# TWO AMERICAN FINANCIAL PLANS

## The Next 50 Years of the Racial Wealth Gap and What You Can Do About It

**BRENT KESSEL, CFP® and KAMILA ELLIOTT, CFP®**
**with AKO NDEFO-HAVEN**

## Abstract

Despite the social progress of the last half-century, the racial wealth gap in 2020 remains vast: 13 cents in Black wealth for each dollar in White wealth.[1] This paper identifies how present-day racial disparities—regardless of their historical cause—will affect the future wealth of an ordinary family of each race. Utilizing best-in-class financial planning software, we have created probability-weighted balance sheets and other inputs—based on national data from a variety of reputable sources—to capture the financial trajectory of a typical Black and a typical White family. Our probability-weighted model found that in 2064, the White family will possess $2,782,727, while the Black family's wealth will be $789,164, or more than 70% less. Even if both couples earn bachelor's degrees, save the same percentage of income into their 401(k)s, and invest identically, the Black family's wealth still ends up 51% less.

For equal achievements and equal work, these two composite families experience drastically different outcomes. This paper examines the role of each of these contemporary disparities—from differing returns on college education to unequal home appreciation rates to inheritances, to name a few—in shaping the next 50 years of the racial wealth divide. Our findings indicate the most significant contributors to the racial wealth gap are wage inequality—due both to the lack of equitable support in completing a college education as well as post-education workplace discrimination—and differences in asset allocation. Together, these inequities prevent Black wealth accumulation with 401(k)s and prudently allocated non-retirement investment portfolios at the same rate as their White counterparts. Directly descending from the legacies of slavery and Jim Crow, these differences are dependent both on institutional realities and, to a lesser extent, individual behavior, and emerge in nearly every realm of financial life.

# Introduction

Democracy and capitalism have created higher standards of living for modern-day Americans than any system of government or economics in human history. For instance, a three-person household with income at the federal poverty level[2] can perhaps afford air conditioning, mobile smartphones capable of communication and information retrieval that even supercomputers couldn't accomplish 30 years ago, a 762 square foot apartment with separate sleeping quarters,[3] drinkable water, and potentially enough food for each family member to consume a normal diet.

The successes of modern capitalism are linked to the wonders of the Industrial Revolution, powered by the cotton gin, textile mills, and railroads. The cotton gin optimized cotton harvesting by automating the labor-intensive process of removing seeds, thereby facilitating a cotton boom in the South and the transition away from less profitable commodities like rice and tobacco. Consequently, Northeast banking and trade centers grew their industrial wealth from their roles in the cotton industry supply chain and by financing cotton manufacturing and export operations. In fact, cotton became the United States' most valuable export, fueling this country's growth from a pre-industrial society into a global economic superpower.[4] What allowed cotton to be so extraordinarily profitable? Slavery. As the Civil War approached, more millionaires per capita lived in the Mississippi Valley than any other region of the United States. The aggregate value of all railroads and factories was less than the estimated combined market value of the country's slave population. Slavery was the engine by which a fledgling group of subservient colonies became the modern United States.

> "Democracy is the worst form of government, except for all those other forms that have been tried from time to time."
>
> — Winston Churchill, November 1947

Despite the many technological advances of the 19th and 20th centuries, our country continues to see immense levels of racial wealth inequality, which can be traced back to Jim Crow institutional discrimination and this country's historical reliance on cheap labor and labor trafficking (i.e. slavery). In 1863, at the height of the Civil War, Black Americans possessed 0.5% of this country's wealth.[5] Even with the social progress of the last 150 years, Black Americans now own only 1.5% while making up approximately the same 13% share of the U.S. population in both 1863 and 2019. The median Black household holds just 13 cents for each dollar of wealth the median White family has: $24,100 to $188,200.[6] Even after controlling for education, employment, and other financial characteristics, the racial wealth gap persists, suggesting that institutional and systemic barriers are more responsible than individual choices for this ongoing divide.

Rather than document the scope and causes of the present racial wealth gap—as much of academic research and journalism already does—this study seeks to examine the divide and its future trajectory, with and without financial planning interventions. The aim is to ascertain which financial planning changes could have the most positive impact. As CFP® practitioners, we believe financial planning technology can provide valuable insights into the racial wealth gap, and the financial services industry more broadly can play a critical role in helping to narrow it.

Our research found that each financial planning assumption ranges from slightly to markedly different between the median Black and White American family, and these differences ultimately produce substantial long-term wealth disparities. We aim to illustrate the cumulative effect of present-day inequities, irrespective of historical cause, on the wealth-building process going forward. With all other characteristics constant, these two families—highly representative of the typical American households of their respective races—end up with extraordinarily different results. This paper begins with an executive summary that highlights the differences in financial planning assumptions and captures our key findings. Each subsequent section includes detailed analysis specific to a particular assumption in the financial plan—or said more plainly, part of American financial life.

**Slavery was the engine by which a fledgling group of subservient colonies became the modern United States.**

These topics move chronologically through the course of a life, beginning with education and concluding with inheritance. These sections explain how and why we chose each assumption, are supplemented with historical context and academic research, and include financial advice that can be used by all readers to improve outcomes as well as guidance for financial advisory professionals looking to better advise Black clients.

We do not intend to propose systemic solutions in this paper. Instead, we have objectively presented—to the best of our ability—the key financial facets of the racial economic divide, their historical causes, and their probable futures. So, what are the lifelong financial effects of present-day disparities on two typical American families?

# Executive Summary

Meet Ashley and Michael Jones and Chris and Emily Williams. These two households—quite similar in their dreams and values—differ in one crucial way: their race. The Joneses, Black, and the Williamses, White, each represent a typical household of their respective race. The two financial plans, varying in assumptions based on probability-weighted, national data for Black and White households, produce two entirely different future wealth outcomes. These probability-weighted (not median) plans project that in 2064,[7] the Jones family net worth in present dollars will be $789,164, $1,993,563 less than the Williams household net worth of $2,782,727. Including expected inflation of 3%, those figures rise to $2,897,379 and $10,216,650, respectively.[8]

To accurately identify the relative magnitude of each individual component of the wealth gap, we adjusted variables individually while leaving all else constant. However, we collectively adjusted those that are strongly interrelated—grouping educational outcomes, income, expenses, and retirement accounts, as one overall change.[9] Some of the remaining variable adjustments, such as non-retirement investment returns, are able to be examined in isolation. Others, such as homeownership, require the adjustments above to produce realistic outcomes.[10] Overall, our findings suggest that the racial and social progress made since the civil rights movement and the end of de jure institutional discrimination has done little to improve the economic situation of a typical Black family. In fact, a median 70- to 80-year-old Black household today has a net worth of $74,070, whereas the median net worth of similarly aged White households is $262,342, 3.54 times greater than the Black family's net worth.[11] This study's results reveal a nearly identical picture, 50 years in the future, with White net worth 3.53 times greater than the net worth of a typical Black household.

## Comparing Each Family's Key Probability-Weighted Financial Assumptions

| | Jones | Williams |
|---|---|---|
| Age | 30 | 30 |
| Income | $53,730 | $77,803 |
| Student Loan Balance | $12,168 | $11,520 |
| Student Loan Interest | 6.0% | 5.7% |
| Student Loan Repayment Period | 20 years | 20 years |
| Business Equity | $351 | $1,906 |
| Business Growth | 7.0% | 8.6% |
| Home Purchase Price | $84,700 | $184,250 |
| Mortgage Interest Rate | 4.24% | 3.94% |
| Mortgage Term | 30 years | 30 years |
| Home Appreciation Rate | 2.41% | 3.07% |
| 401(k) Balance | $17,826 | $59,186 |
| 401(k) Contributions | 5.7% | 8.5% |
| 401(k) Growth Rate | 8.00%[12] | 8.15% |
| Non-Retirement Investments Growth Rate | 5.77% | 7.70% |
| Annual Expenses | $41,984 | $49,689 |
| Inheritance | $6,880 | $25,860 |
| Life Expectancy | Male: 75<br>Female: 80 | Male: 78<br>Female: 82 |

For explanations behind each figure, see the relevant section for more details. For a full list of every assumption used in each family's financial plan, see the appendix.

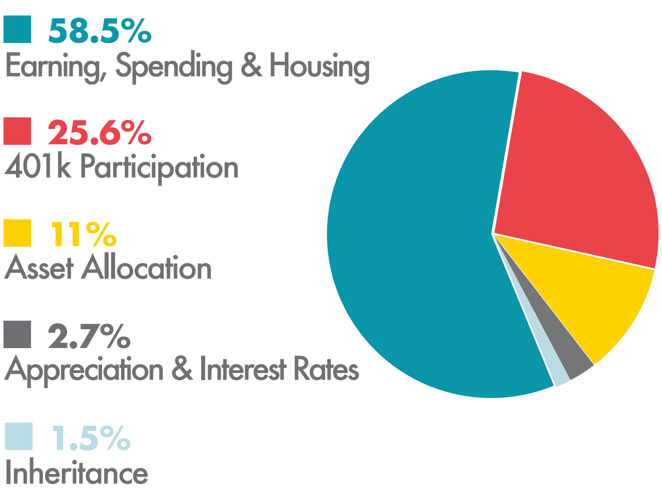
Wealth doesn't refer only to wages or liquid assets, which explains why the racial wealth gap doesn't correspond to the shrinking racial income gap. Wealth, or net worth, offers a comprehensive account of a family's overall financial state—home equity, investments, retirement accounts, savings, debts, etc. Wealth provides choice, security, health and longevity, extended family and community benefits, job creation, and eventually, inheritance. It can fund a college education for children. It can facilitate a family member to take entrepreneurial risk. In short, wealth is the engine of financial success and upward mobility for a family, and thus, for the community to which that family belongs.

Importantly, the benefits of wealth are inter-generational. Family wealth clearly influences educational attainment, which in turn plays its own role in building assets. Family wealth allows for informal financial assistance, for example, contributing to the down payment on a home. Family wealth provides critical security to cover unexpected expenses. At death, family wealth means an inheritance. In these ways—and many more—family wealth is transformative. As the effects of wealth are intergenerational, historical policies that have stripped Black wealth and limited its future growth continue to impact Black families today. The consequences of these policies don't immediately disappear once they're no longer administered; the descendants of those directly impacted by slavery and Jim Crow laws experience poorer financial outcomes than their White counterparts.

Below, we have broken down the primary components of the 2064 racial wealth gap. In the event Michael and Ashley were able to earn the same amounts as the Williamses, they could then afford the same house and personal expenditures. These changes alone would narrow 59% of the racial wealth gap by the time Michael dies. While some of this change might be within Michael and Ashley's control (making sure to earn their bachelor's degrees or aiming for a higher paying career), this analysis assumes only that they are able to achieve the probability-weighted results of White Americans.

Using household income as an example, we took the probability that a Black couple has bachelor's degrees or higher (26%), multiplied that by the combined median income for two 25-34 year-old Black college graduates ($80,003), and added that to the probability a Black couple does not have a bachelor's degree (100%-26%=74%); we then multiplied by the median income for two 25-34 year-old Black high school graduates ($44,500) to arrive

## Contributors to the Future Racial Wealth Gap




> **Contrary to much work about the importance of inheritance, it's the combination of incomes, savings rates, and asset allocations that have a much greater impact on the racial wealth gap.**

at a combined income of $53,730 at age 30. Because a White couple has a higher college graduation rate (36%) and higher incomes at both education levels ($105,000 and $62,205 respectively), they have a probability-weighted household income of $77,803. For simplicity, this analysis leaves out the categories of couples who did not graduate high school, as well those who earned graduate degrees. If the $184,250 house they purchased appreciated at the same rate as White Americans (0.5 percentage points more), and they paid the same interest rate (0.3 percentage points less), they would narrow another 3% of the racial wealth gap.

This, however, is a systemic issue due to banking and other policy inequities rather than something within their control. If Michael and Ashley were counseled to save 8.5% of their salaries (the probability-weighted percentage for White Americans) instead of 5.7%, and they received the average 4% employer match, they'd narrow the gap another 26%. Of course, the ability to save at this rate depends on the relationship between income and spending. Without erasing the income gap, this might be near impossible to achieve on its own. Improving their asset allocation to match that of White investors (both in their 401(k)'s and in other investing) would make up 11% of the gap. The final 3% would be made up by a slightly higher valued family business that appreciates slightly faster, and receiving the average White inheritance of $25,860 at age 53. Contrary to much work about the importance of inheritance, the combination of incomes, savings rates, and asset allocations have a much greater impact on the racial wealth gap.

## Top 5 Pieces of Financial Advice

1. **Attend a not-for-profit college,** choose your major carefully (see the Education section), and graduate. Another option—also with a great return on investment—is to attend a vocational or trade school to prepare you for work in a specific occupation.

2. **Open a checking account,** set up direct deposit of your paycheck, and refrain from using payday loans and check-cashing services which charge the equivalent of 100s of percent in interest each year!

3. **Open a retirement account as soon as possible** and defer at least as much salary as your employer matches, and avoid early withdrawals or loans if at all possible. Ideally, aim to save 10% of your pre-tax income, more if you're between ages 50 to 70.

4. **Start investing early** in low-cost stock index funds or a target date retirement fund to maximize long-term growth. However, don't invest money you might need in the next five years in stocks or stock-based mutual funds.

5. **Use credit wisely:** use a debit card or pay off new credit card purchases every month; take out a fixed-interest rate mortgage, not an adjustable or subprime loan.

## What if the Joneses overachieve?

Given that individuals cannot change many systemic issues such as income inequality and home appreciation rates, we created a second financial plan where the Joneses do everything within their power to eliminate the racial wealth gap.

We started with perhaps the easiest changes to make:

- Increasing the aggressiveness of the Jones' non-retirement asset allocation so they earn annual returns of 7.7% instead of 5.77%, and their 401(k) allocation so they earn annual returns of 8.15% instead of 8%.

- Increase the Jones' 401(k) contributions to match the probability-weighted contributions of the Williams', or 8.5% of pre-tax income.

These two changes make a minimal difference (raising the Jones' 2064 wealth from 28% of the Williamses' to 32%). The Joneses still need to consume almost all of their income because the lack of equal income at the given education levels make it very difficult to save meaningful amounts.

As we saw in the earlier pie chart, earnings are by far the biggest determinant of wealth. The best way to influence one's future earnings, statistically speaking, is to complete a higher level of education. There are differences between types of degrees and career choices that can also influence income greatly, but for this exercise, we will focus on what happens if the Joneses both earn generic bachelor's degrees.

At age 30, they both decide to finish their BA's. This means they must incur a probability-weighted $49,680 of student debt, and we also assume the couple will have 25% lower income while in school. Once they graduate, they earn the median income for Black people with bachelor's degrees (we have not, for this particular exercise, equalized racial incomes as that is a systemic issue). Nevertheless, this change alone narrows 60% of the racial wealth gap by the time Michael Jones dies in 2064.

Now that the Joneses are earning significantly more, they can increase their 401(k) contributions to 13% of pre-tax income once they are 45. However, that alone isn't enough, so they make their 401(k) allocation as aggressive as possible: 100% stocks and real estate investment trusts (REITs). These changes help them narrow another $787,000 of the racial wealth gap.

> **The Joneses can eliminate the racial wealth gap with above-average educational achievement, savings, and an aggressive asset allocation.**

Once they earn their BA's, their higher earnings and investments allow them to buy the same priced home as the probability-weighted White family, worth $184,250. Except, they can only afford to do so at age 37, four years after the Williamses, and they can only put 5% down due to lack of savings. They are also able to spend the same amount as the Williamses on other expenses. All of these changes together eliminate the racial wealth gap by 2064.

## What if the Williamses overachieve?

While it may be good news that the Joneses can make changes to eliminate the wealth gap while spending the same as probability-weighted White families, they must both earn BA's (or one of them must earn a BA in a STEM field like engineering or computer science), and must make their asset allocations and savings rates much more aggressive. What if we made these same changes for the Williamses (e.g. they both get BA's and earn median White income for college grads, and make their asset allocations and 401(k) contribution rates equal those of the overachieving Joneses)?

> If the Williamses achieve at the same above-average rate as the Joneses, the wealth gap returns to over 200%.

By doing this, the Williamses double their 2064 wealth, widening the racial wealth gap back to 2.02 times. Said another way, the Joneses' wealth is 49% of the Williamses' wealth when Michael Jones dies.

### The reasons for this are all systemic:

- White income exceeds Black income for college graduates by anywhere from 31% to 55%, depending on age.
- Home appreciation and mortgage interest rates continue to favor White homeowners based on 2020's differences.
- The Williamses inherit 3.75 times as much as the Joneses in their early 50s (right when they're most likely to pay for their own children's college expenses).
- Starting 401(k) balances (at age 30) are 3.3 times higher for the Williamses.

## Key Findings

This study projects that the baseline social and financial inequities of 2020 will continue to uphold the present racial wealth gap over the next 50 years. In 2020, White families have 3.54 times the wealth of Black families aged 70 to 80. By 2065, our model finds that White families between the ages of 70 and 80 will possess a net worth 3.53 times greater than similarly aged Black families, a figure that suggests the future wealth divide will remain equally vast, in spite of the social and economic progress of the last 50 years.

Most of this future gap emerges due to significant gaps in earnings—even after adjusting for education level—and differences in investment and retirement account growth. These inequities contain both systemic and individual elements, indicating the racial wealth gap need not remain entirely fixed. It would take Herculean efforts for a typical Black household to erase the wealth gap without substantial policy reform and social progress, but Black households can nonetheless considerably diminish the racial wealth gap with greater access to objective financial advice. That is, Black families can indeed improve their financial outcomes by adjusting their investment strategy and asset allocation—especially with the advice of financial professionals and financial planners—despite the racial wealth gap's systemic components. Although the financial services industry has a long way to go regarding diversity and accessibility, it remains a valuable resource for Black households seeking to develop intergenerational wealth and secure their financial futures.

The body of this paper explains our model and findings, explores the relevant literature, and provides useful financial advice for Black and White families alike.

# Education

Widely deemed as the path toward wealth accumulation and upward mobility, a college degree provides an extraordinary return on investment. Whether in the workplace or at home, a college education confers many benefits, ranging from greater earnings to increased community engagement to a longer life expectancy. Although these advantages are clearly interdependent, the net effect is nevertheless life-changing.

The Jones and Williams families both held significant educational aspirations, but we have weighted their financial plans based on the fact 36% of White Americans over the age of 25 have a bachelor's degree or higher, while only 26% of Black Americans have the same credentials.[13] Though we do not discuss possible causes of this disparity until later in this section, it is important to recognize the college completion gap has little to do with behavioral or cultural differences.

## Education's Return on Investment

Despite the cost of higher education, a college degree generates enormous returns for an entire life. The Georgetown University Center on Education and the Workforce found that the lifetime earnings of an individual with a bachelor's degree are 74% greater than somebody with a high school diploma—totaling an increase in lifetime earnings of nearly $1,000,000 (2011 dollars).[14] This benefit is well-documented by substantial academic research on the subject. Although the payoff remains highly dependent on major, professional sector, ethnicity, and gender, a college education nonetheless offers a considerable income premium for all groups. For example, although lifetime earnings of college-educated Black Americans are 20% lower than similarly educated White Americans, a bachelor's degree still substantially improves wealth outcomes for both groups.[15] Moreover, a college education bestows this earnings increase to one's children as well. The household income of a college-educated family whose parents also have college degrees is 25% greater than the income of a first-generation college household.[16] Similarly, 71% of children obtain the same level of education as their parents. Sadly, this is also the reason that Black students drop out of college at much higher rates than their White counterparts. Some of this is due to financial constraints, but some may be due to familial and community expectations. As Benjamin Franklin wrote in his 1758 essay *The Way to Wealth*, "An investment in knowledge always pays the best interest."[17] Indeed, given the median cost of a BA is $72,160,[18] and the increase in lifetime earnings is over 13:1, a college education yields an annualized return on investment of 6.6%.[19]

For some, a bachelor's degree proves unnecessary or cost-prohibitive, in which case a technical or vocational education, or even some college, can provide extraordinary returns. On average, compared to a high school graduate, the cumulative 20-year post-high school earnings of those who earn an Associate of Arts (AA) degree are 24% higher than those with a high school diploma. Those with some college but no degree earn 15% more, and those with the average vocational certificate earn 8% more, respectively, than high school graduates. Interestingly, however, an AA in engineering has cumulative earnings 18% higher than a bachelor's in the humanities or liberal arts. Vocational training in electronics and construction trades also brings higher 20-year earnings than a BA in the humanities or liberal arts.[20] Vocational schools, also called trade or technical schools, teach students occupational skills, preparing them to work in a specific occupation. Vocational schools can ready you for a wide range of careers, ranging from dental hygienist to electrician to pharmacy technician. In addition to their lower cost, these programs are often two years or less, allowing you to quickly enter the workforce in your desired field and begin earning a solid income for your future.

Like many Americans faced with the rapidly rising costs of a college education, both families carry substantial student debt. This near-ubiquitous experience generates the first difference between each family's financial situation. As White college graduates can expect to receive more parental financial support for their education than Black borrowers, it comes as no surprise that Black college graduates are more likely to take on debt, according to a 2016 report by the Brookings Institution.[21] And when they do, they owe $7,400 more by graduation, on average, than their White counterparts. That gap only proceeds to grow as interest accrues, constraining the average Black family's ability to build the sort of intergenerational wealth that allows children to graduate college without loans in the first place. Whereas Emily and Chris Williams collectively have a probability-weighted $11,520 in student loans, the Joneses have $12,168.[22] Despite the decreased likelihood of possessing a college degree, the composite Black family still has a larger student loan balance.

Given that 26% of Black students earn a BA, one can surmise that Black college graduates likely have around $40,000 in loans,[23] while White graduates likely have under $30,000.[24] Before Michael or Ashley have even started their careers, they already have more debt, while simultaneously seeing a smaller share of the income premium created by a college degree.

A greater starting balance is not the only element of student debt where Michael and Ashley are disadvantaged compared to Emily and Chris. According to a policy paper on student loan refinancing by the nonpartisan think tank New America, the average student debt interest rate, including public and private loans, is 6.0% for Black Americans and 5.7% for White Americans.[25] While this gap may seem negligible, it results in notable differences when compounded over 20 years—the average repayment period for debt from an undergraduate degree[26]—particularly considering the investment opportunity cost of each debt payment. Greater educational borrowing, coupled with worse outcomes in the job market, leaves a typical Black college graduate in a difficult financial position. This structural condition results in 21% of Black graduates with bachelor's degrees defaulting on their student debt—compared to only 4% of White graduates and even 18% of White college dropouts.[27] Even when graduates do not default on their loans, that debt restricts future wealth growth, evidenced by young college-educated households without student loan obligations owning seven times the wealth of similar households with student debt.[28]

## Financial Advice

### Avoid for-profit colleges.

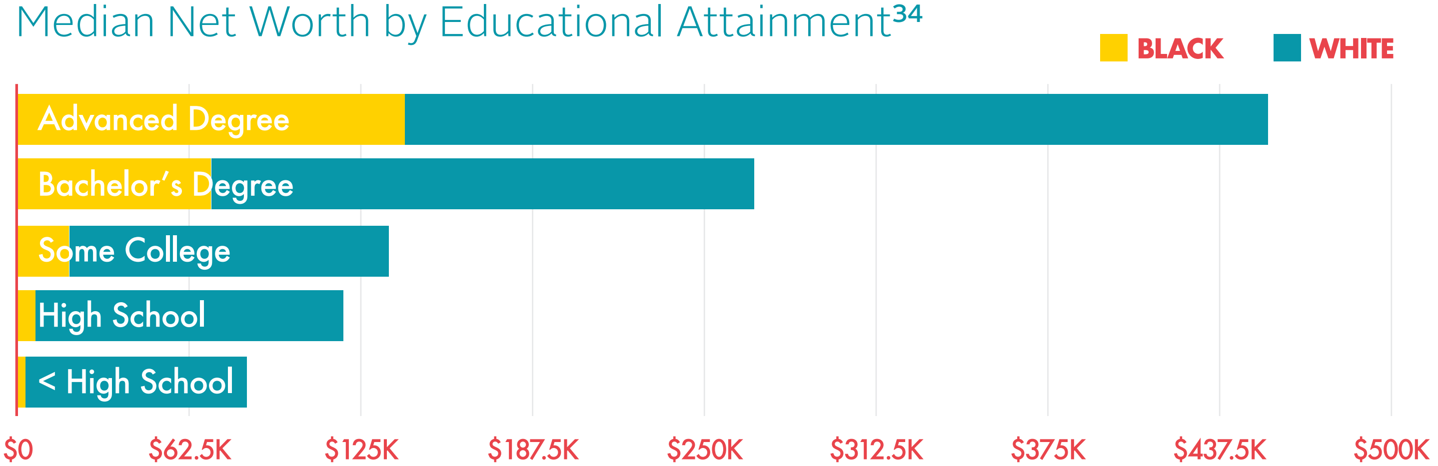
A significant element of the differences in student loan debt between White and Black college graduates stems from enrollment at for-profit universities. While the effect for undergraduate borrowers is marginal, 28% of Black graduate students are enrolled at a for-profit institution, compared to only 9% of White graduate students.[29] Fewer for-profit colleges are accredited, and fewer students complete their degrees.[30]

As a result, the income premium from private for-profit colleges is 34% less than the bonus from private nonprofit colleges, which reduces the long-term return on investment considering costs are pretty similar.[31] Nonprofit universities are usually more affordable due to more generous financial aid programs, providing a significantly better return on investment for the typical student.

The other major assumption for the financial planning projections related to education is income. As we weighted each household's starting student loan balances, so too we weighted each household's income based on the likelihood of graduating college. At age 30, the Joneses earn $53,730, yet the Williamses earn $77,803.[32] Most of this differential arises as an effect of the wage gap, which currently sits at 75 cents per dollar after adjusting for education.[33] Over the course of a life—including salary raises along the way—income disparities for college graduates produce a notable wealth difference. The following section, which covers employment and earnings, analyzes the aggregate effect of the wage gap and college completion rates.

Over a lifetime, the college completion gap, accompanied by inequities in educational borrowing and student debt interest rates, leads to Emily and Chris Williams developing more wealth than Ashley and Michael Jones. While this divergence only constitutes a small portion of the entire racial wealth gap—more significant factors are the wage gap and investment patterns—it nonetheless reflects an overall trend that equal achievements yield unequal wealth outcomes for Black and White families. Neither better decision-making nor harder work would have eliminated this difference, as the realities of college access and affordability impact Black and White households differently.

### Median Net Worth by Educational Attainment[34]



But the differences between each family's experiences began long before they started working or went to college. To find the first educational inequities affecting each family, we must go all the way back to preschool. Despite the elimination of institutionalized segregation and discrimination, de facto residential segregation continues to persist.[35] For Ashley and Michael, born in 1990, 66% of Black children were born in high or medium poverty neighborhoods, compared to only 6% of White children.[36] Before the Fair Housing Act of 1968 was passed and residential segregation was legally terminated, those numbers were 62% and 4%, respectively. Said another way, all of the civil rights and economic progress of those 22 years has increased the likelihood of a Black child being born into a poor neighborhood by 4% while increasing the probability of a White child being born poor by only 2%. Financial resources often define access to early childhood education programs, as the United States lacks a universal pre-Kindergarten education system. Since Black children are more likely to grow up in poverty without high quality preschool, they enter kindergarten behind White children by nearly nine months on average in math and seven months in reading, early inequities that shape educational outcomes years later.[37]

**All of the civil rights and economic progress of the past 52 years has reduced the likelihood of a Black child being born into a poor neighborhood by 6% while reducing the probability of a White child being born poor by 33%.**

When Black children eventually enter elementary, junior high, and high school, they attend segregated, lower-quality schools, receive less funding, and continue to lag behind their White peers. As an effect of residential segregation, school districting creates substantial segregation in public school systems across the country. 77% of Black children currently attend schools that are 50-100% non-White, and over half of those students attend schools that are over 90% non-White.[38] An analysis by EdBuild, a nonprofit focused on education funding, found that predominantly non-White school districts receive $23 billion less in annual funding than predominantly White school districts, despite serving approximately the same number of students.[39] Per student, predominantly White districts receive $13,908 in funding, while predominantly non-White districts receive $11,682, a difference of $2,226 (16%) annually.[40]

By 8th grade, only 16% of Black students are proficient in reading, compared to 44% of White children.[41] Disparities of similar magnitude also exist in writing and math. By the time students apply for college, the results are no different. The average Black student applying to college has a GPA of 3.0 and an SAT score of 941 out of 1600, while an average White student has a GPA of 3.4 and an SAT of 1118.[42] Even though funding per student is 16% lower than majority White districts, Black students' GPAs are only 12% lower.

Still, the high school completion gap has nearly disappeared—93% of White and 88% of Black Americans ages 25 and older have a high school diploma, a sign of remarkable progress over the past 50 years.[43] Even the college enrollment gap is shrinking, with 37% of Black Americans ages 18-24 enrolled in college compared to 42% of Whites.[44] Graduation rates, on the other hand, continue to lag behind, resulting in a substantial gap in the percent of Americans over the age of 25 with a bachelor's degree. Interestingly, however, a peer-reviewed 2010 study found that Black Americans attend college at 1.3 times the rate as White Americans from families with comparable financial characteristics.[45] Black families place significant emphasis on education as an opportunity for social mobility and act on those aspirations at higher rates when they have the financial resources to do so, acquiring both more years of schooling and more credentials. Consistent with research that reveals women outperform men in college completion, Black women graduate college at substantially higher rates than Black men, and the rate of growth is also greater for Black women.[46] These findings suggest that a lack of family wealth coupled with the prohibitive cost of higher education—not stereotypes regarding culture or behavior—are responsible for the college education gap. Consequently, Black undergraduate students are three times more likely than White students to attend private for-profit institutions, enrolling at rates of 12% and 4%, respectively.[47] Evidence suggests this disparity is almost entirely due to broader socioeconomic trends, considering federal educational grant recipients, regardless of race, are more than three times as likely as non-recipients to attend private for-profit colleges.[48] Moreover, often due to insufficient finances, Black students are significantly more likely to drop out: 40% of Black students at four-year colleges graduate in 6 years, compared to 64% of White students.[49] The comparative difference is even more pronounced at for-profit institutions, which tend to have strikingly lower graduation rates across the board than public or private nonprofit schools. Only 18% of Black students graduate from for-profit colleges in 6 years, a rate barely half of the 34% of White students at for-profit colleges who do the same.[50]

With public university costs increasing by over 200% over the past 30 years,[51] outpacing the rate of nominal wage growth,[52] it should be clear that racial disparities in family wealth drive the college completion gap. Moreover, federal aid, often necessary for low-income families to attend college, no longer covers as much as it used to. For example, a Pell Grant—a federal grant program distributed to undergraduate students on the basis of need—covered 67% of average costs in 1975 while a maximum Pell Grant in 2012 covered only 27%.[53] BIPOC students, who are first-generation college students at higher rates, often lack the family wealth necessary to complete a college education, so the reduction in federal aid makes the process even more challenging today. Furthermore, the practice of admitting

## EDUCATION

**1.3X**

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**16%**

**Predominantly White school districts receive 16% more funding per student annually than predominantly non-White districts.**

**12%**

**Even though funding per student is 16% lower than majority White districts, Black students' GPAs are only 12% lower.**

the children and grandchildren of alumni—known as legacy admissions—perpetuates an advantage to applicants who likely already have the advantages of affluence and better educational preparation that come from their ancestors' educational achievements. At many selective institutions, legacy applicants are admitted at two to four times the rate of non-legacy applicants, often above 30%.[54]

> A lack of family wealth coupled with the prohibitive cost of higher education—not stereotypes regarding culture or behavior—are responsible for the college education gap.

Before the costs of public education skyrocketed, the federal government facilitated the college education of White men, setting up their families for financial success. Despite its progressive nature, the G.I. Bill, passed in 1944 to provide benefits for World War II veterans returning home, fostered inequality in its implementation. Congressman John Elliott Rankin, a Mississippi Democrat and the main House sponsor of the G.I. Bill, advocated for the bill to be administered on a local and state level, thus rendering it subject to overtly racist Jim Crow laws.[57] In 1947, while veterans made up half of college enrollments, Black veterans saw few of those benefits—and their families continue to lag in educational achievement generations later.[58] According to Pulitzer Prize-winning journalist Edward Humes, 28% of White veterans went to college on the G.I. Bill, while Black veterans were denied access to academic institutions and were instead encouraged by Veterans Affairs counselors to attend vocational schools.[59] And even when they did go on to college—as 12% of Black veterans did—they were counseled to apply for nonskilled and service jobs, mitigating the income premium of a college education.

**Financial Advice**

## Effect of College Major on Lifetime Earnings

If you're looking to maximize the return on investment from your college education, consider majoring in various STEM fields, such as electrical engineering or computer science. STEM majors tend to have significantly higher starting salaries—a large boost to wealth accumulation—than their counterparts studying liberal arts and humanities.[55] Over the course of a career, a median worker with a STEM degree can anticipate earnings of $3,202,000, whereas a bachelor's degree in the humanities or liberal arts typically produces lifetime earnings of $2,149,000.[56]

With a graduate degree in the same field, those figures increase to $4,214,048 and $2,737,680, respectively. While a BA in humanities can roughly double lifetime earnings, a STEM degree can triple them. Given that universities charge roughly the same tuition for STEM and humanities degrees, this leads to a much higher return on investment for STEM graduates.

## The Cognitive Effects of Poverty

In 2013, psychologists found that poverty decreases IQ, though their research subjects might seem quite unusual. Small-scale sugarcane farmers in southern India receive most of their annual earnings at once—after the harvest—so they often live comfortably after harvesting and in a difficult financial situation beforehand. Studying 464 farmers in 54 villages in Tamil Nadu, India, the researchers found a 13 point decrease in IQ due to temporary financial distress.[60] To contextualize, a drop of this magnitude in cognitive ability is equivalent to the effects of chronic alcoholism or going without sleep for a night, according to the study. People living in poverty are often blamed for poor financial decision-making, but this research suggests that the causality of this argument is reversed.

The authors hypothesize that a limited amount of mental bandwidth becomes overwhelmed by the stress of challenging financial circumstances. Poverty's cognitive effects can thus serve to entrench its presence, which disproportionately affects Black households. 22% of Black Americans live in poverty compared with only 9% of White Americans.[61] Furthermore, a study analyzing data from the National Longitudinal Survey of Youth 1979 Cohort discovered that each additional point in IQ corresponds to increases in income between $234 and $616 annually.[62] Multiplied by the 13-point drop, this amounts to several thousand dollars of lost income each year due to the cognitive impairment of poverty.

## EMPLOYMENT

### 59%

The typical Black household receives 59% of the typical White household's annual earnings.

### 50%

Changing an applicant's name—from a stereotypically Black name to a stereotypically White name—increases the likelihood of receiving a positive response from potential employers by 50%.

### $1

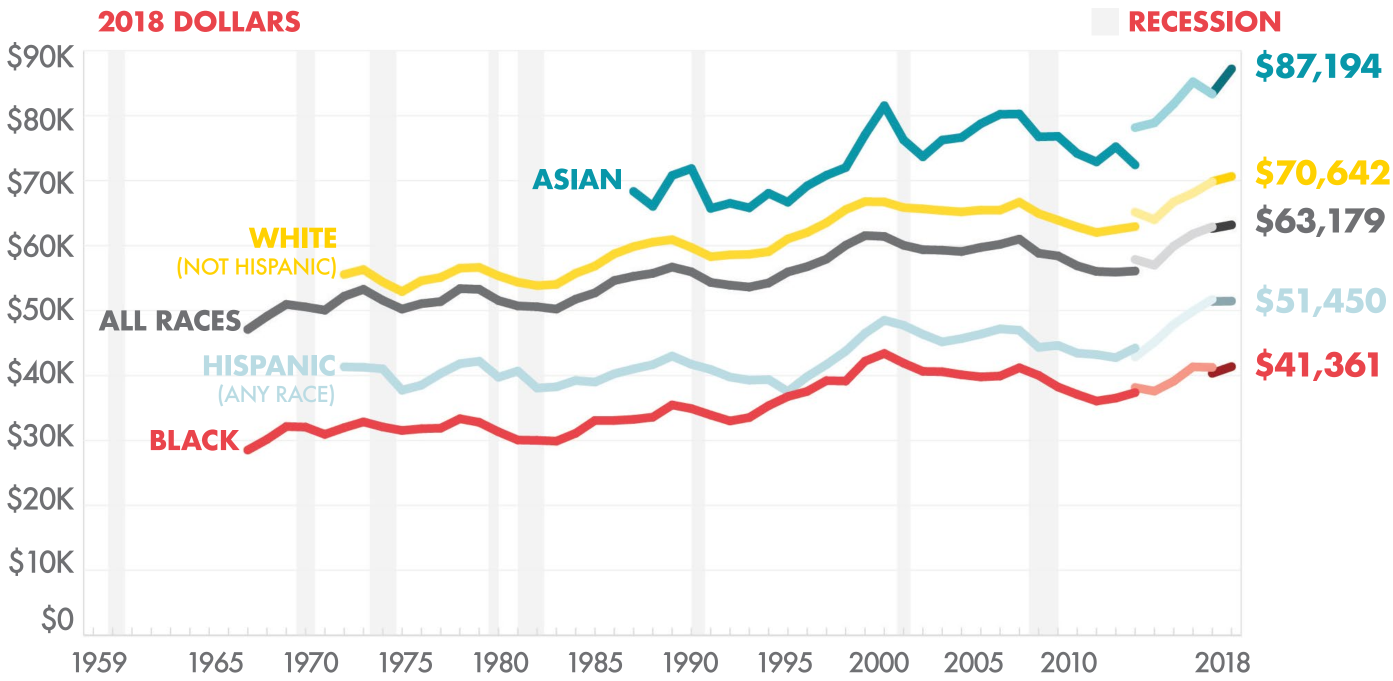
Every $1 increase in income adds $5.19 in wealth over a 25-year period for White households, while the same builds only 69 cents of wealth for a Black household.

# Employment

After years of hard work, countless academic achievements and obstacles, thousands of exams and assignments, the Jones and Williams households have completed their formal education and are finally ready to enter the workforce. Despite the inequities between each family's experience up until this point, employment seems to provide the opportunity for a fresh start, a chance to earn their keep and climb to a higher rung of the socio-economic ladder.

The wage gap—both by gender and race—is no new phenomenon. Documented for as long as national data has been collected on income, the racial wage gap demonstrates no signs of narrowing. The graph below of Census data reveals the household earnings divide has remained relatively constant in size since the 1960s. In 2018—the most recent year of available data—the median White household earned $70,642 compared to $41,361 for the median Black household.[63] In other words, the typical Black household receives 59% of the typical White household's annual earnings. Some of this ratio is explainable by differences in the median number of earners per household—a number strongly influenced by rates of unemployment, incarceration, etc. However, looking at the individual worker level still yields poorer results for Black Americans. A 2019 analysis by the Economic Policy Institute discovered that a Black worker at the 50th percentile of the income distribution earns 75.6 cents per dollar in wages of a comparable White worker.[64] Moreover, this disparity has actually expanded since 2000, when it was 79.2 cents. The reality is even worse for Black women, who earn 66 cents for each dollar made by White men.[65] A large disparity still exists in highly educated industries: Black female doctors earn 73 cents on each White male dollar.

## Real Median Household Income by Race and Hispanic Origin
**1967 to 2018**



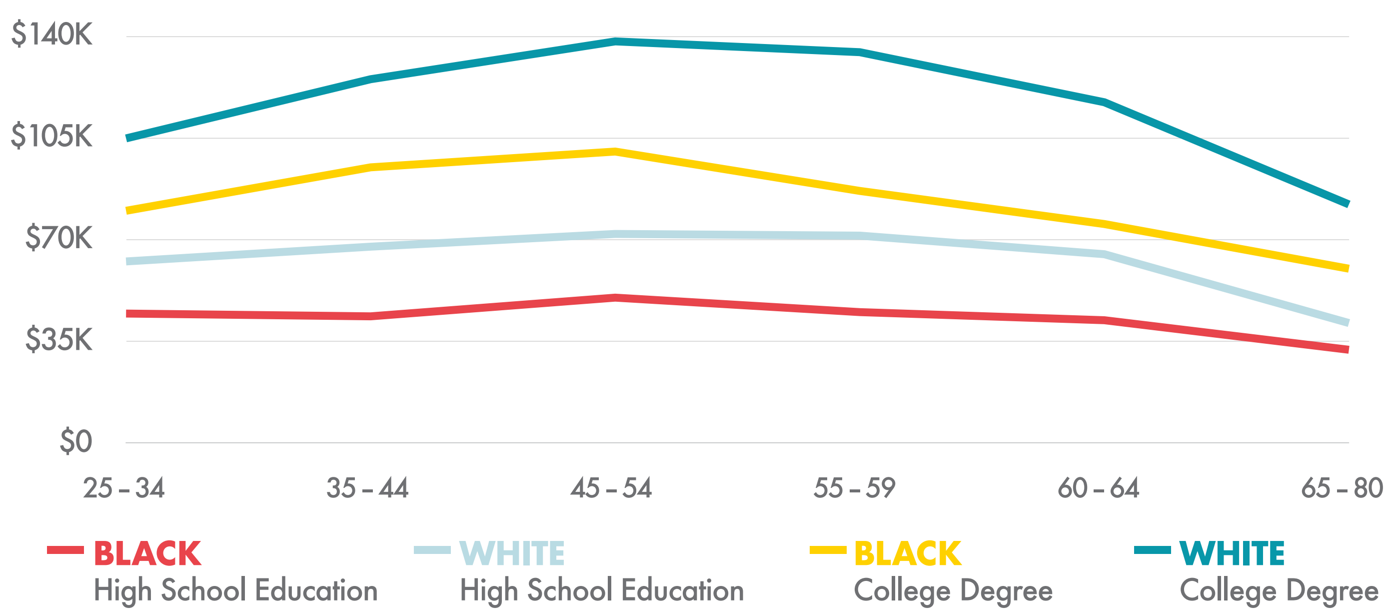
Even with the same educational credentials, Black households earn less than their White counterparts, visually represented in the graph below. This pattern persists at every measure of educational attainment, ranging from 65 cents on the dollar without a high school diploma to 70 cents with a diploma to 75 cents with a four-year college degree.[66] Consistent with the numbers above, the wage gap continues to decrease the higher the education level, as Black individuals with graduate or professional degrees earn 82.4 cents on each dollar earned by White Americans with the same educational background.[67]

Inequities in wages—the bedrock for the development of long-lasting wealth—magnify other economic inequities and perpetuate the racial divide. Research reveals that White families possess more assets and maintain a higher net worth at every level in the national household income distribution.[69] This finding confirms that the many components of the racial wealth gap are thoroughly intertwined and analytically inseparable. For instance, Black households in the third quintile of the national income distribution—i.e. at the median—have a similar wealth portfolio as White households in the bottom 20% of earners, with a median net worth of around $20,000 for both groups.[70] Black families in the bottom income quintile have a median wealth of $200—not enough to cover even one unexpected vehicle or medical expense.

> **Even with the same educational credentials, Black households earn less than their White counterparts.**

So, returning to our financial planning projections, how do Michael and Ashley fare in the job market compared to Emily and Chris? The likelihood of hiring discrimination remains unchanged since 1989, with White job applicants 36% more likely to receive a callback than Black Americans after adjusting for education, gender, occupation, and local labor market conditions.[71] Other research suggests that changing an applicant's name—from a stereotypically Black name to a stereotypically White name—increases the likelihood of receiving a positive response from potential employers by 50% while every other element of the application remains

## Median Household Income by Age, Race, and Educational Attainment[68]



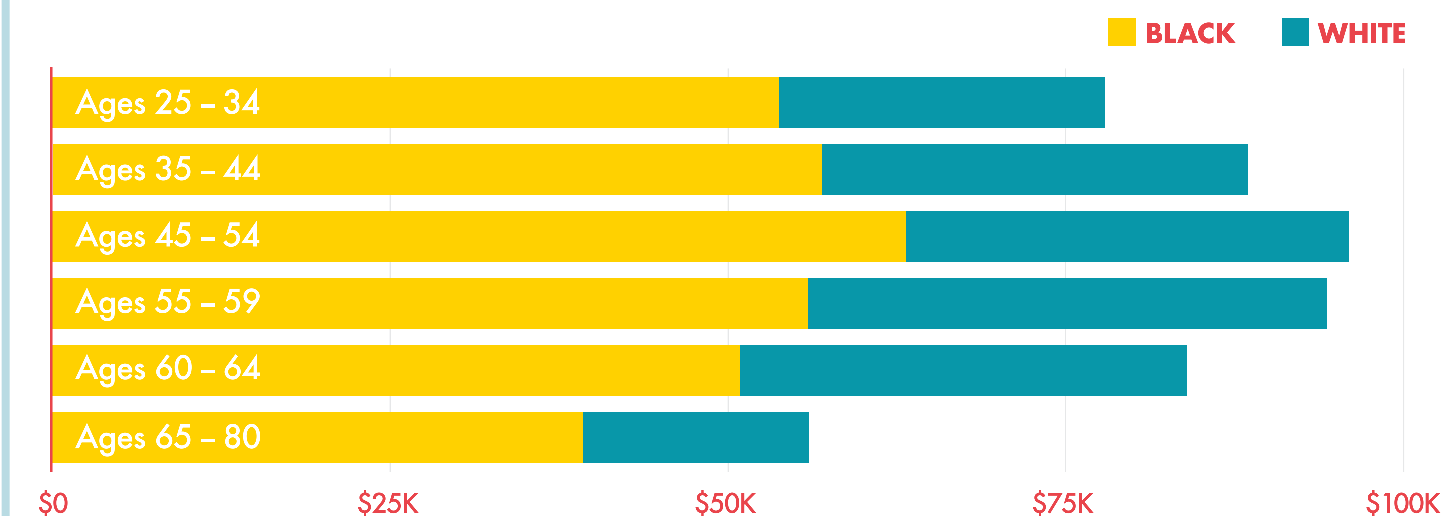
identical.[72] And discrimination doesn't end at the point of hire. A study conducted by the National Bureau of Economic research found that Black workers are monitored more frequently and are held to a higher standard than White peers.[73] The same study revealed that discrimination continues even when productivity of Black workers exceeds that of their White counterparts. Furthermore, despite making up only 13% of the labor pool, racial discrimination against Black workers constitutes 26% of all claims filed with the Equal Employment Opportunity Commission, a federal agency tasked with enforcing civil rights laws prohibiting all forms of workplace discrimination.[74]

> The likelihood of hiring discrimination remains unchanged since 1989, with White applicants 36% more likely to receive a callback than Black Americans.

Although hiring discrimination remains quite common, both the Joneses and Williamses began working in 2013—at the age of 23—after graduating college in 2012. As income is highly dependent on educational attainment, each family's annual earnings, derived from Census Bureau data, are weighted by the likelihood of their respective race having acquired a bachelor's degree.[75] In 2020, at the age of 30, Michael and Ashley collectively make $53,731 compared to Chris and Emily's earnings of $77,803, based on their probability-weighted educational achievements. To maximize the realism of our financial projections, we also adjust each household's income over the course of their lives to accurately reflect the wage increases and decreases that occur as individuals age. The graph below depicts these changes in annual income.[76] Though it may seem counterintuitive that wages begin to decline in the 55-59 age range—at a considerably higher rate for Black households—research from the Federal Reserve Bank of New York found that earnings level out in one's 40s.[78] By effect, wages and consequent buying power actually decrease later in life when adjusted for inflation.

Before Michael Jones passes away in 2065, 5 years before his wife Ashley, the Joneses will have

## Probability-Weighted Earnings by Age and Race in Present Dollars[77]



built millions less in wealth than Chris and Emily Williams due to the wage gap alone.[79] These income losses are inextricably linked to disparities in every other element of personal finances, which are often inaccessible to Black families across this country. For example, higher earnings translate to an increased likelihood of buying a home and building up equity—a major component of wealth for a typical middle-class family. Higher earnings translate to increased rates of saving, of building up a nest egg for a comfortable and meaningful retirement. Higher earnings translate to more stock holdings, which see significant rates of return over a long investment horizon. Higher earnings grow assets and wealth. As long as the wage gap persists, elimination of the wealth gap is next to impossible.

> Before Michael Jones passes away in 2065, 5 years before his wife Ashley, the Joneses will have built millions less in wealth than Chris and Emily Williams due to the wage gap alone.

A 2013 report published by the Institute on Assets and Social Policy, affiliated with the Heller School for Social Policy and Management at Brandeis University, discovered that every one dollar increase in income adds $5.19 in wealth over a 25-year period for White households, while the same income gain builds only 69 cents of wealth for a Black household.[80] The study hypothesizes that historical discrimination has pushed Black workers into employment sectors less likely to offer benefits or employer-based retirement accounts. These service industries tend to have more turnover, which produces further employment and financial instability. Consequently,

## Impact of Covid-19

Confronted with the difficulties of life during the 2020 COVID-19 global pandemic, typical Black and White households faced different financial challenges. In April 2020, when unemployment caused by COVID-related closures peaked, fewer than half of Black adults were employed.[81] Numbers from June 2020 indicated that White unemployment had rsien to 10.1% from 14.2% in April, but Black unemployment remained high at 15.4%. The effects of unemployment overflow into other financial realms; since the pandemic began, Black homeowners and renters missed payments at higher rates than any other group, increasing the possibility of foreclosure or eviction.

Already in a precarious economic situation before the pandemic, the typical Black American—from the worker to the student to the entrepreneur—was projected to fall even further behind their White peers as an effect of the COVID-19 pandemic. As the 2008 recession disproportionately erased Black wealth, so too has the COVID recession disproportionately hindered BIPOC economic success. The full extent of these other pandemic-induced disparities, from housing to businesses to health, will be explored later in each of the relevant sections.

it is more challenging for Black families to grow wealth from income gains in the same way as White families, particularly as median Black household wealth tends to hover around the level of an emergency savings fund. When Black families start out with the same wealth portfolio as a White household, that 69 cent accumulation in wealth per increased dollar of income expands to $4.03.

Beyond the racial wage gap, Black households experience unemployment at substantially higher rates than their White counterparts. In December 2019, well before the economic impact of COVID-19, 5.9% of Black Americans over the age of 16 were unemployed, nearly double the 3.2% unemployment rate for Whites.[82] Between 1999 and 2012—an interval including the 2008 financial crisis—46% of Black families experienced some period of unemployment compared to 34.6% of White households.[83] The same disparity lingers even after adjusting for education; Black Americans with an associate's degree are unemployed at higher rates than White Americans without a high school diploma.[84] While our financial projections for the Jones and Williams families don't include any spells of unemployment, using median household income sufficiently incorporates and captures the effects of this structural phenomenon.

When including unemployed and incarcerated men into calculations on the wage gap, a 2018 study observed that Black men earn only 51 cents on each dollar of White male wages.[102] Looking back 70 years to 1950, that number was no different. If that gap had shrunk, Michael and Ashley's earnings would be a bit closer to the Williamses' which would have by far the largest effect on narrowing the racial wealth gap.

## Mass Incarceration

Although Black and White Americans use and sell drugs at comparable rates, Black Americans are 2.7 times more likely than Whites to be arrested on drug-related charges and 6.5 times more likely to be incarcerated.[85] Consequently, despite making up only 13% of the population, African-Americans comprise 33% of the U.S. prison population.[86] As the War on Drugs took shape in the 1980s, incarceration levels skyrocketed, far exceeding rates of crime and population growth. Today, nearly 2.3 million people find themselves incarcerated at any given time, costing American taxpayers around $80 billion each year.[87]

The median prisoner—aged 34[88]—committed a nonviolent offense and served 1.3 years.[89] As one might expect, a spell of incarceration results in losing wages for the duration of that sentence. Using our probability-weighted income assumption of $53,730, missing one wage earner for 1.3 years amounts to lost income of $34,925.[90] If imprisonment had not occurred, and that amount had been invested instead, they would have a balance of $198,780 by the time they retire at the age of 65.[91] Weighted by the likelihood of incarceration—1 in 3 Black men can expect to go to prison at some point in their lifetime[92]—the typical Black household experiences wealth losses of $66,260 due to lost wages alone, a process catalyzed by the War on Drugs and deliberate policies of mass incarceration.

The effect on future employment is pronounced; many employers refuse to hire the formerly incarcerated. Still, White males with felony convictions are more likely to obtain a positive response from a prospective employer than Black men without criminal records.[93] Future earnings fall substantially as well, with estimates ranging from 20% to 40% decreases.[94] The financial impact of mass incarceration magnifies the already precarious position of Black households; 65% of families with an imprisoned member find themselves unable to meet basic needs. [95]

The typical family with an imprisoned member also builds up substantial debt, averaging $13,607, from criminal justice-related fees and fines.[96] To maintain contact with their loved ones via phone or email, 34% of families fall into debt, as fees for prison communication often exceed several thousand dollars. As local governments have expanded spending on corrections and the judiciary, often outsourcing to private firms seeking profit, these fees have increased. For instance, in 1991, only 25% of inmates owed criminal justice debt upon leaving prison. Today, that number is 85%.[97] Cities with a larger proportion of Black Americans in their populations impose higher court-related fines and fees. Cities in the top quintile of Black population concentration collect $28.60 per capita in criminal justice debt revenue, compared to $9.10 in the bottom quintile.[98]

An investigation by NPR discovered that 43 states and the District of Columbia bill defendants for a public defender via processing fees, 41 states invoice inmates for room and board, and 44 states charge for probation and parole supervision.[99] Inability to pay these fees, which regularly amount to thousands of dollars, often leads to reincarceration, which in turn results in more lost wages and further debt.

According to a study analyzing the effect of incarceration on wealth, a young man who has experienced incarceration—even for a brief period—has one eighth the wealth of a never-incarcerated peer by their mid-30s.[100] Financial losses only account for a small element of mass incarceration's total effects, which range from voter disenfranchisement to psychological trauma to increased rates of recidivism, generating a self-perpetuating cycle. When it comes to the next generation, children growing up with an incarcerated parent are hurt both emotionally and financially. They see worse educational outcomes—facing expulsion and suspension rates nearly six times higher than their peers—which in turn depresses future earnings and wealth accumulation.[101]

By no means are the authors suggesting that society should ensure convicted criminals experience no economic hardship. Rather, we are quantifying the extent of the hardship and pointing out the racially disproportionate ways incarceration is applied to Black and White Americans despite very similar rates of crime.

## Housing

Homeownership is essential to the process of wealth creation and a home is often a family's largest asset. Although home equity takes years to build, it serves as an intergenerational asset that can secure financial freedom and stability for one's family. Moreover, it can function as collateral for a loan, enabling a family to acquire additional investments, consolidate debts, and improve overall financial security.

However, the path to homeownership has never been equal. As this element of the American Dream became a reality for millions of White Americans in the mid-20th century, widespread policies of deliberate segregation and an extensive system of housing discrimination prevented generations of Black Americans from acquiring the same opportunities. And while housing discrimination may no longer be legal, the specter of segregation continues to haunt Black families seeking to build home equity in the present—the Joneses included. In fact, the gap between White and Black homeownership has grown since 1960, eight years before the passage of the Fair Housing Act.[103] When housing discrimination was the legalized norm, 65% of White households owned homes, compared to only 38% of Black households. By the end of 2019, that 27-point divide had risen to 30 points, with a White homeownership rate of nearly 74% and a Black rate of 44%.[104]

As the Jones and Williams families look to purchase homes of their own, we begin to see the accumulated present effect of historical and ongoing discrimination on each family's wealth-building. These housing differences—including appreciation rates and mortgage terms—produce a net wealth difference of $25,861 between the Joneses and Williamses by the end of their lives.[105] Despite similar accomplishments, Michael and Ashley do not build up the same level of housing wealth as their White counterparts.

To explain the variables behind this significant difference, let's begin with the first housing-related assumption used in our financial planning projections—initial home values. National housing data documents that the median home purchase price in 2020 was $250,000.[106] By contrast however, homes in majority-Black neighborhoods were worth 23% less than homes in majority-White neighborhoods, after controlling for home quality and neighborhood characteristics, according to the Brookings Institution.[107] This devaluation sums to aggregate losses of $156 billion. After adjusting for the devaluation of Black residential property and the probability of homeownership, those initial values become $184,250 for the Williams family and $84,700 for Ashley and Michael.[108] Even when buying homes of similar quality, Black and Hispanic families pay 2% more on average due to information asymmetry and seller discrimination.[109] As property tax payments are derived from purchase price, the Williams family pays quite a bit more annually: $2,303 vs $1,059.[110]

Most people require a mortgage to afford the purchase of a home, and the wage gap and differing levels of family financial support result in unequal mortgage

Housing differences—including appreciation rates and mortgage terms—produce a net wealth difference of $25,861 between the Joneses and Williamses by the end of their lives.

## Impact of Property Taxes

Funding for public schools comes from federal, state, and local taxes. Local contributions—which comprise most of a school district's funding—are usually raised via property taxes, resulting in the concentration of fully funded and high-quality schools in wealthier districts. However, this reality negatively influences the children of wealthy people of color as well. The average Black family with a household income of $100,000—the 80th percentile among all Black families—lives in a neighborhood where the average household income is $54,000.[111] This affects school location and quality, educational outcomes, and ultimately the ability for Black Americans to build wealth over several generations.

terms. In 2015, 70% of first-time homebuyers were White while only 9% were Black, an inequality made possible by the fact that Whites receive family assistance in buying homes twice as often—and in larger amounts—than their Black counterparts.[112] Consequently, Black households are more likely to have down payments of 5% or less, whereas White families often put down upwards of 20% of the total home purchase price.[113] Therefore, the Joneses put down 5%—totaling $4,235—while Emily and Chris pay $27,638 up front.[114] Although both families chose a 30-year fixed-rate mortgage, the most common mortgage type, they actually have noticeably different interest rates. According to the Federal Home Loan Mortgage Corporation—colloquially known as Freddie Mac—the cost of conventional 30-year fixed-rate mortgages has fallen recently, resulting in an average interest rate of 3.94% in 2019, which we have used as the assumption for the White family.[115] However, several independent studies establish that Black Americans pay higher interest rates on their mortgages—ranging from 21 to 42 additional basis points[116]—than comparable White borrowers, after adjusting for creditworthiness.[117] Accordingly, we have increased the Jones family's mortgage interest by 30 basis points, resulting in an annual rate of 4.24%. This disparity is entirely attributable to discriminatory lending behavior, a practice that is well-documented across metropolitan areas and appears unchanged in recent years.

> **Even when buying homes of similar quality, Black and Hispanic families pay 2% more on average.**

Even after adjusting for age, employment background, credit history, debt-to-income ratio, and metropolitan area, Black Americans are denied home loans more frequently and are charged higher interest rates than their White homebuying counterparts. In 2017, 19.3% of Black mortgage applications were denied, compared to only 7.9% of White applications.[125] This remains unchanged from the 1990s, when a Federal Reserve analysis of 6.4 million mortgage applications found qualified Black applicants are rejected at twice the rate of qualified White applicants.[126] When Black mortgage applicants are approved, they're five times more likely to receive a subprime loan than borrowers in White neighborhoods, according to a study by the U.S. Department of Housing and Urban Development.[127] Moreover, borrowers in upper-income Black neighborhoods were two times more likely to refinance in the subprime market than borrowers in low-income White neighborhoods. In the aftermath of the 2008 financial crisis, Bank of America and Wells Fargo's mortgage units paid $355 million and $175 million, respectively, to settle discrimination suits over lending practices.[128] The Department of Justice alleged that Countrywide Financial Corporation—Bank of America's mortgage unit—had guided more than 200,000 African-American and Hispanic borrowers towards subprime loans even with prime loan-qualifying credit profiles. As a large element of the housing bubble, these discriminatory loans catalyzed racially disproportionate foreclosure rates and thus contributed to the Great Recession having a greater effect on Black Americans. Black-owned homes also appreciate at lower rates, functionally denying the Joneses the opportunity to keep up with the Williamses. According to data from the government-run American Housing Survey, Black homes appreciated at an annual rate of 2.41%, compared to 3.07% for a White-owned home from 2004 to 2017.[132] Had Michael and Ashley's home appreciated at 3.07% instead, their net worth at death would be $19,590 higher. Despite making all the right decisions, there is nothing Michael or Ashley could do differently to earn that wealth, a figure that actually exceeds the current median wealth of Black households. Multiple peer-reviewed studies have reached a similar consensus,[133] confirming that homes in Black neighborhoods and Black-owned homes in mixed-race communities increase in value at lower rates.[134] To find the origin of these disparities, we must examine the historical record of discriminatory housing policies by both public and private actors.

At the peak of the Great Depression, the Roosevelt administration aimed to stabilize the housing market and prevent foreclosures. To do so, they created the Home Owners' Loan Corporation (HOLC), which drew maps of cities across the United States, classifying neighborhoods by mortgage lending risk. The lowest ranked neighborhoods—labeled "hazardous"—were drawn in red, which became the source of the term "redlining." These neighborhoods often received the lowest rank due to the high composition of Black residents. The Federal Housing Administration, established in 1934, used these maps to determine which mortgages would be federally insured. The FHA Underwriting Manual explicitly required segregation to maintain home values and price stability, decrying the "infiltration of inharmonious racial groups."[135] Generations of Black families were subsequently denied access to credit, thereby limiting opportunities for wealth-building such as homeownership and entrepreneurship. 98% of FHA-insured loans from 1934 to 1962 went to White families[136] rather than the 89% that would have represented their average

## Recovery from Recession

Moments of macroeconomic financial stress impact typical Black and White homeowners to a different degree. Researchers project that a median Black family's net worth in 2031 will be 40% lower due to the Great Recession, compared to 31% for a typical White household.[129] Scholars point to two primary factors behind this disparity: the aggregate effect of predatory lending and the larger share of Black wealth in home equity. As an effect of this disproportionate wealth erasure, White families mostly recovered from the crisis by 2013, but it took BIPOC families much longer. Once wealth had returned to pre-Recession levels for White families, median Black families were still down 20%, reflective of their financial precarity and instability.[130] In fact, real median Black household income didn't exceed its pre-Recession high until 2017—and still remained barely higher in 2020.[131]

## 40 Acres and a Mule

Federal policies often facilitated the development of White homeownership, while the same leaders reneged on policies intended to produce racial housing parity. The Homestead Act of 1862 played a key role in the westward expansion of the United States, providing free 160-acre tracts to White families willing to live on the land. By 1934, the government gave more than 1.5 million White families a total of over 246 million acres, accounting for 10% of the total U.S. land mass.[118] Historians estimate that around 46 million American adults today are directly descended from recipients of free government land, an asset which enabled White families to build wealth and climb the socioeconomic ladder.

On the other hand, Black Americans had a different experience. As the Civil War was coming to a close, General Sherman issued Special Field Order 15, which promised to give 40-acre land tracts to recently emancipated slaves on the southeast coast, providing a footing to grow intergenerational wealth. Commonly known as 40 acres and a mule, this policy—along with other Reconstruction measures intended to help former slaves—was reversed when Andrew Johnson ascended to the presidency after Lincoln's assassination. The typical American home today sits on 0.2 acres of land; imagine what Black Americans might have accomplished with 40.[119] Finally freed from slavery and hopeful for the future, Black Americans were left with nothing and proceeded to face legal barriers like restrictive Black codes and discriminatory Jim Crow laws. When they could build wealth, it was often violently erased via lynchings and massacres—from Tulsa[120] to Rosewood[121] to Elaine, Arkansas.[122] William Darity Jr. and A. Kirsten Mullen—a Duke University economist and a writer, respectively—estimate that distributing 40 acres of land to each formerly enslaved family of four, approximately 40 million acres of land, would have been worth $400 million in 1865.[123] That sum, compounded to the present, could be as high as $3.1 trillion, amounting to $193,220 in increased wealth per Black household today.[124] Historical government policies don't exist in a vacuum; their unequal implementation in the past continues to shape the present, contributing to the gulf between the Jones and Williams families' financial outcomes.

proportion of the U.S. population.[137] White households accessed opportunities Black families could not, primarily by building home equity. From there, Whites could fund college educations, build larger and more diverse investment portfolios, provide inheritances to their children, and grow other intergenerational assets, the benefits of which are still reaped decades later, influencing the shape of the present racial wealth gap.

During the Great Migration, millions of Black families headed north and west to find economic opportunity and escape Jim Crow discrimination. With racially restrictive home covenants struck down by the Supreme Court in 1948, wealthy real estate moguls sought other ways to maintain segregation and profit off these shifting demographic trends. Without access to federally backed conventional mortgages due to redlining, Black Americans intent on owning a home had no choice but to sign predatory housing contracts, a practice especially prevalent in Chicago.

> **Generations of Black families were subsequently denied access to credit, thereby limiting opportunities for wealth-building such as homeownership and entrepreneurship.**

The scheme of selling homes on contract begins with blockbusting, where real estate agents would convince White homeowners to sell their homes below market value by inciting fear that the neighborhood would shortly be overwhelmed by Black families. These speculators would then proceed later to mark up the cost by an average of 84% and sell to Black buyers on contract.[138]

A contract home purchase looks like a mortgage on the surface; the buyer starts with a down payment and makes monthly installments, albeit with high interest. However, buyers wouldn't gain ownership of the home until the entire contract was paid off. Black buyers were subject to all the demands of homeownership without any of its benefits. Their payments were also higher—nearly $600 more each month in 2019 dollars.[139] As the practice was unregulated, contract sellers could evict buyers for one missed payment—a regular occurrence considering the predatory mortgage terms coupled with employer discrimination—and the buyer would

## Why do poorer communities tend to be located on the east side of cities?

A 2016 study published in the peer-reviewed journal Spatial Economic Analysis discovered that unequal air pollutant distribution drove wealthy residents away from the east side.[143] As prevailing wind patterns in the United States and Europe blow west to east, so too airborne pollutants from industrial factories traveled to the east of many cities. As poor air quality lowered home values and the cost of rent, working-class communities became concentrated in neighborhoods on the east side, as they had no other financial option. Although the pollution behind this inequality diminished considerably in the 20th century, the social and geographic outcome—cemented by segregationist policies like redlining—remains.

then lose their entire investment, including all payments made up until that point. With somewhere between 75% and 95% of Black home purchases on contract in the 1950s and 1960s, this scheme resulted in aggregate losses ranging from $3.2 billion to $4.0 billion in Chicago alone.[140] With the passage of the Fair Housing Act in 1968, redlining and other forms of institutionalized housing discrimination and segregation became illegal. Still, the government often failed to effectively enforce the legislation, thereby allowing de facto housing discrimination to persist.[141] Even if the law were enforced properly, the effect of redlining on neighborhoods had already been cemented.

> Redlining played a causal role in the formation of urban neighborhoods and ongoing racial wealth inequality.

Research by the Federal Reserve Bank of Chicago indicates that redlining played a causal role in the formation of urban neighborhoods and ongoing racial wealth inequality via reduced credit access and consequent community disinvestment, even long after its end.[142] Redlining thus operated as a self-fulfilling prophecy. The racist belief that mortgages in predominantly Black neighborhoods would be risky resulted in community impoverishment and segregation that continues to this day. In other words, the HOLC maps were not reflective of wealth disparities but rather served to shape those disparities. Prohibiting redlining didn't heal the wound; it simply slowed the bleeding. Home values and appreciation rates remain lower in Black communities. As evidenced by the differing financial trajectories of the Jones and Williams families, the persistence of these community inequities will continue to shape the lives and financial outcomes of typical Americans for decades to come, absent new policy changes.

## HOUSING

**9%**

In 2015, 70% of first-time homebuyers were White while only 9% were Black.

**2X**

A Federal Reserve analysis of 6.4 million mortgage applications found qualified Black applicants are rejected at twice the rate of qualified White applicants.

**30%**

When housing discrimination was the legalized norm, 65% of White households owned homes, compared to only 38% of Black households. By the end of 2019, that 27-point divide had risen to 30 points, with a White homeownership rate of nearly 74% and a Black rate of 44%.

## Spending

Expenses are a critical assumption in our two families' financial projections, as they greatly influence how much can be saved and invested each year for future growth. As a household becomes increasingly wealthy, they can afford increased expenditures for things they value, whereas a household without wealth has generally dedicated the entirety of their income to meeting basic needs alone. As the Joneses and Williamses each begin to build financial security for their families, let's take a look at how their expenses differ.

Using the 2018 Consumer Expenditure Survey conducted by the U.S. Bureau of Labor Statistics, we have created expense profiles for each family. The survey, which collects data on average annual expenditures, provides a detailed picture of spending by category, ranging from groceries to utilities to transportation—and everything in between. Each year, the Joneses spend $41,984,[144] and the Williamses spend $49,689.[145] In their late 50s and early 60s, as they approach retirement, their annual spending declines with their income, decreasing to $37,916 and $44,874, respectively.[146] In retirement, when spending typically plummets more dramatically, their annual expenses fall to $31,629 and $37,434, respectively. Though the Jones family spends a much higher share of their income than Chris and Emily, Michael and Ashley do not have much of a choice. Considering their lower wages—an annual difference of nearly $25,000—the Joneses must devote a greater share of their earnings towards fulfilling basic needs.

> **The accumulated effects of historical discrimination make it more challenging for Black families to save.**

The Bureau of Labor Statistics data confirms this intuitive pattern; as income decreases, a greater share must go towards meeting expenses to the point where outflows tend to exceed inflows at household incomes below $50,000.[147] In this situation, which as of this writing includes 35% of White households and 57% of Black households,[148] families are forced to either draw from savings or enter into debt, thereby reducing net worth and diminishing the probability of a comfortable retirement. When a typical family must cover an unexpected expense—from vehicle damage to a medical emergency to necessary home repairs—the financial stress often requires sacrifices in other areas of that family's financial plan. On the

### Financial Advice

#### Open a checking account.

It's actually much cheaper in the long term to open a bank account instead of paying exorbitant fees and interest at non-traditional financial institutions like check cashers and payday lenders. You could end up saving $40,000 over the length of your career by using a transactional account instead of cashing your checks.[172]

## Healthcare Disparities

Healthcare costs constitute a significant proportion of a typical family's expenses. Racial inequities in healthcare access and outcomes increase Black healthcare expenditures. In 2020, Black people died from the COVID-19 pandemic at 3.6 times the rate of White Americans.[149] With shorter life expectancies, higher infant and maternal mortality rates, and higher death rates from most illnesses, it's clear that medical treatment in the U.S. is deeply unequal. 11% of African-Americans are uninsured compared to 8% of Whites.[150] Two in five Black households each year report not obtaining necessary medical care due to an inability to afford it.[151] Researchers estimate that racial healthcare disparities annually produce $35 billion in excess expenditures, $10 billion in illness-related lost productivity, and $200 billion in premature deaths.[152] Black communities disproportionately bear the effects of air pollution[153] and live closer to hazardous waste[154] sites and food deserts,[155] exacerbating these inequities.

As Black Americans suffer and die from asthma at higher rates,[156] reducing disparities in asthma treatment could save Black workers more than $1,600 annually in medical expenses and lost wages.[157] This inequity is directly linked to the history of community segregation; a 2020 study published in The Lancet found that previously redlined neighborhoods currently have asthma-related emergency department visit rates that are 2.4 times higher than non-redlined census tracts.[158] Black people also die from illnesses such as cardiovascular disease and diabetes at higher rates. However, reducing inequities in the treatment of high blood pressure, blood sugar, and obesity could increase Black life expectancy by 5 to 7 years[159]—greater than the current life expectancy gap of 3.5 years.[160] While current health outcomes are often attributed to poor nutrition, this narrative ignores the role of historical community disinvestment and the subsequent dearth of healthy food options in producing these conditions in the first place. Moreover, childhood malnutrition diminishes developmental potential, reducing future adult income by around 20%, creating cycles of poverty that obstruct Black Americans seeking to achieve wealth parity.[161]

other hand, families with moderate wealth or access to lower-cost credit can easily cover the inevitable difficulties that life brings while keeping their financial plan on course. With savings or good credit—many components of which are intergenerational—a family can afford to take more risk or invest in property or a family business. A family without savings isn't afforded the same luxury and typically minor setbacks can quickly become devastating. If the Joneses could hypothetically afford to save at the same rate as the Williams family, their net worth would be significantly greater by the time of their deaths. However, due to their lower incomes they must spend a much higher percentage on necessary goods and services.

The accumulated effects of historical discrimination make it more challenging for Black families to save. For example, nearly a third of Black households spend more than half their income on housing alone, and Black families are twice as likely to lack the funds to meet basic monthly expenses.[162] In fact, a median White family has six times the liquid savings of a median Black family.

## Government Assistance

Contrary to popular belief, working-class White people without college degrees are the greatest beneficiaries of government assistance programs. The safety net, comprising both government benefits and tax credits, lifts 44% of White people above the poverty line who would otherwise be in poverty, compared to 43% of Black individuals. This research, conducted by the think tank Center on Budget and Policy Priorities, also indicates there is a substantial correlation between not having a college degree and requiring government assistance to be above the poverty line. Still, as a respective share of the overall population, Black people are more likely to receive government benefits—such as Medicaid, the Supplemental Nutrition Assistance Program (SNAP), or Temporary Assistance for Needy Families (TANF)—due to their higher rates of poverty.

At lower income levels, Black Americans spend more on housing and transportation, whereas Whites prioritize income-producing assets.[165] Researchers believe this difference is a consequence of housing discrimination and subsequent labor market segregation, which increases commute times—and expenses—for typical Black workers. The same study found little difference in saving patterns between Black and White Americans at similar income levels. Still, higher incomes translate to greater savings for typical White households, which in turn can be invested rather than consumed, compounding racial wealth inequality. Put simply, equal achievements produce unequal wealth outcomes.

Some contend that the financial decisions of Black households contribute to their inability to build intergenerational wealth. For example, Black people supposedly lack financial literacy and spend beyond their means on conspicuous consumption. However, after controlling for income, a typical White household actually spends 1.3 times more than an average Black household.[166] Furthermore, after adjusting for socioeconomic status and other demographic characteristics, Black Americans have similar levels of unsecured debt as Whites.[167] Still, over 47% of Black households are underbanked or unbanked, compared to only 17% of White families.[168] Of unbanked households, over half cite "do not have enough money to keep in an account" as a reason behind their decision, suggesting that the wealth gap is behind banking disparities, not the other way around. Other common justifications are distrust of banks, privacy concerns, and complaints about account fees being too high and unpredictable. As established in the housing section, Wells Fargo and Bank of America

> **We shouldn't blame poor decision-making, but rather recognize that present economic circumstances and institutional behavior constrain financial choices and serve to perpetuate poverty.**

paid enormous sums to settle lending discrimination suits. This deep-seated distrust in Black communities of banking systems is real, and it leads to continued disparities in wealth accumulation. We shouldn't blame poor decision-making, but rather recognize that present economic circumstances and institutional behavior constrain financial choices and serve to perpetuate poverty.

Considering the deliberate targeting of minority communities with subprime loans in the leadup to the 2008 financial crisis, banks and other financial service firms should work to repair broken trust and actively include people of color as a means of addressing the wealth gap. Banking access is also unequal; there are 41 financial institutions per 100,000 people in White-majority counties compared to 27 in non-White-majority counties.[169] Payday lending, check cashing, and other high-cost financial services—with typical annual APRs of around 400%[170]—are disproportionately located in predominantly BIPOC neighborhoods. Further, banks in Black neighborhoods often require higher minimum balances than banks in White neighborhoods: $871 vs $626.[171] For families on the lower end of the earnings distribution, that's the difference between having a bank account and not. We should try to be cognizant of harmful stereotypes, as their use in this context often serves to justify the racial wealth gap. Instead, we should focus on reforming the systems and institutions that produce unequal financial outcomes in the first place.

## SPENDING

**1.3X**

A typical White household spends 1.3 times more than an average Black household.

**47%**

Over 47% of Black households are underbanked or unbanked, compared to only 17% of White families.

**2X**

Black families are twice as likely to lack the funds to meet basic monthly expenses.

## A Flawed Tax System

As the federal government maintains a progressive income tax model—whereby marginal tax rates increase as income increases—conservative pundits and politicians often claim that poor people, many of whom are BIPOC, are not paying their fair share of taxes while taking advantage of government handouts. When looking at federal income tax alone, this narrative appears accurate. However, when including all taxes—consumption and sales taxes, payroll taxes, property taxes, corporate taxes, estate taxes, and of course, income taxes—the picture looks quite different. According to groundbreaking research by Emmanuel Saez and Gabriel Zucman, economists at the University of California, Berkeley, the United States essentially has a flat tax system.[173] The one exception? The wealthiest 400 Americans, for whom the combined tax rate is 23.0%, the lowest of any group.[174]

Using the interactive simulator created by the authors of The Triumph of Injustice, we've compared the effective overall tax rates of our two composite families.[175] The Williamses pay 24.1% of their income in taxes, and the Joneses pay 24.2%. As the Jones and Williams families are representative of the median household of each race, these findings suggest that the aforementioned freeloader narrative is inaccurate. Poor Americans pay a greater share of their income towards consumption taxes—such as sales tax or sin taxes—and payroll taxes like Social Security and Medicare. As those without wealth must consume nearly the entirety of their income to survive, consumption taxes account for over 10% of income in the bottom earning decile, compared to less than 2% at the top.[176] Further, Social Security—the most significant payroll tax—is only applied up to a ceiling of taxable income, resulting in a heavier burden for the working class, and therefore a disproportionate number of people of color. These taxes offset their relatively lower income tax contribution, effectively creating a national flat tax system.

According to a 2018 distributional analysis of state and local tax structures conducted by the Institute on Taxation and Economic Policy, tax codes in 45 states are regressive, taxing the poor at higher rates than the rich.[177] Rather than implement progressive state taxes, many states favor taxes on consumption. The average effective state and local tax rate for the bottom income quintile is 11.4%, 1.3 times higher than the rate of 8.6% for the top quintile of earners. The report's authors note that these calculations exclude non-tax revenue—fines and fees, such as the cost of public parking—on which states are increasingly relying and which is extraordinarily regressive.

Moreover, of the personal tax cuts present in the Tax Cuts and Jobs Act of 2017, 72% went to the top 20% of earners, and 80% of the total cuts went to White households.[178] The law thus disproportionately favors White, wealthy households at the expense of everybody else. The typical Black household saw a tax cut of $840, compared to $2,020 for a typical White household, a deficit much greater than the wage gap alone. With capital gains taxed at a lower rate than labor along with recent reductions in the estate tax, it's clear this tax code ultimately served to worsen

## Business Ownership

Business equity, the difference between a business' assets and its debts, operates as another element of intergenerational wealth. Inequities in business ownership magnify the racial wealth gap; 15% of White households own business equity compared to only 7% of Black households. Black-owned businesses account for only 1.3% of total sales in the United States despite making up 9.5% of all American businesses.[179] One might then expect that these higher rates of entrepreneurship would close the racial wealth gap, but Black business owners still have less than a third of the median wealth of White business owners: $91,500 vs. $287,166.[180] While still large, this gap is substantially smaller than the enormous 10-to-1 wealth difference of all median White and Black households. Increasing access to entrepreneurship in under-resourced communities will go a long way toward reducing wealth inequality; a longitudinal study—tracking the same individuals over time—found that the median net worth of Black business owners is 12 times that of Black non-business owners.[181] While greater starting wealth means it is easier to start a successful business, this study identified a causal relationship between becoming self-employed and generating future wealth, even when beginning with less as typical Black entrepreneurs do.

> ”
>
> **The largest limiting factor on Black business is not a lack of entrepreneurial aspiration, but rather the financial resources and financial markets access to act upon those aspirations.**

Although most American families do not own a business, both Ashley Jones and Chris Williams—brimming with entrepreneurial spirit and seeking self-employment—started small businesses in their mid-20s. Now 30, both the Jones and Williams families possess some business equity, the value of which is probability-weighted like the other financial assumptions used throughout this paper. The typical Black household has only $351 in probability-weighted business equity while White households have $1,906.[182] Moreover, Black-owned businesses tend to grow revenue at a slower annual rate—7.0%[183]—than White businesses—8.6%.[184] As revenue growth corresponds with business growth, we used these rates to model business equity growth in our financial planning projections. These disparities in business equity and growth alone produce a wealth gap at the end of the plan of $13,680.

Importantly, inequities in business ownership are not a question of entrepreneurial aspirations; start-up rates are actually higher among Black Americans than White Americans.[185] However, Black businesses often lack sufficient access to capital and fail at higher rates, issues discussed in further depth below. Before starting their businesses, the Jones and Williams families had different levels of net worth, which in turn affects initial outcomes. The typical White business owner starts their business with $106,720 in working capital, while the typical Black business owner starts with $35,205.[186] Lower levels of intergenerational family wealth and access to angel investors thus serve as barriers to entry for aspiring Black entrepreneurs. To counteract these difficulties, Black business owners often seek loans. Even so, Black-owned business loan applications are denied at higher rates, leading other owners to forego loan applications out of fear of rejection. 42% of minority-owned small business loan applications are denied compared to only 16% of White-owned applications.[187] When they do receive a loan, the median amount is smaller: $25,000 vs. $58,000.[188] Additionally, Black-owned businesses pay higher loan interest rates—an average of 7.8% compared to only 6.4% for White business owners—which increases the cost of credit and makes business success more difficult. Combining all these factors results in only 1% of Black-owned businesses receiving loans in their first year, compared to 7% of White businesses.[189] Significantly larger shares of Black business owners are dissatisfied with their lender, suggesting some level of discrimination.[190] Facing these loan challenges, Black entrepreneurs rely on personal funds and credit more frequently than White business owners, which, coupled with lower credit scores, results in lower profit and growth outcomes.[191]

Even when off the ground, business owners in Black neighborhoods do not see the same levels of success as their White counterparts. Researchers point to several limits on business growth, including industry choice and geographic location. As decades of residential segregation have resulted in impoverished Black neighborhoods, businesses established in those communities often lack as profitable a consumer base as businesses located in wealthier areas. Similarly, as an effect of generally lower educational attainment, hiring options are increasingly restricted. Consequently, Black businesses are concentrated in industries that provide personal services, such as beauty salons, child day care, and home health care.[193] Black businesses are significantly underrepresented in professional services, which generate greater revenue and faster growth. Still, altering industry choice alone will not resolve these growth inequities, as Black businesses in every sector earn lower revenue than White businesses in the same sector.[194] Importantly, industry choice is dependent on education, experience, professional licensing, training, equipment costs, etc., all of which closely correlate with family wealth. These factors ultimately limit revenues and business growth, suggesting that for a typical Black entrepreneur, other elements of the racial wealth gap actually govern their

## Philanthropy & Wealth

These inequities don't only apply to for-profit businesses; Black-led nonprofits often face similar difficulties in securing funding. Average revenues of early-stage Black-led organizations are 24% less than their White-led peers, and their unrestricted net assets—funding or donations that can be used for any purpose—are 76% less.[192] These disparities persist even when adjusting for education level and issue area, suggesting these funding inequities arise as an effect of broader systems, not individual leaders. Researchers suggest several explanations.

One theory contends that Black nonprofit organizers have fewer connections to the philanthropic community, a likely possibility considering the ties between philanthropy and wealth. Another contributing factor is that large funders might rely on performance and evaluation metrics that lack cultural sensitivity, thereby unintentionally excluding organizations led by people of color from equitable funding consideration. These observations suggest that funders should actively seek out BIPOC-led nonprofits to eliminate racial disparities in funding, especially as some nonprofit organizations may have the potential to help reduce racial discrimination and diminish the racial wealth gap.

business outcomes. According to a 2020 Brookings report, businesses in Black neighborhoods with high Yelp ratings grow slower than similarly rated businesses in White neighborhoods, even after adjusting for levels of education, income, and age in the neighborhood.[195] If those disparities were eliminated and Michael Jones' business grew at the same rate as Emily Williams', the Jones family's relative net worth would increase.

As an aggregate effect of the inequities outlined above, the average probability for Black businesses to fail is 26.9%, compared to 22.6% for White-owned businesses.[196] While this difference might seem small, remember that surviving Black businesses are generally less successful. However, Black-owned firms bear the brunt of widespread economic distress. For instance, during the COVID-19 pandemic, 41% of Black-owned businesses—totaling 440,000—permanently closed their doors.[197] 1.8 million White-owned businesses shuttered as well, a drop of 17%. This disparity demonstrates Black-owned businesses are concentrated in industries particularly impacted by public health measures, those that cannot transition to an online working environment. Additionally, the racial wealth gap more generally means Black business owners lack the cushion of wealth necessary to survive temporarily lost earnings. Despite federal steps to support small businesses struggling with the effects of the pandemic, only 26% of Black-owned firms received any aid from the Small Business Administration, and only 12% received the entirety of their requested funding.[198]

Comparatively, half of all Paycheck Protection Program applicants received at least some of their requested funding,[199] a disparity which highlights the difficulties in accessing credit discussed earlier. In August 2020, the nonpartisan government watchdog group Accountable.US released a report revealing that the 10 poorest congressional districts received $13.3 billion less in PPP funding—a total of over 56,600 fewer loans—than the 10 wealthiest districts.[200] The poorest districts are 41.8% Black, while the wealthiest have an average Black population of 6.3%, demonstrating the government response to the coronavirus pandemic privileged the businesses and communities already better equipped to survive.

## BUSINESS OWNERSHIP

**7%**

**15% of White households own business equity compared to only 7% of Black households.**

**42%**

**42% of minority-owned small business loan applications are denied compared to only 16% of White-owned applications.**

The largest limiting factor on Black business is not a lack of entrepreneurial aspiration, but rather the financial resources and financial markets access to act upon those aspirations. Many prospective Black entrepreneurs currently lack sufficient assets or collateral to qualify for loans due to the racial wealth gap, demonstrating that racial economic inequality more broadly restricts possibilities for business ownership and increasing wealth. These findings suggest a need to invest in Black communities and entrepreneurs, thereby growing the profitable customer base in Black neighborhoods and improving Black business outcomes. Small businesses often hire from the community, so strengthening Black businesses nationwide could shrink the wage gap and revitalize the financial position of Black America.

# Investing

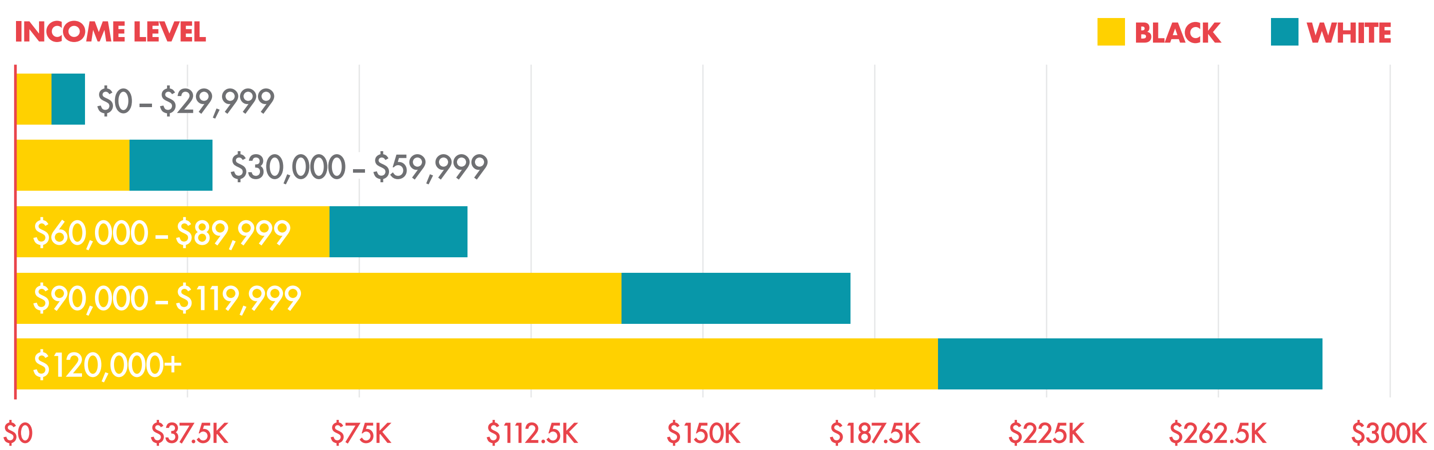
As a key element of every successful financial plan, retirement savings and investments in higher-growth assets often dictate what retirement will look like and what can be left for the next generation. Over the course of a life, these investments generate compound returns, providing a path to future financial security. Although the markets have historically provided the means for the affluent to expand their wealth, the proliferation of financial advisors, tax-advantaged retirement accounts, and digital investment platforms have made investing more accessible than ever.

> Investing is now more accessible than ever.

Consequently, the racial *investment* gap—particularly among middle-class families—has shown signs of shrinking in recent years. In 2010, 60% of Black households and 79% of White households with incomes over $50,000 were invested in stocks or mutual funds.[202] By 2016, those figures increased to 67% and 86%, respectively. While the gap remained equal in size—19 percentage points—the two groups are now closer, as Black investing increased by a comparatively larger margin. Still, other elements of the racial wealth gap continue to limit opportunities for Black investment. White households have seven times the retirement savings of a typical Black household,[203] and 75% of Black families have less than $10,000 saved for retirement.[204] Many Black families adopt less diverse asset portfolios and more conservative investing strategies—with real estate comprising a larger share of total assets—due to having fewer economic resources overall, coupled with historical distrust of financial institutions. As this paper intends to provide useful financial advice to help families build wealth, this section offers several steps that all households can take to improve their investment and retirement outcomes.

With our composite families beginning work at 23, they each had seven years of compounded retirement account contributions by 2020. While both families can expect employer contribution rates of 4.7% of their income—the average employer-match contribution rate as of 2019[206]—they differ in how much they each

## Average Retirement Account Balance by Income and Race[205]



## Financial Advice

### Start investing in the stock market at a young age.

As returns compound year over year, the earlier you start, the better. In fact, if you invest $1,000 annually beginning at age 25 with 7% returns, you will have $213,610 by 65, nearly $66,000 more than the $147,913 saved if you begin at age 30 instead, even though you only invested $5,000 more in total.[201]

choose to contribute. According to a study jointly conducted by Ariel Investments and Aon Hewitt, the average contribution rate for African-Americans earning the Jones' household income—$53,730—is 5.7%.[207] By contrast, the average contribution rate for White workers at the Williams' income level is 8.5%. Moreover, as Black households favor slightly more conservative retirement account funds, Michael and Ashley's retirement account grows at 8.00% annually, while Chris and Emily's 401(k) earns annual returns of 8.15%.[208] Beyond retirement account balances, Black families prefer less risky investments generally, so non-retirement investments for the Joneses grow at 5.77% annually, compared to 7.70% for the Williamses.[209]

By adopting a more aggressive asset allocation, the value of the Joneses' non-retirement investments increases by $214,565 in 2064. However, as Black families often require liquid assets to meet everyday needs, there must be systematic reforms, particularly in resolving the wage gap, before these investments can become a reality for Black households across America. Consistent with results from the Ariel/Aon Hewitt study, the Joneses contribute 10.4% of their income each year, and the Williamses contribute 13.2%—including employer match. Using an annual compound interest model with these contribution and return rates, the Joneses would have $52,431 in their 401(k) by age 30, whereas Chris and Emily would have $98,643.[210] However, as Black workers are disproportionately employed in industries less likely to offer retirement benefits, only 34% of Black households have a retirement account, compared to 60% of White households.[211] We have probability-adjusted the assumptions for both the Jones and Williams families' retirement accounts to accurately reflect this disparity. Accordingly, at age 30, the Joneses have a probability-weighted $17,826, while the Williams household has $58,186.[212] Looking forward to future values, the financial planning software automatically calculates annual contributions and growth, displaying the importance of 401(k)s to overall net worth. By the time of their deaths, these disparities in retirement contributions and annual rates of growth result in substantial lost wealth for Michael and Ashley.

As established in the section on employment, much of the significant divide in retirement accounts between Black and White families can be attributed to the industries in which Black workers are concentrated. In fact, at firms that offer employer-sponsored retirement plans, the account participation rate

> **By adopting a more aggressive asset allocation, the value of the Joneses' non-retirement investments increases by $214,565 in 2064.**

Financial Advice

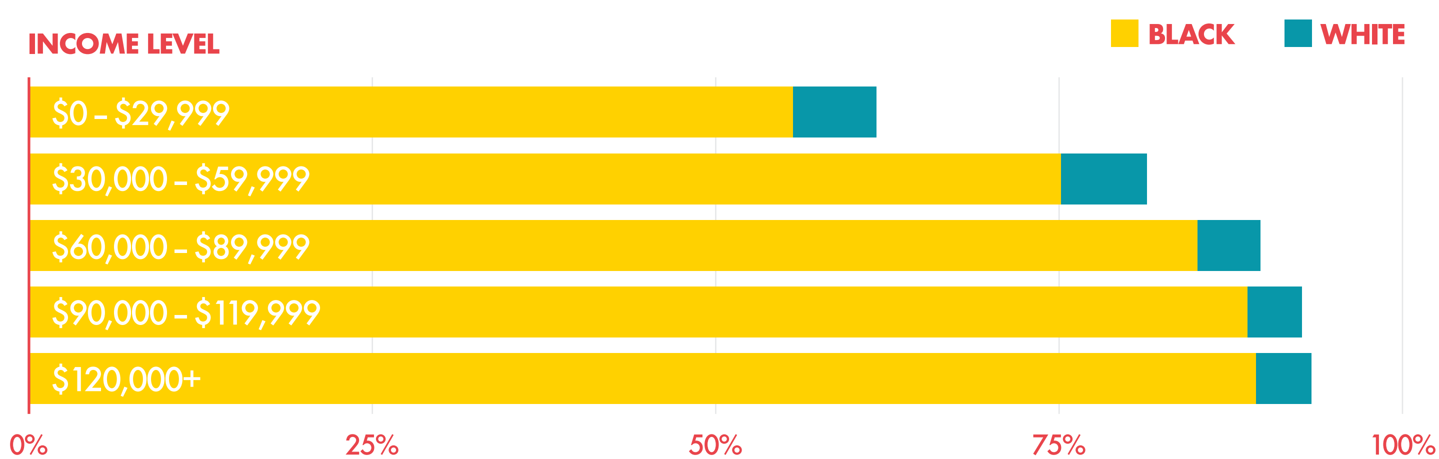
## Open a retirement account early in your life.

Even without access to an employer-sponsored plan such as a 401(k), you can likely open an individual retirement account (IRA), which allows tax-deferred contributions. Another option is a Roth IRA, which offers completely tax-free growth and withdrawals and is often better if you have a decade or more to go until retirement.

difference nearly disappears when controlling for income. Therefore, working to close the income gap—and encouraging more employers to provide these retirement benefits—will produce gains in Black retirement account participation.

The graph below suggests the disparity in retirement savings is not about values or financial literacy. Rather, it seems that less affluent Black people face additional financial challenges—more pressing than saving for retirement—than their White counterparts, which prevents them from participating and contributing in 401(k) accounts at the same rates. That is, as Black Americans are 75% more likely to lack a credit history[214]—and have lower average credit scores[215]—large unforeseen expenses can be harder to manage, particularly with a general lack of family wealth. Consequently, after adjusting for income and age, Black households are 276% more likely to take hardship withdrawals from retirement accounts for themselves or their families.[216] The effect on long-term wealth is profound, as early withdrawals reduce future growth and often come with high fees. The Ariel/Aon Hewitt study mentioned earlier notes that some Black workers conceive of their retirement accounts as an easy source of withdrawable cash rather than an instrument of long-term growth. While this impression may contribute to the racial wealth divide, we must recognize that the need for liquid resources is an effect of racial wealth inequality more broadly. In other words, lack of wealth produces the conditions that require 401(k) withdrawals in the first

### Plan Participation Rates by Income and Race[213]



place, reversing the causality of the prevailing opinion that account withdrawals magnify the wealth gap.

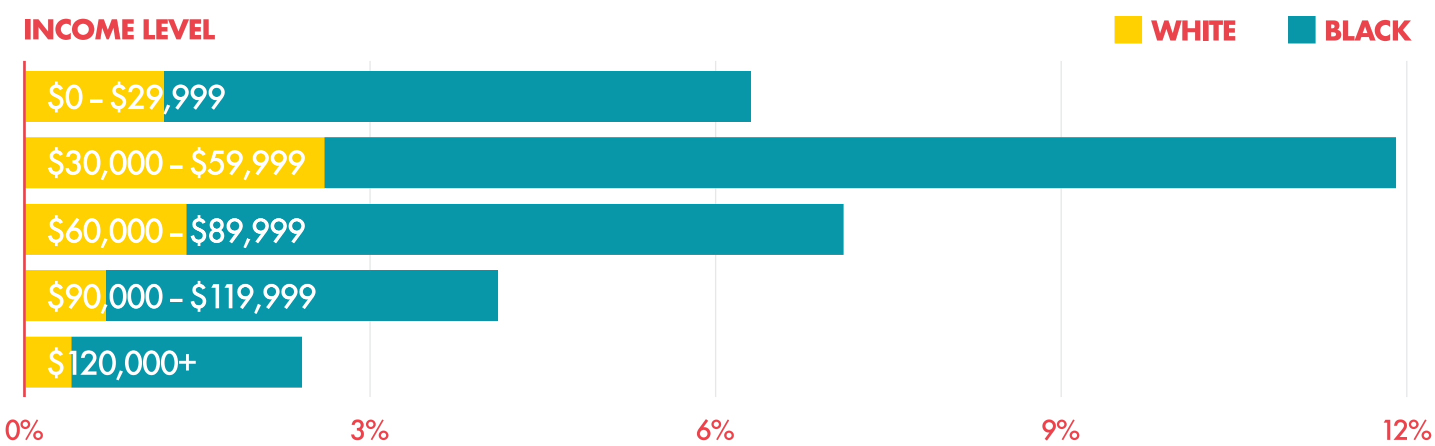
Differences in contribution rates are similarly affected by income, as saving becomes significantly more feasible when all non-discretionary expenses can be met. In many lower-income Black households—for whom expenses exceed income—contributing to a retirement plan proves quite difficult. This situation undermines the financial outcome of Michael and Ashley Jones.

## Financial Advice

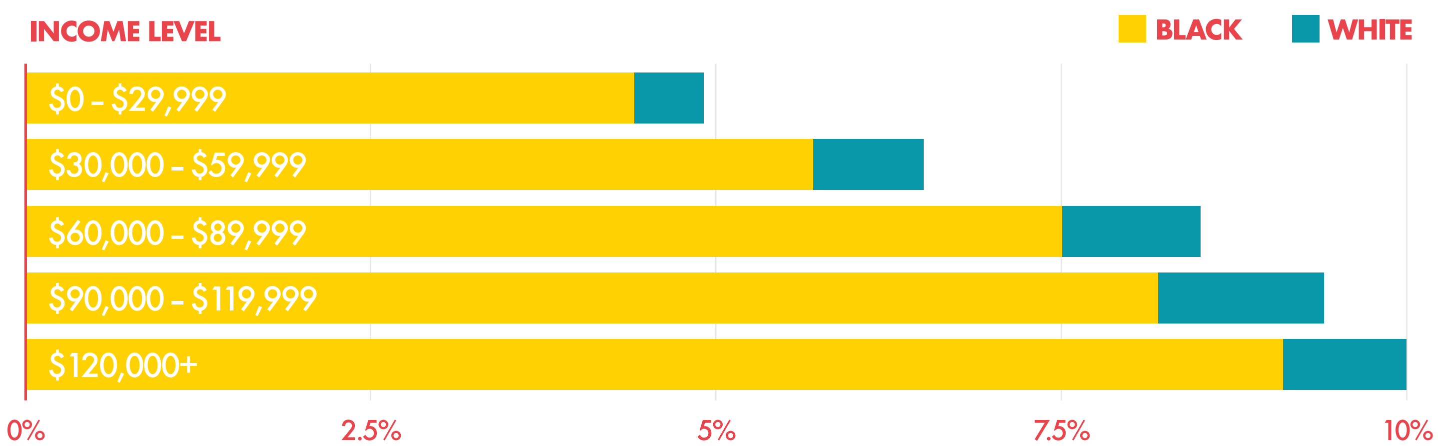
### Be patient with your retirement account.

You're in it for the long haul, so your focus should be on long-term growth. Try not to see your 401(k) as a liquid asset, and minimize withdrawals and loans from it.

## Hardship Withdrawals by Income and Race[217]




## Employee Contribution Rate by Income and Race[218]



Around 55% of White households have four or more distinct asset types, whereas only 21% of Black families can say the same.[219] Even for wealthier Black people, real estate investments—a traditionally conservative investment that grows more steadily than other options—account for a greater share of their total assets.[220] Scholars posit that Black Americans prefer more conservative investments because of distrust in financial institutions due to historical discrimination, examples of which are presented throughout this paper.

Secondly, Black families often live in more volatile financial situations, which might increase the appeal of more consistent yet lower returns. In fact, Black Americans are more likely to fall out of wealth than White Americans: only 24% of Black people in the top quartile in 1984 remained there 20 years later, compared to 60% for White people.[221] This finding demonstrates that much of the racial wealth

## Investment Asset Allocation by Race[222]

| | BLACK | WHITE | RATE OF RETURN[223] |
|---|---|---|---|
| Certificates of Deposit | 28.1% | 10.0% | 3.68% |
| Mutual Funds (70% stock, 30% bonds) | 9.4% | 37.5% | 8.4% |
| Stocks | 31.2% | 35.0% | 9.5% |
| Bonds | 0% | 12.5% | 5.6% |
| Savings Bonds | 6.3% | 0% | 3.6% |
| Cash Value of Life Insurance | 25.0% | 5.0% | 3.0% |

## INVESTING

**75%**

75% of Black families have less than $10,000 saved for retirement.

**7X**

White households have seven times the retirement savings of a typical Black household.

**34%**

Only 34% of Black households have a retirement account, compared to 60% of White households.

**21%**

Around 55% of White households have four or more distinct asset types, compared to only 21% of Black families.

> Only 24% of Black people in the top quartile in 1984 remained there 20 years later, compared to 60% for White people.

gap operates institutionally, even affecting elements that appear entirely based on choice, such as asset allocation. Without higher incomes or greater family wealth, it's often difficult to grow a diversified portfolio. Similarly, investing in high-risk, high-growth instruments proves too dangerous because poorer families need liquid assets and cannot afford volatile price changes. However, this conservative investing strategy—assuming they can afford to invest anything at all—is quite weak in the long-term, as returns are generally lower.

While there are clearly notable disparities in private retirement plans, Social Security serves as a great equalizer. The typical Black household has only 14% of the private retirement wealth of a White household, but Social Security brings that number up to 46%.[224] Although not entirely eliminated, this difference indicates that the racial wealth gap can be significantly diminished by deliberately strengthening public policies such as Social Security. Like every other financial assumption analyzed thus far, disparities in investing impact the other components of each family's financial plan to a substantial degree. In thinking about what is left for the next generation, it seems clear that from the womb to the grave, the educational, social, and financial experiences of a Black family will cause there to be a substantially lower transfer of intergenerational wealth.

## Financial Advice

### Be more aggressive with your investments, especially in your younger years.

Put more into the stock and bond markets, and less into residential real estate, annuities or permanent life insurance, or cash and money market funds.

A prudently diversified investment strategy emphasizing owning companies (stocks) and investment real estate (REITs) generates significantly higher returns over a long period of time. Although short-term declines will be inevitable, you'll likely be in a much better financial position come retirement with a more growth-oriented portfolio, considering the substantially higher long-term expected rates of return.

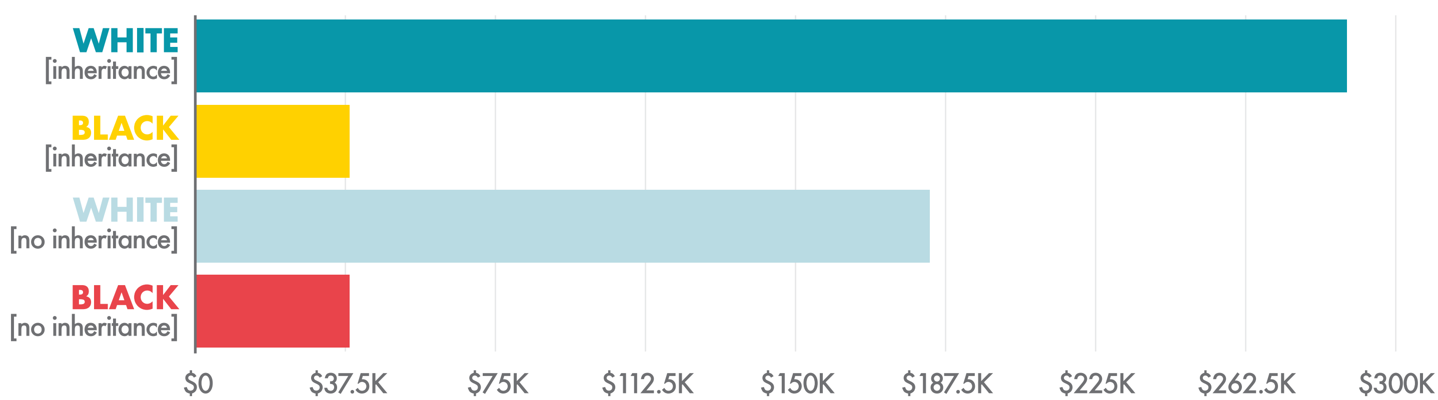
# Inheritance

This paper's predominant finding is that historical barriers to the wealth-building process continue to impact Black families today and will reproduce similar racial wealth gaps 50 years from now. As many academics and journalists have written, one of the key drivers of this disparity is the difference in intergenerational wealth transfers. Americans inherited approximately $765 billion in gifts and bequests in 2020.[225] Black households received a disproportionately small portion of that total sum, perpetuating the legacy of the past as we project their financial conditions into the future. The end of institutionalized racial discrimination supposedly leveled the playing field, but in part because family wealth accumulates over generations, the damage was already done. Those many inequities, most of which are identified throughout this paper and almost all of which persist today, emerged before either the Joneses or Williamses were even born. Regardless of the decisions and achievements of our two composite families, government policies affecting their forebears continue to powerfully shape financial outcomes in the present and well into the future.

Indicative of this history, Black families are significantly less likely to receive an inheritance, and when they do, it is much smaller. According to research published by the Federal Reserve, 23% of White families—and 9% of Black families—report receiving an inheritance.[226] The median value of an inheritance if one receives one—$56,217 for White households and $38,224 for Black households[227]—has been adjusted based on the probability of receiving a bequest. Accordingly, Michael and Ashley inherit a probability-weighted $3,440, while the Williams household receives $12,930.[228] Based on life expectancies of their parents' generation, the Joneses receive their inheritance at age 51, compared to 53 for Emily and Chris. These numbers are consistent with data on the mean age of mothers[229] and estimated life expectancy in 1990,[230] the birth year for all members of the Jones and Williams families. The financial plans project that these inheritance inequities, entirely produced by outcomes in previous generations, in isolation still result in a net worth difference of $30,407.[231]

For each inherited dollar, White families grow 91 cents of wealth, while Black households see gains of 20 cents.[233] Similar to disparities in 401(k) hardship withdrawals or wealth growth on each dollar of increased income, Black families must often prioritize meeting everyday needs over long-term investments,

## Median Family Wealth by Race and Inheritance[232]



which prevents higher wealth creation. By beginning with fewer assets in every generation, median Black households repeatedly start from behind, and any comparative gains are offset by this pre-established advantage.

A 27-year longitudinal study found that White inheritors increased their wealth by $282,000 over the period of the study compared to increases of $72,000 for White non-inheritors.[234] On the other hand, Black inheritors grew their wealth by $20,000, and Black non-inheritors saw gains of only $12,000. The purely financial effects of family wealth, excluding the educational and social benefits it confers, extend well beyond estate transfers alone. White households are 4.5 times as likely as their Black counterparts to receive a large sum of money from a living family member, a phenomenon known as an in vivo transfer.[235] These gifts, which include the funding of a college education or assistance with the down payment on a home, allow for the preservation of family wealth, contributing meaningfully to the racial wealth gap.

Whereas White households often expect financial help from their parents, moderately successful Black households are more likely to provide informal financial assistance to their parents and other less affluent members of their families and community. Extensive kin networks of mutual support are particularly common in Black communities. These structures of financial reciprocity prove economically beneficial for poorer Black families, but actually expand the racial wealth divide for households with higher income. Qualitative research suggests that middle and upper-income Black households place greater value on assisting their community, feeling an obligation to support those without the same level of financial success. As middle-class Black Americans are more than twice as likely to have a poor sibling[236] and 4.5 times more likely to have parents living below the poverty line,[237] differing rates of informal financial assistance seem probable. In fact, Black households annually earning between $100,000 and $150,000 provided informal financial assistance in a given year at more than double the rate of their White peers.[238] Although the effect on wealth is not particularly well-documented yet, the opportunity cost of this financial support is quite high, as that money could otherwise be saved or invested for future growth. While there are clearly emotional and social benefits of providing assistance to kin, it is important to recognize this phenomenon as a contributor to the persistence of the racial wealth gap.

> **Black households annually earning between $100,000 and $150,000 provided informal financial assistance in a given year at more than double the rate of their White peers.**

## INHERITANCE

**$1**

**For each inherited dollar, White families grow 91 cents of wealth, while Black households see gains of 20 cents.**

**4.5X**

**White households are 4.5 times as likely as their Black counterparts to receive a large sum of money from a living family member.**

# Conclusion

The year is 2070. A few months after celebrating her 80th birthday with lifelong friends and family, Ashley Jones has passed away. Her husband, Michael, had died 5 years earlier.[239] Ashley lived life to its fullest, taking advantage of every opportunity thrown her way. Despite the many difficulties she and her husband faced, their story is one of perseverance and success. They managed to finance a college education, to purchase a home, to grow their own business, all the while grappling with what it means to be Black in the United States. Although some like to believe we live in an era of colorblindness in which race no longer matters as it once did, the lived experiences of most Black Americans prove otherwise. From the school-to-prison pipeline, to workplace discrimination, to housing, investing, and taxation, the financial headwinds experienced by Black people are fundamentally different than those of White people.

It is undeniable that this country has seen tremendous progress in decreasing overt expressions of racism. Still, institutional disadvantages continue to impact Black Americans in nearly every realm of their financial lives. Importantly, systemic racism is not the product of the explicit bias of particular individuals; rather, it is the product of historic policies that impaired the social progress of Black communities, leaving them with no means of catching up. Although most of those policies reside firmly in the past, their many consequences do not. The racial wealth gap is inextricably tied to the legacy of slavery, a legacy whose roots run deeper than we might care to admit. That legacy is interwoven into the economic fabric of the United States, and that legacy continues to be passed down from each generation to the next. As slavery and Jim Crow discrimination erased Black wealth, their consequences and present-day differences in median financial planning assumptions still prevent typical Black families from acquiring the same degree of wealth as typical White families, even with identical educational and professional accomplishments.

> **In 2064, the Williamses will possess $2,782,727 in wealth, 3.5 times greater than the Joneses' net worth of $789,164.**

We have already seen the net wealth differences produced by each minor disparity in the two families' financial plans. But what is the cumulative future effect of present-day racial inequities? In 2064, the probability-weighted Williamses will possess $2,782,727 in wealth, 3.5 times greater than the Joneses' net worth of $789,164. The Survey of Consumer Finances, conducted by the Federal Reserve, reveals an equal factor of 3.5 for similarly aged Black and White households in the present. Barring new legislation and policy change, the wealth gap between median Black and White households will remain enormous. The differences in income, spending, and retirement investments—adjusted together in the financial planning software—constitute the vast majority of the gap. Moreover, while these projections offer a reasonably accurate estimate of future wealth, they assume that everything goes right. Both families' financial lives went exactly as planned, free from ordinary hiccups like medical emergencies or temporary unemployment. For most families, frankly, that isn't the case. Financial surprises are nearly inevitable, and they occur at higher frequency and impact Black Americans to a greater degree, as Black Americans are more likely to experience temporary unemployment, incarceration, illnesses, etc. Often lacking the necessary resources to cope with the financial distress produced by these difficulties, typical Black families will fall even further behind than the aforementioned projections forecast. Moreover, our probability-weighted model looks at each major component of personal finances, but many of these elements—such as home and business ownership, inheritances, and retirement accounts—are often structurally inaccessible for Black families. That said, this study discovers that Black families can significantly improve their financial outcomes by working with CFP® professionals to both contribute more, and increase the long-term returns of retirement accounts and other investments. Without this above-and-beyond financial effort, our findings suggest the wealth gap will remain approximately equal—if not greater—in magnitude 50 years from the time of this writing.

> Black families can significantly improve their financial outcomes by working with CFP® professionals to both contribute more, and increase the long-term returns of retirement accounts and other investments.

While this paper doesn't necessarily endorse any particular legislative solutions, many academic experts on racial economic inequality have designed policies that directly target the racial wealth gap. From better enforcement of anti-discrimination legislation to investing in Black communities and businesses to baby bonds,[240] from a universal basic income (which would disproportionately help Black Americans) and even to direct reparations,[241] scholars and politicians have proposed a variety of policies varying in both scope and efficacy. Just as the racial wealth gap arose from deliberate government policies aiming to uphold racial segregation, so too deliberate government policies can facilitate the economic development of Black America, as they did for White America in the 19th and 20th centuries.

Still, individuals and CFP® professionals retain significant control over long-term finances, and prudent financial and asset allocation decisions can narrow the racial wealth gap considerably. Will the next 50 years preserve the racial wealth gap as these financial plans project, or will we finally bring the racial economic divide to its knees, fulfilling the dream of equality of opportunity established in this country's founding values? That is up to all of us as a society to decide.

# For Practioners

As CFP® professionals, we believe the financial services industry can and should play a key role in solving the racial wealth gap. Below, CFP® professionals can find several material strategies to improve wealth outcomes in communities of color. Not only is it the right thing to do, but it would also significantly increase revenue throughout the financial sector. In fact, if Black clients accessed financial products at the same rate as White clients, even with the wealth gap intact, the financial sector could earn approximately $2 billion in greater revenue annually.[242] If the racial wealth gap were also closed—a marker of true financial inclusion—financial institutions would earn $60 billion in additional revenue annually.

In order to actively repair trust in financial institutions, firms need to deliberately increase inclusion, both in new hires and in client diversity. The financial sector has a long way to go in this regard; a 2019 report by the CFP board found that only 1.5% of CERTIFIED FINANCIAL PLANNERS™ are Black.[243] The same report expressed that workplace diversity—when bolstered by a culture of inclusion—brings a host of material benefits, including greater revenues, better employee satisfaction and retainment, and better treatment of a wider range of clients. On the client side, one major barrier to accessing wealth management services for people of color is the minimum asset requirement at many firms. As this paper demonstrates, the racial wealth divide is enormous, thereby limiting the ability of Black households to receive financial planning services and advice, which in turn entrenches the racial wealth gap. In order to actively include poorer people of color, often in need of financial advice, firms can lower minimum AUM requirements, adopt retainer or project-based fee structures, and increase sliding scale or pro bono work.

When you interact with Black clients, make sure to be respectful of a family's values, even if they might weaken financial outcomes. For instance, some Black families place great value on tithing. To maintain a positive and ongoing client relationship—necessary to build trust with Black communities more broadly—you need to be understanding of this choice and others like it. Clearly many elements of the racial wealth gap operate in areas beyond the influence of CFP® professionals. Much of the racial wealth divide is institutional, but that doesn't mean we can't make a difference. Even if CFP® professionals can't close the racial income gap or eliminate discrimination, we can still collectively produce a big impact. In addition to the consequential guidance already shared, ranging from choice of major to avoiding expensive banking and credit, we can advise our Black clients to adopt more growth-oriented asset allocations, start saving early for their children's education, and fund retirement accounts at higher rates.

## Rebuilding Trust

While not a universal experience, Black communities report higher levels of distrust of both financial and medical professionals, often due to poor previous experiences with those professionals. This distrust influences wealth accumulation; one third of unbanked Black households isolate distrust of banks as a reason behind their unbanked status.[244] Moreover, distrust worsens health outcomes. For instance, recently published research suggests that structural discrimination in healthcare, followed by distrust and a "reluctance to engage" with medical professionals, intensifies racial disparities in HIV prevention and treatment.[245] Still, this distrust isn't wholly unwarranted, considering the historical discrimination perpetrated by mainstream financial and medical institutions. Moreover, an August 2020 study reveals that when cared for by a White doctor, Black newborns are three times more likely than White newborns to die.[246] In fact, the mortality rate of Black newborns is halved when looked after by a Black doctor. Meanwhile, a doctor's race is statistically irrelevant in the survival outcomes of White newborns. By actively seeking inclusion and reducing disparities in healthcare and the financial services industry, this trust can be rebuilt, significantly improving both health and wealth outcomes in communities of color.

# About the Authors

## Brent Kessel, CFP®

Brent Kessel is the co-founder and CEO of Abacus Wealth Partners, a multi-billion dollar financial advisory firm whose mission is to expand what's possible with money. Brent was born and raised in apartheid South Africa and has been passionate about racial justice ever since. Abacus' 40+ advisors help clients define their most important social values and financial goals, then manage all aspects of their financial lives in service of both. Abacus has been a dedicated impact investment advisor for over 20 years, and aims to become one of the most diverse and inclusive independent financial advisory companies in the U.S. Brent has taught impact investing at MIT and has been featured on the front page of the Wall Street Journal and the cover of Yoga Journal. His book, *It's Not About the Money*, was named one of the top five business books of the year by Kiplinger's Personal Finance Magazine.

## Kamila Elliott, CFP®

Kamila is the President of GRID 202 Partners, a financial planning firm with locations in Washington, DC and North Carolina. She has nearly two decades of financial planning and investment experience assisting high net worth individuals, endowments, foundations, and business owners with comprehensive wealth solutions and holistic planning. Kamila is on the CFP Board of Directors, the policymaking and oversight body of Certified Financial Planners for over 88,000 professionals in the U.S. She serves on the Investment Committee for Women Against Abuse Inc. in Philadelphia, PA and is on the Board of Directors for the Junior League of Charlotte, Inc. She is a CERTIFIED FINANCIAL PLANNER™ and holds licenses for Life, Health, and Long-Term Care Insurance.

## with Ako Ndefo-Haven

Originally from Los Angeles, Ako is a student at Yale University where he studies history and political science. At Yale, Ako serves as an editor on the managing board of the Yale Daily News, is involved in several political organizations, and loves to participate in intramural sports. After graduating, Ako plans to attend law school and pursue a career in litigation or transactional law. In his free time, Ako enjoys playing chess and pick-up basketball.

# Appendix: Calculations & Methods

## General

**Footnote 9** — The probability-weighted model employed as the primary means of comparison in this paper reduces the values of each assumption based on its probability. For instance, because only 34% of Black households have a retirement account, the median 401(k) balance at age 30 has been multiplied by 34%. While this model evaluates the contribution of each assumption, it also understates the scope of the wealth gap because the difference between having a retirement account and not—or owning a home and not—is more significant than the initial value associated with it. To capture the relative impact of each financial assumption, we adjusted the given variable individually, while leaving all else constant. However, as financial assumptions are naturally interconnected, these adjustments were performed holistically, which necessitated some collective adjustments. For instance, increasing expenses before increasing income is nonsensical, so the adjustment to income must precede adjustments to expenses or savings rates. Similarly, those that can be adjusted individually—such as homeownership—must follow the interrelated components, otherwise they wouldn't make much sense either (e.g. the Joneses would be unable to purchase a more expensive home without increased income beforehand). Here is the full list of financial planning variables includes an asterisk (*) next to the interconnected assumptions that were adjusted first and together.

| | JONES | WILLIAMS |
|---|---|---|
| Age | 30 | 30 |
| Income* | $53,730 | $77,803 |
| Income Growth (age 30-54), including inflation* | 3.81% | 4.05% |
| Income Growth (age 55-65), including inflation* | 1.21% | 1.89% |
| Student Loan Balance* | $12,168 | $11,520 |
| Student Loan Interest* | 6.0% | 5.7% |
| Student Loan Repayment Period | 20 years | 20 years |
| Business Equity | $351 | $1,906 |
| Business Growth | 7.0% | 8.6% |
| Home Purchase Price | $84,700 | $184,250 |
| Down Payment | 5% | 15% |
| Amount Borrowed | $80,465 | $156,613 |
| Mortgage Interest Rate | 4.24% | 3.94% |
| Mortgage Term | 30 years | 30 years |
| Home Appreciation Rate | 2.41% | 3.07% |
| Property Taxes | $1,059 | $2,303 |
| 401(k) Balance* | $18,404 | $56,522 |
| 401(k) Contributions* | 5.7% | 8.5% |
| 401(k) Employer Match | 4.70% | 4.70% |
| 401(k) Growth Rate* | 8.00% | 8.15% |
| Non-Retirement Investments Growth Rate | 5.77% | 7.70% |
| Annual Expenses* | $41,984 | $49,689 |
| Expenses in Semi-Retirement* | $37,916 | $44,874 |
| Expenses in Retirement* | $31,629 | $37,434 |
| Charitable Contributions* | $766 | $1,021 |
| Inheritance | $6,800 | $25,860 |
| Inheritance Age | 51 | 53 |
| Annual Inflation | 3% | 3% |
| Life Expectancy | Male: 75. Female: 80 | Male: 78. Female: 82 |

## Education

**Footnote 20** — This study from the Federal Reserve Bank of St. Louis confirms that college provides an income premium of one million dollars for both Black and White workers. Working from the age of 23 to 64, this income premium is distributed over 41 years. As the net price of a college education (i.e. with average financial aid) averages at $72,160 (see footnote 19), the annualized return on investment can be calculated by dividing the income premium by the cost. That is, the annualized return on investment is calculated by the following equation: $\sqrt[41]{(\$1{,}000{,}000 \div \$72{,}160}$ = 1.066, or 6.6%.

**Footnote 23** — To calculate the probability-weighted student loan balances, we multiplied the average student loan balance by the probability of completing college. According to a Brookings report (footnote 22), the average Black college graduate owes $23,400 upon graduation, whereas the average White college graduate owes $16,000. Doubling these numbers to account for the two graduates in each household produces balances of $46,800 for the Joneses and $32,000 for the Williamses. Multiplying these values by college completion rates (26% and 36%, respectively) yields the starting balances of $12,168 and $11,520. Because this method ignores college dropouts who have some student debt, it understates the magnitude of debt disparities.

**Footnote 31** — To calculate probability-weighted education by income, we used Census data on household income by education. We only looked at high school graduates and those with bachelor's degrees and beyond, which slightly simplifies the overall picture but provides a solid estimate. The median household income for 25-34 year old college-educated Black households is $80,003, whereas a high school education results in annual earnings of $44,500. The following equation calculates the probability-weighted Black household income: ($80,003 × 26%) + ($44,500 × (100% – 26%)) = $53,730. A 25-34 year old college-educated White household earns $105,000, whereas the median household income for White high school graduates is $62,505. As White household income is higher at both education levels, those values produce a higher probability-weighted income as well: ($105,000 × 36%) + ($62,505 × (100% – 36%)) = $77,803.

**Footnote 58** — Using income by major data from the Georgetown Center on Education and the Workforce report, we calculated approximate career earnings by field of study and degree type (bachelor's vs. graduate degrees). We assumed a career for a bachelor's degree earner is 23-65 and 26-65 for a graduate degree earner. Additionally, we used median income values (in 2013 dollars) for the age range of 21-24 for ages 23-24 and the median values for the age range of 25-59 for ages 25-65 to approximate wage increases over the course of a life. We used a single income value for the entire age range of 25-65, which operates as a decent estimation considering the lower annual salary in a worker's early career is offset by the annual salary greater than the median at the end of their career. For STEM, income is $43,000 from 23-24 and $76,000 from 25 to 65. Therefore, ($43,000 × 2) + ($76,000 × 41) = $3,202,000. Importantly, our calculation is inclusive of year 65, which is why we multiplied the greater income figure by 41 rather than 40. Additionally, for graduate earnings, we applied the "graduate degree wage premium" isolated by the report for each field of study to the income values from 26 to 65 (excluding all income from years 23 to 25 under the assumption that this period is used for the graduate degree). Averaging the graduate degree premiums for biology and life sciences (63.3%); physical sciences (50.0%); health (29.2%); computers, statistics, and mathematics (25.6%); and architecture and engineering (25.0%) yields a total STEM graduate premium of 38.62%. Therefore, the estimated STEM graduate degree career earnings are ($76,000 × 40) × (1 + 38.62%) = $4,214,048. For liberal arts and humanities, income is $29,000 from 23-24 and $51,000 from 25 to 65, and the graduate degree wage premium is 34.2%. Therefore, the same calculation as above yields values of ($29,000 × 2) + ($51,000 × 41) = $2,149,000 and ($51,000 × 40) × (1 + 34.2%) = $2,737,680. For the social sciences, income is $33,000 from 23-24 and $60,000 from 25-65, and the graduate degree wage premium is 44.6%. Therefore, career earnings by degree type are ($33,000 × 2) + ($60,000 × 41) = $2,526,000 and ($60,000 × 40) × (1 + 44.6%) = $3,470,400, respectively. For education, median income is $30,000 from 23-24 and $46,000 from 25-65, and the graduate degree wage premium (from the category "teaching and serving") is 33.3%. Therefore, career earnings are ($30,000 × 2) + ($46,000 × 41) = $1,946,000 and ($46,000 × 40) × (1 + 33.3%) = $2,452,720. Lastly, for business degrees, median income is $37,000 for 23-24 and $65,000 for 25-65, and the graduate wage premium is also 33.3%. Thus, business degree career earnings are ($37,000 × 2) + ($65,000 × 41) = $2,739,000 and ($65,000 × 40) × (1 + 33.3%) = $3,465,800.

## Employment

**Footnote 78** — As wages grow over the course of a lifetime, our assumptions seek to accurately model these increases. Using Census data that tracks median household income by race, age, and educational attainment, we created probability-weighted incomes, in present dollars, for age 30, ages 45-54, and ages 60-64. Age 30 figures, as previously established, are $53,731 for the Joneses and $77,803 for the Williamses. By taking Census income and educational data for 45-54-year-olds—multiplied by the probabilities of having graduated college—we come up with probability-weighted incomes at age 45-54 of $63,118 and $95,942, respectively. At 60-64, that decreases to $50,839 and $83,896. We calculated the Joneses' 30-54 annual growth rate with the following formula: $\sqrt[20]{(\$63{,}118 \div \$53{,}731} - 1 + 3\% = 3.81\%$, adding 3% to account for inflation. For the Williamses, $\sqrt[20]{(\$95{,}942 \div \$77{,}803} - 1 + 3\% = 4.05\%$. From ages 45-54 to ages 60-64, these calculations become $\sqrt[12]{(\$50{,}839 \div \$63{,}118} - 1 + 3\% = 1.21\%$ and $\sqrt[12]{(\$83{,}896 \div \$95{,}942} - 1 + 3\% = 1.89\%$, respectively. For context, we took the 20th root and the 12th root to calculate from the middle of each age period, i.e. age 30 to age 50 and age 50 to age 62.

**Footnote 93** — If the median earnings lost during imprisonment—$34,925—were invested instead, they would reach a sum of $198,780 by retirement. As the median prisoner is 34 years old, these investments compound over the 31 years from 34 to 65. We used the annual growth rate of a typical Black asset portfolio, 5.77%, for this calculation (see the appendix section on investing for the calculations behind this growth rate). ($\$34{,}925 \times 1.0577^{31} = \$198{,}780$). To determine the probability-weighted loss, we divide this figure by 3, or $66,260 (one out of three Black men serve time in prison, see footnote 94).

## Housing

**Footnote 110** — Zillow data suggests the median home purchase price in the U.S. is $250,000 at the time of this writing. As the Brookings report cited in footnote 109 suggests, Black-owned homes are worth 23% less than similar White-owned homes, the non-adjusted Black value becomes $192,500 ($250,000 × 77% = $192,500). As the White homeownership rate is 73.7%, the probability-adjusted purchase price for the Williamses is $184,250 ($250,000 × 73.7% = $184,250). With a significantly lower Black homeownership rate of 44%, the Joneses' probability-adjusted purchase price is $84,700 ($192,500 × 44% = $84,700).

**Footnote 135** — Using data from the American Housing Survey conducted by the U.S. Census Bureau, we determined median home appreciation rates by race. In 2004, the White purchase price was $135,000, while the Black purchase price was $110,000. In 2017, the median White home value was $200,000, and the median Black home value was $150,000. These 13 years of compounded returns yield appreciation rates of 3.07% ($\sqrt[13]{\$200{,}00 \div \$135{,}000} - 1 = 3.07\%$) and 2.41% ($\sqrt[13]{\$150{,}00 \div \$110{,}000} - 1 = 2.41\%$).

## Spending

**Footnote 147** — Beginning with the Joneses' annual expenses, the third income quintile of Consumer Expenditure Survey data has an average income of $54,900, quite close to the Jones household income of $53,730. At this income quintile, average annual expenditures are $51,729. In order to not double count mortgages, property taxes, retirement account contributions, and charitable spending—all of which are calculated separately in our financial planning software—we've removed these figures from living expenses. After subtracting these values—a total of $8,831—we're left with average annual expenses of $42,898. This produces an expense-to-income ratio of $42,898 ÷ $54,900 = 73.138%, which in turn multiplied by the Joneses' income of $53,730 becomes $41,984. For the Williams household income of $77,803, the closest average income is $79,250, present in the seventh income decile of CES data. At this income, average annual expenditures are $64,029. Average mortgage payments, property taxes, retirement account contributions, and charitable spending sum to $13,416. Removing these results in adjusted average annual expenses of $50,613. This produces an expense-to-income ratio of $50,613 ÷ $79,250 = 63.865%, which in turn multiplied by the Williamses' income of $77,803 becomes $49,689.

**Footnote 149** — To determine how expenses decrease later in life, we've used CES data with age as the reference. At ages 45-44, average expenses are $75,387, which—after removing mortgage and property tax payments, retirement account contributions, and charitable donations—becomes $56,612. At ages 55-64, average expenses are $66,212, which falls to $51,129 after removing the necessary categories. Therefore, expenses drop by 1 – ($51,129 ÷ $56,612) = 9.69% from ages 45-54 to ages 55-64, a decrease we've applied to our composite families' semi-retirement expenses. From ages 55-64 to ages 65+, expenses drop by another 16.58% which we've reduced from our two families' retirement expenses. Additionally, a note on charitable donations: the Consumer Expenditure Survey includes a section on cash contributions, 59% of which are charitable and tax-deductible, according to this analysis. Accordingly, we've deducted the product of 59% and the cash contributions along with mortgage, property tax, and retirement account payments to not double count in our financial planning software.

## Business

**Footnote 186** — We've used the previously cited business growth rates by race and median business equity, according to the 2016 Survey of Consumer Finances, to identify the amount of business equity at age 30. The Survey of Consumer Finances indicates that median business equity for White business-owning households is $100,000, while the median Black household with a business has just $27,200 in business equity. As the same data suggests business equity peaks at age 55, we worked backwards using business growth rates to find the values at age 30, reversing 25 years of compounded growth. Black businesses grow at a rate of 7.0% annually (footnote 187), whereas White-owned businesses have growth rates of 8.6% (footnote 188). Additionally, only 7% of Black households own business equity, whereas 15% of White households own business equity, which we've included in our probability-weighted analysis. Therefore, the Joneses possess $27,200 ÷ ( $1.07^{25}$ ) × 7% = $351 and the Williamses own $100,00 ÷ ( $1.086^{25}$ ) × 15% = $1,906 in business equity.

## Investments

Footnote 212 — These values were calculated by evaluating the returns of each asset class and the asset mix of a typical Black or White household. The table below displays the non-401(k) asset mix of each race, according to a study conducted by Credit Suisse.[247]

As "other managed assets" and "other financial assets" are unclear categories, retirement accounts are already accounted for in this analysis, and transaction accounts aren't growth vehicles, our reweighting of the remaining categories to find the investment return rate is displayed in the second table.

| Table 1 | BLACK | WHITE |
|---|---|---|
| Transaction Accounts | 14% | 13% |
| Certificates of Deposit (CDs) | 9% | 4% |
| Mutual Funds | 3% | 15% |
| Stocks | 10% | 14% |
| Bonds | 0% | 5% |
| Retirement Accounts | 47% | 38% |
| Savings Bonds | 2% | 0% |
| Cash Value of Life Insurance | 8% | 2% |
| Other Managed Assets | 2% | 6% |
| Other Financial Assets | 5% | 2% |

| Table 2 | BLACK | WHITE |
|---|---|---|
| Certificates of Deposit (CDs) | 28.1% | 10.0% |
| Mutual Funds | 9.4% | 37.5% |
| Stocks | 31.2% | 35.0% |
| Bonds | 0% | 12.5% |
| Savings Bonds | 6.3% | 0% |
| Cash Value of Life Insurance | 25.0% | 5.0% |

**Footnote 213** — In estimating rates of return, many CERTIFIED FINANCIAL PLANNER™ practitioners use capital markets expectations to project forward. Given the imprecision and subjectivity involved in such an exercise, we chose instead to use historical returns from the longest data series we could find from the mostly closely-related index for each asset class. We also used 3.0% inflation on all expenses (except property taxes) which corresponds to historical CPI even though today's inflation and interest rates are markedly lower. We used a 3.68% return rate for CDs,[248] 9.54% for stocks,[249] 5.62% for bonds,[250] 3.55% for savings bonds,[251] and 3% for the cash value of life insurance.[252] We used a 70% stock, 30% bond mix for the mutual fund category because 70% of total U.S. mutual fund assets are in stocks and around 30% are in bonds, after excluding money market funds.[253] This allocation yields a return rate of 8.36%: the stock return rate of 9.54% multiplied by 70%, added to the bond return rate of 5.62% multiplied by 30% gives us a mutual fund return rate of 8.364%, rounded to 8.36% in our financial assumptions. To approximate the fees and expenses associated with investing, we subtracted 1% from the stock returns and 0.5% from bond returns. Employing the Excel sumproduct function with the percent of total assets in each class by the historical returns of each respective asset class, we determined the returns of 5.77% and 7.70%. To calculate the returns of the retirement account, we used the same method, but with a different asset mix. According to a study jointly conducted by Ariel Investments and Aon Hewitt, a typical Black-owned 401(k) is 68% stocks, 21% bonds, and 11% money market funds, whereas a typical White-owned 401(k) sees an allocation of 71% stocks, 19% bonds, and 10% in money market funds.[254] Taking the sumproduct once again, with returns of 9.54% for stocks, 5.62% for bonds, and 3.05% for money market funds,[255] yields annual retirement account returns of 8.00% for the Joneses and 8.15% for the Williams family.

**Footnote 214** — As the financial planning projections begin at age 30 but each household began work at age 23, they have 7 years of retirement account contributions and compounded returns that we must include. Using median household income data from the Census, we calculated the compounded balance by age 30 with a spreadsheet that tracks age, account balance, income, employer and employee contributions, and ending balance for each year. Each row of the spreadsheet adds the growth of that given year, including the contribution from that year. The starting balance in the following row takes the ending balance of the previous row (year). Expressed as a formula, each row displays $(P + C) \times (1 + r)$, where P is the balance from the previous year, C is that year's contribution, and r is the annual growth rate (8.00% for the Joneses, 8.15% for the Williamses). The Jones family's contribution rate is 10.4% (including both employee and employer contribution), and 13.2% for the Williams household. Income at 23 for each family, according to Census data, is $51,443 and $76,640, ultimately reaching $53,730 and $77,803 by age 30. Therefore, income and annual contributions grow by 0.624% for the Joneses ($\sqrt[7]{\$53{,}731 \div \$51{,}443} - 1 = .0624\%$) over this period and 0.215% for the Williamses ($\sqrt[7]{\$77{,}803 \div \$76{,}640} - 1 = .0215\%$). Accordingly, the Black household has a balance of $52,431 at 30, whereas the White household has a significantly larger balance of $98,643. However, as only 34% of Black families have a retirement account, compared to 60% of White families, we've weighted the retirement account balances at age 30 by these probabilities. That is, the Joneses have $17,826 in their 401(k)s—$8,913 each—and the Williamses have $59,186, or $29,593 each. The tables below display the findings of the spreadsheet in greater detail.

| Jones Household 401(k) Balance At Age 30 – Annual Growth of 8.00% | | | | |
|---|---|---|---|---|
| Age | Starting Balance | Income | Contributions | Ending Balance |
| 23 | $0 | $51,443 | $5,350 | $5,778 |
| 24 | $5,778 | $51,764 | $5,383 | $12,054 |
| 25 | $12,054 | $52,087 | $5,417 | $18,869 |
| 26 | $18,869 | $52,411 | $5,451 | $26,266 |
| 27 | $26,266 | $52,738 | $5,485 | $34,290 |
| 28 | $34,290 | $53,067 | $5,519 | $42,994 |
| 29 | $42,994 | $53,398 | $5,553 | $52,431 |
| 30 | $52,431 | $53,731 | $5,588 | $62,661 |

| Williams Household 401(k) Balance At Age 30 – Annual Growth of 8.15% | | | | |
|---|---|---|---|---|
| Age | Starting Balance | Income | Contributions | Ending Balance |
| 23 | $0 | $76,640 | $10,116 | $10,941 |
| 24 | $10,941 | $76,805 | $10,138 | $22,797 |
| 25 | $22,797 | $76,971 | $10,160 | $35,643 |
| 26 | $35,643 | $77,136 | $10,182 | $49,560 |
| 27 | $49,560 | $77,302 | $10,204 | $64,635 |
| 28 | $64,635 | $77,469 | $10,226 | $80,962 |
| 29 | $80,962 | $77,636 | $10,248 | $98,643 |
| 30 | $98,643 | $77,803 | $10,270 | $117,790 |

## Inheritance

**Footnote 234** — As the age of inheritance is dependent on the death of one's parents, we've used the life expectancy of the previous generation to determine the appropriate age to receive an inheritance for this analysis. As the mean age of motherhood in 1990 was 27.1 for White mothers and 24.4 for Black mothers, we can determine the age of inheritance using the life expectancy of both Black and White females in 1990. For a White female around 20 years old in 1990, the life expectancy was 80.3, compared to 75.3 for a Black female. Subtracting the mean age of motherhood from the life expectancy provides an appropriate estimate of the age to receive an inheritance. $80.3 - 27.1 = 53.2 \approx 53$ for the Williamses and $75.3 - 24.4 = 50.9 \approx 51$ for the Joneses.

## Conclusion

**Footnote 243** — A 30-year-old Black male has a life expectancy of 74.5. A 30-year-old Black female has a life expectancy of 79.9. We rounded these values to 75 and 80 in the financial planning projections for the Jones family, which produces forecasted death years of 2065 and 2070. For the Williamses, on the other hand, a 30-year-old White male has a life expectancy of 77.9 while a 30-year-old White female has a life expectancy of 82.2. We rounded these figures to 78 and 82, which leads to death years of 2068 and 2072.

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[8]3% inflation compounded over 44 years. ($789,164) * (1.03^44) = $2,897,379 and ($2,782,727) * (1.03^44) = $10,216,650.

[9]See the appendix for a more detailed explanation of the probability-weighted model and the variable adjustment process.

[10]For instance, the Jones family would be unable to purchase a home of the same value as the Williams family at the Joneses' current income level. Therefore, identifying the magnitude of the homeownership gap requires adjustments to income, expenses, and savings beforehand.

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[164]Shapiro, Isaac, et al. "Poverty Reduction Programs Help Adults Lacking College Degrees the Most." *Center on Budget and Policy Priorities*, 16 Feb. 2017, cbpp.org/research/poverty-and-inequality/poverty-reduction-programs-help-adults-lacking-college-degrees-the.

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[173]Saez, Emmanuel, and Gabriel Zucman. *The Triumph of Injustice: How the Rich Dodge Taxes and How to Make Them Pay.* W.W. Norton & Company, 2019.

[174]Saez, Emmanuel, and Gabriel Zucman. "How to Tax Our Way Back to Justice." *The New York Times*, 11 Oct. 2019, nytimes.com/2019/10/11/opinion/sunday/wealth-income-tax-rate.html. Here's a great New York Times opinion piece written by the authors of The Triumph of Injustice that summarizes the main findings of the book.

[175]Since the simulator uses individual income, we've divided each household income by 2. For the Joneses, $53,730 / 2 = $26,865. For the Williamses, $77,803 / 2 = $38,902. We then looked at these values in the simulator (with "include health insurance in total taxes" not checked), the results of which follow in the text.

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[183]Perry, Andre M., et al. "Five-Star Reviews, One-Star Profits: The Devaluation of Businesses in Black Communities." *Brookings Institution*, 18 Feb. 2020, brookings.edu/research/five-star-reviews-one-star-profits-the-devaluation-of-businesses-in-Black-communities/. This report finds that 7% annual growth is the norm for both highly and lowly rated Black businesses.

[184]Everett, Craig. "Private Capital Access Index, First Quarter 2019." *Dun & Bradstreet*, Pepperdine Graziadio Business School Private Capital Markets Project, 2019, dnb.com/content/dam/english/economic-and-industry-insight/DNB_Q1_2019_PCA.pdf. Nationally, businesses anticipated revenue growth of 8.6% in 2019. As most businesses are owned by White individuals, we decided to use 8.6% as the growth figure for White households. Moreover, the Brookings report above corroborates this figure, insofar as highly rated White-owned businesses see annual growth between 8.5% and 9%.

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[202]Noel, Nick, et al. "The Economic Impact of Closing the Racial Wealth Gap." *McKinsey & Company*, McKinsey & Company, 13 Aug. 2019, mckinsey.com/industries/public-sector/our-insights/the-economic-impact-of-closing-the-racial-wealth-gap.

[203]Shapiro, Thomas. *Toxic Inequality: How America's Wealth Gap Destroys Mobility, Deepens the Racial Divide, and Threatens Our Future*, Basic Books, 2017.

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[206]"Fidelity® Q1 2019 Retirement Analysis: Account Balances Rebound from Dip in Q4, While Savings Rates Hit Record Levels." *Fidelity Investments*, Business Wire, 9 May 2019, businesswire.com/news/home/20190509005139/en/Fidelity%C2%AE-Q1-2019-Retirement-Analysis-Account-Balances.

# Appendix: Reference Notes

[207]Ariel Education Initiative. "401(k) Plans in Living Color." *Ariel Investments*, Aon Hewitt, 2012.

[208]See the appendix for an explanation of the calculations behind the retirement account growth rate.

[209]See the appendix for an explanation of the calculations behind these non-retirement account growth rates.

[210]See the appendix for an explanation of the calculation behind the starting account balance.

[211]Dettling, Lisa, et al. "Recent Trends in Wealth-Holding by Race and Ethnicity: Evidence from the Survey of Consumer Finances." *Board of Governors of the Federal Reserve System*, 27 Sept. 2017, federalreserve.gov/econres/notes/feds-notes/recent-trends-in-wealth-holding-by-race-and-ethnicity-evidence-from-the-survey-of-consumer-finances-20170927.htm. Most wealth research comes at the household level, but federal law requires tax-advantaged retirement accounts to be in only one person's name. Therefore, each family's balance would actually be composed of two separate accounts, but we've artificially combined them to operate on a household level. This method doesn't change any aspect of the financial planning results; it's purely a decision made for clarity's sake.

[212]After multiplying $52,431 and $98,643 by 34.0% and 60.0%, respectively, those values become $17,826 and $58,186. From this point onward, our projections act as if both families have retirement accounts and regularly contribute to them, which doesn't entirely correspond with the reality that most Black households don't have retirement accounts. As an effect, the Joneses will actually see greater wealth—due to their 401(k)—than a typical Black household. We've included it nonetheless to highlight the wealth difference caused by differing asset allocation and contribution rates.

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[214]Brevoort, Kenneth P., et al. "Data Point: Credit Invisibles." *CFPB Office of Research*, Consumer Financial Protection Bureau, May 2015, files.consumerfinance.gov/f/201505_cfpb_data-point-credit-invisibles.pdf. 15% of Blacks are credit invisible and 13% have unscored records. The same is true for 9% and 7% of Whites, respectively. (15+13) / (9+7) = (28/16) = 1.75, or 75% more likely.

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[222]Natella, Stefano, et al. "Wealth Patterns among the Top 5% of African-Americans." *Credit Suisse*, 2014. We took out retirement accounts, "other managed assets," and "other financial assets," as they can each have any rate of return, and reweighted the asset allocation with the remaining categories.

[223]Historical returns of each asset class, according to various stock and bond indices. See the appendix for a list of sources and greater explanation. Weighting these historical returns by the asset allocation of each race produces the 5.77% and 7.70% investment growth rate we used in our financial planning projections.

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[225]McIntosh, Kriston, et al. "Examining the Black-White Wealth Gap." *Brookings Institution*, Brookings Institution, 27 Feb. 2020, brookings.edu/blog/up-front/2020/02/27/examining-the-Black-White-wealth-gap/.

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[233]Shapiro, Thomas, et al. "The Roots of the Widening Racial Wealth Gap: Explaining the Black-White Economic Divide." *Institute on Assets and Social Policy*, The Heller School for Social Policy and Management at Brandeis University, Feb. 2013, heller.brandeis.edu/iasp/pdfs/racial-wealth-equity/racial-wealth-gap/roots-widening-racial-wealth-gap.pdf.

[234]Shapiro, Thomas. *Toxic Inequality: How America's Wealth Gap Destroys Mobility, Deepens the Racial Divide, and Threatens Our Future*, Basic Books, 2017.

[235]Shapiro, *Toxic Inequality*, 2017.

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[240]Several studies confirm that baby bonds would increase net worth for all groups and close at least part of the racial wealth gap, as poorer families—who would receive larger bonds—are disproportionately BIPOC. See *Can 'Baby Bonds' Eliminate the Racial Wealth Gap in Putative Post-Racial America?* by Darrick Hamilton and William A. Darity Jr. and *Universal Baby Bonds Reduce Black-White Wealth Inequality, Progressively Raise Net Worth of All Young Adults* by Naomi Zewde.

[241]See William A. Darity Jr. and A. Kirsten Mullen's 2020 book, *From Here to Equality: Reparations for Black Americans in the Twenty-First Century, for a great account of historic injustice and the role of reparations.* Darity is a professor of economics and public policy at Duke University, where he directs the Samuel DuBois Cook Center on Social Equity.

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[245]Bogart, Laura M., et al. "Medical Mistrust, Discrimination, and the Domestic HIV Epidemic." HIV in US Communities of Color, edited by Bisola O. Ojikutu and Valerie E. Stone, Springer, 2021, pp. 207–231, doi:10.1007/978-3-030-48744-7_12, link.springer.com/chapter/10.1007/978-3-030-48744-7_12.

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[248]Historical returns of CDs using as a proxy the Bloomberg Barclays U.S. Treasury Bond Index from 2/1/92 to 6/30/20.

[249]Russell 3000 Index total return from 1/1/87 to 12/31/19

[250]Bloomberg Barclays U.S. Aggregate Bond Index total return from 1/1/87 to 12/31/19.

[251]U.S. Treasury Bellwethers Bond Index from 04/05 to 06/20.

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