan modification and mortgage restructuring could mitigate. Our long-run perspective suggests that nevertheless, even in a frictionless environment, closing the post-slavery racial wealth gap would take hundreds of years. From today’s vantage point, which reflects both these initial conditions as well as decades-long disadvantages in wealth accumulation for Black Americans, only extreme distortions in savings rates, income growth, and capital gains can overcome the slow rate of convergence. Therefore, without policies that directly address the initial conditions of the racial wealth gap, convergence is a distant and potentially impossible scenario.

Our paper also contributes to the literature on wealth inequality and its long-run dynamics (Piketty, 2013; Piketty and Zucman, 2014; Saez and Zucman, 2016). These studies document rising wealth inequality in the 20th and 21st centuries, analyzing the role of returns on capital and rising top incomes, among other factors. We adopt a simple framework inspired by this literature to understand the evolution of the per capita white-to-Black wealth ratio over the last 160 years. The most simplified version of the model matches the basic shape of the long run gap we observe in our newly harmonized data. Allowing for differing wealth accumulation conditions per racial group enriches our simulation of the racial gap and generates an even better fit with the data, capturing in particular the complete stagnation and even reversal of racial wealth convergence in recent decades.

The rest of our paper is structured as follows. We review the literature on the historical racial wealth gap in Section 2. Section 3 then describes the construction of our long-run series on the per capita white-to-Black wealth ratio. In Section 4, we introduce a simple framework for wealth accumulation by racial group and use this to interpret trends in the wealth gap since Emancipation, focusing particularly on the role of savings-induced versus capital gains induced wealth accumulation. Section 5 discusses the policy implications of our findings, and Section 6 concludes.

2 Related literature on the historical racial wealth gap

The limited availability of wealth data for Black and white individuals before the 1980s has restricted much of the analysis of the literature to recent decades.³ Nevertheless, a number of papers investigate trends in Black and white wealth formation in the late 19th and early 20th centuries. These studies have largely relied US Census data and on property tax records from select Southern states that tabulated assessed wealth or tax payments separately for Black and white populations.

³The PSID added a module on wealth in 1984, and past researchers have typically relied on post-1983 waves of the SCF.

Du Bois (1901) uses tax records for the state of Georgia to document patterns in landholding by Black individuals in that state. Higgs (1982) uses specific data from Du Bois (1901) and the Comptroller-General of Georgia to illustrate a substantial increase in the total assessed value of Black wealth in Georgia over the period 1874-1915. Margo (1984) incorporates similarly disaggregated property tax data from the additional states of Louisiana, North Carolina, Virginia, and Kentucky, where he likewise finds sustained increases in aggregate Black wealth and declines in the per capita wealth gap in all of these states but Louisiana.⁴

Several studies have modeled and empirically demonstrated the critical role of post-Civil-War racial disparities for wealth inequality in this period and beyond. Spriggs (1984) examines the accumulation of wealth by Black Americans in Virginia, noting that discrimination in land and labor markets inhibited racial wealth convergence in the decades after the Civil War. DeCanio (1979) uses a theoretical model to show that the redistribution of “40 acres and a mule” to Black families would have substantially improved their relative position, but in the best-case scenario would have only allowed Black families to eventually achieve half of per capita white wealth. A study by Canaday (2008) uses individual property tax assessment records for Calhoun County, South Carolina matched to complete count Census data and finds that both Black men and women experience faster wealth accumulation than white individuals between 1910 and 1919. Miller (2020) studies the impact of land grants to Black families in the Cherokee Nation after emancipation and finds reductions in the racial wealth gap in the Nation relative to the rest of the South.

Other scholarly work on this period has focused on cross-region differences in the number and nature of Black businesses and prosperous individuals. Schweninger (1989) and Schweninger (1990) documents the wealthy Black entrepreneurial and planter class of free Black persons before the Civil War in the Lower South, especially in New Orleans, Charleston, and several other Louisiana parishes. Importantly, however, Schweninger (1989) claims this group’s wealth had largely deteriorated by 1870 whereas an emergent urban Black population in the Upper South gained wealth in this period by becoming farmers, skilled artisans, and small business owners.

A related literature focuses on racial inequality in homeownership. Collins and Margo (2011) traced the evolution of the racial homeownership gap from 1870 to 2007. The gap narrows in the 1870 to 1920 period but shows remarkable stability thereafter. These data do not incorporate information on the value of homes, however, which is only available starting in 1930 and for which complete count census data do not exist after 1940 (the full count 1950 census will not be declassified until 2022). A study by Akbar et al. (2019) documented how neighborhood racial transition in 10 northern cities during the first Great Migration led to changes in rental and house prices that eroded the value of Black homes and thus posed a barrier to Black wealth accumulation by 1940.

In prior work of two of this current project’s coauthors, Kuhn et al. (2020) harmonized the historical and modern files of the Survey of Consumer Finances (SCF) creating a new dataset of

⁴Margo (1984) argues that the part of this growth may be due to discriminatory over-assessment of Black-owned property for tax purposes—a pattern that has been documented in tax assessment today (Avenancio-León and Howard, 2019).

household level wealth and income information for the US from 1949 to 2016. Although primarily focused on the role of asset prices and portfolio composition in wealth dynamics in the postwar period, the authors also provide a brief analysis of the racial wealth gap confirming stability and persistence in this large gap over the postwar period.

Our paper provides the first comprehensive picture of the racial wealth gap from the Civil War through the present. Relative to prior literature, we plan to improve historical measures of Black and white wealth in three ways. First, we combine the data originally used in [Margo \(1984\)](#), the Georgia data by [Du Bois \(1901\)](#), and the 1860 and 1870 Censuses which recorded real and personal wealth; we also digitize county-level wealth by racial for the six states with these data available. Second, we incorporate information from national estimates of Black wealth and aggregate wealth by [Work \(1922\)](#). Third, we validate our estimates of the historical racial wealth gap using data from the Census of Religion on growth in Black church edifice values, the Census of Agriculture on Black farm wealth, data on deposits held at Black banks, and the Census of Population data on housing values.

A key contribution of this work is a harmonized series of Black and white wealth per capita created by drawing from this large number of data sources. The next section describes the construction of our historical series in detail and presents our initial estimates.

3 Construction of the long-run racial wealth gap series

We build our estimate for the long-run racial wealth gap from four main sources. For the time period from 1860 to 1870, we rely on full count Census data. For the period from 1870 to 1922, we use state-level tax records in combination with aggregate wealth estimates for taxable wealth from Census reports. For the period from 1922 to 1936, we rely on estimates for Black wealth from the *Negro Year Book* by Monroe Work in combination from [Saez and Zucman \(2016\)](#) for national wealth in the United States. For 1950 onwards, we rely on SCF+ data. Below we describe how we construct wealth gap estimates for the different time periods and compile the final data series.

For 1860, we rely on the wealth information for real estate and personal property from the full count Census data.⁵ To compute per capita wealth for the Black population, we include the enslaved and assume zero wealth for this group.⁶ For the count of the enslaved in 1860 we aggregate county-level statistics from [Haines et al. \(2010\)](#) and confirm that these match the number for the enslaved from the Census Black population report covering 1790-1915 ([Cummings and Hill, 1918](#)): a total of 3,953,760 enslaved Black individuals. We also assign zero wealth to all observations missing wealth data. For top-coded observations, we impute wealth using the distribution of wealth at the top in 1913 from [Saez and Zucman \(2016\)](#), the earliest year for which such an estimate is available. Details on the imputation are provided in Appendix B. Using these data, we compute per capita

⁵In 1860, personal property included the value of the enslaved.

⁶This is a conservative assumption in that we do not take into account the debt implied by a lifetime in bondage.

wealth for the white and Black populations and take the ratio as our estimate for the racial wealth gap in 1860.

We proceed similarly for 1870; however, there are two key differences. As 1870 was the first post-Civil-War Census, the formerly enslaved were enumerated for the first time as part of the US Black population, so we are directly able to estimate per capita wealth for the Black population. However, in addition to top-coding, the 1870 Census also suffers from censoring from below. Enumerators were instructed that values for personal property below 100 dollars should not be recorded. We impute average personal property below the 100-dollar threshold for 1870 and explain the details in Appendix D. The effects are very minor as we estimate that most households below the 100 dollar threshold for personal property indeed had no wealth at all. For the top coding, we apply the same approach as in 1860 to the 1870 data.

For the period covering 1870 to 1922, we rely on state-level tax records from Arkansas, Georgia, Kentucky, Louisiana, North Carolina, and Virginia, described in the previous section above. Southern states were home to the vast majority of the Black population until the early 20th century and 41% of the Black population lived in the six states for which we have tax data. Importantly this set of states includes both the Lower and Upper South, which featured different economic structures and demographics in both the ante-bellum and post-bellum period (see [Schweninger \(1990\)](#)). We estimate the growth rate of aggregate Black wealth in these states from 1870 to 1917 the last year the data are readily available. Specifically, we run a regression of log wealth on a time trend and state fixed effects. We estimate a time trend for wealth of 0.054 and we take this coefficient as our estimate of the average wealth growth rate for Black wealth after 1870. Appendix Figure B4 shows the pooled raw data with the predictions from the regression.⁷

We find that after 1870, the prediction and the raw data align closely. We take the estimated wealth level for the Black population from the 1870 Census data and extrapolate forward using the estimated wealth growth rate until 1922. We stop in 1922 because it is the last year for which we have estimates for taxable wealth from the “Wealth, Public Debt, and Taxation” report. We construct wealth of the white population as the difference between total taxable wealth and the wealth of the Black population. We construct wealth per capita for the Black and the white population by dividing the estimates of total wealth by the population estimates for the Black and white population (linearly interpolated for the intercensal years). Using the constructed estimates for per capita wealth, we construct the wealth gap as the white-to-Black ratio of per capita wealth as before.

For the years between 1922 and 1940, we rely on estimates of aggregate Black wealth in the US from [Work \(1922\)](#). Estimates are available for three years within this window: 1926, 1930, and 1936. We combine Work’s estimates with national wealth estimates from [Saez and Zucman \(2016\)](#) to construct the level of wealth of the white population by subtracting Black wealth from

⁷For robustness, we also examine growth in log Black church wealth over 1890 to 1926 using data from the US Census of Religion. The time trend in church wealth over this period is 0.055, very close to the growth rates we estimate in the tax records.

total wealth and divide by the populations for each respective group to arrive at per capita wealth estimates. As we believe Work’s estimates are based off of state auditor reports recording wealth assessed for taxation, and given a documented ratio of assessed to market value of wealth for this time period of less than one, we adjust the wealth gap constructed from these estimates downwards by an adjustment factor derived from the average wealth ratios on either end of the 1926-1936 window. We explain the full details of this adjustment in Appendix B.3.1.⁸

For the period starting in 1950, we rely on data from the SCF+. To improve the accuracy of the estimates over time, we use three-year moving averages to construct the time series for average wealth of Black and white households and household sizes over time. We then compute average per capita wealth at three-year intervals over this time period based on the smoothed average household wealth estimates by the number of household members. Based on these per capita estimates for wealth of the Black and white population, we construct the racial wealth gap from 1950 to the present.

Figure 1 shows the resulting time series. Our current long-run series shows the rapid convergence in the racial wealth gap after Emancipation, continued progress over the late 19th and early 20th century followed by stagnation. Remarkably, the racial wealth gap in 1920 was only moderately higher than it is today. In addition, it appears that convergence has completely stopped. The slope in the wealth gap after 1980 is slightly positive. Under these conditions, if trends continue as they have over the last four decades, there is no indication that further progress will be made in closing the racial wealth gap.⁹

4 The trajectory of the long-run racial wealth gap

In this section, we introduce a simple yet intuitive theoretical framework to understand the long-run dynamics of the racial wealth gap documented in Section 3 and Figure 1. By doing so, we concentrate on three distinct factors: (i) initial conditions, (ii) savings-induced wealth accumulation, and (iii) capital gains-induced wealth accumulation.

4.1 Wealth accumulation model

To provide a benchmark for the evolution of racial wealth gaps in the US over the last 150 years, we introduce a simple yet intuitive model of wealth accumulation for each racial group. In the spirit of Saez and Zucman (2016), average wealth for each group follows the transition equations below:

⁸We present the full series alongside the unadjusted 1926, 1930, and 1936 estimates in Appendix Figure B7. The blue does show the unadjusted wealth gap based on the original Monroe Work data for 1926, 1930, and 1936.

⁹We also construct the inverse wealth gap (the ratio of Black-to-white per capita wealth) and the share of wealth owned by the Black population over time. We rely on the same underlying data for the construction. In each year, we construct the Black wealth share as total Black wealth over the sum of total white and Black wealth which by construction is total wealth. We scale estimates in 1926, 1930, and 1936 as described before and smooth estimates after 1950 also accordingly. Appendix Figures B8 and B9 depicts these series.

$$\begin{aligned}
W_{t+1}^j &= (1 + q^j) \left[W_t^j + s^j Y_t^j \right], \text{ where} \\
Y_t^j &= (1 + g^j) Y_{t-1}^j.
\end{aligned} \tag{1}$$

$j = \{b, w\}$ represents the two racial groups (b for Black and w for white), W_t^j and W_{t+1}^j the real per capita wealth of group j at time t and $t + 1$, and Y_t^j the per capita income of group j at time t , which evolves with a growth rate g^j . In the equation, wealth is accumulated with regard to two distinct components: the capital gains rate q^j and saving rates of individuals s^j . To keep the framework extremely simple, we fix q^j , s^j , and g^j to be constant over time.

After some derivations, the white-to-Black wealth ratio at time $t+1$ (WR_{t+1}) can be expressed as

$$WR_{t+1} \equiv \frac{W_{t+1}^w}{W_{t+1}^b} = WR_t \times \frac{1 + q^w}{1 + q^b} \times \frac{1 + s^w \frac{Y_t^w}{W_t^w}}{1 + s^b \frac{Y_t^b}{W_t^b}}. \tag{2}$$

Then, the log growth rate of the racial wealth gap from t to $t + 1$ is

$$\log \left(\frac{WR_{t+1}}{WR_t} \right) \approx \underbrace{\left(q^w - q^b \right)}_{\text{Differences in capital gains}} + \underbrace{\left[s^w \frac{Y_t^w}{W_t^w} - s^b \frac{Y_t^b}{W_t^b} \right]}_{\text{Differences in saving}}. \tag{3}$$

Equation 3 shows how two distinct components influence the evolution of the racial wealth gap, which are racial differences (i) in capital gains-induced wealth accumulation and (ii) savings-induced wealth accumulation. In terms of capital gains, the absolute differences between Black and white Americans have a one-to-one impact on the growth rate of the racial wealth gap. If savings-induced wealth accumulation of Black and white Americans is equal, then the slightest difference in capital gains in favor of white individuals would set the racial wealth gap on a diverging path. Compared to this, the effect of saving differences on the growth rate of the racial wealth gap depends not only on their saving rates, but also on Black and white individual's income and wealth levels of the previous period. Thus, differences in income growth rates will also influence the savings-induced component of the wealth gap.

As a starting point, we simulate the long-run evolution of the racial wealth gap by assuming identical q and s across the two racial groups. The purpose of this thought experiment is to analyze how the racial wealth gap would have evolved had Black and white households faced equal conditions for accumulating wealth after Emancipation. Equal q and s would imply, for example, that Black and white households had equal access to financial markets and institutions and both groups were able to frictionlessly transmit wealth across generations over the last 150 years. Then, Equation 3 simplifies to:

$$\log \left(\frac{WR_{t+1}}{W_t} \right) = s \cdot \left(\frac{Y_t^w}{W_t^w} - \frac{Y_t^b}{W_t^b} \right). \quad (4)$$

The equation shows how evolution of the racial wealth gap is then solely driven by the racial differences in initial income and wealth levels. The higher the discrepancy between Black-White inverse wealth-to-income ratios, the more important is savings-induced wealth accumulation for wealth convergence. In other words, our benchmark model allows us to examine the impact of initial conditions right after Emancipation on the racial wealth gap today.

For this exercise, we allow for heterogeneous income growth across the racial groups. We estimate annualized income growth rates for the two groups directly from the data. Over the full 150 year period, Black income per capita grew at a higher annualized rate than white (2.3% vs. 2%), indicating income convergence between the two groups over this period.¹⁰ For q and s we plug in annualized averages of national estimates from [Saez and Zucman \(2016\)](#), which are $q = 1\%$ and $s = 5\%$. For initial values of the racial wealth gap, we use the white-to-Black per capita wealth ratio as observed in the 1870 Census (20:1) and the income ratio (3.6:1) constructed from historical estimates of Black and white per capita income.¹¹ We trace out the evolution of the white-to-Black per capita ratio under the model in Equation 1 and the parameters and starting conditions listed above.

Figure 2 presents the evolution of the simulated wealth gap with equal wealth accumulation conditions across Black and white individuals (left panel) and the Black and white wealth-to-income ratios (right panel). Overall, the simulated wealth gap follows a hockey-stick pattern, very similar to our long-run series of the racial wealth gap. Convergence is rapid immediately post-Emancipation until the early-to-mid 20th century, after which convergence slows down considerably. This shape can be explained by the fact that Black individuals were starting from very low initial levels of wealth compared to their income. According to our benchmark model, white individuals started with much higher initial wealth in 1870, with a wealth-to-income ratio of 4.5, while Black individuals started with a wealth-to-income ratio of 1. Therefore, in this early period, the contribution of savings to wealth accumulation is extremely high for Black individuals (Equation 4). As Black wealth grows, so do wealth-to-income ratios for Black Americans, and convergence slows down considerably. This change in slope is substantial, such that full wealth convergence appears to be a distant scenario not yet in sight. A question arises at this point: under equal conditions for wealth accumulation, when would Black wealth converge to white wealth (a ratio of 1)?

Table 1 presents the observed white-to-Black wealth and income ratios for the year 2020 and simulated wealth and income ratios for future periods, with columns 2 through 4 presenting the ratios in the years 2020, 2050, and 2230. Even under equal conditions for wealth accumulation –

¹⁰We take estimates of historical income per capita for each racial group from [Margo \(2016\)](#).

¹¹The construction of the 1870 wealth ratio estimate is described in detail in Section 3. The income ratio is calculated using data from [Margo \(2016\)](#). For 1870, we assume a wealth-to-income ratio of 4.5:1 for White Americans, adapting the values for the US in [Piketty and Zucman \(2014\)](#).

that is, identical capital gains and savings rates – initial conditions for Black Americans were so poor that the wealth gap would not fully disappear within the next 200 years. 210 years from now, in the year 2230, by which time income would have fully converged according to our framework, the wealth ratio would be still by 1.4:1. Thus, our simple exercise shows that (i) full income convergence is not sufficient for closing the wealth gap, and (ii) even with equal wealth-accumulating conditions, initial inequality in 1870 was so severe that full racial wealth convergence may never occur.

4.2 Drivers of slower convergence: the role of savings and capital gains

Relative to the idealistic benchmark model, the data show that Black-white convergence in wealth is an even more distant scenario. Though we match the overall “hockey-stick” shape of the convergence quite well with our benchmark model, our long-run series indicates that convergence has been much slower relative to this idealized scenario. Under our framework, this slower convergence path must stem from racial differences in wealth accumulating conditions, namely savings and capital gains.

Indeed, a large literature provides evidence on systemic disadvantages faced by Black Americans in wealth accumulation. Differences in income, life expectancy, and family structure all give rise to differences in savings rate and therefore savings-induced wealth accumulation for Black Americans (Carroll et al., 1999; Gittleman and Wolff, 2004; Dal Borgo, 2019; Dynan et al., 2004; Bayer and Charles, 2018; Aneja and Xu, 2020; Charles and Hurst, 2002; Keister, 2004; Altonji and Doraszelski, 2005). In addition to this, Black Americans have been barred from equal access to financial institutions (Baradaran, 2017; Avenancio-León and Howard, 2019), experienced violent destruction or expropriation of their property (Albright et al., 2021; Cook, 2014; Messer et al., 2018), and relegated to highly segregated asset markets (Akbar et al., 2019; Aaronson et al., 2020). All these together have implications on Black Americans’ portfolio structure and quality of their assets, implying worse capital gain rates than their white counterparts. Indeed, allowing for worse wealth accumulating conditions for Black Americans in the model (in terms of q and s) brings the path of convergence closer to the data (see the light gray solid line in Figure F2.¹²

Nevertheless, our simulation exercise shows that even with worse wealth accumulating conditions for Black Americans throughout the whole post-Emancipation period, we would still be on a path to convergence. This is not borne out in the most recent decades in the data, starting from the 1980s. Prior to 1980, despite differences in the speed of convergence, the white-to-Black wealth gap steadily decreased, arriving at a gap level of 5:1. It has since increased again to a level of 6:1 by 2020. In the next section, we discuss the drivers of this re-divergence in Black and white wealth post-1980.

¹²Note that q and s in these simulations are still held constant throughout the historical period. Our current preliminary series suggests periods of slower and faster convergence, which would be consistent with shifts in the gaps in q and s between Black and white Americans over time. Once we relax our q and s to vary over time, we are able to perfectly match the data with our simple wealth accumulation model. For a detailed description of the method used for the time-varying model and a presentation of the simulated series, see Appendix H.

4.3 Divergence post-1980: The importance of capital gains

How have the conditions for Black and white wealth accumulation changed over the last 150 years? In Table 2, we report Black and white differentials in income growth, savings rates, and capital gains for three key periods: 1870 to 1950, 1950 to 1980, and 1980-2020. For income, we compute annualized growth rates for Black and white Americans over the full sample period using the data of Margo (2016) and the SCF+. For saving rates and capital gains, we rely on our estimates using the SCF+ starting from 1950.¹³

In general, we observe an overall deterioration in Black Americans' wealth accumulating conditions starting in the 1980s: the stalling of income convergence along with persistent saving rates differentials. Further, differences in Black and white capital gains doubled over this period. Given these facts, we now use our wealth accumulation model and plug in the estimated values of income growth, savings rates, and capital gains post-1980 to visualize how such worsening wealth accumulating conditions for Black Americans have contributed to the dynamics of the racial wealth gap. Figure 3 presents the simulation results. Here, we present three scenarios, where the racial wealth gap evolves with (i) equal wealth accumulating conditions, (ii) differences in savings rates and capital gains (which we estimate from the data), and (iii) only differences in savings rates. In all three scenarios, we plug in the estimated post-1980 income growth rates of Black and white Americans.

First, in contrast to the world where wealth accumulating conditions remained equal for the two groups (light gray dashed line), slowed racial income convergence and worse savings rates and capital gains of Black Americans post-1980 help explain the recent re-divergence in the racial wealth gap (see black dashed line). Second, this pattern seems to be particularly driven by large differences in capital gains. If we only accounted for racial differences in savings, without accounting for differences in capital gains, the wealth gap would still be on a path to convergence (see solid gray line).

In fact, the increasing importance of capital gains for the general evolution of wealth inequality in the US post-1980 has been the subject of a large recent literature (Piketty, 2013; Piketty and Zucman, 2014; Saez and Zucman, 2016; Kuhn et al., 2020). Rising wealth-to-income ratios, driven by asset booms, has decreased the importance of income growth and savings flows for the wealth distribution, as the stock of wealth is high relative to income flows. In this case, portfolio composition of households begins to play an important role for wealth accumulation, as it determines the level of capital gains they earn on their wealth portfolio.

In Table 3, we present the asset portfolio composition of Black and white households from 1950-2020. Averaging over the full period, the difference in portfolio composition across the two groups is striking. Housing and other non-financial assets make up 68% of the asset side of Black households' balance sheets while financial assets play a much minor role. In particular, equity (direct and indirect) holdings of Black Americans are low, making up only 4% of total assets.¹⁴ For

¹³For a full description of our estimation method of savings rates and capital gains, see Appendix I.

¹⁴Equity includes both direct holdings and indirect holdings in form of mutual funds. However, this share does not include indirect holdings of equity (or fixed-income assets) in form of defined-contribution pension plans. After

white households, by contrast, housing and other non-financial assets make up a much smaller share (45%). Business and stock holdings make up a similar share of assets for white households (also 37%), compared to 17% for Black households. Examining the patterns in these differences over time reveal that they have been highly persistent. Over the full historical period, wealth portfolios of white households have been more diversified than those of Black households.

Such pronounced portfolio differences between Black and white households mean that differential appreciation across asset classes can contribute to changes in the racial wealth gap (Kuhn et al., 2020). If housing prices boom (holding everything constant), Black households would benefit more due to their high exposure to this asset class, thus potentially leading to a decrease in the racial wealth gap. In the case of a stock market boom, however, the racial wealth gap would worsen as Black households profit less from high capital gains. A simple decomposition illustrates how booms in the housing market and equity market have contributed to the racial wealth gap. Fixing households' portfolio composition to their 1950 values, we present the accumulated capital gains of Black and white households on both their housing and equity wealth in Figure 4.

Capital gains on housing have been quite stable until the 1980s, when the housing market experienced a boom (dashed gray line in the left panel of Figure 4). From 1971 to 2007, right before the Global Financial Crisis, house prices increased by 10%. We see a drop in housing capital gains in the aftermath of the crisis that seems to persist for the next 5 years, but then recovers afterwards. Compared to real estate owners, however, equity owners experienced much higher capital gains, especially beginning in the 1990s (solid black line in the left of Figure 4). If households held the same proportion of their assets in stocks as they did in 1950, by 2020 they would have experienced a 40% increase in their wealth purely due to capital gains. By comparison, accumulated capital gains on housing by 2020 is just over 10%. Such diverging patterns in the equity market and housing market have led to large differentials in capital gains between white and Black households due to white households' higher share of assets in equity compared to Black households (see the right panel of Figure 4).

An important caveat to note is that our focus is on the average wealth gap, due to data limitations that prevent us from tracking distributional gaps over the full 160 year period. There is consensus in the literature that it is mostly wealthy households who hold equity in their asset portfolio and indeed the skewed nature of equity holding has driven overall wealth inequality over the last several decades (Saez and Zucman, 2016; Piketty and Zucman, 2014; Kuhn et al., 2020; Xavier, 2020).

Since the wealthiest Americans are mostly white, the increase in general wealth inequality may have contributed to the racial wealth inequality as well. Indeed, once we exclude the top 10% wealthiest US households from the sample, the differences across Black and white households mostly disappear: white households of the bottom 90% of the total wealth distribution are more invested in housing assets, and their equity holdings align with those of Black households.¹⁵ Thus, the over-

reveiling, equity holdings make up 18% of the total white assets, while only 7% for Black assets.

¹⁵See Figure Table F1 in the appendix.

representation of white Americans at the top wealth distribution helps explain why rising overall wealth inequality has exacerbated the racial wealth gap in recent decades.

In summary, we explain the overall shape of the long-run evolution of the mean Black-to-white wealth gap by highlighting the importance of initial conditions, savings-induced wealth accumulation, and capital gains-induced wealth accumulation. First, we show that, given the severe initial conditions that Black Americans faced at the time of Emancipation, 150 years later we have arrived at a stage, where convergence is very rigid. In addition to this, persistently worse wealth accumulating conditions for Black Americans, in terms of savings and capital gains, have slowed convergence substantially.

With equal access to financial institutions and capital markets since Emancipation, the white-to-Black wealth ratio would be half the size it is today, a ratio of 3 to 1 as opposed to 6 to 1. Furthermore, the racial wealth gap is now on track to diverge again, driven by the strong increase in racial differentials in capital gains since 1980. Less diversified portfolio structures for Black Americans combined with disproportionate gains from equity market booms for the wealthiest white Americans has linked the evolution of the average racial wealth gap to overall wealth inequality.

5 Policy implications: How will we reach convergence?

Our analysis so far on the long-run evolution of the average racial wealth gap indicates that convergence may never happen, thus raising questions for policy interventions that seek to ameliorate racial wealth inequality. In this section, we now look ahead and ask under what scenarios would we reach convergence. By doing so, we discuss the efficacy of major policies that have been proposed to reduce both racial wealth gaps and overall wealth inequality in the US.

Despite a clear role for overall inequality in the recent evolution of the racial wealth gap, which we document in the previous section, improvements in Black Americans' financial inclusion will not in fact hasten according to our model. Indeed, in order for Black Americans to experience full convergence in the near future, say in the next 30 years by 2050, they would need more than double the capital gain rates of white Americans (5% compared to 2%), a savings rate of 31%, or income growth of nearly 8%. which is not a realistic scenario given all the restrictions Black Americans face in the financial markets.

By contrast, direct intervention on the level of the racial wealth gap, which we argue is a direct legacy of starting conditions under slavery, would greatly speed up convergence. Reparations are one such policy that directly target the origins of the racial wealth gap. To assess how such a policy would affect racial wealth differences, we apply the policy proposed by [Darity and Mullen \(2020\)](#): payments of approximately \$267,000 per person among the 40 million eligible Black descendants of the American enslaved. Our own calculations suggest that this policy would greatly reduce the wealth gap, from a ratio from 6:1 to 1.3:1.

We argue that such an intervention would bring the the level of the racial wealth gap into a range

where other policy interventions then have more sway in determining the future of convergence.¹⁶ In Figure 5, we present three scenarios illustrating the sensitivity of the post-reparations wealth gap to differences in wealth accumulating conditions across racial groups. Under equal conditions (Black solid line), the white-Black gap after reparations increases slightly at the beginning, but converges to a value of 1.35:1. If we assume higher capital gains for white individuals, however, the racial wealth gap begins diverging again. Plugging in observed differences in capital gains from the data (dark grey dashed line), the white-Black wealth gap increases to a level of 3 within the next 50 years. Smaller differences in capital gains would slow down the divergence path, but would not lead to convergence (light grey dashed line).¹⁷

Thus, policies targeting inequality in capital gains induced or savings induced wealth accumulation can help maintain a stable path for racial wealth gap convergence post-reparations. [Boerma and Karabarounis \(2021\)](#) propose investment subsidies for Black individuals, as they can have positive effects on their investment returns. [Zewde \(2020\)](#) analyzes the effect proposals like baby bonds would have on wealth inequality and the racial wealth gap by allowing young adults to start with higher wealth, crucial not only for building a base for wealth accumulation, but also for enabling investment in education. Additionally, because baby bonds are a form of financial asset, this policy may also lead to greater inclusion of Black households in financial markets. Even though this policy is not specifically targeted to reduce the racial wealth gap, Black households would disproportionately benefit from a progressive baby bonds policy.

An alternative policy that can directly address the negative consequences of heterogeneous portfolio composition of Black and white households is a wealth tax for households in the top 0.1% wealth distribution. As we have shown in Section 4.3, the wealth divergence since the last recent decades seems to be exacerbated by the high capital gains from the wealthiest households who hold large amount of equity wealth. By taxing their wealth, the net capital gains on their wealth would decrease, leading to a closing in the gap across Black and white capital gain rates.

Convergence would likely be further accelerated through a combination of the policies discussed above as they would not only disproportionately boost the relative wealth of Black Americans, but also move them into wealth groups with higher capital gains and savings ([Dyner et al., 2004](#); [Juster et al., 1999](#); [Kuhn et al., 2020](#)).

6 Conclusion

We assemble a new historical series of white-to-Black per capita wealth ratios for the United States from 1860-2020. To do so, we draw on numerous data sources, including complete count historical

¹⁶For example, recent working paper by [Boerma and Karabarounis \(2021\)](#) argues for investment subsidies for Black individuals over direct transfers. They model the wealth gap persisting through Black individuals' pessimistic beliefs about returns on investment owing to a history of capital and labor market discrimination. See also [Aliprantis et al. \(2021\)](#) for similar implications.

¹⁷It's worth noting, of course, that reparations-style policies may also have general equilibrium effects on the wealth accumulating conditions of Black Americans, something we abstract from in our discussion here.

US censuses, southern state tax records, and a recently published database harmonizing 70 years of the Survey of Consumer Finances. Our new long-run series captures three distinct patterns of convergence. After a period of initial rapid convergence in the racial wealth gap during the first 50 years after Emancipation, racial wealth convergence has slowed down substantially since the mid-20th century, with the wealth gap on a diverging path in recent decades.

We show that this basic shape of convergence can be well explained by a simple wealth accumulation model with heterogeneous income growth across Black and white Americans. Given extremely low levels of Black wealth under slavery, even modest accumulation can imply a high growth rate for Black wealth that greatly exceeds that of white wealth, thus generating rapid convergence. However, as the racial wealth gap decreases, convergence slows and differences in returns on wealth and savings across Black and white households begin to matter more for the shape of convergence. Given existing differences in the wealth accumulating conditions for white and Black individuals, our analysis suggests that full wealth convergence is still an extremely distant or unattainable scenario. Furthermore, since the 1980s capital gains have become the most important driver of the racial wealth gap, explaining a large part of the recent diverging patterns. With asset prices booming since the 1980s, white households, who tend to be more invested in equity, have benefited much more from higher capital gains than Black households, for whom housing continues to be the most important asset.

Our results thus emphasize the importance of policy interventions that target the level of the wealth gap, such as reparations, if hastening convergence is the goal. After interventions like this, policies that aim to equalize wealth accumulating conditions across Black and white Americans can have complementary effects, maintaining a stable path to convergence.

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Figure 1: White-Black wealth ratio: 1860-2020

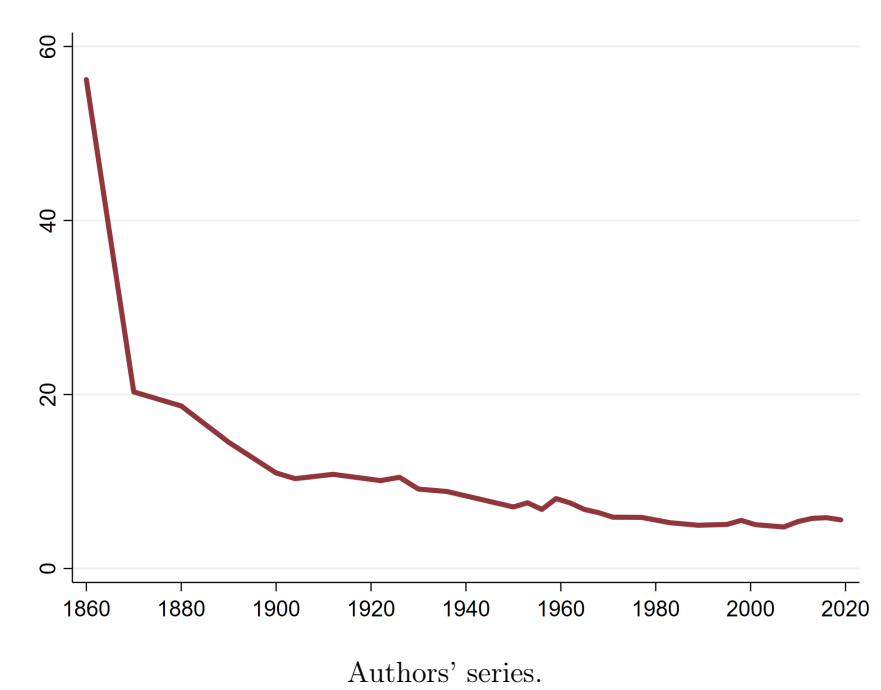


Figure 2: Simulation of the racial wealth gap under equal conditions

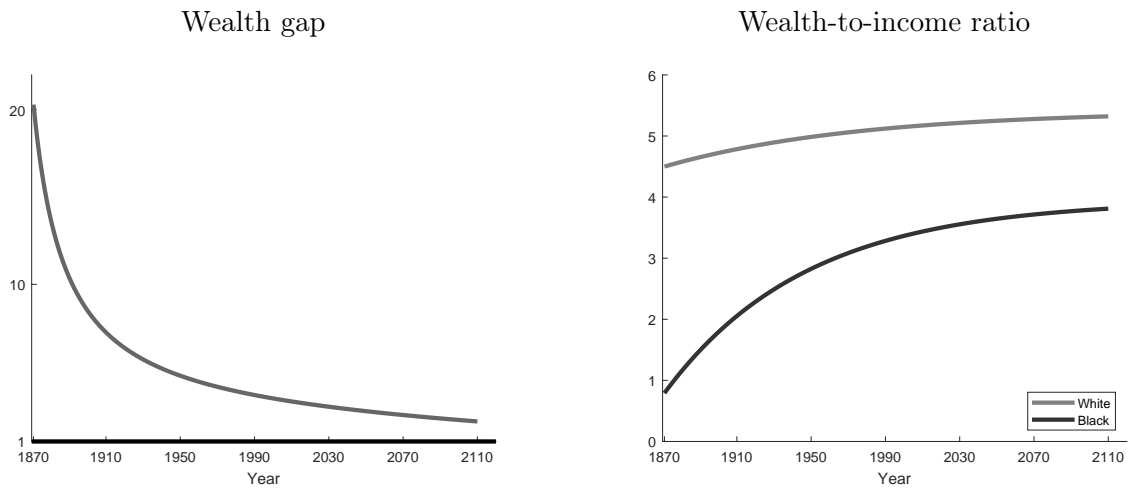


Figure 3: Wealth gap convergence since 1980

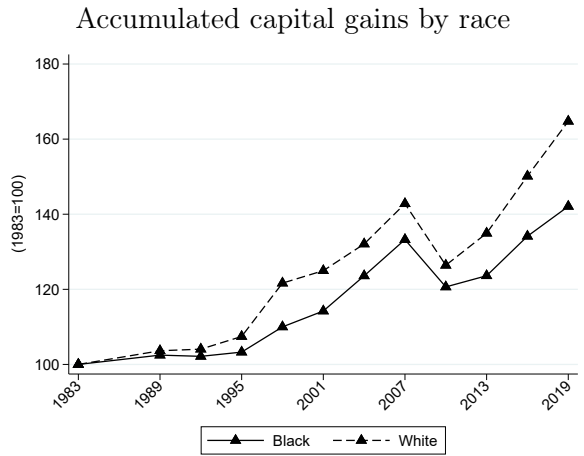
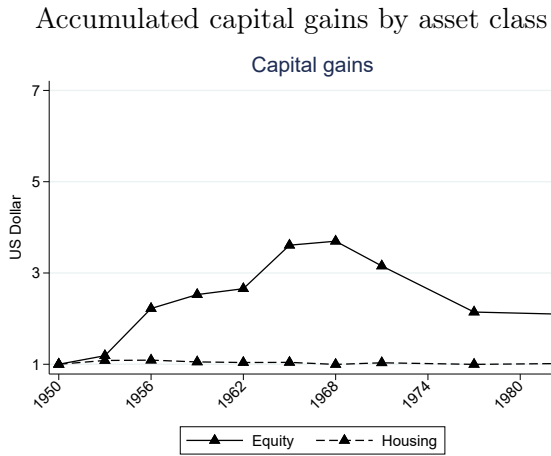
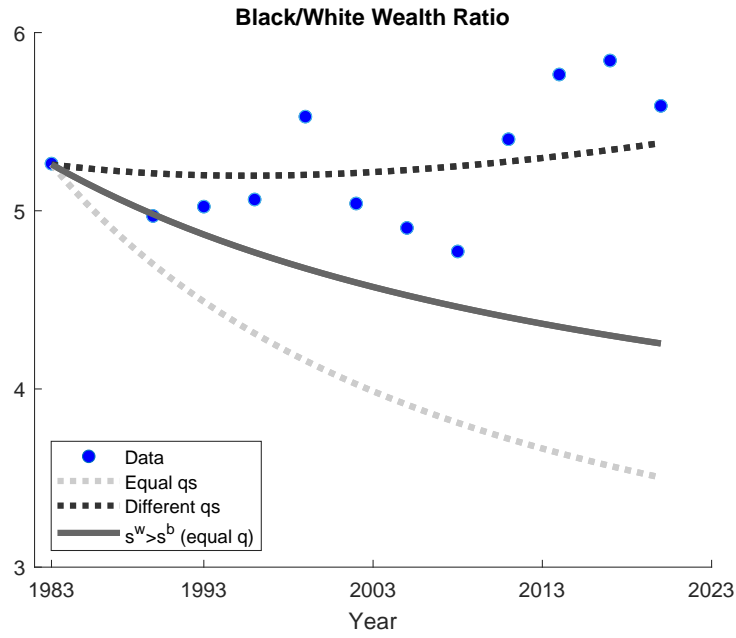


Figure 4: *Notes:* Growth rate of accumulated capital gains based on 1950 portfolio levels, indexed to 1983=100. On the left-hand side, we present the accumulated capital gains by asset class. On the right-hand side, we accumulate capital gains of stocks and housing separately by race.

Figure 5: Wealth convergence under [Darity and Mullen \(2020\)](#) reparations

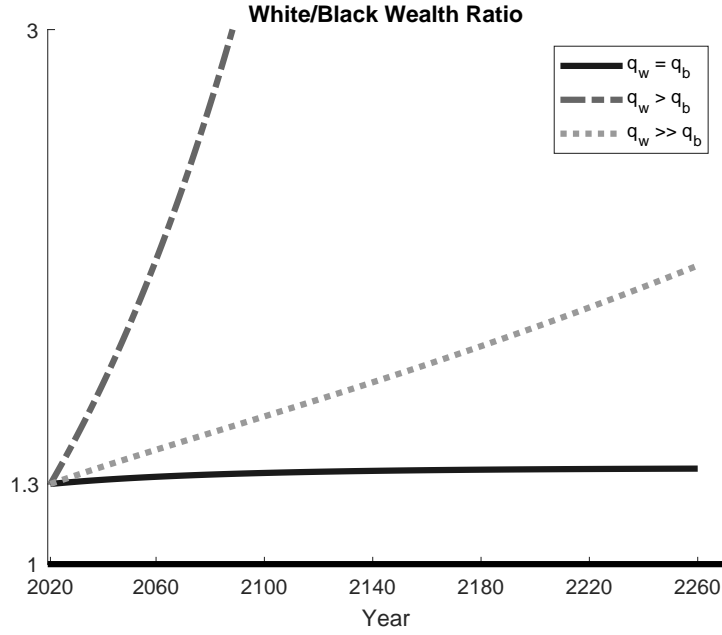


Table 1: Simulated wealth gap: 2020-2230

	2020 (data)	2020	2050	2230
Wealth ratio (W/B)	5.7	3.1	2.7	1.4
Income ratio (W/B)	1.5	2.1	1.9	1

Table 2: Changes in wealth accumulating conditions post-1980

	$g^w - g^b$	$s^w - s^b$	$q^w - q^b$
1870-1950	-0.53 p.p.	-	-
1950-1980	-0.42 p.p.	1.09 p.p.	0.38 p.p.
1980-2020	0.02 p.p.	1.11 p.p.	0.76 p.p.
Whole sample period	-0.36 p.p.	1.10 p.p.	0.58 p.p.

Notes: The table presents the differences between white and Black wealth accumulating conditions in terms of income growth ($g^w - g^b$), saving rates ($s^w - s^b$), and capital gains ($q^w - q^b$).

Table 3: Portfolio shares

Decade	Other nonfin	Housing	Business	Equity	Liquid assets	Other fin
<i>White</i>						
1950	0.03	0.34	0.35	0.18	0.10	-
1960	0.03	0.35	0.29	0.24	0.10	-
1970	0.02	0.42	0.22	0.25	0.09	-
1980	0.03	0.50	0.22	0.10	0.11	0.04
1990	0.05	0.50	0.17	0.06	0.12	0.11
2000	0.05	0.44	0.17	0.12	0.10	0.15
2010	0.03	0.44	0.18	0.10	0.09	0.17
2020	0.03	0.39	0.20	0.13	0.09	0.18
Average	0.03	0.42	0.22	0.15	0.10	0.07
<i>Black</i>						
1950	0.04	0.53	0.33	0.04	0.05	-
1960	0.07	0.58	0.19	0.12	0.05	-
1970	0.06	0.66	0.13	0.10	0.05	-
1980	0.09	0.68	0.10	0.01	0.09	0.03
1990	0.09	0.66	0.07	0.01	0.06	0.11
2000	0.08	0.60	0.06	0.04	0.06	0.17
2010	0.07	0.64	0.08	0.02	0.05	0.14
2020	0.07	0.57	0.09	0.03	0.06	0.18
Average	0.07	0.62	0.13	0.04	0.06	0.08

Online appendix for “The racial wealth gap, 1860-2020”

Appendix A Data sources for historical racial wealth gap series construction

We investigate the evolution of the racial wealth gap using a variety of national and state-level sources. Specifically, our wealth data were assembled from state fiscal reports (1866-1916); the US decennial Census (1860 and 1870); aggregate Black wealth estimates by Monroe Work (1863-1936); and the historical and modern Survey of Consumer Finances (1949-2019). Additionally, we use population data from the Census as well as the Census Bureau’s report on the U.S. Black population from 1790 to 1915. In this Appendix, we describe key data sources in detail.

US Decennial Censuses, 1860 and 1870 We obtain our earliest measures of per capita Black and white wealth at the national level, from the 1860 and 1870 waves of the US Census. We use the IPUMS version of the complete count censuses for these years (Ruggles et al., 2021). We begin our analysis in 1860 as the 1850 Census only recorded real property and not personal property, which included the enslaved and accounted for a significant source of total wealth prior to the Civil War¹⁸ Therefore we begin our analysis in 1860.

Importantly, the 1860 Census of Population does not include a count of the enslaved, who were enumerated in separate slave schedules. We aggregate Haines et al. (2010) data on the enslaved Black population by county.¹⁹

The 1870 Census of Population is the first full accounting of the Black population in the United States. For the 1870 Census, enumerators were instructed to record personal property for those with at least \$100 and real property for all.

Southern state auditor reports, 1866-1916 For the years following Emancipation, we rely on southern state auditor reports analyzed in Higgs (1982) and Margo (1984) to understand Black wealth accumulation and racial wealth gaps in the South between the Civil War and World War I. We used the website HathiTrust Digital Library (<https://www.hathitrust.org/>) to access annual tax auditor reports for available Southern states in available years in the period 1866-1916. Data were obtained directly from such reports for the following states: Louisiana, North Carolina, Virginia, Kentucky, and Arkansas. These reports provide either county-level aggregates of assessed wealth by racial group or aggregate tax payments by racial group. In the latter case, we imputed Black and

¹⁸We estimate that personal property made up 42% of total wealth in 1860.

¹⁹These estimates correspond to the Census’s 1918 publication “Black Population 1790-1915” (Cummings and Hill, 1918).

white aggregate wealth by assuming the Black-white ratio of property tax payments equalled the wealth ratio and multiplying the former by the state’s reported aggregate wealth for that year or an adjacent year, drawing from the imputation strategy employed by [Margo \(1984\)](#). We also included similar data from Georgia, which had been previously assembled by [Du Bois \(1901\)](#). To complete the early state-level dataset, per capita wealth observations from [Margo \(1984\)](#) were combined with population figures to calculate aggregate wealth levels by race in years where the corresponding state fiscal report was not found online and additional years were taken from [Work \(1922\)](#). Figure [B1](#) depicts an excerpt from the Virginia state auditor report for the fiscal year ending in 1904.

Monroe Nathan Work’s *The Negro Year Book* Currently, for additional estimates of Black wealth at the national level in the early 20th century, we digitize figures from Monroe Nathan Work’s *The Negro Year Book: An Annual Encyclopedia of the Negro* for the years 1926, 1930, and 1936. While information on Work’s methodology is limited, the estimates seemingly incorporate extensive research conducted by Work on the growth of Black churches, farmlands, businesses, and other assets on top of additional indicators of Black social and economic progress. Notably, Work includes state-level wealth estimates in his yearbooks that are consistent with the data we digitized from state auditor reports, suggesting these state-level records figure prominently in his estimation of national Black wealth. Work’s national Black wealth estimates are low compared to the 1870 Census, likely due to being drawn from assessed rather than market-value-based estimates of wealth; however, once the levels are adjusted, the trend matches well with the data from Census and the historical SCF, available from 1949 onwards. More details on these adjustments are provided in [Section B](#) and [Appendix B.3.1](#).

Sources on national wealth in the late 19C and early 20C Throughout the 1880 to 1940 period, we calculate white wealth as the difference between estimated Black wealth and total wealth in the United States. Given the demographic makeup of the country during this period and patterns of wealth-holding in the Census, we believe this generates a reasonable estimate of white national wealth. For the years 1880 to 1922, we obtain national wealth estimates from the US Census Bureau report on “Wealth, Public Debt, and Taxation” that was published until 1922,²⁰ covering national wealth and state breakdowns from 1850 to 1922. For the years 1926, 1930, and 1936, we incorporated estimates from [Saez and Zucman \(2016\)](#) on aggregate wealth for the United States.

Historical Survey of Consumer Finances (SCF+) Finally, from 1949 to the present, we utilize a newly harmonized series of the Survey of Consumer Finance (SCF+), which provides micro-level data on households’ socioeconomic characteristics and wealth composition. The SCF+ is an extension of the Survey of Consumer Finances (SCF) provided by [Kuhn et al. \(2020\)](#). Before the modern Survey of Consumer Finances (SCF), which the U.S. Federal Reserve Board has conducted every three years since 1983, the Survey Research Center of the University of Michigan gathered

²⁰Early editions were titled “Wealth, Debt, and Taxation.”

data on household income and wealth along with their demographics at an annual frequency from 1947 to 1971, and again in 1977. [Kuhn et al. \(2020\)](#) extract this historical data based on the original codebooks and match the variables across the historical and modern waves. The final dataset allows us to study the joint distribution of income and wealth consistently over the period from 1949 to 2019.

Wealth in the SCF+ comprises marketable wealth, which is the current value of all marketable assets net the current value of debts. Assets include liquid assets (certificate deposits, checking and savings accounts, call and money market accounts, housing and other real estate, bonds, stocks, corporate and non-corporate equity, and defined contribution retirement accounts. Total liabilities are the sum of housing debt, car loans, education loans, loans for consumer durables, credit card debt, and other non-housing debt. We exclude social security and defined benefit pension claims, which are not available over the full period. Using these data, we compute decadal averages of per capita wealth by race.

Additional state tax records We have identified several sources of individual-level pre-World-War-II tax records from additional southern states and other localities. Our plan is to link selected years for states that will maximize our coverage of Black wealth to complete count censuses where we observe an individual’s race. This extends the method of [Canaday \(2008\)](#)—who linked individuals from a single county in South Carolina—to all counties in all states where records are available. Thus far, we have identified the following states where promising additional records are available: Virginia, Texas, Tennessee, and Mississippi. We have already begun digitizing tax records for New Orleans, for which race-specific property estimates are missing in the Louisiana state auditor reports. To construct measures of Black wealth outside the South, we are focusing on the tax records of New York and Philadelphia, which are available in microfilm in the time period of interest. Our digitization and Census-linking approaches are detailed in Appendix ??.

Finally, we are also digitizing county-level wealth information for Black and white populations from the six southern states for which these data are readily available in auditor reports. We intend to combine these data with other sources of data to predict Black wealth in counties outside the states for which we have county-level wealth data by race.

1900-1940 Censuses of Agriculture The 1900-1940 Censuses of Agriculture recorded information on farm values and farm ownership separately by racial group. Although these data provide information only on the farm sector, agriculture was a key sector of both employment and land ownership for Black Americans in the South, particularly in the decades following Emancipation.

1930 and 1940 Census of Population The 1930 Census is the first to ask households about the value of their homes. Given the importance of real estate as a source of Black wealth as we document in Section ??, the aggregate value of farms and homes owned by Black Americans will

provide an important second estimate of national Black wealth prior to the SCF+ series, which begins in 1949.

Black banks Information on the deposits and liabilities of Black banks covering the period are available from [Harris \(1936\)](#), [Work \(1922\)](#), [Stein and Yannelis \(2020\)](#), and [Ammons \(1996\)](#). These data cover a time period that overlaps with race-specific farm ownership and farm values data from the Census of Agriculture as well as data on housing values from the Census of Population. We intend to use these data to refine our measures of Black wealth for the pre-WWII period and to provide additional information on the composition of Black wealth during this time period. The data on bank holdings are particularly important for non-southern Black wealth where agricultural land is a less likely source of wealth.

Appendix B Additional details on construction of the historical racial wealth gap series

This appendix provides additional details on the construction of our long-run series.

B.1 Top-coding in the 1860 and 1870 censuses

[Saez and Zucman \(2016\)](#) report that the top 0.01 percent of tax units owned 8.8 percent of total wealth in 1913. We take the estimate for total taxable wealth from the Census publication “Wealth, Public Debt, and Taxation” ([States. et al., 1924](#)), which is 16,159,616,068 dollars in 1860 and use this to derive an estimate for average wealth of the top 0.01 percent of tax units. In the Census data, we consider the household to be equivalent to the tax unit. We replace all top coded observations by this estimate for average top wealth. In other words, we estimate that there are 533 tax units in the top 0.01 percent of the population in 1860 and we estimate average wealth for them of 2,668,456 dollars. In 1870, we estimate that there are 771 tax units in the top 0.01 percent with an average wealth of \$3,432,867. The estimate for national wealth in 1870 is \$30,068,518,507.

B.2 Digitization of state auditor reports

We digitize state auditor reports for six states that assessed wealth (or recorded total tax payments on assessed wealth) separately for the Black and white populations in those states between the 1860s and the early 20th century. The six states are Virginia, Kentucky, Arkansas, Georgia, Louisiana, and North Carolina. Figure [B1](#) below shows an excerpt from the 1903-1905 auditor report for the state of Virginia.

Figure B1: Virginia auditor report, 1903-1905

All money on deposit with any bank or other corporation, firm, or person.	Shares of stocks of incorporated companies.	TOTAL VALUE	Total value of personal property owned by whites.	Total value of personal property owned by negroes.	COUNTIES.
Value.					
29,389		570,785	566,695	4,090	Shenandoan.
45,226	10	1,782,249	1,574,839	207,410	Smyth.
7,282		348,807	304,423	44,384	Southampton.
250		306,787	290,532	16,255	Spotsylvania.
45,428	4,250	446,656	371,288	75,368	Stafford.
34,798		609,788	510,358	99,430	Surry.
97,602		1,242,088	1,221,560	20,528	Sussex.
700		353,297	349,011	4,286	Tazewell.
1,550		149,739	115,799	33,940	Warren.
18,605		748,168	739,670	8,498	Warwick.
		316,659	266,346	50,313	Washington.
82,159	50	857,007	850,017	6,990	Westmoreland.
103,220	10,000	1,124,340	1,117,860	6,480	Wise.
3,500		252,476	204,429	48,047	Wythe.
114,165	618,523	\$80,254,537	\$75,901,055	\$4,353,482	York.
					Total, Counties.

These reports were originally analyzed by [Higgs \(1982\)](#) (Georgia only) and [Margo \(1984\)](#) (the remaining five states) to understand post-Civil-War wealth accumulation by Black Americans as well as the racial wealth gap during this period.

B.2.1 Comparison of historical state wealth ratios to Margo (1984)

Below we compare our estimates for the white-Black per capita wealth ratio derived from our digitization of state auditor reports to those of [Margo \(1984\)](#). Table B1 shows that results are broadly similar for most states with Louisiana being the exception. This is due to the fact that the Louisiana state auditor reports exclude data for Orleans Parish, which includes New Orleans. [Margo \(1984\)](#) assumes that country parish ratios apply to the state overall, for which aggregate wealth is available, and computes the state-wide wealth ratio this way. We use a different approach to account for the possibility of greater wealth holding by Black Americans in New Orleans relative to the country parishes. We take the 1870 Census and compute white-to-Black wealth ratios in New Orleans. We then subtract total country parish wealth from total wealth in Louisiana to derive

wealth in New Orleans every year for which tax data are available. Assuming that the white-to-Black wealth ratio in New Orleans holds constant over time, we compute Black and white wealth in New Orleans using this method and then recompute the per capita wealth ratio for the state of Louisiana using these adjusted measures for aggregate Black and white wealth in the state.

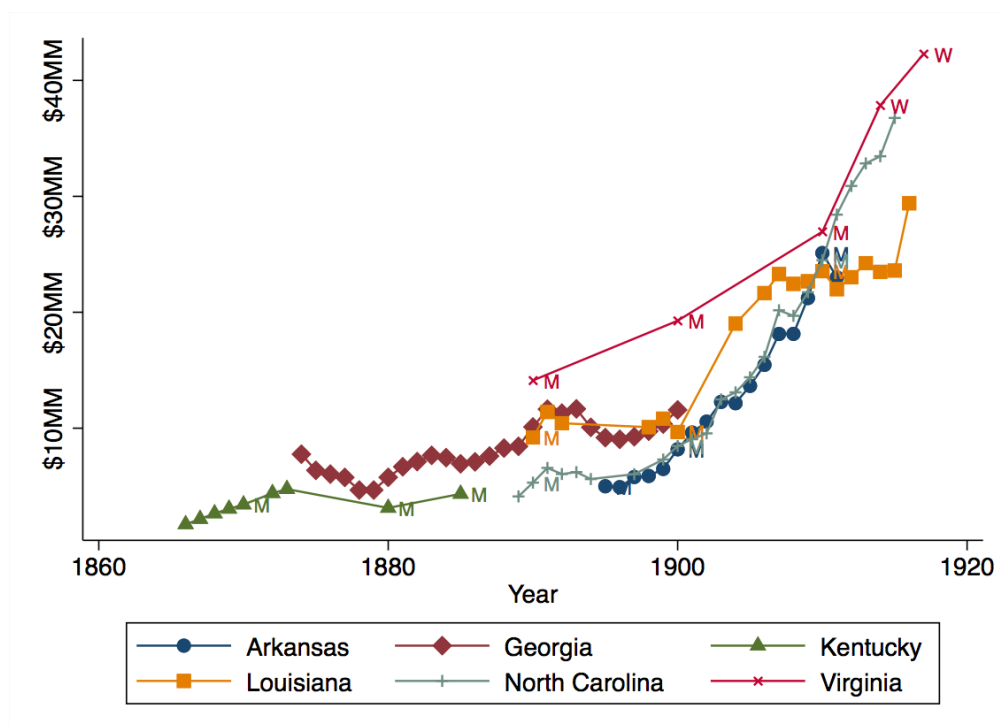
Table B1: Average white-Black wealth ratios: Margo (1983) & DKKS (2020)

	1870	1880	1885	1890	1895	1900	1910	1910
Arkansas								
Margo(1983)						9	7	6
DKKS(2020)						9	7	6
Georgia								
Margo(1983)								
DKKS(2020)		36	36	32	26	24	23	
Kentucky								
Margo(1983)	36	22	22	19				
DKKS(2020)	33							
Louisiana								
Margo(1983)					18		20	25
DKKS(2020)					14		16	19
North Carolina								
Margo(1983)					17		13	9
DKKS(2020)					17		12	9
Virginia								
Margo(1983)					19		14	10
DKKS(2020)							13	11

Source: Margo (1983): Margo’s (1983) data originally collected from southern state auditor reports and reported for selected years in Table 1. DKKS (2020) calculated from their new digitization of these same reports and supplemented by W.E.B. Du Bois’s data on property holdings by race in Georgia from 1877 to 1900.

Figure B2 plots aggregate Black wealth in each of the six states. Here, wealth has been adjusted using the Warren-Pearson Index so as to be in \$1910-1914. Each of the six states shows substantial accumulation of Black wealth over this period.

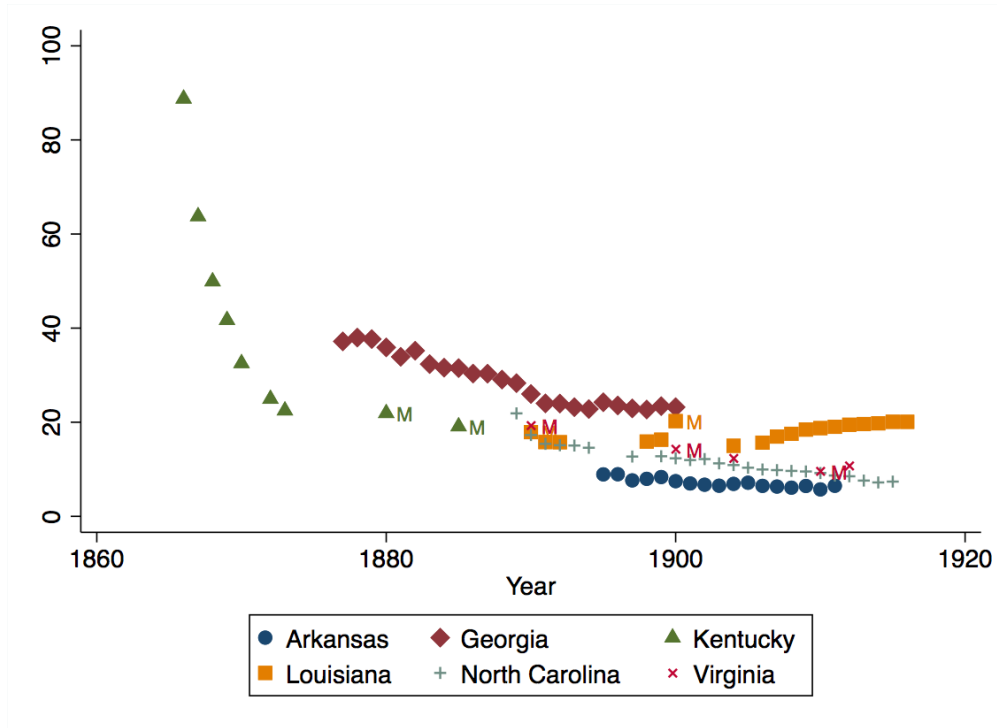
Figure B2: Aggregate Black wealth by state, 1860-1920 (1910-1914 \$)



Notes: Estimates adjusted to be in real \$1910-1914 using the Warren-Pearson Index. Source: State auditor reports; Margo (1984): “M”; Work (1922): “W”.

Figure B3 plots the white-to-Black per capita wealth ratios for each state. The pattern of rapid initial convergence followed by a slowdown in convergence that we document in our national series is replicated for these six states.

Figure B3: White-Black per-capita wealth ratio by state, 1860-1920



Source: State auditor reports; Cummings and Hill (1918); Margo (1984): “M”.

We use these data to estimate growth rates in Black wealth which we then use to extrapolate Black wealth as recorded in the 1870 Census until the year 1922, the last year for which we have national wealth estimates from the Census Bureau’s “Wealth, Public Debt, and Taxation” report. Figure B4 plots predicted log wealth against observed log wealth for the six states in a linear prediction of wealth over time, including state fixed effects.

B.2.2 Alternative growth rate estimate using data on Black church values

We provide an alternative estimate for growth in Black wealth for this time period using data from the Census of Religion, which recorded wealth of Black churches.

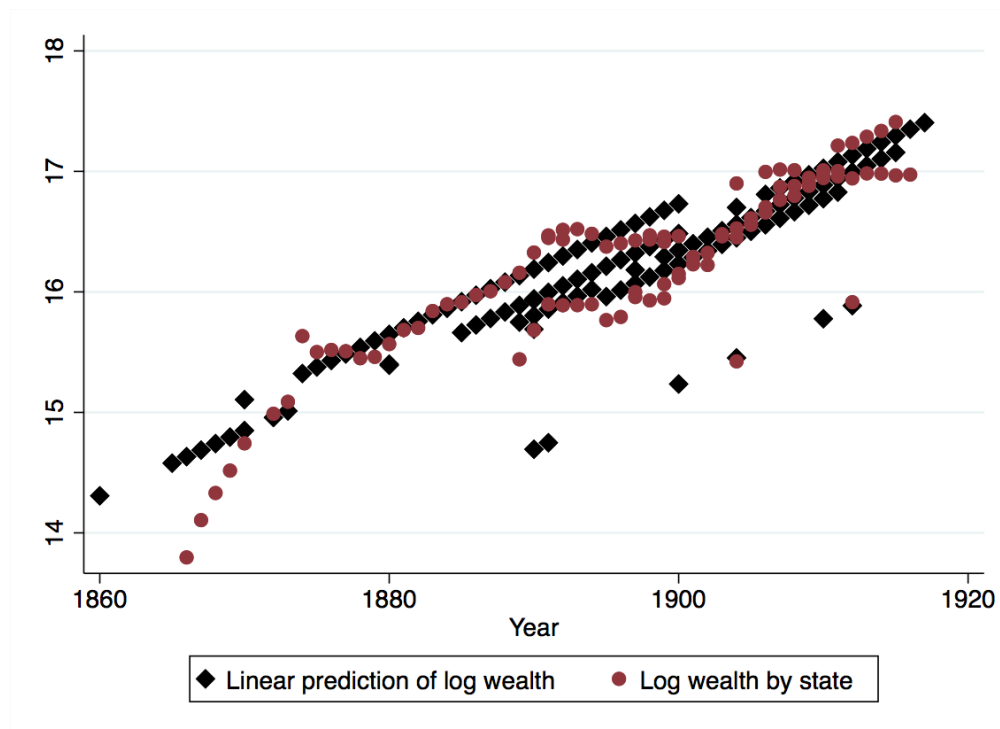
Table B2: Value of Black churches, 1890-1926

	1890	1906	1916	1926
Value of Black churches	\$26,626,448	\$56,636,159	\$86,809,970	\$205,782,628

Source: 1906, 1916, and 1926 US Censuses of Religion digitized by the authors.

The time trend in log Black church wealth over this period is 0.055, very similar to the trend in log Black wealth from the state auditor reports covering a similar period, from 1870 to 1917.

Figure B4: Log wealth and predicted log wealth for six southern states

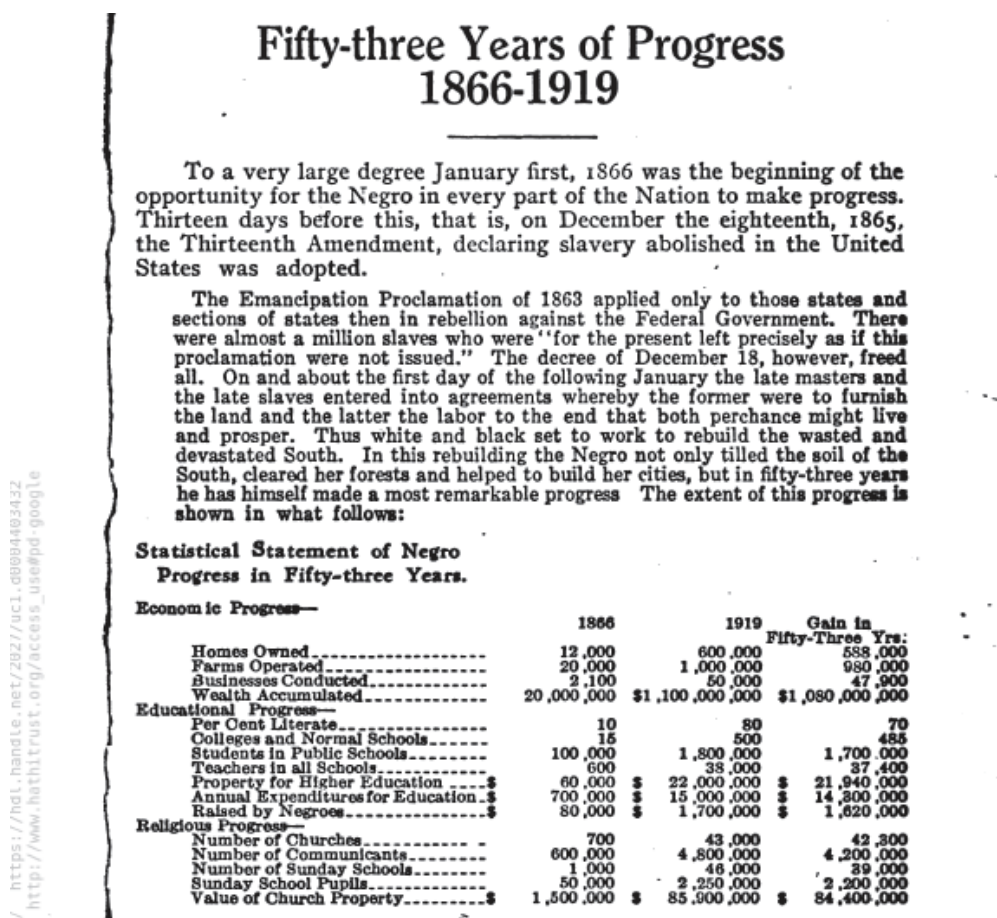


Notes: Log wealth and log wealth predicted using a linear time trend and state fixed effects. States included are Kentucky, North Carolina, Georgia, Arkansas, Virginia, and Louisiana. Data sources: *Southern state auditor reports*; [Work \(1922\)](#); [Margo \(1984\)](#).

B.3 Black wealth estimates from Monroe Nathan Work's *Negro Year Book*

Monroe Nathan Work (1866-1945) was a sociologist who published an annual encyclopedia on the status of Black Americans called the *Negro Year Book*. In it, he provides the only national estimates of Black wealth in the early 20th century that we are aware of. Figure B5 gives an example of the presentation of these types of estimates in these annual reports. We digitize these estimates and make adjustments based on the fact that they likely extrapolate from the reports discussed in Appendix B.2 above. We describe the adjustment procedure in detail below.

Figure B5: Excerpt from *The Negro Year Book* (Work, 1922)



B.3.1 Adjusting estimates from Work (1922)

Incorporating these racial wealth gap estimates results in a large upward jump in the time series for the racial wealth gap when compared to the Census data that precedes these points and the SCF+ which follow them. When comparing the estimates for total wealth from Saez and Zucman (2016) to the numbers for taxable wealth in 1922 from "Wealth, Public Debt, and Taxation," we find that the numbers closely align, with the Saez and Zucman (2016) estimate at 92.7% of the number from "Wealth, Debt, and Taxation." If anything, a lower national estimate would result in a lower racial

wealth gap as the residually determined wealth of the white population would be smaller. This comparison strongly suggests that the higher estimate stems from the estimates for Black wealth from [Work \(1922\)](#).

We surmise that the estimates from [Work \(1922\)](#) are based on the same state-level tax records we use to estimate Black wealth for the early 20th century. One reason is that he describes changes in wealth in the same states for which auditor report breaking down wealth by racial group are available. Assessed values for tax purposes are substantially below their market value in these years. Appendix Figure [B6](#) which excerpts from [States. et al. \(1924\)](#) shows the ratio of true to assessed values for the early 20th century. If estimates in Monroe Work are based on tax records, then they will understate on average wealth of the Black population relative to the estimates for total wealth that are used to construct the wealth of the white population as a residual. We therefore scale the racial wealth gap for these three years by assuming a linear time trend between 1922 and 1950.

We proceed as follows. We first construct the linear time trend between the average wealth gap over the period from 1912 to 1922 as starting point and 1950 and 1953 as the end point of the linear trend. We compare the average wealth gap for 1926, 1930, and 1936 implied by the linear trend to the average wealth gap implied by the original estimates from [Work \(1922\)](#). We take the ratios of these averages as the scaling factor we apply to the original Work estimates to adjust them in levels. Using this approach, we keep the time series variation implied by the Work estimates and only adjust their levels over time. The resulting adjustment factor is 0.603, which implies that we scale down the wealth gap by about 40 percent. Reassuringly, adjustment factor is similar to the assessment ratios depicted in Appendix Figure [B6](#), the state-level average of which is 57%.

Figure [B7](#) plots the full series containing adjusted estimates from Work, as well as the unadjusted estimates for 1926, 1930, and 1936.

Figure B6: Excerpt from US "Wealth, Public Debt, and Taxation" report

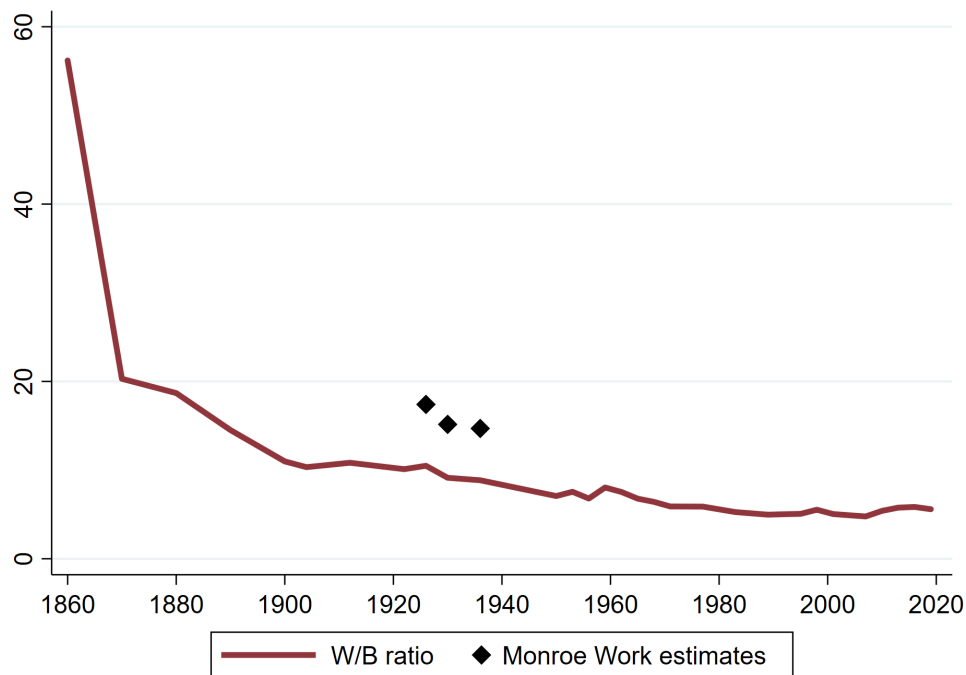
**PER CENT OF ESTIMATED TRUE VALUE OF REAL PROPERTY AND IMPROVEMENTS
REPRESENTED BY ASSESSED VALUATIONS**

STATE	1922	1912	1904	1900	STATE	1922	1912	1904	1900
Alabama.....	47.7	40.0	45.9	46.7	Nebraska.....	70.1	15.0	17.7	18.7
Arizona.....	81.0	50.0	33.5	34.6	Nevada.....	50.0	30.0	37.7	36.5
Arkansas.....	22.6	28.0	38.7	39.4	New Hampshire.....	79.5	100.0	65.4	65.4
California.....	46.6	45.1	49.2	51.1	New Jersey.....	63.2	54.1	54.1	54.1
Colorado.....	73.6	25.0	40.4	30.8	New Mexico.....	43.0	25.7	25.7	35.4
Connecticut.....	63.2	66.7	80.7	80.2	New York.....	84.8	66.7	90.1	64.6
Delaware.....	77.5	56.7	56.7	56.6	North Carolina.....	75.7	60.0	60.0	54.2
District of Columbia.....	90.8	66.7	66.7	66.7	North Dakota.....	76.0	17.2	30.6	30.5
Florida.....	20.0	35.5	35.5	35.7	Ohio.....	70.2	90.0	46.4	47.6
Georgia.....	37.9	52.5	52.5	54.0	Oklahoma.....	62.3	50.0	25.1	24.5
Idaho.....	50.0	85.0	41.8	41.7	Oregon.....	43.5	63.5	30.1	29.8
Illinois.....	24.1	18.0	14.7	14.1	Pennsylvania.....	57.8	58.6	58.6	57.5
Indiana.....	80.2	45.0	60.3	62.1	Rhode Island.....	80.0	75.2	75.2	75.3
Iowa.....	12.7	11.7	19.8	20.1	South Carolina.....	20.3	33.3	46.5	47.1
Kansas.....	65.7	72.4	22.9	24.4	South Dakota.....	82.6	46.2	46.2	45.8
Kentucky.....	71.0	62.2	62.2	62.8	Tennessee.....	57.8	60.0	61.1	61.8
Louisiana.....	68.9	40.0	53.3	53.8	Texas.....	40.2	50.0	48.5	49.3
Maine.....	52.0	73.8	73.8	73.6	Utah.....	61.4	33.3	42.8	44.0
Maryland.....	64.0	65.8	65.8	65.5	Vermont.....	55.0	70.0	71.8	71.7
Massachusetts.....	77.5	90.6	90.6	90.4	Virginia.....	40.7	50.8	55.3	58.1
Michigan.....	85.2	58.7	62.7	62.7	Washington.....	28.0	42.3	46.0	47.7
Minnesota.....	34.7	37.1	37.7	36.6	West Virginia.....	40.0	49.7	49.7	51.2
Mississippi.....	44.5	54.8	54.8	54.2	Wisconsin.....	85.3	75.0	71.0	36.9
Missouri.....	59.1	40.0	40.5	42.0	Wyoming.....	72.4	100.0	31.4	30.2
Montana.....	28.7	43.5	43.5	45.7					

¹ Revised basis; in the report for 1912 the basis used was 25 per cent.

Data sources: *States. et al. (1924)*.

Figure B7: Historical racial wealth gap series with unadjusted Work estimates

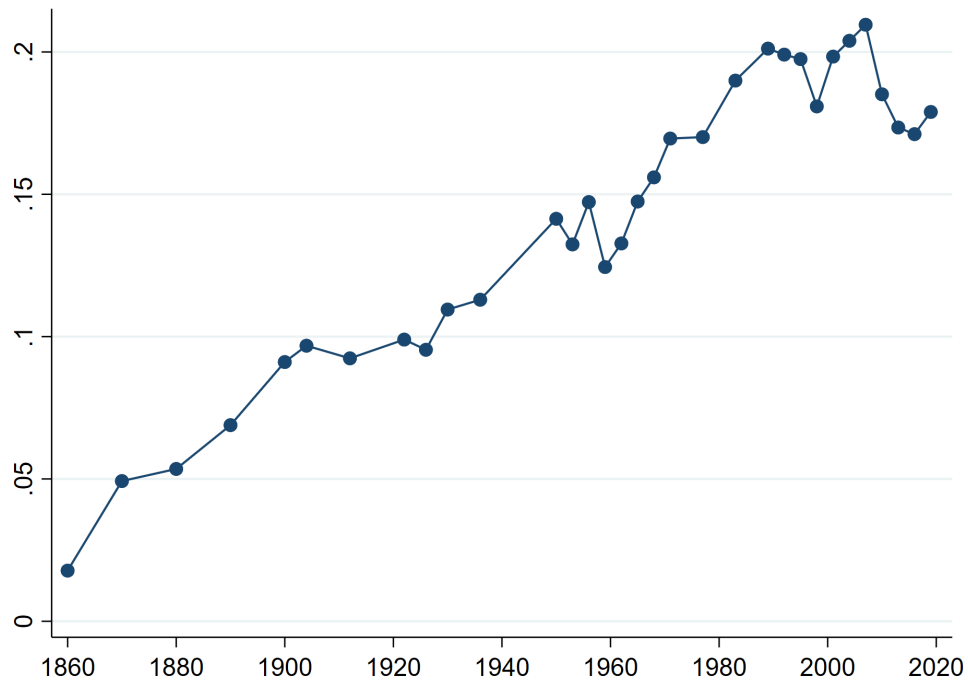


Data sources: Authors' series, including unadjusted estimates of the 1926, 1930, and 1936 wealth gap constructed using estimates from [Work \(1922\)](#) and [Saez and Zucman \(2016\)](#).

Appendix C Alternative measures of the racial wealth gap since 1860

We also provide a series of Black-to-white wealth ratios since 1860—Figure B8 below—and the Black share of national wealth since 1860, Figure B9, which we discuss in detail in Appendix Section C.1 below.

Figure B8: Black-to-white wealth ratio: 1860-2020

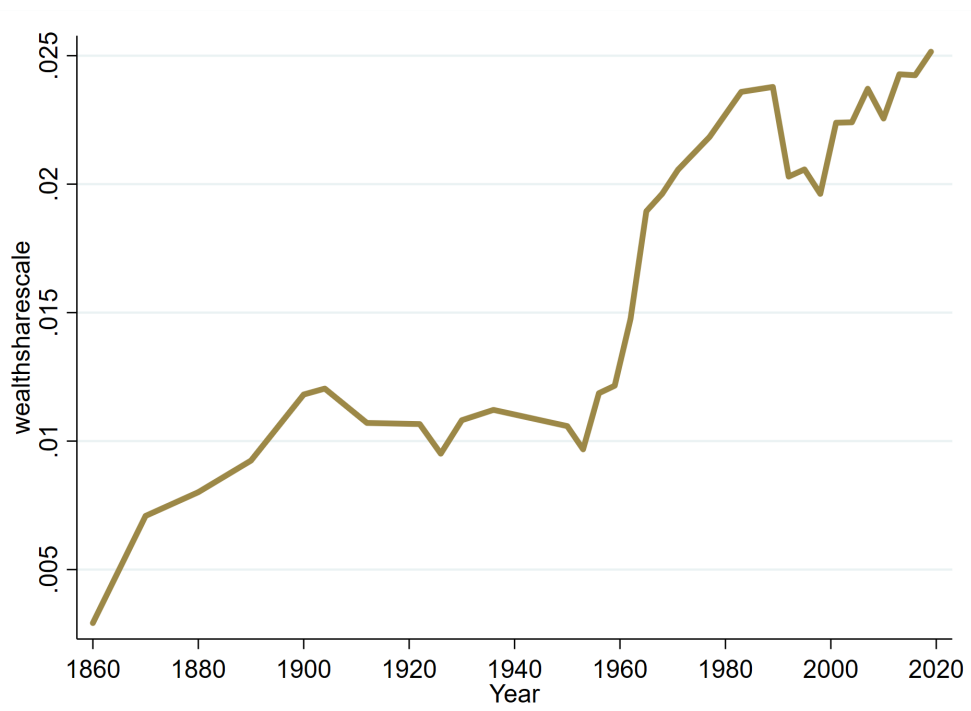


Data sources: Authors' series of the Black-to-white per capita wealth ratio from 1860 to 2020.

C.1 Black Americans' share of national wealth, 1860-2020

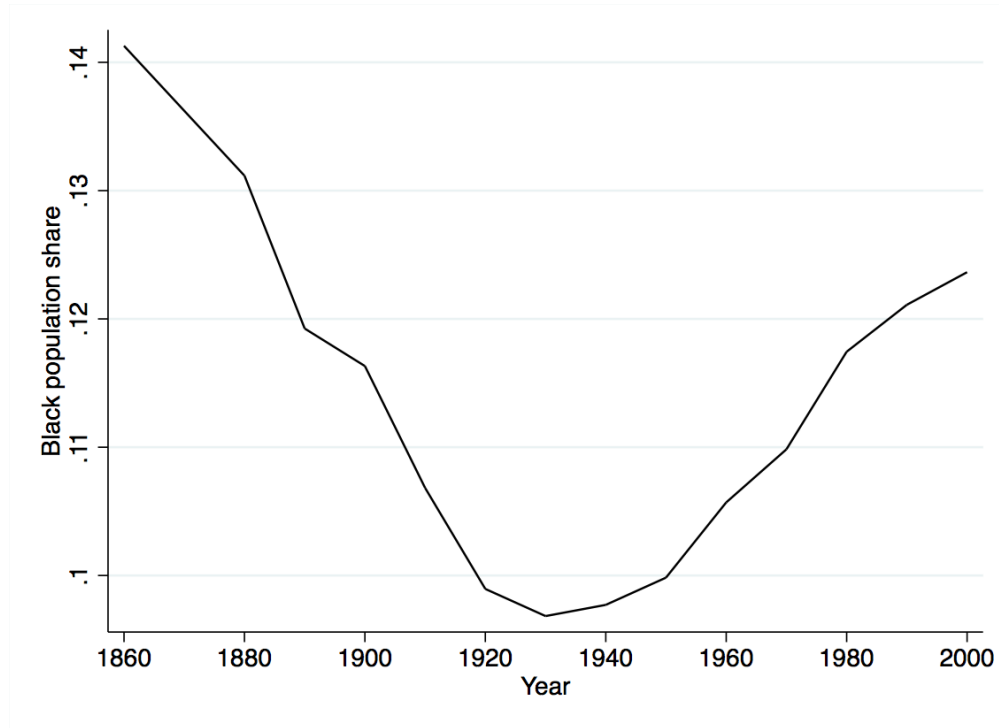
Black per capita wealth has been a steadily growing share of white per capita wealth. In 1870, five years after the end of the Civil War, the Black population in the US held just 0.5% of the nation's wealth despite representing 14% of the population. The Black share of wealth increased steadily over the late 19th century but saw little change from 1900 to 1940. The share then increased dramatically from 1950 to 1980. We hypothesize that the reason behind these time series fluctuations is that the Black share of national wealth reflects both per capita Black wealth growth and changes in the Black population share. We depict the time series of the Black population share in Appendix Figure B10. From 1860 to 1940, a period which encompasses the era of mass European migration to the United States (approximately 1880 to 1920), the Black population share of the US population fell from around 14% to less than 10%. Between 1950 and 1980 the Black population share climbed back up to just under 12%. In the early 20th century, the forces of rapid Black per capita wealth growth and declining Black population share counteracted each other, producing a flat trend in the Black share of national wealth. From 1950 to 1980, continued Black per capita wealth growth and a rebound in the Black share of the population combined to produce a large increase in the Black share of national wealth. Still, by 2020, the Black share of national wealth is low relative to the population share, at 2.5% compared to over 12%.

Figure B9: Black share of national wealth: 1860-2020



Data sources: Authors' series of the Black share of national wealth from 1860 to 2020.

Figure B10: Black share of US population: 1860-2020



Data sources: Authors' series of the Black share of the US population from 1860 to 2020.

Appendix D Alternative assumptions around bottom-censoring in the 1870 Census

In the first step, we consider the 1860 Census data that does not have censoring at 100 dollars for personal property. We use these data to estimate the share of persons with personal wealth of zero conditional on having wealth below 100 dollars. For the Black population, we include the enslaved population of 3,858,866 persons with personal property of 0 dollars. We find that 99.4% of the Black population and 97.5% of the white population in 1860 that report personal property below 100 dollars report zero dollars of personal property. In the entire population only 15.1% of all individuals, 17.3% of white individuals and 1.3% of Black individuals, report positive values for personal property in 1860.

We then consider the 1870 data and find that the recording of personal property in 1870 also contains slightly above 80,000 non-zero observations below 100 dollars whereas there should be none (54,000 white individuals, 26,000 Black individuals). We consider these records as the result of data collectors not following the instructions and also recording values below 100 dollars. Based on these records, we estimate separately for the Black and white population conditional means for personal property below 100 dollars in 1870, i.e., we compute the conditional mean for positive

personal property below 100 dollars for Black and white individuals. For Black individuals, we get a mean of 39 dollars and for white individuals a mean of 48 dollars. We impute these means to a fraction of individuals that according to our 1860 estimates should have non-zero personal property below 100 dollars, i.e., we match the 1860 share for the Black and white population with “true zeros.” Before the imputation, average personal property of Black individuals was 15 dollars and it is 15 dollars after the imputation. For white individuals, we have 248 dollars of average personal property before the imputation and 249 dollars including the imputation. The share of individuals with zero wealth in the group of individuals with less than 100 dollars is 99.8% for white individuals before the imputation and it is 97.5% after the imputation. For Black individuals, the share of Black individuals with zero personal property conditional on having less than 100 dollars of personal property is 99.4% after the imputation unchanged from the 99.4% before the imputation. The shares for zero wealth after the imputation are targeted based on the 1860 data.

In both years, we replace missing observations with zeros. In 1860, we replace 2,004 observations for real estate and 1,608 observations for personal property. In 1870, we replace 329 observations for real estate and 355 observations for personal property.

Appendix E Homeownership and housing gap analysis

We construct a time series of Black and white homeownership rates from Census, which can be compared to the series published by [Collins and Margo \(2011\)](#). First, we extract all housing value and homeownership information from the full count Census data in 1860, 1870, 1900, 1910, 1920, 1930, and 1940. We then add data from ACS for 1960 to 2019. To construct a homeownership dummy in 1860 and 1870, we consider if households report positive real estate wealth, following [Collins and Margo \(2011\)](#). For 1860, we add the enslaved population and assume that a counterfactual household size for enslaved Black persons is equivalent to the household size of free Black persons in 1860, or about five individuals. The resulting share of 20% of counterfactual household heads among the enslaved population corresponds to the share in the free Black population (19.2%). We replace all missing housing values with zeros.

We construct time series for housing values and homeownership rates by collapsing data for homeownership and housing values by year for Black and non-Black heads of households.²¹ Thus, unlike our measures of the wealth gap, the housing gap and homeownership gap are per household and not per capita. Home values in the Census data are only available in from 1930 onwards. From 1960 onwards, we use American Community Survey (ACS) data. Housing values in these data are top coded with time varying top coding levels.

²¹Note, we do not make age or gender restrictions on household heads as in [Collins and Margo \(2011\)](#).

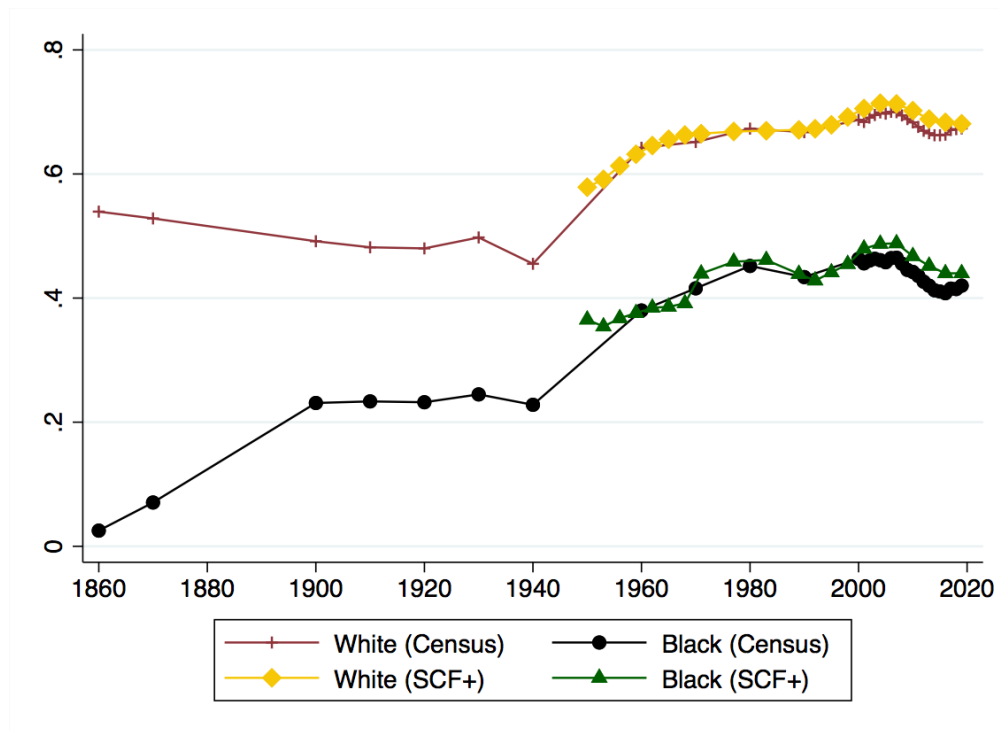
Table E1: Top-coding of home values in Census and ACS

Census	Top Code
1960	\$35,000
1970	\$50,000
1980	\$200,000
1990	\$400,000
2000	\$1,000,000
ACS (2000-2007)	\$1,000,000

We currently do not adjust the housing wealth series from ACS for top-coding but provide a comparison to data from the SCF+ that does not have top-coding of housing values. We also replace values coded as missing by zeros. We collapse data annually using Census-provided weights.

To construct housing values and homeownership rates in the SCF+ data, we take the value of housing assets and consider a household an homeowner if the household reports positive housing assets. We collapse data by SCF+ survey year using survey weights.

Figure E1: White and Black homeownership rates from 1860-2020



Data sources: Census (IPUMS version), ACS, and SCF+.

Figure E1 shows white and Black homeownership rates from Census and ACS that are linearly

interpolated for years when no data are available. The series also shows homeownership rates in the SCF+ after 1950. Results are highly consistent with [Collins and Margo \(2011\)](#). Homeownership rates for white households slightly decline rate between 1860 to 1940, a strong increase between 1940 and 1960, and a slightly increasing but rather constant trend after 1960. For Black households, there is a large increase in homeownership rates between 1870 and 1900. Between 1900 and 1940, Black homeownership rates remain flat at just over 20 percent. Homeownership rates for Black households increased strongly between 1940 and 1960 from around just over 20 percent to almost 40 percent. There is a slightly increasing trend between 1960 and 2007 but also a large drop in the aftermath of the financial crisis of 2008. Today, homeownership rates of Black and white households are again at the levels of 1970 and a large racial homeownership gap persists.

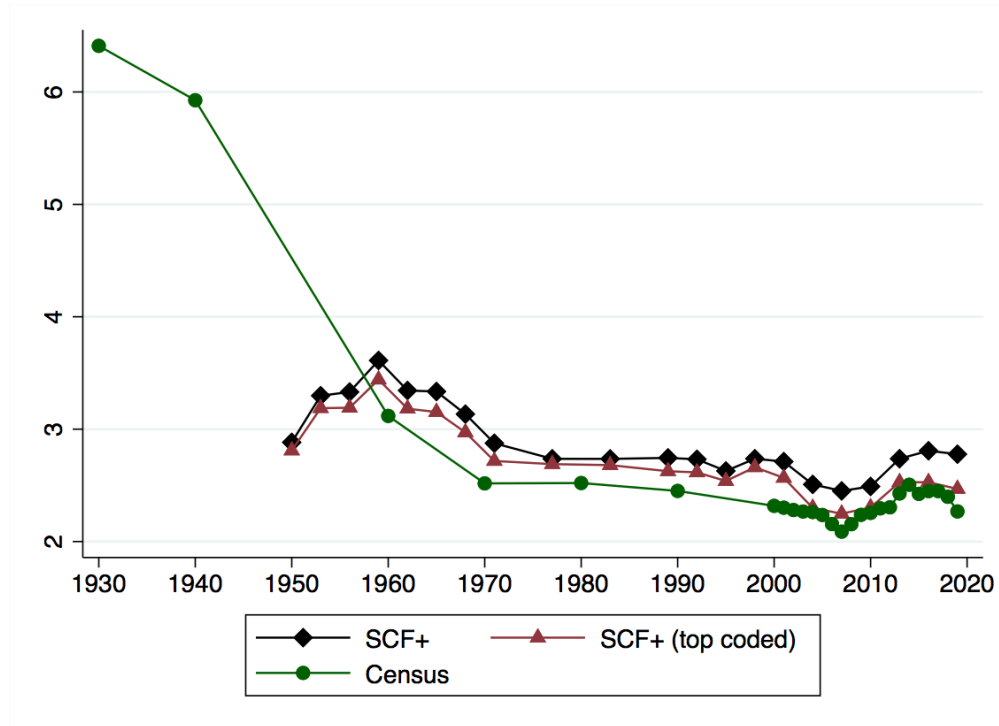
The post-1950 data allows a comparison between SCF+ and Census data. To improve estimates of the time series trends, we construct moving averages across three survey waves in the SCF+. Whereas the time series of homeownership rates for non-Black households can be accurately estimated using single survey waves, the moving average improves the estimated time series for Black households. [Figure E1](#) shows the estimated time series relative to the estimates from Census data and show that the two estimates align closely, partly due to the fact that the SCF+ data has been stratified to the national homeownership rate.²² The flatter slope of the increase in homeownership rates between 1950 and 1960 for both groups suggests a slightly more rapid increase during World War II.

In the next step, we compare the home values of Black and white households. We construct a housing value gap similar to our wealth gap series with the key difference that our housing gap is a per household gap, not a per capita gap. The gap that represents the ratio of the average home value of white households to Black households. We do not condition on homeownership so that the average home value also includes households with zero housing wealth. We also do not subtract debt to get home equity but consider the gross value of housing. In the SCF+ data, we again use three-wave moving averages as discussed above in the construction of homeownership rates. We offer two estimates based on SCF+ data. One estimate uses the reported housing value from the survey and the second one that we refer to as “top-coded” does not report values above the top-coding limit of the Census from the nearest Census wave (See [Table E1](#) for Census top-coding values over time).

[Figure E2](#) shows the resulting home value gap series. Home value gaps in Census align with those in the SCF+ data starting in 1960. In 1960, the ratio of average white households’ housing assets to average Black households’ housing assets was 3 and declined between 1960 and 1970 to around 2.5 where it still stands today. The gap moved downwards during the 1990s and 2000s, but increased substantially again after the financial crisis of 2008. The SCF data shows a higher home value gap after 1960 at around 2.7, but shows a similar trend to the gap estimated from Census data. When we impose top coding from the nearest Census survey on the SCF+ data, the housing gap is only modestly reduced. Before 1950, the Census data shows a much higher home value gap

²²The SCF+ also match trends in and levels of homeownership rates by age.

Figure E2: White-to-Black per household home value ratio 1930-2020



Data sources: Census (IPUMS version), ACS, and SCF+.

of 6 in 1940 and 6.5 in 1930. This gap reduces strongly and is cut in half between 1940 and 1960. One reason for this is the stronger relative increase in homeownership rates for Black households in the decade of World War II. The homeownership rate increased over this time period by about 15 pp from 25% to 40% for the Black population and by 20 pp for the white population (from 45% to 65%). Expressed as a growth rate, the homeownership rate for the Black population grew by about 60% (from 25% to 40%) and by 44% for the white population (from 45% to 65%), so that there was a larger growth at the extensive margin in housing wealth for Black households over this time period.

Appendix F Alternative wealth gap estimate fo 1930

We construct an alternative estimate of the racial wealth gap in 1930 combining three different sources on Black wealth: county-level Census of Agriculture data with estimates of total farm value by owner status and racial group; microdata from the Census of Population with estimates of home values for all homeowners and information on their racial group; and data on Black banks from [Clarke \(Clarke\)](#). In addition to these, we draw on [Saez and Zucman \(2016\)](#) for total bank assets in 1930.

Below, we detail how we construct white and Black farm wealth, housing wealth, and financial

wealth.

Farm wealth gap Tabulations of the Census of Agriculture from 1900 to 1940 provide breakdowns of total farm land and building value by racial group (nonwhite and white) and owner status (owner, manager, or tenant). We calculate white farm wealth as the difference between total farm land and building value across all operated farms regardless of ownership status and total farm land and building value of nonwhite *owned* farms. We compute per-capita farm wealth gaps from these two measures using the number of nonwhite and white individuals:

$$\text{Per capita farm wealth gap} = \frac{\text{Farm wealth}^W / \text{White pop}}{\text{Farm wealth}^{NW} / \text{NW pop}}$$

where $\text{Farm wealth}^W = \text{Farm value}_{\text{operated}}^{\text{All}} - \text{Farm value}_{\text{owned}}^{NW}$ and $\text{Farm wealth}^{NW} = \text{Farm Value}_{\text{owned}}^{NW}$.

Housing wealth gap We use the Census of Population microdata from 1930 and 1940 to calculate housing wealth gaps. The 1930 Census is the first census in which enumerators elicited home values from homeowners enumerated in the Census. We construct per capita housing wealth values as follows:

$$\text{Per capita housing wealth gap} = \frac{\text{Housing wealth}^W / \text{White pop}}{\text{Housing wealth}^B / \text{Black pop}}$$

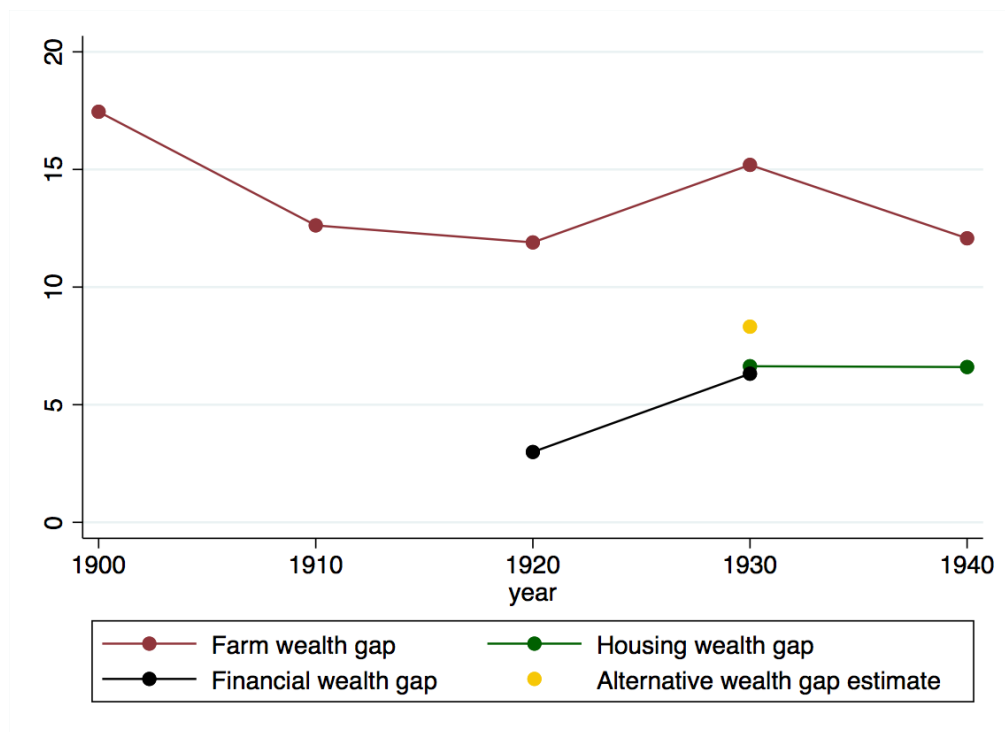
Financial wealth We use data on Black banks from [Clarke \(Clarke\)](#) as a proxy for total financial assets of Black Americans in 1930. In the balance sheets data for Black banks, not all financial asset categories are listed—for instance, pensions, royalties, etc. We therefore calculate two measures of total US financial wealth, one excluding forms of wealth not listed in the balance sheet data for Black banks and the other including all assets. The first financial gap measure can be interpreted as an equity plus fixed income plus deposits ratio. The second measure makes the strong assumption that Black households did not have any financial wealth in the form of pensions. Below is our measure of financial wealth per capita for each racial group:

$$\text{Per capita financial wealth gap} = \frac{\text{Fin. wealth}^W / \text{White pop}}{\text{Fin. wealth}^B / \text{Black pop}}$$

where $\text{Fin. wealth}^W = \text{Resources}^{\text{US banks}} - \text{Resources}^{\text{Black banks}}$ and $\text{Fin. wealth}^B = \text{Resources}^{\text{Black banks}}$.

Figure F1 shows these different gaps as well as an alternative overall wealth gap that sums farm, housing, and financial wealth for each racial group and divides by their respective populations.

Figure F1: White-to-Black per household home value ratio 1930-2020



Data sources: Census of Population (IPUMS version); Census of Agriculture (ICPSR version); Clarke (Clarke); Saez and Zucman (2016).

Appendix G Portfolio composition across the income- and wealth distribution

Table F1: Asset shares along the wealth and income distribution

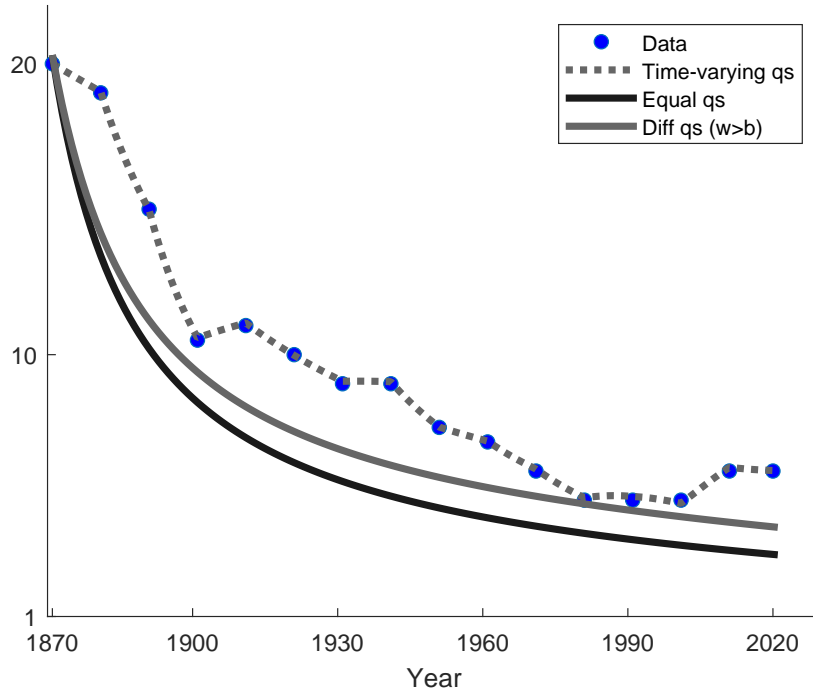
	White			Black		
	b50	mid	t10	b50	mid	t10
<i>Wealth groups</i>						
Equity (dir + indir)	3%	11%	26%	3%	7%	15%
Business	1%	6%	33%	1%	7%	38%
Housing	66%	60%	25%	69%	65%	34%
<i>Income groups</i>						
Equity (dir + indir)	12%	16%	26%	5%	8%	15%
Business	14%	15%	32%	9%	11%	23%
Housing	52%	48%	27%	65%	58%	47%

Appendix H Wealth accumulation with time varying q , s , and g

So far in our wealth accumulation model, we have assumed constant wealth accumulating conditions of Black and white Americans throughout the whole period 1870-2020. This assumption, however, may not capture the dynamics in reality, as racial differences in capital gains (q), saving rates (s), but also income growth (g) may have varied over time.

Therefore, we now allow these parameters to vary over time that will allow us to match the data perfectly. By doing so, we fix some parameters to reduce the degree of freedoms. First, we calculate the racial differences in capital gains q from the data and assume that during 1870-1950, the white-to-Black difference in q is 0.4 percentage points, and during 1950-2020 0.9 percentage points. Second, we also fix the racial differences in income growth to be 0.5 percentage points during 1870-1950, 0.4 percentage points during 1950-1980, and zero during 1980-2020. Then, we estimate the racial differences in s that allows for a perfect match of the data. Table F2 presents the results and Figure F2 the final simulation results.

Figure F2: Wealth gap convergence under time varying q and s



Decades	$s^w - s^b$
1870-1880	3.5 p.p.
1880-1890	1.7 p.p.
1890-1900	0 p.p.
1900-1910	3.6 p.p.
1910-1920	2.1 p.p.
1920-1930	2.1 p.p.
1930-1940	3.2 p.p.
1940-1950	0.7 p.p.
1950-1960	2 p.p.
1960-1970	0.5 p.p.
1970-1980	0 p.p.
1980-1990	3.1 p.p.
1990-2000	2.2 p.p.
2000-2010	3.5 p.p.
2010-2020	3 p.p.

Table F2: Time-varying racial differences in saving rates

Appendix I Estimating racial differences in q and s

I.1 Synthetic saving rates

We estimate the so-called “synthetic” saving rates of Black and white households separately using the method of [Saez and Zucman \(2016\)](#). As a first step, we decompose the accumulation of personal wealth at the US aggregate using an asset-specific accumulation equation, which decomposes the growth of a given asset into a volume effect (saving) and a price effect (capital gains or losses). Each asset (and liability) type that enters the wealth composition can be expressed as

$$A_{t+1} = (1 + q_{t+1,A}) \cdot (A_t + S_{t,A}), \quad (5)$$

where A_{t+1} and A_t are the real value of an asset from households’ wealth at time $t + 1$ and t , and $S_{t,A}$ is the net-of-depreciation saving flow of the respective asset type A in t . $q_{t+1,A}$ is then the real rate of capital gain (or loss) from asset type A between t and $t + 1$. Since A_{t+1} , A_t , and $S_{t,A}$ can be observed in the National Accounts, $q_{t+1,A}$ is estimated as the residual of Equation 5.

As a next step, we turn to the SCF+ and estimate the synthetic savings of all asset (and liability) classes for Black and white households separately. Again, for a given asset type A , a white (or Black) household accumulates wealth following the following transition equation:

$$A_{t+1}j = (1 + q_{t+1,A}) \cdot (A_t^j + S_{t,A}^j), \quad (6)$$

with $j = \{b, w\}$ representing the two racial groups. Since we have estimates of the capital gains (or losses) for each asset class and A_t^j is observable from the SCF+, this time $S_{t,A}^j$ is estimated as residuals of the accumulation equation 6, the reason why they are labeled as “synthetic savings”.²³ Total savings of households is then the sum of all savings in each asset class included in their wealth portfolio. For our purpose, we concentrate on the racial difference in saving rates (total savings relative to their total income) rather than on the levels.

I.2 Heterogeneous capital gains

In Table F3 we present the average capital gains on three major asset classes, which are housing, equity, and business. For real estate and equity, we use the values provided by the Macrohistory Database of [Jordà et al. \(2019\)](#). To calculate capital gains on businesses, we use data from the US Financial Accounts. Also, we present white and Black households’ total capital gain rates on their asset portfolio. Here we assume that households experience the same capital gain rates within the same asset class, so the heterogeneity is solely coming from differences in their portfolio

²³In order to obtain an adequate measure of savings, it is crucial to harmonize the asset class definitions of the SCF+ with the national accounts to match the accumulation equation 5 and 6. We follow the wealth definitions of [Bauluz and Meyer \(2021\)](#).

composition.²⁴ The total capital gains of Black (or white) households (q^j , $j = \{b, w\}$) is thus the weighted sum of the capital gains on different asset classes with regard to its share of wealth:

$$q_t^j = \sum_A \omega_{t,A}^j q_{t,A}, \quad (7)$$

where $q_{t,A}$ denotes the capital gains on asset class A and $\omega_{t,A}$ its weight as a share of wealth at time t .

Overall we observe that white households have experienced higher capital gains than their Black counterparts throughout the whole period (0.65 percentage points). During 1950-1980, the discrepancy was much lower (0.38 percentage points), which however strongly increased after 1980, with racial differences in capital gains almost doubling. Differences in capital gains on housing and stocks explain this divergence of capital gains of Black and white households. Even though both the stock market and housing market experienced a boom during the post-1980 period, equities have experienced a stronger increase in their values. Since Black households hold almost no equity, we observe that the divergence across Black and white starts from the 1980s, when stock prices grows more strongly than house prices.

Table F3: Capital gains: 1870-2020

	Housing	Equity	Business	cg^w	cg^b	$cg^w - cg^b$
1950-1980	0.46%	2.15%	2.16%	1.52%	1.14%	0.38%
1980-2020	1.13%	5.58%	3.65%	2.19%	1.56%	0.63%
Whole sample period	0.83%	4.27%	3.00%	2.17%	1.52%	0.65%

Notes: The table presents capital gains on housing, equity, and business assets that we estimate as a residual from Equation 6.

I.3 The racial wealth gap along the distribution

The analysis so far has focused on mean wealth holdings and the average wealth gap. The U.S. wealth distribution is highly skewed with a large difference between the median and the mean household (Kuhn et al., 2016). We therefore examine in this section racial gaps at different points along the wealth distribution. The key question is whether the racial wealth gap varies along the

²⁴In reality, the Black population has been exposed to discrimination and constraints with regard to their investment, starting from limited access to banks after Emancipation (Stein and Yannelis, 2020; Baradaran, 2017) and red-lining in the real estate market (Jackson, 1980; Aaronson et al., 2020), such that heterogeneity in capital gains within an asset class may exist.

wealth distribution and if the differences at the mean is driven solely by under-representation of Black households at the top of the distribution.

Table F4: Black and white wealth and income along the distribution, 1950-2020

	White			Black		
	Mean	Median	90th	Mean	Median	90th
1950						
Housing	62,911	34,645	148,989	20,678	0	61,553
Other non-financial assets	5,400	2,596	14,712	1,953	0	7,497
Bonds	7,985	0	16,499	403	0	185
Equity	111,692	0	142,293	11,101	0	0
Liquid financial assets	13,850	2,382	36,053	1,687	0	3,622
Net wealth	189,248	46,999	340,631	28,548	1,956	59,803
Total debt	12,589	634	43,923	7,275	660	21,026
1980						
Housing	158,569	100,935	343,567	55,287	2,717	135,874
Other non-financial assets	13,592	8,391	28,876	8,959	3,242	22,122
Bonds	10,508	0	4,637	422	0	184
Equity	123,603	0	122,232	9,708	0	0
Liquid financial assets	31,961	5,386	81,148	7,725	648	19,250
Net wealth	322,036	107,966	595,354	66,877	17,197	140,867
Total debt	35,022	6,438	102,876	19,085	2,531	64,010
2010						
Housing	331,872	164,726	686,356	111,295	0	306,345
Other non-financial assets	31,836	18,120	58,912	13,923	7,358	33,580
Bonds	69,993	88	137,363	12,727	0	28,476
Equity	347,705	5,491	474,769	32,433	0	38,436
Liquid financial assets	54,082	6,398	98,835	9,427	988	17,282
Net wealth	773,925	164,616	1,366,768	126,579	16,802	301,459
Total debt	109,422	35,141	294,562	60,836	11,052	191,334

Notes: The table shows mean, median, and 90th percentile asset positions, net wealth, and income for Black and white households from the full sample period of the SCF+. All values are in 2019 dollars. Housing includes other real estate. Equity includes business wealth. Also, bonds and equity include indirect holdings.

We start in Table F4 with a simple descriptive summary of asset components on the balance

sheets of Black and white households, as well as their total net wealth at the mean, median, and 90th percentile. We take snapshots in three decades (1950, 1980, and 2010) for which we have disaggregated balance sheet data from the SCF+. We find that in each decade there are large differences of wealth levels between the median and the mean and the ratio of mean to median wealth is always higher for Black households. The large differences between the average and the median Black household stems mainly from the extremely low wealth levels of the typical black household. In 1950, the median Black household owned less than 2,000 dollars in 2019 dollars and hence even less than the median liquid wealth holdings of white households at that time. In relative terms, the situation improved for the median Black households over the next three decades with an increase to 17,000 dollars of wealth. This increase implied a major growth rate of wealth for the median Black household but the additional 15,000 dollars of additional wealth are still only a quarter of the wealth change for the median white household over this time period whose wealth increased from 47,000 dollars to 108,000 dollars in 2019 dollars. The change of the wealth gap as the ratio of wealth levels depends however on the relative growth rates and a higher growth rate of wealth for black households from low levels will lead to a falling wealth gap at the median similar to the strong convergence of wealth levels in the 19th century. At the mean, wealth levels are higher and the differences in wealth growth are much smaller for the average household. Over the same time period, we find that wealth of Black and white households roughly doubled. As a consequence, we observe much stronger convergence of the wealth gap at the median than at the mean and we will return to this fact again below. Over the next three decades, we observe virtually no wealth growth for the Black population whereas the median white person saw wealth levels rising by another 50 percent what will result in a rising racial wealth gap also at the median during the last 20th and early 21st century.

When we look at the composition of asset portfolios of Black and white households, we find that the median level of equity and bonds is zero for both during the 1950s and 1980s.²⁵ Only recently, the median holdings of white households turned positive whereas the median holdings of Black households remained zero. Indeed, median holdings of most asset classes of Black households are zero with the exception of liquid assets and other non-financial assets, the asset class containing the value of vehicles. The median holdings of housing and stocks, the two asset classes with large capital gains from changing asset prices over the last four decades are typically zero for Black households. Hence, the median asset position for Black households resemble a situation of a household with a bank account and a car but no notable savings that can yield high financial returns or capital gains. As a consequence, any capital gains in stocks or housing over the last decades bypassed the majority of the Black population whereas the median white household has always been a homeowner and although she did not benefit from rising stock prices she still participated in the capital gains from the housing market.

When we move further up the Black and white wealth distribution, we find that racial differences in asset positions close to some extent once we reach the 90th percentile. At the 90th percentile,

²⁵Note that these are median holdings of each asset class not the holdings of the median-wealth household.

Black households have holdings of all asset classes over time, yet, equity holdings only turn positive during the 2010 decade. Differences in equity are large throughout these seven decades. In 1950, the 90th percentile of equity holdings of white households are even more than double the total wealth at the 90th percentile of Black households. In 1980, total wealth at the 90th percentile of Black households is 10% larger than the 90th percentile of equity holdings of white households but by 2010 this has reversed again and the total wealth to enter the 10% richest Black households is still 170,000 dollars below the equity holdings at the 90th percentile of white households. Hence, even the equity wealth of the rich part of the white population grew more than the total wealth of the rich part of the black population. Still we find that overall, the wealth gap at the 90th percentile declined slightly over time, but remained at about 4.5 during the 2010 decade.

Figure F3: The racial wealth and income gap along the distribution

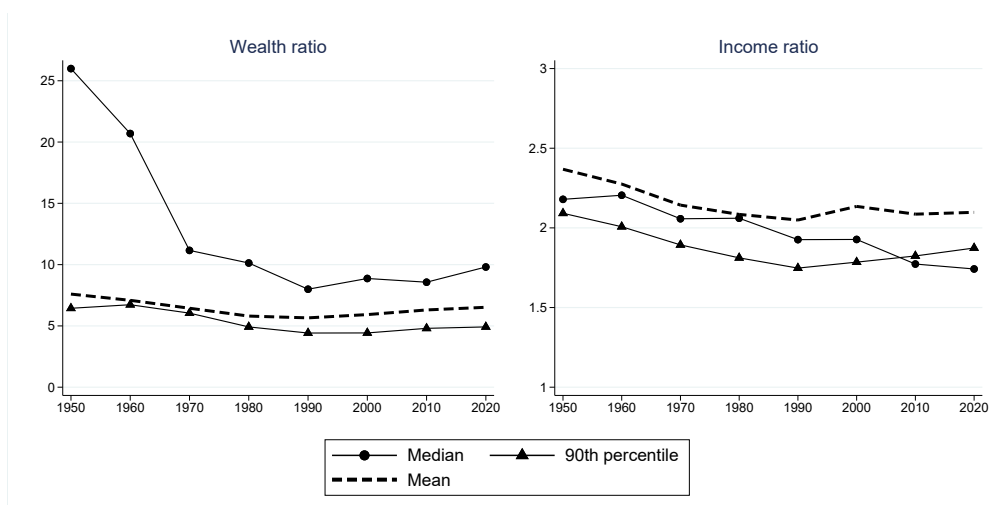
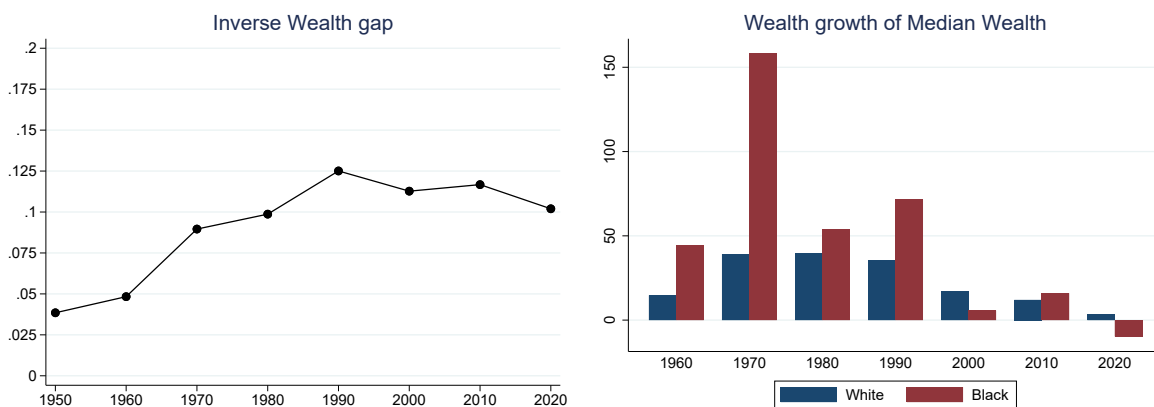


Figure F3 shows the entire time series of the wealth gaps along the wealth distribution. We consider again as we did for the mean per capita wealth at the median and 90th percentile and construct white-to-Black wealth and income ratios of these per capita wealth percentiles over time. We first observe that the racial wealth gap along the distribution is much more dispersed than the income gap, highlighting once again the fact that the racial income gap is going to fall short of fully accounting for the evolution of the racial wealth gap. Striking is the level and the development of the median wealth gap that differs substantially from the level and dynamics of the mean and the upper tail of the wealth distribution. The median gap is throughout the seven decades since 1950 higher than the wealth gap at the mean. By contrast, we find that the median income gap is below the mean income gap. The difference is that whereas Black households always participated in the labor market, their participation in financial and housing markets was very limited as we saw in Table F4. The very low levels of accumulated wealth of Black families implies a high wealth gap at the median. Indeed, we saw that median holdings of most asset classes were even zero for Black households. As we move to richer households (90th percentile), the racial wealth gap is much lower

and stable, fluctuating around a white-to-Black ratio of 5:1.²⁶

When we consider the median household as the typical Black and white household, we find that the high white-to-Black wealth ratio of 25:1 in 1950 indicates an even more devastating picture for the pre-1950 period at the median compared to the mean. Yet, it must be taken into account that the wealth gap diverges and is very sensitive as wealth of Black households tends towards zero as we saw was the case during the 1950s with median wealth levels below 2,000 dollars. We therefore report in Figure F4a the inverse of the racial wealth gap at the median. We find that in 1950 the median black person had less than 5 cents for each dollar of wealth of the median white person. The inverse wealth gap shows also a convergence but it looks less dramatic with the gap at the median going to about 12 cents per dollar of wealth for Black persons relative to the median white person. Any closing of the racial wealth gap as a ratio variable of levels requires that wealth of the Black population had higher growth rates than of the white population. We therefore show in Figure F4b a direct comparison of growth rates between decade levels of wealth where the decade in the figure always corresponds to the second period. What stands out are the high growth rate differentials between 1950 and 1960 and between 1960 and 1970 when also the wealth gap at the median was cut in half. At the median, we see slightly higher growth until 1980 to 1990 and since then there has been higher wealth growth of median wealth in the white population. Strikingly, growth of median black wealth was even negative between the last two decades.



(a) Inverse median wealth gap

(b) Growth of median wealth

Although we see convergence at the median that appears faster in the decades after 1950 compared to the mean, the convergence also at the median also slowed down during the 1980s and the wealth gap grew again larger between 1990 and 2000. Hence, we see in terms of the evolution of the racial wealth gap generally very similar patterns although slightly shifted with convergence during the decades after 1950 and a slow down during the last decades of the 20th and during the 21st century. Table F5 summarizes these patterns by presenting annualized growth rates for the pre- and post-1980 period. From 1950 to 1980, the racial wealth gap at the median has converged with

²⁶In Appendix J, we present the so-called racial wealth gap rank as an alternative measure of the racial wealth gap along the distribution.

a convergence rate of 3% compared to less than 1% at the mean. After 1980, the racial wealth gap has stalled at the median and 90th percentile, while at the 99th percentile we observe diverging patterns. This seems to have contributed to the evolution of the wealth gap at the mean.

Table F5: Growth rates of the racial wealth gap along the distribution

Period	Mean	Median	90th	99th
1950-1980	-0.89%	-3.09%	-0.89%	-0.23%
1980-2020	0.29%	-0.08%	0%	0.64%
Whole sample	-0.22%	-1.38%	-0.38%	-0.23%

Notes: The table presents the annualized growth rates of the racial wealth gap at the mean, median, 90th percentile, and 99th percentile of the wealth distribution.

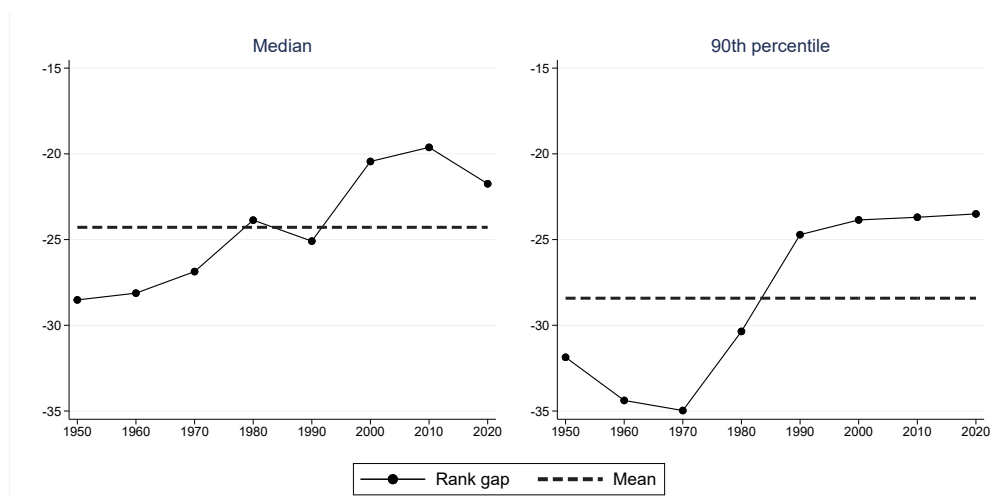
Our inspection of the racial wealth gap along the distribution provides valuable new insights for a better understanding of the racial wealth gap. While racial differences in income have remained stable along the distribution, the racial wealth gap is substantially larger at the median compared to the upper tail. This can be explained by the fact that Black households at the 50th percentile of the wealth distribution have even less diversified portfolios compared to the average, with most of their assets in the form of other non-financial assets and liquid financial assets that do not generate capital gains. Nonetheless, what has not been detectable from the mean is the fact that at the median, Black households' wealth experienced a fast convergence period during 1950-1980, which was also the period when Black households experienced a swift increase in homeownership rates and housing values (Collins and Margo, 2011). Indeed, policy efforts on reducing racial discrimination in the real estate market during the Civil Rights movement, such as the Fair Housing Act in 1968, may have contributed to this positive development of the racial wealth gap. In particular, our results suggest that such policies may have benefited mostly households at the bottom tail of the wealth distribution, as discrimination may have been more pronounced for poorer households.

Appendix J Racial wealth rank gap

Along their respective wealth distribution, Black households are always worse off in terms of asset holdings than their white counterparts, thus leading to a persistently large gap in their net wealth. An additional way to visualize these ongoing disparities is the so-called wealth rank gap; this measure visualizes the difference between a Black household's percentile in the Black wealth distribution and the position he/she would hold in the white wealth distribution. We follow the method of Bayer and Charles (2018) and present the rank gap at the median and 90th percentile wealth distribution

during 1950-2020 in Figure F5.

Figure F5: Racial rank gaps for net wealth at the median and 90th percentile.



Notes: The racial rank gap is the difference in percentage points between the rank that the wealth level of the median and 90th percentile takes in the wealth distribution of white households and the rank of the median white household. Dashed line shows the long-run average of the racial wealth rank gap.

Unsurprisingly, Black household's position at the white distribution is always lower than their position at the Black distribution. On average, median (90th percentile) Black households belong to the 26th (62th) percentile of the white wealth distribution during 1950-2020. Nevertheless, at the median we observe a slow but steady convergence of the rank gap, with Black households belonging to the 20th percentile of the white wealth distribution in 1950, then improving their position to almost the 30th percentile in 2010 (In 2020, we observe a slight deterioration of their position to 28th percentile). Black households at their 90th percentile wealth distribution were to some extent more rigid than at the median. During 1970-1990, 90th percentile Black households strongly improved their position from the 55th to 65th percentile of the white wealth distribution, but then remained at this position for the next 30 years.