



CLOSING THE RACIAL INEQUALITY GAPS

The Economic Cost of Black Inequality in the U.S.

Citi GPS: Global Perspectives & Solutions

September 2020



Citi is one of the world's largest financial institutions, operating in all major established and emerging markets. Across these world markets, our employees conduct an ongoing multi-disciplinary conversation - accessing information, analyzing data, developing insights, and formulating advice. As our premier thought leadership product, Citi GPS is designed to help our readers navigate the global economy's most demanding challenges and to anticipate future themes and trends in a fast-changing and interconnected world. Citi GPS accesses the best elements of our global conversation and harvests the thought leadership of a wide range of senior professionals across our firm. This is not a research report and does not constitute advice on investments or a solicitations to buy or sell any financial instruments.

For more information on Citi GPS, please visit our website at www.citi.com/citigps.



Dana M Peterson Director, is a Global Economist with Citi Research. Her goal is to provide high value, accurate and timely analysis that informs Citi's top tier clients in their investment, risk, and business planning decisions. Dana has specific responsibility for identifying, analyzing, and publishing research papers on important global economic themes having direct financial market implications. Such global economic themes include, monetary policy, fiscal and trade policy, debt, taxation; ESG; and demographics. Dana also examines U.S. themes using granular data. Dana and her research have been featured by U.S. and international news outlets in print and on television, including the CNBC, Bloomberg, Thomson-Reuters, WSJ, the Financial Times (FT), Fox Business News Network, BNN-Bloomberg, Globe and Mail, CBC, and National Post.

Please note: This is the last report written by Dana Peterson in her role as Global Economist at Citi. We thank Dana for her insights and dedication to global thematic and in particular her work on this important Citi GPS report. We wish her all the best in her new role as Chief Economist at The Conference Board.



Catherine L Mann is the Global Chief Economist at Citigroup where she is responsible for thought leadership, research guidance of a global team of economists, and cross-fertilization of research across macroeconomics, fixed-income, and equities. Prior to this position, she was Chief Economist at the OECD, where she also was Director of the Economics Department and was Finance Deputy to the G20 (2014-2017). Prior to the OECD, she held the Barbara '54 and Richard M. Rosenberg Professor of Global Finance at the International Business School, Brandeis University, where she also directed the Rosenberg Institute of Global Finance (2006-2014). She spent 20-plus years in Washington, DC (1984-2006) where her positions included Senior Fellow at the Peter G. Peterson Institute for International Economics; Economist, Senior Economist, and Assistant Director in the International Finance Division at the Federal Reserve Board of Governors; Senior International Economist on the President's Council of Economic Advisers; and Adviser to the Chief Economist at the World Bank. Dr. Mann received her PhD in Economics from the Massachusetts Institute of Technology and her undergraduate degree is from Harvard University.

+1-212-816-6498 | catherine.mann@citi.com

CLOSING THE RACIAL INEQUALITY GAPS

The Economic Cost of Black Inequality in the U.S.



Raymond J McGuire
Vice Chairman, Citi
Chairman, Banking, Capital Markets,
Advisory

In his Letter from a Birmingham Jail, Dr. Martin Luther King Jr. wrote, “We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly.”

Today, more than at any time since Dr. King’s assassination, we are bearing witness to the grave injustices affecting our fellow citizens. Black, Latinx, and Native Americans have been hospitalized for COVID-19 at a disproportionately high rate, a direct result of what the Centers for Disease Control and Prevention has identified as “long-standing systemic health and social inequities.” Blacks and People of Color are also bearing a disproportionate share of the pandemic’s economic devastation. And the killings of Ahmaud Arbery, Breonna Taylor, and George Floyd have finally shaken the U.S. and the world awake to the egregious racial inequities in our criminal justice system.

As Dr. King noted, these injustices affect all of us. Higher rates of infection among some affect the health of all, and the loss of health, life, and livelihood among communities of color diminish everyone’s economic security. No one should want to live in a society that incarcerates or kills so many of its citizens just because they are black or brown.

The privileges we enjoy by working for Citi come with responsibilities. While elected officials and community activists must do their part, so must we. One important thing we can do is to show the costs of racial inequality through objective analysis which is what the authors of this report have sought so effectively to demonstrate. Our overarching goal for the Citi GPS series is not only to tackle the key opportunities and challenges of the 21st century, but also to address complex societal questions and to not shy away from difficult subjects. As such, we believe we have a responsibility to address current events and to frame them with an economic lens in order to highlight the real costs of longstanding discrimination against minority groups, especially against Black people and particularly in the U.S.

The analysis in the report that follows shows that if four key racial gaps for Blacks — wages, education, housing, and investment — were closed 20 years ago, \$16 trillion could have been added to the U.S. economy. And if the gaps are closed today, \$5 trillion can be added to U.S. GDP over the next five years.

I write this forward as Citi’s Vice Chairman and Chairman of our Global Banking, Capital Markets and Advisory business, but my journey began at the bottom. My two brothers and I were raised in Dayton, Ohio by our single mom and her parents, who had migrated from Georgia to escape the injustice and terror of Jim Crow. They worked tirelessly as janitors, social workers, and leaders at our local church to give us every opportunity. At any given time, we shared our home with five to eight foster siblings.

Yet even today, with all those credentials and as one of the leading executives on Wall Street, I am still seen first as a six-foot-four, two-hundred-pound Black man wherever I go — even in my own neighborhood. I could have been George Floyd. And my wife and I are constantly aware that our children could have their innocence snatched away from them at any given moment, simply for the perceived threat of their skin color. I hope that the analysis in this report brings sober perspective as well as hope to our readers as we collectively find substantive and sustainable opportunities to address the gaps we identify.

A Path Towards Equality

NOT ADDRESSING RACIAL GAPS BETWEEN BLACKS AND WHITES HAS COST THE U.S. ECONOMY UP TO **\$16 TRILLION** OVER THE PAST 20 YEARS



Closing the Black wage gap could have added **\$2.7 trillion in income** available for consumption or investment.



Facilitating easy access to higher education for Black students could have increased lifetime incomes **\$90-\$113 billion**.



Improving access to housing credit might have added an additional **770,000 Black homeowners**, adding **\$218 billion in sales** and expenditures.



Providing fair and equitable lending to Black entrepreneurs might have resulted in the creation of an additional **\$13 trillion** in business revenue and potentially created **6.1 million jobs** per year.

If these racial gaps were closed today, we could see **\$5 trillion** of additional GDP over the next 5 years, or an average add of **0.35 percentage point** to U.S. GDP growth per year and **0.09 percentage point** to global growth per year.

WHAT CAN THE GOVERNMENT DO TO CLOSE THE GAPS BETWEEN BLACKS AND WHITES?



WHAT CAN INDIVIDUALS DO?

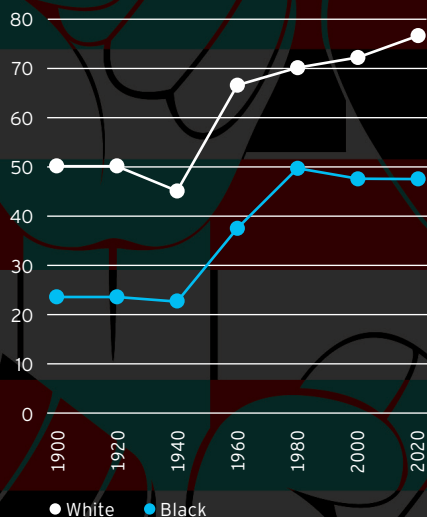


ATTITUDES AND POLICIES THAT UNDERMINE EQUAL ACCESS ARE AT THE ROOT OF THE RACIAL GAPS PLAGUING U.S. SOCIETY

Housing

The gap between white and Black home ownership remains wide with discriminatory practices still an issue.

U.S. Home Ownership Rate by Race (%)



Source: Census Bureau, FRED

Policing

Blacks are 5x as likely to be incarcerated vs. whites and make up an oversized percent of the U.S. prison population – 33% vs. 12% of total U.S. population.



Source: NAACP

Voting

Over past 10 years, 25 of 50 States have implemented voting restrictions which disproportionately affect Black voters.



Of the 3.1 million American adults estimated as banned from voting, 2.2 million are Black Americans.

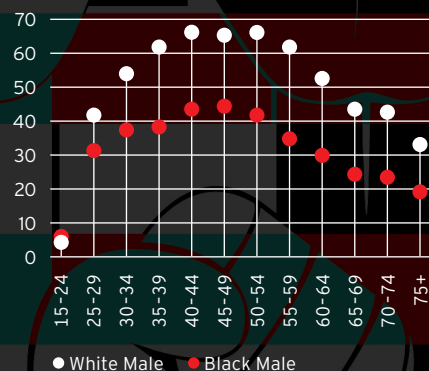
Source: The Sentencing Project

Income

Peak income occurs sooner and is lower for Black males (age 45-49, \$43,859) vs. white males (age 50-54, \$66,250).

White families have 8x as much wealth as Black families and lower debt-to-asset ratios (~10% vs. ~30%).

Median Income by Race and Age 2018 (US\$ 000's)



Source: Census Bureau, Federal Reserve

WHAT CAN CORPORATES DO?

SUPPORT DIVERSITY AND INCLUSION INITIATIVES FROM THE TOP

ADDRESS RACIAL GAPS IN HIRING, RETENTION, AND FIRING

ENGAGE IN CORPORATE SOCIAL RESPONSIBILITY

DISMANTLE STRUCTURAL BARRIERS TO HIRING BLACK TALENT

RECRUIT MORE BLACK BOARD MEMBERS

DEVELOP METRICS TO ANALYZE, REPORT, AND REACT

Contents

The Economic Costs of U.S. Racial Inequality	7
COVID-19 Shines Light on Racial Disparities	9
Why Gaps Exist: Racism and Inequality Are Little Improved	18
Bias	19
Housing & Education	21
Policing & Voting	26
Income and Wealth	32
Closing Gaps Generates Growth	36
Racial Wage Gap	37
Racial Labor Segmentation Gap	40
Racial Education Gap	43
Racial Wealth Gap	48
Racial Housing Gap	52
Racial Investment Gap	59
How Do We Close the Gaps: Future Policy	66
What Can Governments Do?	67
What Can Companies Do?	79
What Can Individuals Do?	89

The Economic Costs of U.S. Racial Inequality

Racial equity has real economic benefits, while discrimination has real economic costs

A useful definition of racial equity hails from the San Francisco Fed: “racial equity means just and fair inclusion in an economy in which all can participate, prosper, and reach their full potential. We will know we have achieved racial equity when race no longer predicts life outcomes.”¹

A plethora of data, studies, and societal ills indicate the U.S. has yet to achieve the point of racial equity, given the prevalence of major gaps in economic opportunity, education, income, housing, and wealth that run along racial fault lines.

The COVID-19 pandemic and the deaths of several Black people while in police custody in rapid succession have laid bare the United States’ longstanding problem of discrimination against minority groups, especially against Black people. Moreover, it has laid bare how inequality has produced real economic costs and social losses.

These costs are most evident in racial gaps: wide numerical differences in key social and economic indicators between Black and white Americans. These gaps are apparent in unemployment, net worth, debt levels, wages, peak income, financing for businesses, spending on education, and rates of imprisonment and sentencing levels. The gaps in many cases remain wide 60 years after the Civil Rights Movement. In some cases, including in homeownership rates and college degree attainment, the gaps are wider now than in the 1950s and 1960s.

This report (1) identifies the underlying causes of the racial and economic gaps exacerbated by the COVID-19 pandemic; (2) discusses the value of closing gaps; and (3) outlines how governments, corporations, and individuals can work together to eliminate gaps for good.

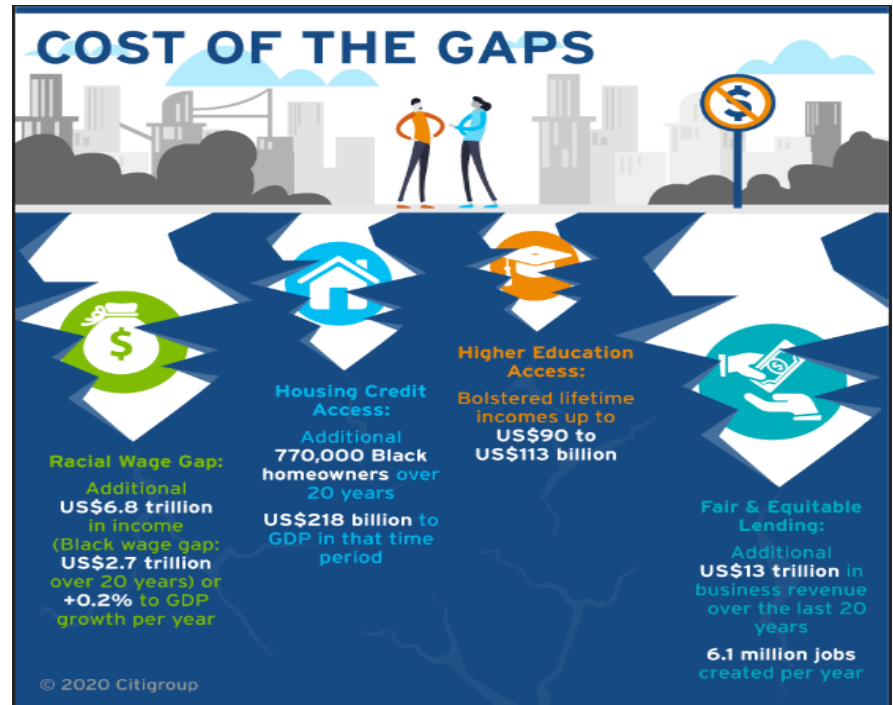
We discover that closing racial gaps is a pareto improvement to both the U.S. economy and society. If racial gaps for Blacks had been closed 20 years ago, U.S. GDP could have benefitted by an estimated \$16 trillion. If we close gaps today, the equivalent add to the U.S. economy over the next five years could be \$5 trillion of additional GDP, or an average add of 0.35 percentage points to U.S. GDP growth per year and 0.09 percentage points to global GDP growth per year.

- Closing the Black racial wage gap 20 years ago might have provided an additional \$2.7 trillion in income available for consumption and investment.
- Improving access to housing credit might have added an additional 770,000 Black homeowners over the last 20 years, with combined sales and expenditures adding another \$218 billion to GDP over that time.
- Facilitating increased access to higher education (college, graduate, and vocational schools) for Black students might have bolstered lifetime incomes that in aggregate sums to \$90 to \$113 billion.
- Providing fair and equitable lending to Black entrepreneurs might have resulted in the creation of an additional \$13 trillion in business revenue over the last 20 years. This could have been used for investments in labor, technology, capital equipment, and structures and 6.1 million jobs might have been created per year.

¹ “[Racial Equity Primer](#),” Federal Reserve Bank of San Francisco, June 12, 2020.

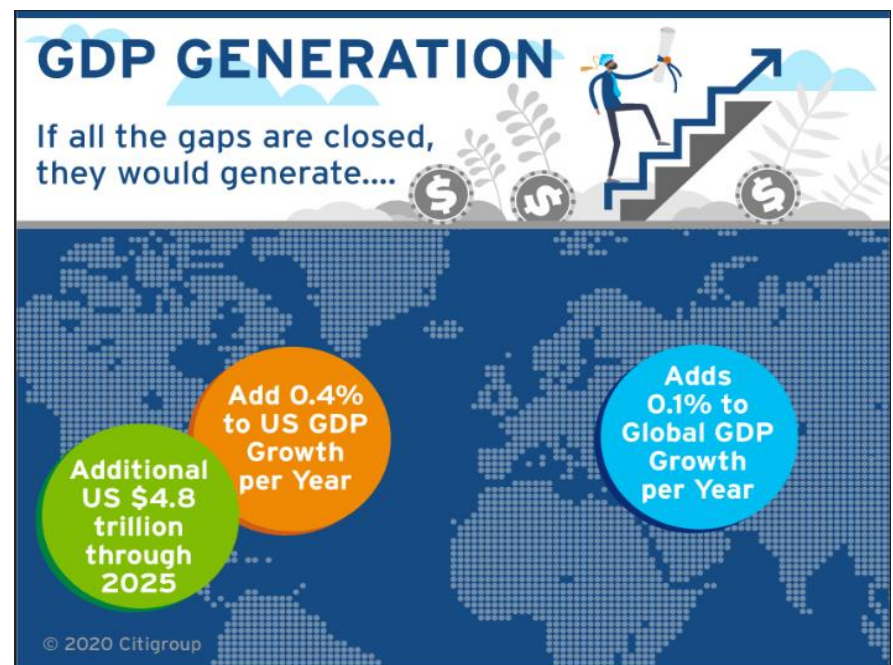
- Closing the wage, housing, education, and business investment racial gaps can help narrow the wealth gap, which is significant for facilitating homeownership, business, and job creation, plus establishing a pipeline for intergenerational wealth accumulation.

Figure 1. Racial Gaps Cause Economic Harm



Source: Citi Research

Figure 2. The Economic Case for Closing Racial Gaps is Highly Compelling



Source: Citi Research

COVID-19 Shines Light on Racial Disparities

Figure 3. COVID-19 Uncovers Long-Standing Biases and Inequities in the U.S.



Source: Shutterstock

Dual health and economic crises resulting from the coronavirus lays bare long simmering racial tensions and inequities in the U.S.

Data reveal the burden from the pandemic has fallen disproportionately on Black Americans and tangible and emotional hardships from the virus spilled into national outrage after several high profile deaths of Blacks during altercations with police

The dual health and economic crises resulting from the coronavirus lays bare long simmering racial tensions and inequities that have plagued the U.S for centuries. The overlay of deep job cuts, threat of eviction, hunger, business closures among minority groups, and uneven fiscal supports, with high rates of infections and deaths, plus repeated incidences of police brutality involving Black Americans has proven too great to ignore. The result not only has precipitated protests in the streets, but also a general reassessment of the very soul of the nation. Specifically, how past and current biases have embedded themselves into the economy and society, and what should be done to rectify them.

While all racial and ethnic groups are suffering from the fall-out of the pandemic, data reveal the burden is falling more heavily on certain demographics. Black persons, in particular, appear to have suffered greater job losses amid government-ordered shutdowns; found themselves in industries that are essential but low paying; possessed more pre-existing factors leading to COVID-19 mortality; owned businesses that closed permanently or were unable to access Paycheck Protection Program (PPP) loans; and reported elevated rates of food, income, and housing insecurity amid the crisis. The tangible and emotional hardships of the virus impact spilled over into national outrage about the deaths of several Black people during altercations with the police. Most notably, the video-taped death of George Floyd.

The combination of the pandemic and deadly community policing tactics leads us to revisit the problem of racial gaps in the U.S., and the case for closing them. First we review the disproportionate impact of the virus on minority groups, and Black persons in particular, plus the linkages to preexisting racial gaps.

Health Divide

In NYC, ethnic minorities were more likely to both contract COVID-19 and die from COVID-19

Ethnic minorities were more likely to contract and perish from COVID-19. Death rates tallied by the [U.S. Center for Disease Control \(CDC\)](#) for New York City — a particularly hard hit region — showed mortality figures for Black/African American persons (92.3 deaths per 100,000 population) and Hispanic/Latino persons (74.3) were substantially higher than that of white (45.2) or Asian (34.5) persons. A Federal Reserve Bank of New York study reveals there is a high significance of death from COVID-19 and the existence of various conditions, including belonging to a low income group, living in a densely populated urban area, and/or being a member of a major minority group (Figure 4).² Indeed, an overlay of COVID-19 deaths and U.S. counties having large minority populations indicates a higher prevalence of perishing from COVID-19 if one belongs to a racial minority: Black, Hispanic, and Native American plus select Asian and Pacific Islander population groups (Figure 5).

Figure 4. Being a Minority with Low Income, and/or Residing in Densely Populated Urban Areas Raised the Likelihood of Death from COVID-19

Regressions of Cases and Deaths on Demographics				
	Cases/ 1,000 population (1)	Cases/ 1,000 population (2)	Cases/ 1,000 population (3)	Cases/ 1,000 population (4)
Low Income	.5843** (2.46)	1.183*** (5.18)	.8616*** (3.37)	.1192*** (9.09)
Majority Minority	3.838*** (14.91)	2.887*** (11.58)	2.453*** (8.34)	.0951*** (6.64)
In Metropolitan Statistical Area	1.837*** (6.68)	-1.381*** (-4.51)	-1.465*** (-4.77)	-.1096*** (-6.23)
Log Population Density		1.41*** (20.35)	1.404*** (20.26)	.1177*** (29.57)
Low Income x Majority			1.335*** (2.77)	
Observations	3216	3136	3135	3136

Note: t statistics in parenthesis; Significance: * 10% level, ** 5% level, *** 1% level

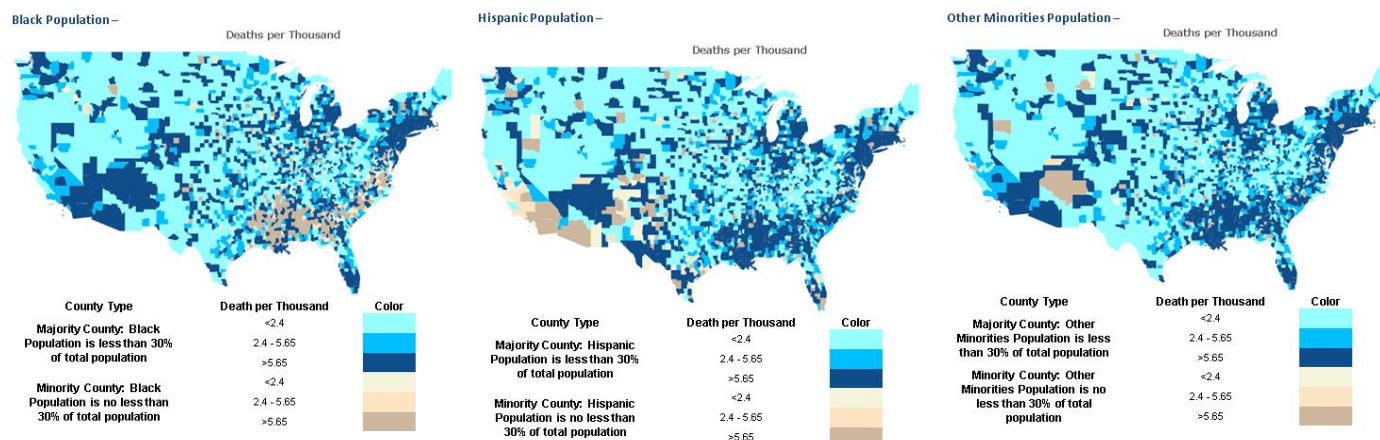
Source: Federal Reserve Bank of NY

Federal data corroborate the racial disparity of COVID-19 death

Federal data corroborate the racial disparity of COVID-19 deaths. The Centers for Disease Control (CDC) stated that contributing factors included living conditions (densely populated, residential segregation, multi-generational households, incarceration), work circumstances (critical workers, lack of paid sick leave), and underlying health conditions (lack of access to health insurance, serious underlying medical conditions, stigma, and systemic inequalities). Regarding health conditions, the SHADAC analysis of the American Community Survey (ACS) Public Use Microdata Sample (PUMS) files reveals that although the number of uninsured persons has fallen since passage of the Affordable Care Act in 2012, ethnic minorities are still less likely to have health insurance (Figure 7).

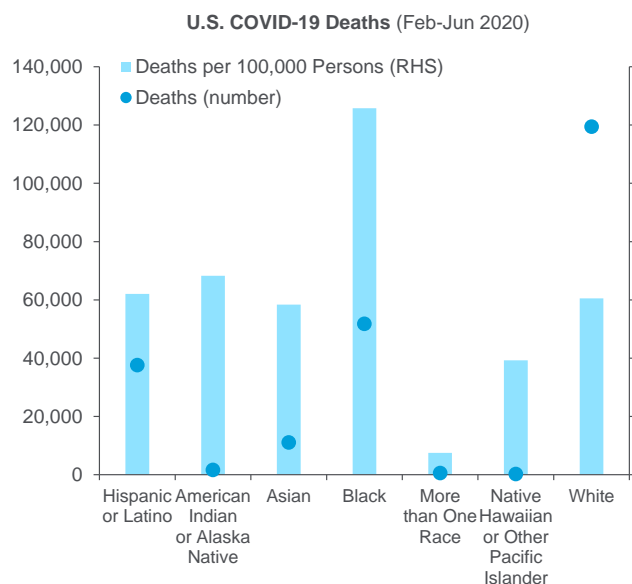
² Chakrabarti, R. and William Nober. "Distribution of COVID-19 Incidence by Geography, Race, and Income." Liberty Street Economics, Federal Reserve Bank of New York, June 15, 2020.

Figure 5. U.S. Counties with Large Number of COVID-19 Deaths Tend to Overlap with Counties Having Large Minority Populations



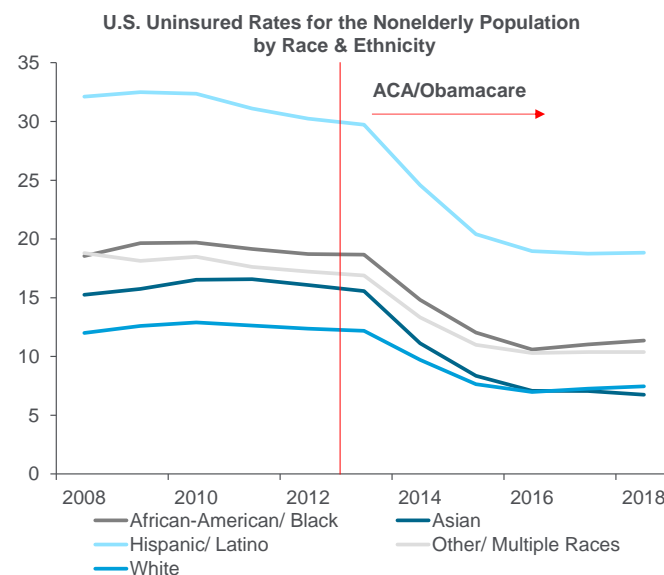
Source: CDC, Census Bureau, Citi Research

Figure 6. Persons Belonging to Minority Groups, Especially Black Persons, Suffered More Deaths Per Capita than White Persons



Source: CDC, Census Bureau and Citi Research

Figure 7. Insurance Coverage has Improved Since Obamacare Passage, But Minorities Are Still More Likely to be Uninsured

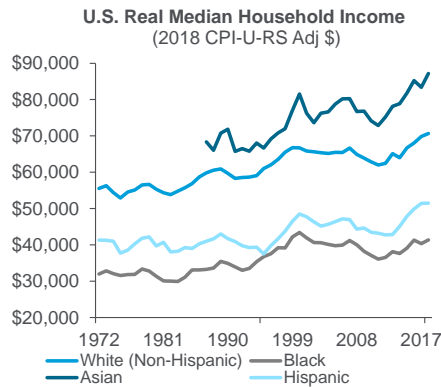


Source: SHADAC analysis of the American Community Survey, Citi Research

Wealth and income gaps between Black families and Hispanic, Asian, and white families have remained wide for last 40 years

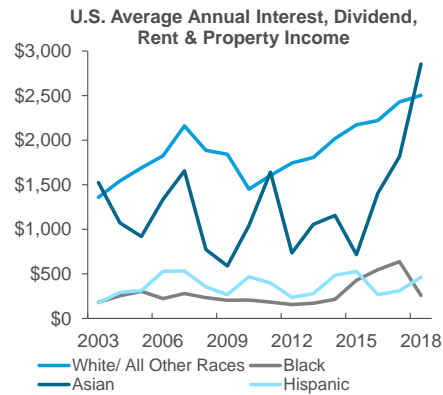
The eroded sentiment among minorities amid the pandemic, and Black Americans in particular, reflects not only policing and health care inequities, but also long simmering economic disparities. Both the wealth and income gaps between Black and Hispanic families and white and Asian families have remained wide over the last 40 years for which the U.S. Census Bureau has collected data. The real median income (Figure 8) and wealth (Figure 9) disparities continue to be stark for Black Americans. These gaps have been exacerbated by business shutdowns amid the coronavirus pandemic. In the latest Bureau of Labor Statistics (BLS) employment report, the civilian unemployment rate in the U.S. continues to edge lower. Nonetheless, jobless rates are falling for white persons faster than for other minorities, and the unemployment rate for Black workers at 13.0 percent is the highest (Figure 10). Moreover, the [NBER](#) reported there was greater business destruction over the February-April 2020 span for Black-owned firms, in terms of percentage decline, than for businesses owned by other ethnicities (Figure 11).

Figure 8. Income Gaps for Black and Hispanic People Remain Wide



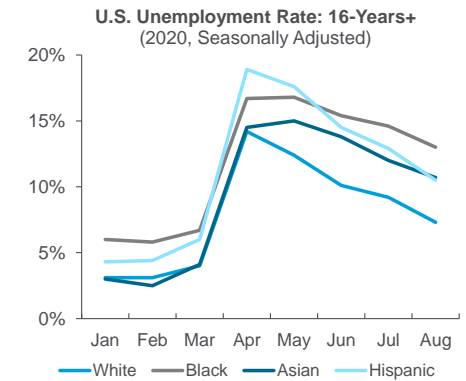
Source: Census Bureau, Citi Research

Figure 9. Wealth Gaps for Black And Hispanic People Have Not Improved



Source: Census Bureau, Citi Research

Figure 10. Jobless Rate Remains Most Elevated for Black People in August 2020



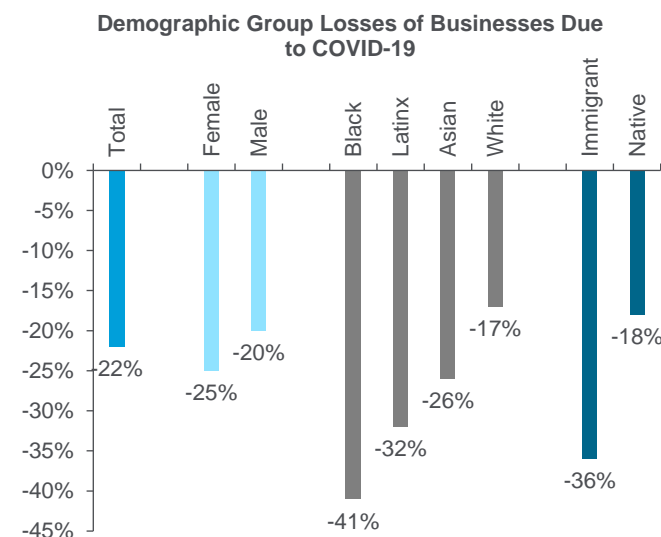
Source: Census Bureau, Citi Research

Insecurity

Black households have had more difficulty managing the basics of daily living amid the COVID-19 pandemic

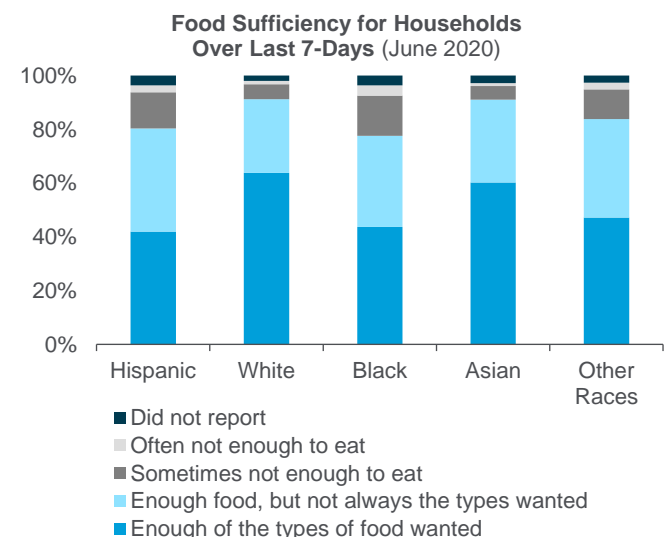
Managing the basics of daily living have been more difficult for Black households amid the COVID-19 pandemic. Food sufficiency has been a greater challenge for select households of color, and Black households in particular, during the COVID-19 pandemic. The Census Bureau's *Household Pulse Survey* revealed that in June 2020, it was more likely the case for Black, Hispanic, and Other Racial category households to have inadequate access to food during the pandemic than was the case for white and Asian households. Black households were more likely to say that they sometimes or often did not have enough to eat (Figure 12). Meanwhile, it was more likely the case that Black, households fell behind on rent or mortgage payments amid the coronavirus pandemic than white households (Figure 13). Black households were also less confident they could make future housing payments than were white households.

Figure 11. Black-Owned Businesses Suffered Brunt of COVID-19 Disruptions

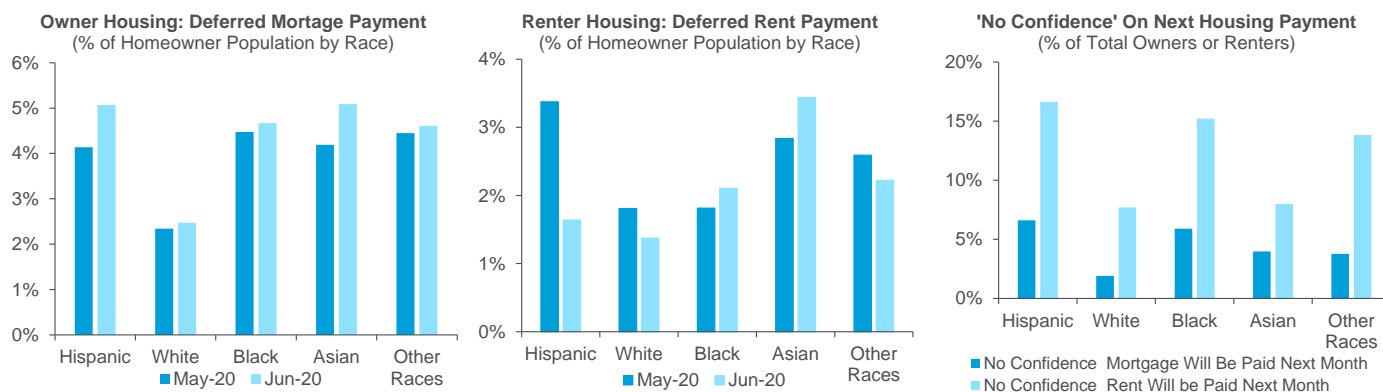


Source: NBER, Citi Research

Figure 12. Black Households Had Significant Challenges Related to Lack of Adequate Access to Food During the Coronavirus Pandemic



Source: Census Bureau *Household Pulse Survey*, Citi Research

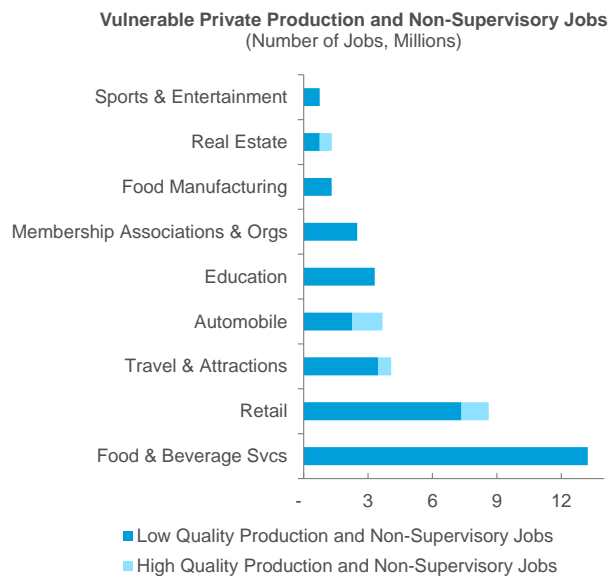
Figure 13. Black Households Are More Likely to Have Deferred Housing Payments and Have “No Confidence” that Future Payments Will be MetSource: Census Bureau *Household Pulse Survey* and Citi Research

Essential vs. Nonessential

The unequal nature of job losses, which heavily affected low-skilled and discretionary sectors that largely employ minorities, was directly linked to food and housing insecurity levels

Food and housing insecurity during the pandemic were directly linked to the unequal nature of job losses that heavily affected low-skilled and discretionary sectors employing large shares of minorities. The U.S. Private Sector Job Quality Index® (JQI) listed jobs in the food and beverage services, retail, travel and attractions, and the auto sector among the most vulnerable amid COVID-19 disruptions (Figure 14). Many of these jobs rank low in the quality index. The JQI interprets “job quality” as meaning the weekly dollar income a job generates for an employee. Hence, it is also likely many of these jobs have low skills requirements given the relatively low quality of pay. U.S. job cuts among these sectors were disproportionately skewed toward women and minorities due to labor market segmentation into areas that were discretionary in nature and/or impossible to execute in a work-from-home scheme. Indeed, a staggering 14 million white workers were laid off, but this is compared to 8 million minorities, which comprise 23 percent of the working age population. In the second quarter of 2020, Black persons working in coronavirus disruption-sensitive sectors experienced an employment loss of 2.7 million. However, as a share of the number of employed Black persons one year prior, the loss was 14 percent compared to 12 percent for white persons (Figure 15). For Hispanic and Asian people the loss was 15 percent, each.

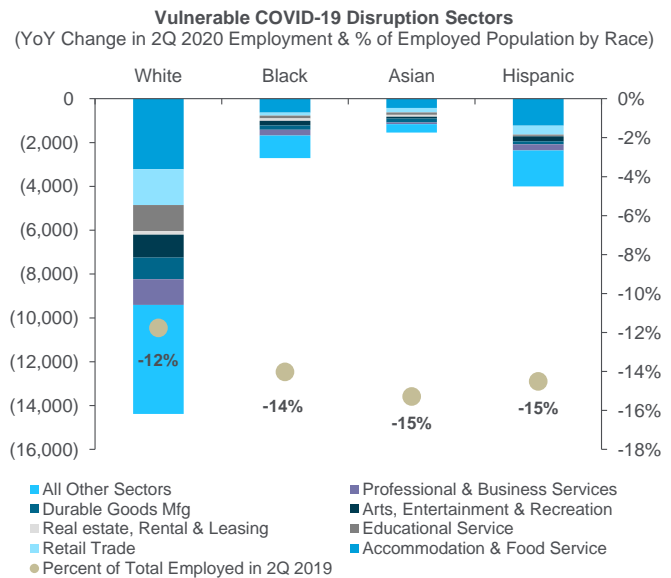
Figure 14. Low-Pay Jobs Also Most Vulnerable to COVID-19 Disruption



Source: U.S. Private Sector Job Quality Index® (JQI), and Citi Research

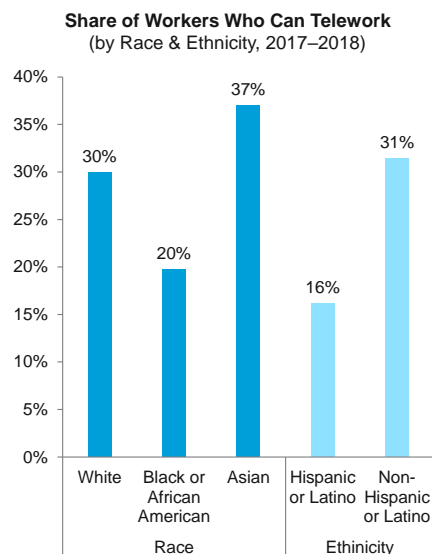
Only 20% of Black workers were able to work from home during the pandemic and Blacks tended to cluster in essential jobs with high exposure to infection

Figure 15. Minority Groups Slightly Harder Hit by Pandemic Layoffs

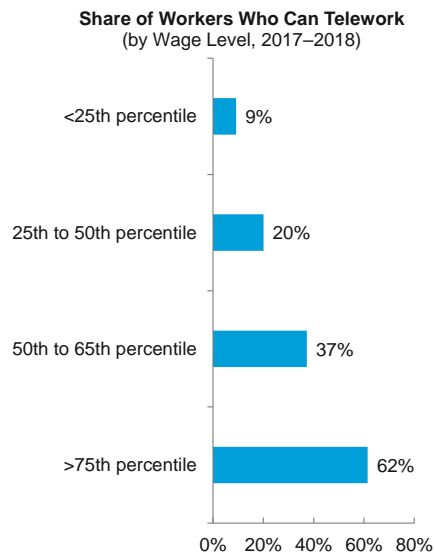


Source: Bureau of Labor Statistics and Citi Research estimates

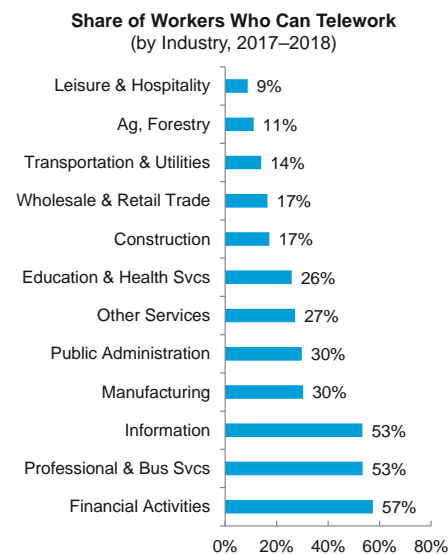
For Black persons who maintained their jobs, the split between essential and non-essential work highlighted that the most hazardous jobs were also among those with the lowest pay. According to the U.S. Bureau of Labor Statistics (BLS), only 30 percent of U.S. workers are able to telework (work-from-home or WFH). Hispanic and Black workers were the least able to WFH (16 percent and 20 percent, respectively). (Figure 16). The BLS also reported laborers who are below the 50th percentile in terms of wage level were the least likely to WFH: <25th percentile (9 percent) and 25th to 50th percentile (20 percent) (Figure 17). Moreover, many of the jobs deemed essential by governments were the least amenable to WFH (Figure 18). Of essential jobs with high exposure to infection, many of them are low wage jobs in which Black workers are clustered (Figure 19). Healthcare, food service, and child care stand out as low-wage, essential occupations employing large numbers of Black employees.

Figure 16. Only 20% of Black Workers Can Work from Home

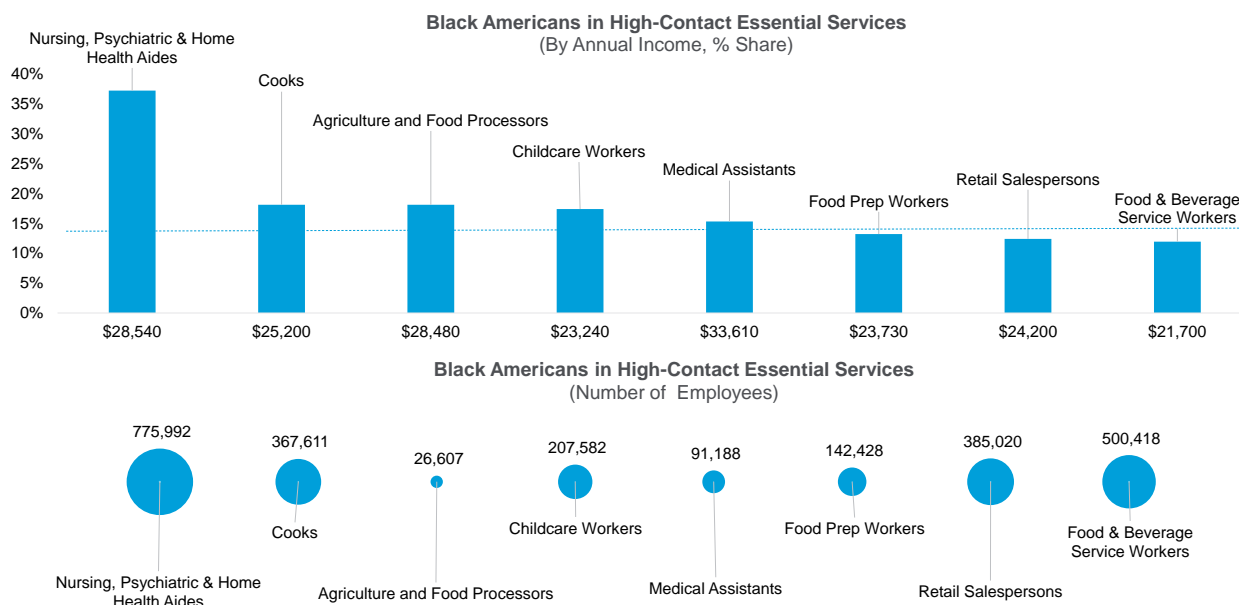
Source: Bureau of Labor Statistics, Citi Research

Figure 17. Low Income Workers Less Likely to Work from Home

Source: Bureau of Labor Statistics, Citi Research

Figure 18. Low Wage Industries Less Amenable to Work from Home

Source: Bureau of Labor Statistics, Citi Research

Figure 19. Black Workers Are Overrepresented in Many of the Lowest Wage Jobs Considered High-Contact, Essential Services

Note: Dotted line denotes Black workers as a percent of the civilian non-institutional population 20 and over or 12.6 percent.

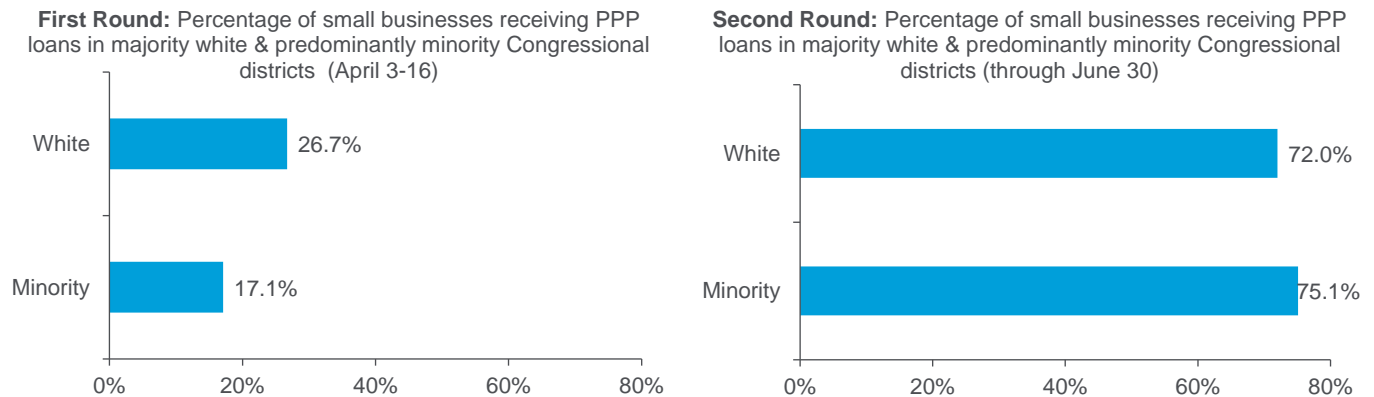
Source: McKinsey Global Institute analysis, U.S. Bureau of Labor Statistics, Citi Research estimates

Uneven Relief

From the perspective of recovery, minority-owned firms received Federal government supports later

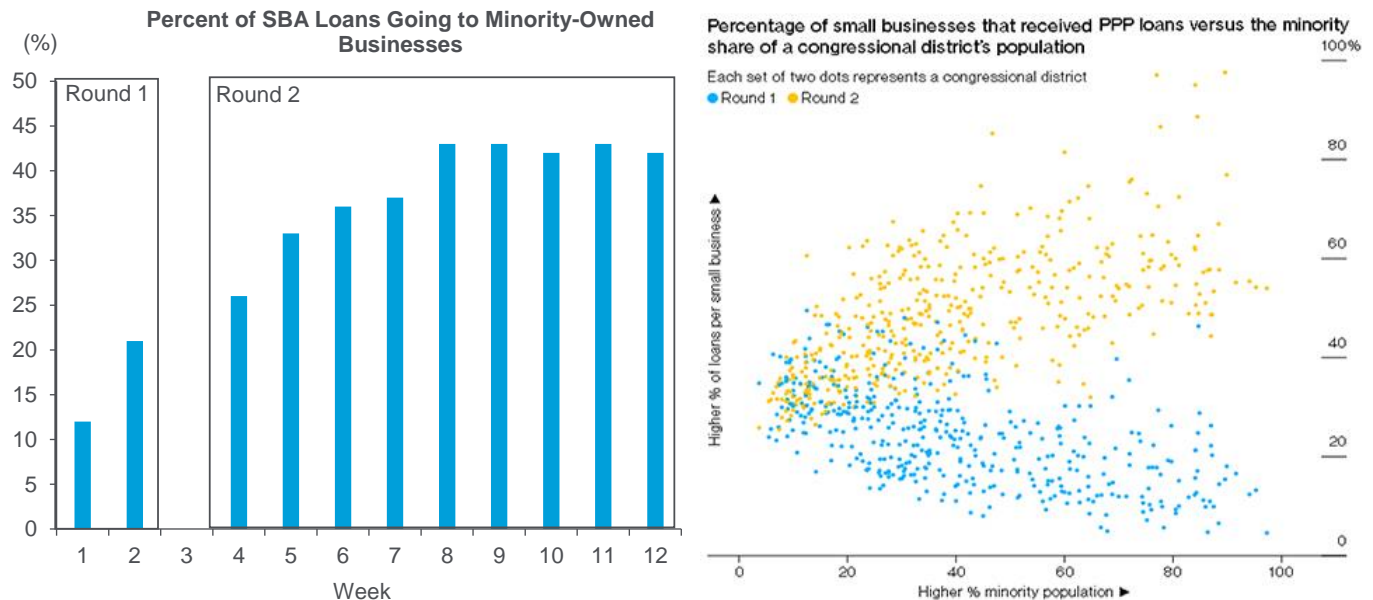
The CARES Act of 2020 legislated the Paycheck Protection Program (PPP), which provided loans to businesses suffering coronavirus disruptions. The potentially forgivable loans were designed to encourage firms to invest and retain workers until domestic demand improved. A Bloomberg News analysis of Small Business Association (SBA) data revealed that in the initial wave of the program, minority-owned firms received fewer loans as a share of the total number of minority-owned businesses (17 percent) than did white-owned firms (27 percent). The percentages improved and largely evened out in the second tranche of PPP loans at 75 and 72 percent, respectively (Figure 20). Nonetheless, minority firms found themselves shut-out of the initial rounds of relief and struggled to receive funding from large financial institutions at the outset of the pandemic disruptions, as the availability of community banks expedited lending (Figure 21).

Figure 20. Minority-Owned Firms Received COVID-19 Relief Later than White-Owned Firms



Source: Bloomberg News

Figure 21. Minority-Owned Firms Received COVID-19 Relief Later



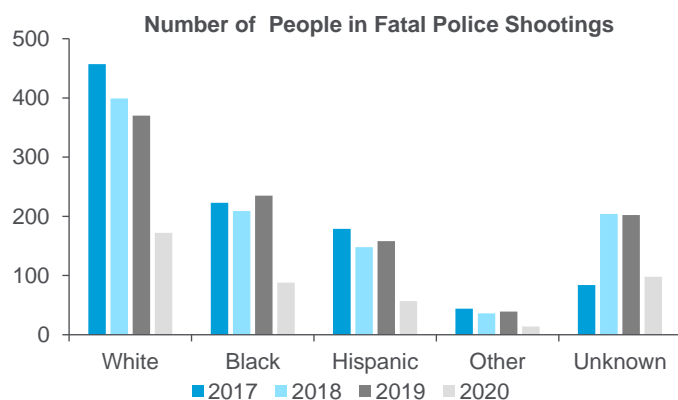
Source: Bloomberg News

Simmering Tensions

The U.S. has been gripped by protests fueled by a conflagration of inequality, racism, and police brutality

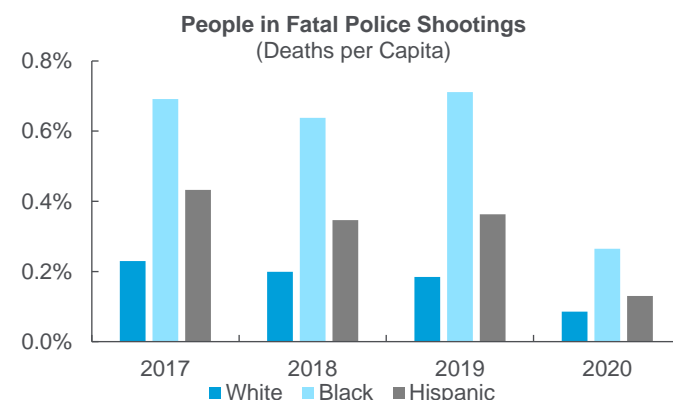
In addition to the disruption from COVID-19, the U.S. has also been gripped by protests fueled by a conflagration of inequality, racism, and police brutality. The civil unrest comes against a backdrop of disproportionately higher numbers of deaths for minorities, especially Black persons from COVID-19, and elevated unemployment figures for Black Americans amid the pandemic-induced U.S. recession. Roughly 1,000 people per year die during altercations with the police (Figure 22). Nearly half of them are racial minorities, and Black persons have a higher share of fatalities per capita (Figure 23). A number of these deaths have come on account of mishandling by police forces, which have been linked at times to long-standing social and racial issues. In general, the U.S. has lost ground relative to other advanced economies, and even the world, in terms of discrimination and violence against minority groups (Figure 24).

Figure 22. Roughly 1,000 People/Yr Die in Altercations with the Police



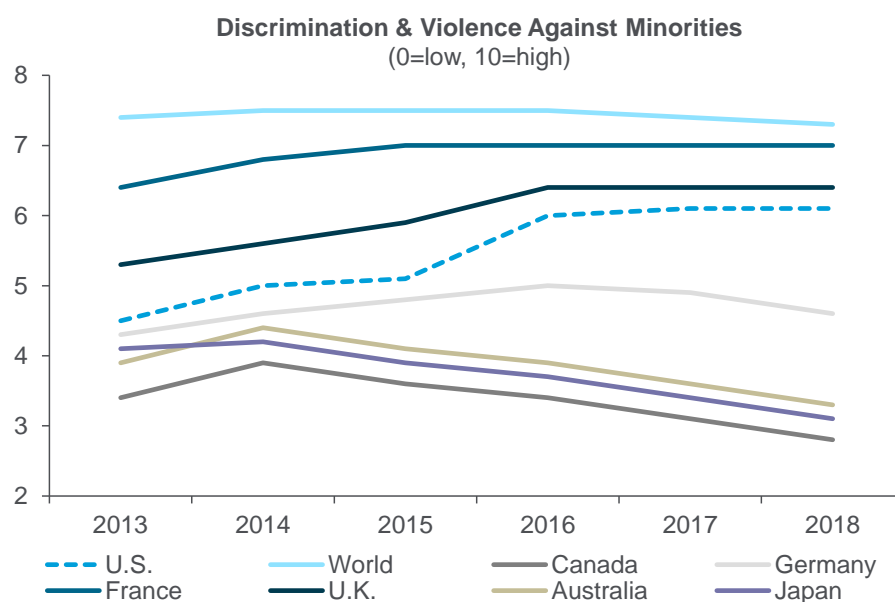
Source: Statista.com, Citi Research

Figure 23. Police-Related Deaths Per Capita is Highest for Black People



Source: Statista.com, Citi Research

Figure 24. The U.S. Has Lost Ground Relative to Other Advanced Economies and the World Regarding Discrimination and Violence Against Minority Groups



Source: The Social Progress Imperative, Citi Research

Why Gaps Exist: Racism and Inequality Are Little Improved

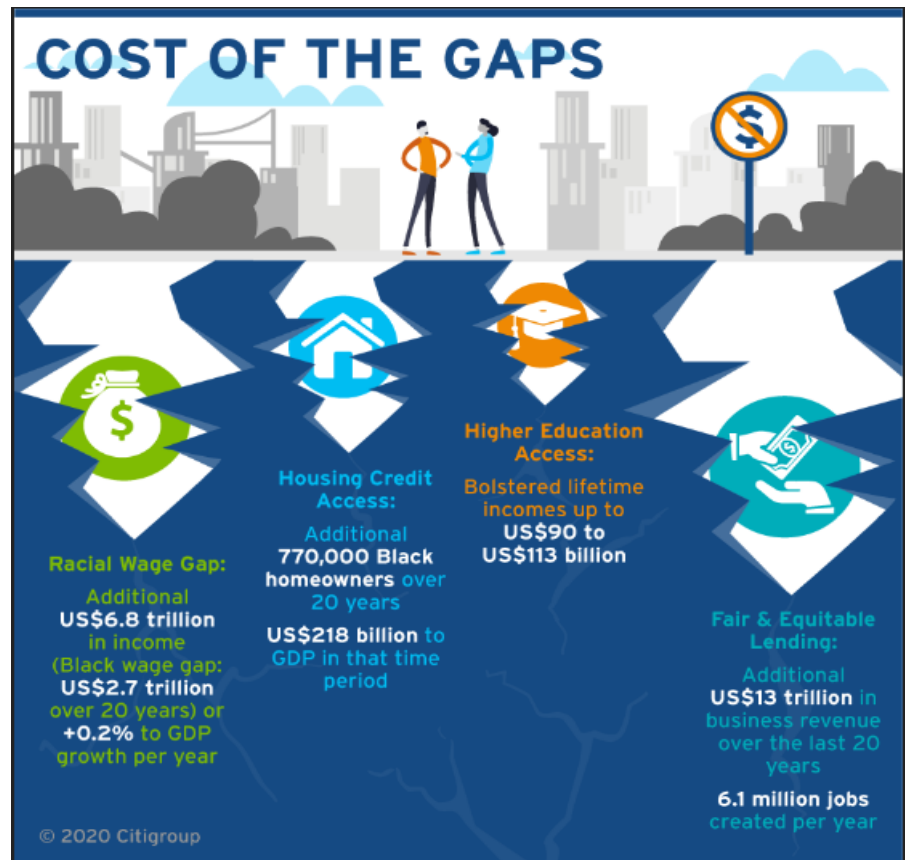
Defining systemic and persistent racism and providing evidence that has led to or exacerbated racial gaps is the first step towards eliminating inequality

Closing racial gaps in the U.S. 20 years ago could have generated \$16 trillion in GDP

The 400 years of enslavement of Black populations in the Americas has residual effects that persist to this day despite tomes of legislation providing equal access to various aspects of American life under the law. Attitudes and policies undermining equal access are at the root of the racial gaps plaguing U.S. society.

Moreover, societal inequities have manifested themselves into economic costs, which have harmed individuals, families, communities, and ultimately the growth and well-being of the U.S. economy. If the racial gaps in wages in the U.S. had been closed two decades ago, there might have been an additional 0.2 percentage point to real GDP growth per year. Adequate access to housing credit might have produced 770,000 new Black homeowners. More Black students with university and advanced degrees might have generated an additional \$90 to \$113 billion in income that could have contributed to consumption. More than 6 million jobs per year might have been added and \$13 trillion in cumulative revenue gained if Black-owned firms had equitable access to credit. The global implications are also apparent given the U.S. contributes a one-third share of growth to the world economy.

Figure 25. What the United States Could Have Gained by Closing Racial Gaps 20 Years Ago



Source: Citi Research

Bias

The results of policies creating and perpetuating bias produce inequality

The persistence of racially-biased attitudes, coupled with the implementation and maintenance of policies enshrining these attitudes, constitute what is often termed as systemic racism. Biases may be conscious or unconscious. Nonetheless, the result of policies creating and perpetuating bias produce inequality. Even when the biases fade, the policies may linger, rendering the inequality multi-generational as it becomes interwoven with the way things are done: in broader society, government, corporations, and/or institutions.

Bias plays a central role in economic and social outcomes for Black Americans

The continuation of racial bias and systemically-entrenched inequality born from past and present biases are evident across multiple facets of U.S. society. The Civil Rights Movement of the 1950s launched 20 years of major legislative achievements for Black persons in America that also spurred other movements for equality. However, 70 years later, improvements appear to be few and far between for many Black Americans. The U.S. is light-years more equal than it was in the 1950s, but systems perpetuating inequalities among different racial groups either still remain or are being reinvented, either consciously or unconsciously.

Bias, whether conscious or unconscious, plays a central role in economic and social outcomes for Black Americans. Building upon the bias seen in businesses financing, there are numerous cases of bias within the hiring spectrum and moreover from a consumption prospective. As discussed by Greenwald and Krieger, 78 percent of those who took the Harvard Implicit Association Test (IAT) displayed implicit bias, with 85 percent of whites showing bias against Blacks. The overarching message in the study was that most people possess bias, and due to its infinitely engrained status, people are generally unaware of their own bias despite its profound impact upon behavior and attitude.³ One study, which sent out resumes with traditionally white-sounding names like Emily and Greg and also resumes with Black-sounding names like Lakisha and Jamal, found a white applicant was 49 percent more likely than their Black counterpart to receive a call back in Chicago and 50 percent more likely in Boston.⁴ This kind of systematic discrimination is inherently exclusionary of Black people from the workforce, demonstrating the significant impact of bias, be it unconscious or not. A 2015 experiment involving baseball card auctions on eBay again highlighted the significant difference racial bias can have on economic outcomes. Baseball cards held by dark-skinned/African American hands sold for approximately 20 percent less than cards held by light-skinned/Caucasian hands, despite the cards held by the African American hand being more valuable on average.⁵ Without addressing bias directly, the challenge of equality will remain profound.

³ Greenwald, A. and Linda Krieger. 2006. "Implicit Bias: Scientific Foundations". California Law Review. 94. 945. 10.2307/20439056.

⁴ Bertrand, M. and Sendhil Mullainathan. 2004. "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." American Economic Review, Vol 94 (4): 991-1013, <https://pubs.aeaweb.org/doi/pdfplus/10.1257/0002828042002561>.

⁵ Ayres, et. al. 2015. "Race Effects on EBay." The RAND Journal of Economics, Vol. 46 (4), pp. 891-917., www.jstor.org/stable/43895621.

The U.S. Civil Rights Movement: A Synopsis

The Civil Rights Movement that began in the late 1950s won African Americans basic rights long denied to them, inspired other discriminated groups to fight for their own rights, and had a deep effect on American society.

After the Civil War, the [13th](#), [14th](#), and [15th](#) amendments to the Constitution were supposed to guarantee equal rights for African Americans. But in the South, segregation of the races, the denial of opportunities to African Americans, and their disenfranchisement continued in a system known as "Jim Crow laws." In 1896, in a controversial decision, the United States Supreme Court, in the case [Plessy v. Ferguson](#), upheld the "separate, but equal" facilities for the races.

During World War II, some progress on equality was made as President Roosevelt outlawed discrimination in the defense industry. Moreover, as the country fought for freedom around the world, many African-Americans began to wonder why they did not enjoy those freedoms at home. In 1954, a series of landmark cases testing segregation pressed by the National Association for the Advancement of Colored People (NAACP) culminated in the Supreme Court's ruling in the *Brown v. Board of Education* case, which unanimously outlawed segregation of public schools.

On December 1, 1955, the modern civil rights movement began when Rosa Parks, an African-American woman, was arrested in Montgomery, Alabama for refusing to move to the back of the bus. A new minister in town, Martin Luther King, Jr., organized a community bus boycott, which eventually led to the desegregation of the bus line and launched protests across the South. In 1960, spontaneous sit-ins by students began at lunch counters throughout the South, and in 1961, "Freedom Riders" boarded inter-state buses to test and break down segregated accommodations. These protests were peaceful, but they were met with violent, and often, brutal force — televised images helped win support from sympathetic whites in the North. In 1963, TV viewers saw hundreds of thousands of African Americans and whites march on Washington, DC to end racial discrimination. It was there that Martin Luther King, Jr. delivered his famous "[I Have a Dream](#)" speech.

After the assassination of President Kennedy and the landslide election of Lyndon Johnson, Congress passed the landmark [Civil Rights Act of 1964](#) and the [Voting Rights Act of 1965](#), which outlawed racial discrimination in public accommodations and schools and removed obstacles to voting. As part of the Civil Rights Act, the Federal government would withhold funds from any state that did not desegregate, and as Health, Education & Welfare Secretary, John Gardner was the man holding the purse strings. In 1967, he threatened to cut off \$95.8 million in Federal welfare funds to the state of Alabama unless it complied with desegregation guidelines. As Gardner remembers, "Civil rights was real hardball."

The passage of the Voting Rights Act, in particular, prompted a massive effort to register African Americans throughout the South to vote. Again, this was often met with violent resistance. After 1966, the Civil Rights Movement began to fracture between those who favored non-violent means to achieve integration and younger, more radical leaders who wanted to fight for "Black power." This split alienated some white allies, a process that was accelerated by a wave of rioting in Black neighborhoods in Northern cities throughout 1965 and 1967.

After Dr. King was assassinated 1968 and more rioting ensued, the Civil Rights Movement as a cohesive effort disintegrated. Yet the push for civil rights continued, with African Americans making gains economically, politically, and socially. Moreover, other discriminated groups were inspired by the Civil Rights Movement and borrowed its tactics. Over the 1960s and 1970s, gays and lesbians, women, Native Americans, and people with disabilities pushed for their own inclusion in American society. [Source: PBS.org.](#)

Housing & Education

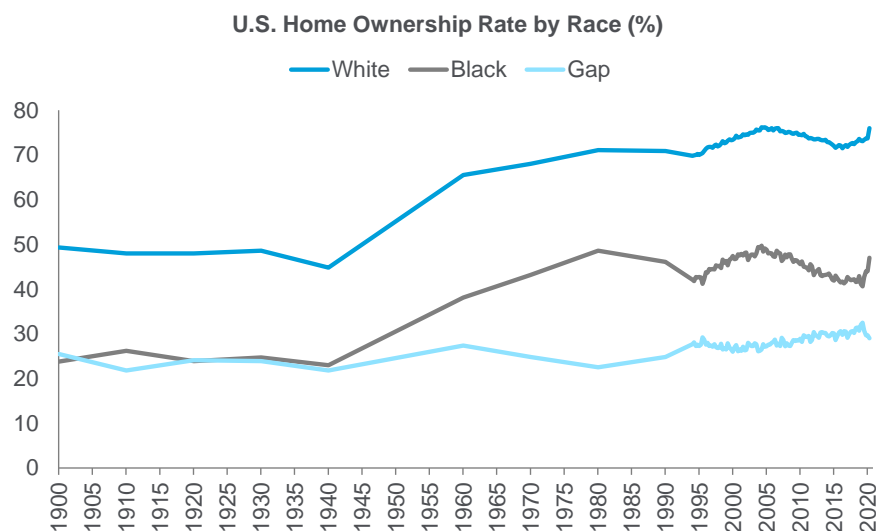
Intricate linkages between racial bias in housing and education dating back over a century are major factors in economic gaps that persist today.

Housing Segregation

Housing discrimination from 1940 through the 1960s prevented Black Americans from owning homes and subsequently building intergenerational wealth

Past discriminatory housing practices have contributed to economic inequality for Black Americans in the present. According to the Economic Policy Institute (EPI), systemic and legalized housing discrimination over the 1940 to 1960 period prevented Black families from achieving homeownership, a critical staple for building intergenerational wealth.⁶ Moreover, the disparity in homeownership was perpetuated by continued discrimination in housing, through government, private sector, individual, and even technological choices and actions, keeping the racial gap wide (Figure 26). As recently as 2019, a popular Internet platform was cited for discriminatory practices by its search engines according to the Fair Housing Act.⁷

Figure 26. The Gap Between Black and White Homeownership Rates Remains Wide



Source: Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS, 2020. <https://doi.org/10.18128/D010.V10.0>, Census Bureau, FRED, Citi Research.

New Deal policies predating WWII enshrined modern housing segregation and discrimination in the U.S.

In an effort to combat a housing shortage in the mid 1930s the Federal Housing Administration (FHA) refused to insure mortgages in and near Black neighborhoods, a practice known as redlining. The most desirable neighborhoods for mortgages were designated green, and the least, typically predominantly Black neighborhoods, were designated red.

⁶ da Costa, P., "Housing discrimination underpins the staggering wealth gap between blacks and Whites," Economic Policy Institute, April 8, 2019.

⁷ Aranda, C., "Fighting Housing Discrimination in 2019," Urban Institute, April 1, 2019.

Prior to the Fair Housing Act in 1968, policies by the government as well as individual and private sector choices perpetuated housing segregation

One study revealed that between 1934 and 1968, 98 percent of home loans approved by the Federal government were given to white applicants.⁸ The FHA also subsidized builders creating large tracts of housing in suburban areas as long as those projects excluded Black homebuyers. Meanwhile, minorities were directed to urban housing projects. These urban neighborhoods, where Black family housing was permitted, were often cut off from resources and subject to underinvestment.⁹

Individual and private sector choices also perpetuated housing segregation. Prior to the Fair Housing Act of 1968, residents of neighborhoods were allowed to create contracts called restrictive covenants to establish and maintain a particular racial makeup. Minorities, particularly Black persons, were prevented from moving into the suburbs or predominantly white sections of metropolitan areas either legally or through intimidation. Maps of Black neighborhoods were redlined and/or persons wishing to leave these neighborhoods for majority-white neighborhoods were threatened with violence.¹⁰ Realtors were threatened with the loss of their licenses if they showed homes to Black families outside of prescribed areas. These activities not only upheld segregation, but also concentrated poverty and underdevelopment in geographic locations.

Housing discrimination became less overt after the Fair Housing Act including practices like gentrification, which decreased the affordability of homeownership for Blacks

Housing discrimination did not end with the Fair Housing Act. Tactics used to reinforce segregated neighborhood boundaries and majority-white suburbs became less overt. Real estate agents would show potential Black home purchasers houses in predominantly Black neighborhoods and decline to show many, if any, in other neighborhoods. Banks would continue to decline to provide financing for mortgages to Black homeowners, and insurance companies would refuse to insure mortgages assumed by Black owners. “Gentrification” in urban areas contributed to the decrease in affordability of housing for Black households. Realtors, renovators, and builders played a role as neighborhoods formerly populated by a certain racial or ethnic group were renamed, homes were upgraded to “luxury” status raising the price point, or upscale homes were built in low-income neighborhoods, inviting other such projects. These developments can lead to the displacement of current residents resulting in a change in demographics.¹¹ Governments can frustrate affordable housing availability via zoning laws limiting construction of multi-family units or expansion of neighborhood boundaries. Even positive community revitalization activities by governments, such as investment in transit infrastructure, can have the negative externality of inviting gentrification that affects Black communities.

Barriers to homeownership have resulted in Black families holding the least amount of housing wealth

Fifty years of barriers to Black home ownership means that Black families have missed out on the benefits of home price appreciation — a key ingredient to wealth accumulation. The Federal Reserve’s Survey of Consumer Finances reported that as of 2016, Black homeowners continued to hold the least amount of housing wealth compared to other racial groups (Figure 27). The median amount of housing wealth for a Black family was \$124,000, while the median amount for white families was \$200,000, Hispanic households \$158,000, and other households \$240,000.

⁸ Fulwood III, S., “The United States’ History of Segregated Housing Continues to Limit Affordable Housing,” Center for American Progress, December 15, 2016.

⁹ Gross, T., “A ‘Forgotten History’ Of How The U.S. Government Segregated America,” NPR, May 3, 2017.

¹⁰ da Costa, P., “Housing discrimination underpins the staggering wealth gap between blacks and Whites,” Economic Policy Institute, April 8, 2019.

¹¹ National Low Income Housing Coalition. “Gentrification and Neighborhood Revitalization: WHAT’S THE DIFFERENCE?”.

Black homeowners also don't see the same price appreciation in their homes as other homeowners

A Princeton University study notes that even among Black families owning homes, properties do not appreciate at the same rate as properties held by other ethnic groups.¹² This is a reflection of the location of Black-owned homes in areas with generally lower home values and/or bias in the way others view Black homeowners. Even though the Great Recession's housing crisis featured a wave of foreclosures, in the subsequent ten years, white homeowners were more likely to see some home price appreciation (+3 percent on average) versus Black families who didn't see a recovery (-6 percent on average) (Figure 28).¹³ Indeed, past housing policies have concentrated Black families into higher-poverty neighborhoods with fewer of the amenities that help raise home values. Moreover, even higher-income Black families are still more likely to own homes in impoverished, predominately Black neighborhoods (Figure 29). Black families have also not benefited from tax incentives related to homeownership, including mortgage interest deductions (Figure 30).

Figure 27. Black Families Hold the Least Amount of Housing Wealth

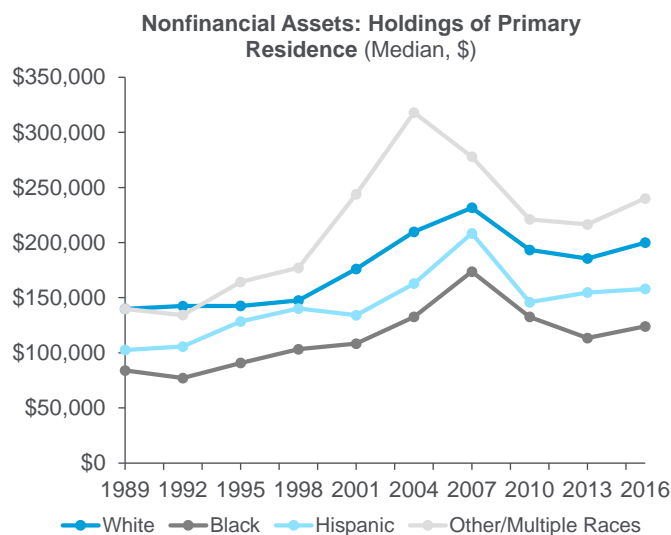
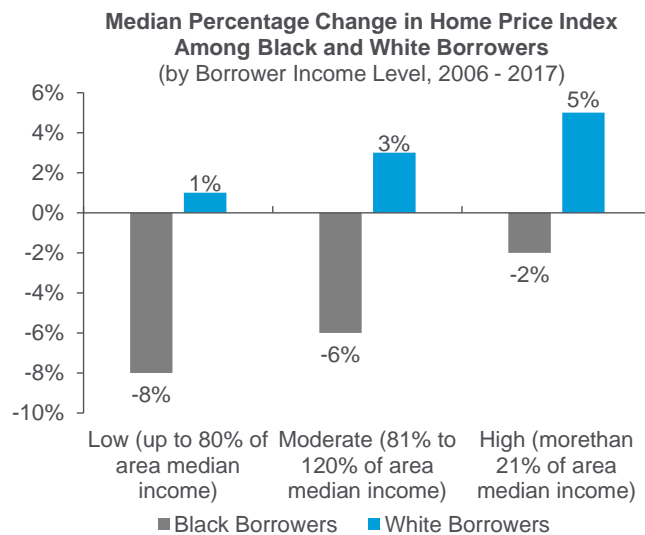


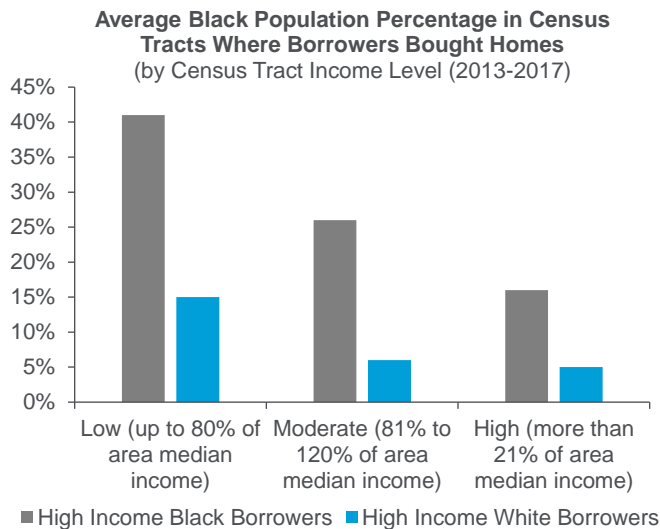
Figure 28. Black Homeowners Experienced Home Price Depreciation



¹² "The sordid history of housing discrimination in America," Vox, December 5, 2019.

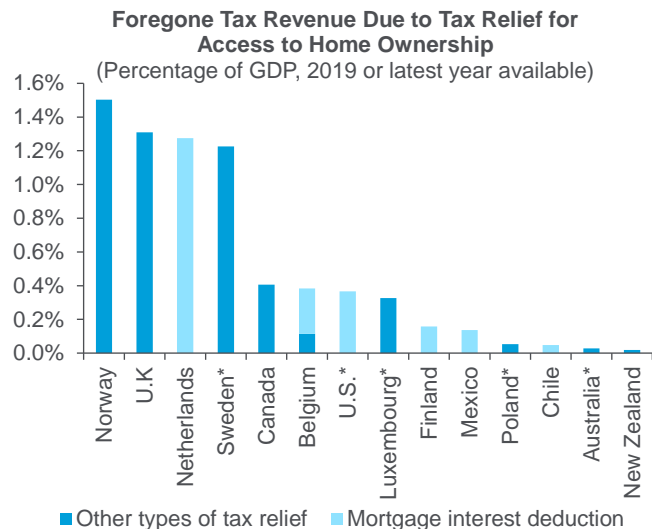
¹³ Zonta, M., "Racial Disparities in Home Appreciation," Center for American Progress, July 15, 2019.

Figure 29. Wealthier Black Families Live in Black Neighborhoods



Source: Center for American Progress, Citi Research

Figure 30. Homeowners Benefit From Special Tax Treatment in the U.S.



Note: * indicates that spending is missing for one of the policy instruments and the reported amount is therefore a lower-bound estimate. Source: OECD, Citi Research

Separate & Unequal Education

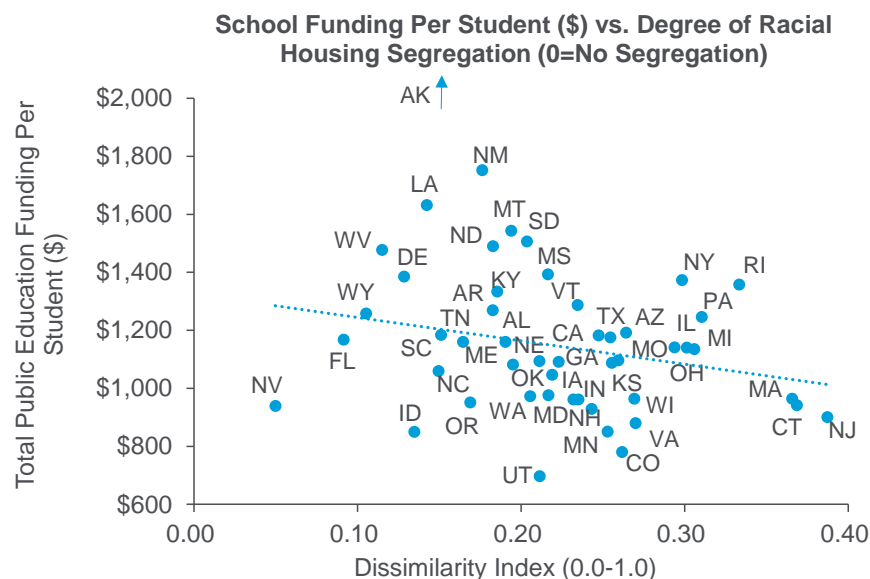
Segregated housing has led to segregated schooling by virtue of how schools are generally funded in the U.S.

Segregated housing has facilitated and perpetuated unequal access to quality education for Black Americans, which is pivotal to erasing income and wealth gaps. *Brown vs. the Board of Education* was designed to end separate and categorically unequal public schooling. However, housing segregation and the method used to fund schools have helped to perpetuate separate and unequal access to education for many Black students (Figure 31). A significant degree of evidence suggests a strong correlation between high-value housing and the quality of schooling. Seventy-five percent of children attend public schools in the U.S., which means they are assigned to a school nearest to where they live. If neighborhoods are segregated, then so are the schools. Moreover, if schools are largely funded via property taxes, then schools in wealthy neighborhoods will invariably receive greater resources, while schools in poorer areas will receive fewer resources (Figure 32). State governments attempt to make up the differences, but often fall short.¹⁴ Resources affect both the quality of the school and the education students are given. Hence, racially segregated schools in areas of concentrated poverty have fewer resources, higher teacher turnover, and a lower quality of education.¹⁵ School choice in the form of vouchers and charter schools have in various instances improved the quality of education, but have been unable to address the underlying problem of segregation.

¹⁴ Chingos, M. M. and Kristin Blagg. 2017. "Do Poor Kids Get Their Fair Share of School Funding?", Urban Institute.

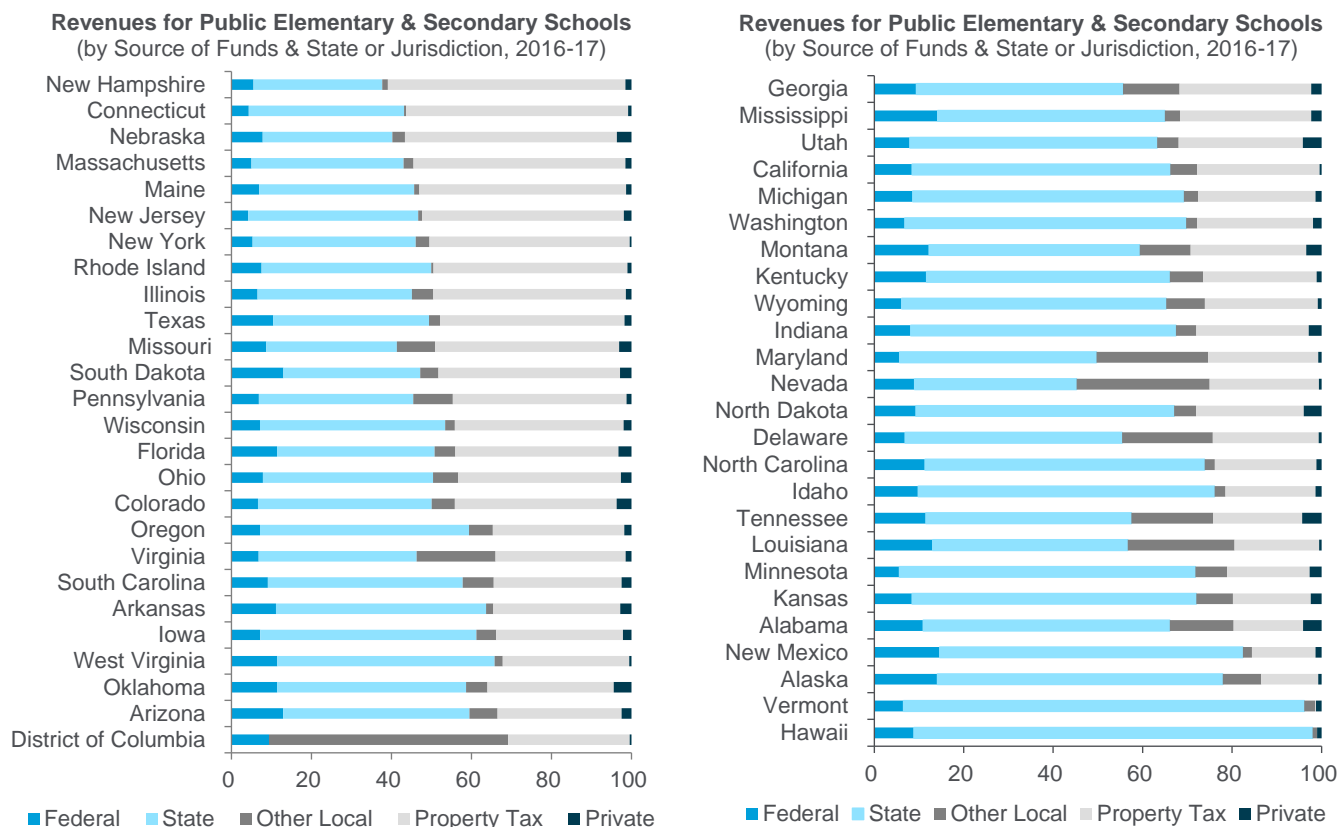
¹⁵ Bhargava, S., 2018. "The Interdependence of Housing and School Segregation," Open Society Foundations, Harvard University.

Figure 31. Greater Racial Housing Segregation Often Means Less Public School Funding



Source: Urban Institute, U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2016-17

Figure 32. More Than One-Third of States Rely on Property Taxes as a Major Source of Public School Funding



Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2016-17

Policing & Voting

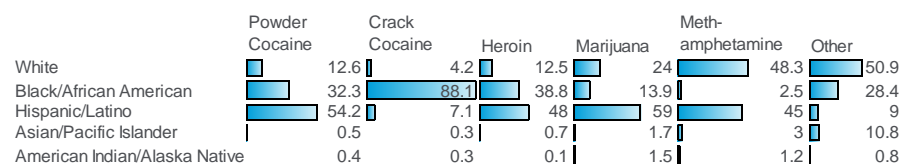
Policies relating to community policing and mass-incarceration have contributed to a deleterious cycle that has led to underrepresentation in government and the labor market.

Community Policing

The War on Drugs enhanced prosecution of Blacks through disparate application of punishment

Extraordinary levels of incarceration as a consequence of bias within the criminal justice system are evident from movements such as the War on Drugs. Following the Rockefeller drug laws of the 1970s and born from the Reagan era, the War on Drugs has become interchangeable with the enhanced prosecution of Blacks. The perceived injustice is only amplified when considering the disparate application of punishment when associated with crimes committed predominantly by Blacks, such as the abuse of crack-cocaine, with 88 percent of Federal crack defendants Black by 2012, in comparison to crimes committed predominantly by whites crime (powdered cocaine) (Figure 33).¹⁶ Though the original 1986 100-1 ratio (500 grams of powdered cocaine and just 5 grams of crack cocaine incurred the same five-year sentence) has been reduced by the 2010 Fair Sentencing Act, a significant disparity remains with the current ratio standing at 18-1.¹⁷ According to recent Bureau of Justice Statistics, there has been material improvement in incarceration rates in the U.S., with the rate for Black Americans declining the most; down 34 percent since 2006.¹⁸ Nonetheless, the share relative to the entire Black population remains stubbornly high (Figure 34).

Figure 33. Drug Offences for Black Prisoners Are Overwhelmingly for Crack Cocaine



Source: Bureau of Justice Statistics, Citi Research

Unequal application of drug-related sentencing has led to mass-incarceration leading to a much higher likelihood of Black incarceration

Reductions in incarceration rates notwithstanding, Black Americans remain far more likely to be imprisoned than their other racial counterparts — almost twice as likely as Hispanic Americans and five times more likely than white Americans. As a result, the United States prison population is disproportionately Black dominated (33 percent) relative to their presence in the U.S. total population (12 percent). A similar trend can be seen with the Hispanic population (23 percent of prison population vs 16 percent of U.S. population), in contrast to white Americans who make up just 30 percent of the prison population despite being 63 percent of total U.S. population. Startlingly, one in every three Black boys born can expect to be sentenced within

¹⁶ Banks, R. R., 2003. "Beyond Profiling: Race, Policing, and the Drug War." *Stanford Law Review*, Vol. 56, (3), pp. 571–603. "Cruel and Unusual: Disproportionate Sentences for New York Drug Offenders, 1997 " *Human Rights Watch* Vol. 9 (2) (B). Internet. Available: <http://www.hrw.org/summaries/s.us973.html>.

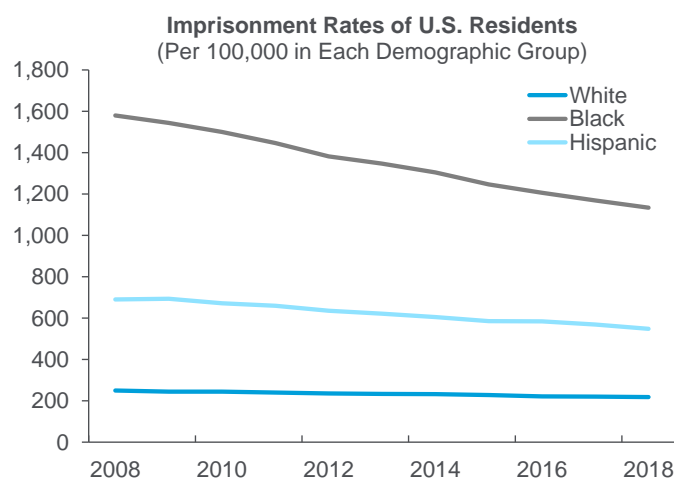
¹⁷ U.S. Department of Justice. "Drug Offenders in Federal Prison: Estimates of Characteristics Based on Linked Data," Office of Justice Programs, Bureau of Justice Statistics, October 2012. ACLU Fair Sentencing Act <https://www.aclu.org/issues/criminal-law-reform/drug-law-reform/fair-sentencing-act>.

¹⁸ Carson, E.A., "Prisoners in 2018," BJS Statistician, U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.

their lifetime, versus one in every six Latino boys and one in every seventeen white boys.

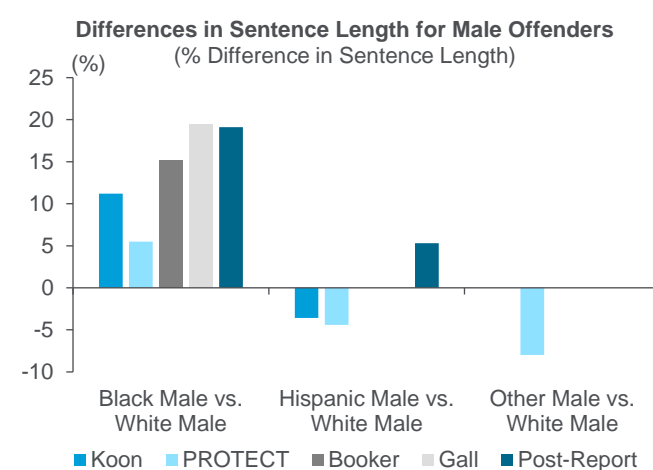
This disparity is even more apparent when reviewing individual age ranges, with 1 in 20 Black Americans between the ages of 35 and 39 in either State or Federal Prison. Moreover, several studies have shown the percentage difference in sentence length for Black versus white prisoners can be from 5 to 20 percentage points (Figure 35). Though only accounting for 5 percent of the global population, the U.S. is home to 25 percent of the world's prison population, recording the highest incarceration rate globally. Aside from the racial inequality, the cost of maintaining this system is outsized, costing \$81 billion in 2012 alone (with the rate of spending three times that on Pre K-12 education over the last 30 years).¹⁹

Figure 34. Imprisonment Rates Have Fallen, But Still Remain Elevated for Black U.S. Residents



Source: Bureau of Justice Statistics, Citi Research

Figure 35. Sentences for Black Prisoners Can Exceed Those of White Offenders by 5 to 20 Percentage Points



Source: US Sentencing Commission, 1999-2016 data files, Citi Research

Incarceration limits an ex-offenders ability to obtain employment, earn income, and build wealth

Incarceration also limits the ability of Black ex-offenders to obtain employment, earn income, and build wealth. The Brookings Institute highlights several key facts linking low job prospects to incarceration and vice-versa. Former prisoners fare poorly in the labor market, with only 55 percent earning any income in the first year of release and median earnings of only \$10,090. Prisoners generally had poor labor market prospects before becoming incarcerated. An estimated 51 percent of prime-age men were employed two full years prior to imprisonment, with median earnings of only \$6,250. Growing up in poverty dramatically increased the likelihood of incarceration. Boys raised in families in the bottom decile of the income distribution were 20 times more likely to be in prison in their early 30s than those born in the top decile. Notably, boys from the poorest families were 40 times more likely to be imprisoned than boys from the wealthiest families. Brookings finds that an astounding one-third of men age 30 without any annual earnings are either incarcerated or ex-prisoners. Moreover, where one grows up is highly correlated with the likelihood of incarceration. Imprisonment rates can vary by a factor of 30 between zip codes in the same city.²⁰

¹⁹ NAACP. "Criminal Justice Fact Sheet."

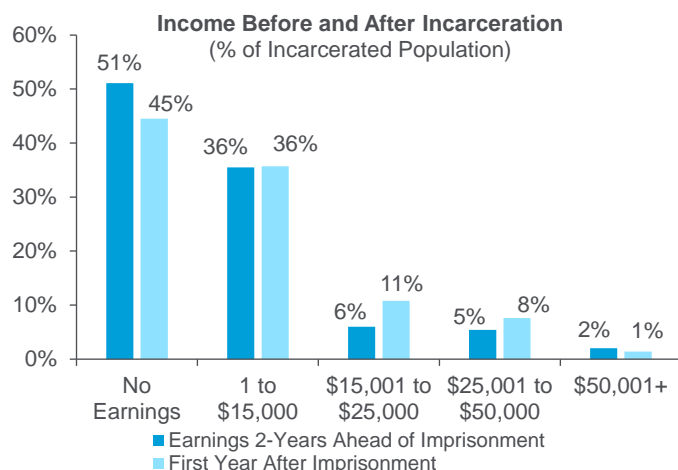
²⁰ Looney, A., "5 facts about prisoners and work, before and after incarceration," Brookings, March 14, 2018.

Bias against ex-prisoners leads to a poor earnings trajectory post-imprisonment

A poor earnings trajectory post-imprisonment is linked to bias. Unemployment following incarceration is often a consequence of the “prison penalty,” where employers discriminate against persons with criminal records. Evidence of a criminal record reduces employer call-back rates by 50 percent.

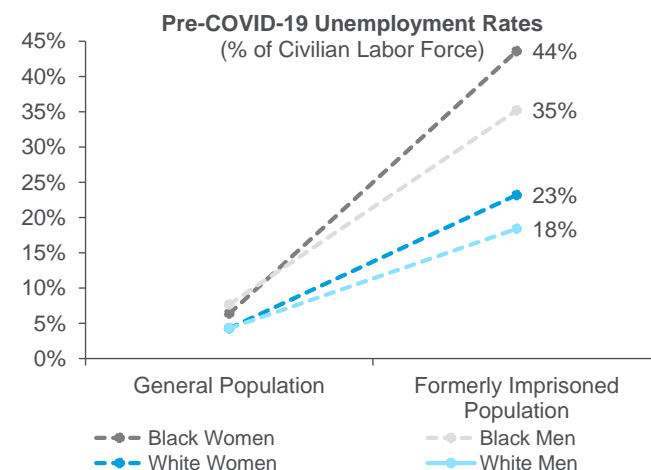
Studies suggest that formerly incarcerated persons do desire to work: among 25-44 year olds, 93.3 percent were active in the labor market compared to 83.8 percent of the general population of the same age. However, unemployment rates for formerly incarcerated persons can be five times that of persons who were never imprisoned. Unemployment rates for Black female former inmates were 44 percent before COVID-19, and the rate for Black males was 35 percent. Black women are also more likely to work part-time jobs after imprisonment than other racial groups.

Figure 36. Incarceration and Poor Earnings Prospects Are Interrelated



Source: Brookings, Citi Research

Figure 37. Ex-Prisoners Are 5x More Likely to be Unemployed



Source: Prison Policy Initiative, Citi Research

Voting Power

Felony disenfranchisement has a disproportionate impact on Black Americans due to the cycle of mass incarceration

This cycle of mass incarceration becomes increasingly problematic when considering the impact of felony disenfranchisement and its disproportionate impact on people of color. As of 2016, one in every thirteen Black American adults could not vote due to felony convictions, with more than 20 percent of Black adults in four states (Florida, Kentucky, Tennessee and Virginia) disenfranchised.²¹ There is a sense of cyclicity within disenfranchisement as 27 percent of non-voters were rearrested versus only 12 percent of voters. It has been argued that political elections would have seen differing outcomes should disenfranchisement not have been established, including seven Senate races between 1970 and 1998, as well as the infamously tight Gore-Bush Presidential election of 2000.²² Though there has been significant progress, with 25 States modifying their felony disenfranchisement provisions since 1997 (10 repealing or amending lifetime disenfranchisement laws), it still stands that of the total 3.1 million American adults estimated as banned from voting, 2.2 million are Black Americans.²³

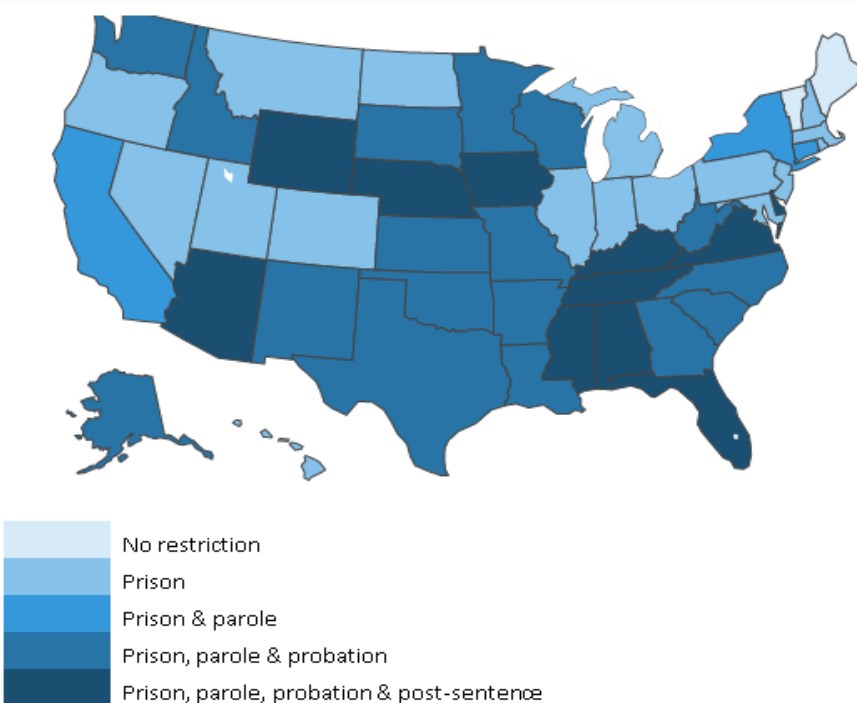
²¹ Chung, J., 2017. “Felony Disenfranchisement: A Primer,” The Sentencing Project.

²² Uggen, C. & Manza, J. 2002. “Democratic contraction? Political consequences of felon disenfranchisement in the United States”. American Sociological Review, 67 (6), 777-803. Uggen, C. & Manza, J. 2004. “Voting and subsequent crime and arrest: Evidence from a community sample”. Columbia Human Rights Law Review, 36 (1), 193-215.

²³ Porter, N. 2010. “Expanding the vote: State felony disenfranchisement reform, 1997-2010.”, DC: The Sentencing Project., Uggen, C., Larson, L., & Shannon, S. 2016. “6

The forced reduction in political clout is only compounded by already lower voter turnout rates for Black and minority voters versus their white counterparts. Excluding record turnout in 2008 (69.1 percent) during the Obama election cycle, Black voters have underperformed white voters with regards to turnout; 51.4 percent vs. 54.2 percent on average from 2000-2018.²⁴

Figure 38. Felony Disenfranchisement Restrictions by State, 2019



Source: The Sentencing Project

With the U.S. set to become minority white by 2045 based on demographic trends, the Black and minority vote will become increasingly significant

The Black and minority vote is set to become increasingly significant as the U.S. is forecast to become minority white by 2045.²⁵ With white voters at less than 50 percent for the first time, the influence of minority voters will be enhanced with the Black vote making up 13.1 percent of the vote, Hispanic 24 percent and Asian 7.9 percent. This trend is compounded by the emergence of Gen Z as part of the electorate. As a group, 'minority majority' is set to potentially be reached in Gen Z as early as this year (2020), with the 18-29 age range achieving this by 2027.²⁶ Perhaps unsurprisingly Gen Z voters are set to be some of the most 'liberal' yet, essentially reflecting Millennial positioning on key issues.

Younger voters (Gen Z) are more ethnically diverse and are more consolidated around core social issues than older voters

What is apparent is that Gen Z voters from both sides of the aisle are more consolidated around core social issues than their older counterparts. Significantly, over 60 percent of both Gen Z and Millennial voters view increasing racial and ethnic diversity as a good thing for society, versus only 48 percent of Boomers.

million lost voters: State-level estimates of felony disenfranchisement", Washington, DC: The Sentencing Project.

²⁴ United States Elections Project. "Voter Turnout Demographics".

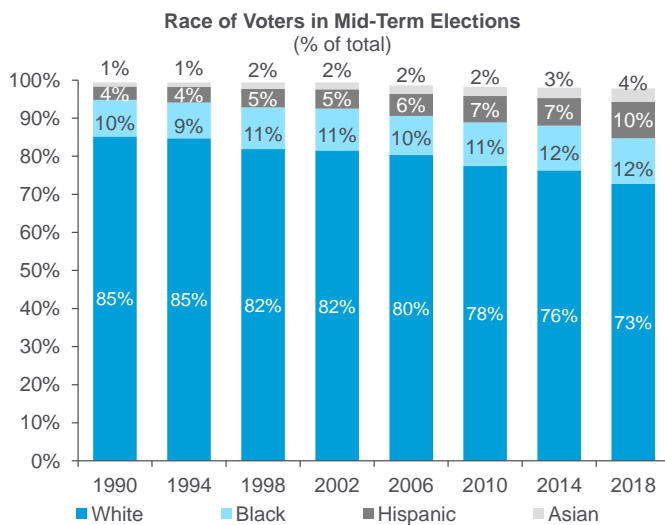
²⁵ Frey, W.H., "The US will become 'minority White' in 2045, Census projects," Brookings Institute, May 14, 2018.

²⁶ Ibid.

More importantly, even amongst Republican Gen Z voters, a majority still agree with that statement, versus only 30 percent of Republican Boomers.²⁷

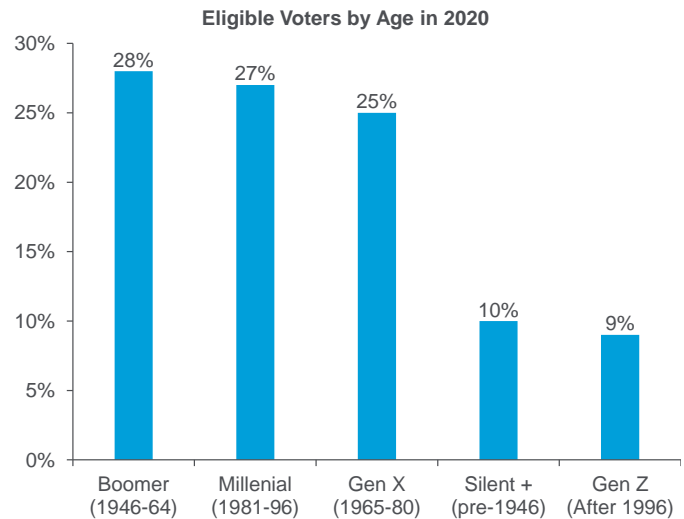
This disparity between younger and older Republicans can be found elsewhere, with a majority of Republican Gen Z also in favor of the government having a larger role in society. Sixty-six percent of American Gen Z and Millennials also hold the opinion that the Black population in the U.S. is treated less fairly than the white population vs. only 50 percent of Gen X. As the younger generations gain prominence amongst the voting population, first as a support to the already established Millennial voting trends and then in their own right, they will demand more political attention. With Gen Z voters composing 9 percent of the 2020 electorate (up from 4 percent in 2016), versus the declining share of Baby Boomers (from 68 percent in 2016 to only 4/10 in 2020), policymakers may need to be more conscientious of this new group of voters.²⁸

Figure 39. Minority Voters Are Gaining Ground



Source: The Pew Research Center, Citi Research

Figure 40. Potential Voters Are Skewing Younger (i.e., <40 Years of Age)



Source: The Pew Research Center, Citi Research

Recent events have rallied and inspired the political activism of many young and Black voters — traditionally two groups with lower-than-average voter turnout. Given the demographic makeup of Gen Z is increasingly diverse (minority majority by 2020 with Blacks (14 percent) and Hispanics (25 percent) the largest minority groups), it's unsurprising that movements such as '#BlackLivesMatter' had the support of over 60 percent of Millennials and Gen Z, versus only 37 percent of Boomers.²⁹ Should young minority voters translate this intensified interest in addressing the issues most prominent to themselves into presence at the polls, then there is a real argument to stress the significance and impact this group can have.

²⁷ Parker, K., Graf, N., and Ruth Igielnik "Generation Z Looks a Lot Like Millennials on Key Social and Political Issues", Pew Research Center, January 17, 2019.

²⁸ Parker, K. and Ruth Igielnik "On the Cusp of Adulthood and Facing an Uncertain Future: What We Know About Gen Z So Far", Pew Research Center, May 14, 2020.
Cilluffo, A. and Richard Fry "An early look at the 2020 electorate," Pew Research Center, January 30, 2019.

²⁹ Parker, K., Graf, N., and Ruth Igielnik "Generation Z Looks a Lot Like Millennials on Key Social and Political Issues", Pew Research Center, January 17, 2019.

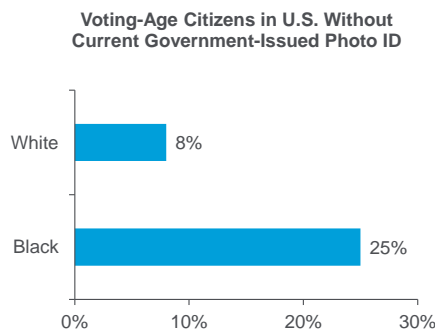
Voter suppression, although less blatant than during the Jim Crow era, still exists today

Voter suppression remains a persistent threat to full participation of Black voters in the U.S. democratic process. The connection between voter suppression and race did not end in the 1960s. Tactics that disenfranchise voters of color, and particularly Black voters, are still in existence today, although they are less blatant than those deployed during the Jim Crow Era. The Voting Rights Act of 1965 significantly curtailed voter suppression. In 1966, the Supreme Court invalidated poll taxes. However, a 2013 Supreme Court decision *Shelby County v. Holder* vacated key provisions of the Voting Rights Act opening the door for state and local governments to erect barriers to voting for racial minorities. The main element in the 2013 decision ended the requirement of state and local governments to obtain preclearance from the Federal government before changing voting rules. Over the last 10 years, 25 of 50 states have implemented new voting restrictions. Ten of those states have sizable Black populations: Mississippi, Alabama, Florida, Georgia, North Carolina, South Carolina, Virginia, Illinois, Michigan, and Tennessee according to the [Brennan Center](#).

States have enhanced barriers to voting since 2013

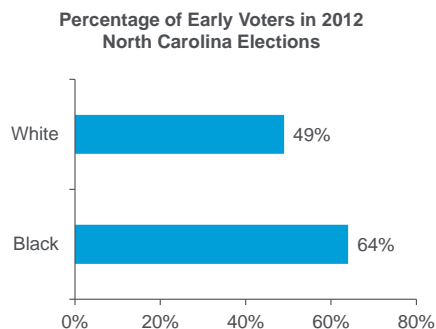
New restrictive voting rules include requiring voters to present government-issued photo IDs, which disproportionately affects the youngest and oldest voters, as they are less likely to have a driver's license or permit (Figure 41). There is even disparity among types of IDs. In Texas for example, handgun licenses, which are predominantly held by white persons (82 percent), are permissible (Figure 44). But student IDs are disallowed, despite more than half of the students of the University of Texas system being racial or ethnic minorities (51 percent). While the stated aim of voter rules is to combat voter impersonation fraud research by the Brennan Center for Justice has found [scant evidence of such types of behavior](#). Other barriers to voting include restrictions on early voting, which is largely used by minority voters; third party voter registration drives that often target Black voters; voter list purges, which have eliminated 33 million voters from the rolls over the 2014-2018 period (Figure 43); and exact matches of voter registration form data and IDs. Other tactics include not upgrading technology; moving or closing polling stations without notifying voters; shortening voting hours; restricting early voting on weekends when Black voters are likely to vote; shutting Departments of Motor Vehicles (DMVs) in minority communities where heavy voter registration takes place; and/or not properly training poll workers. Federal courts have ruled that many voting restrictions have been implemented with the aim to racially discriminate.

Figure 41. Black Voters Are More Likely to Not Have Government Issued Photo IDs



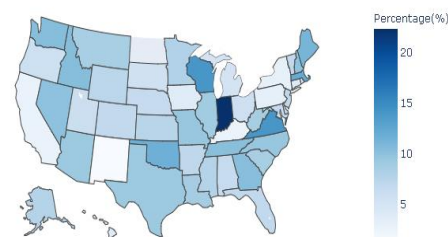
Source: Brennan Center. Citi Research

Figure 42. In Some States, Like North Carolina, Black Voters Are More Likely to Vote Early



Source: Brakebill vs Jaeger, Citi Research

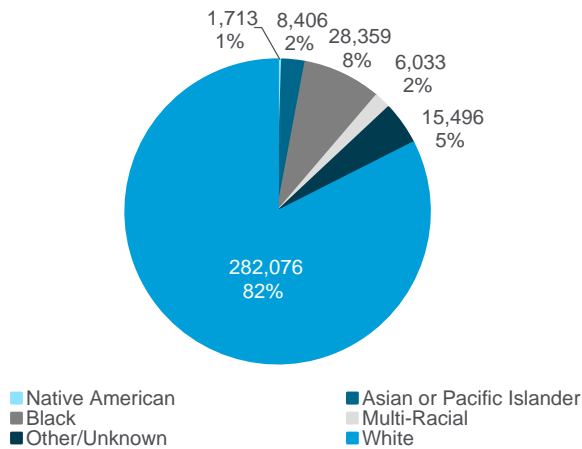
Figure 43. Several States with Notable Minority Populations Are Engaged in Heavy Voter Registration Purges: Percent of Lists Purged



Source: Brennan Center. Citi Research

Figure 44. Handgun Licenses Are Acceptable Forms of ID for Voting in Texas, but Student IDs Are Not

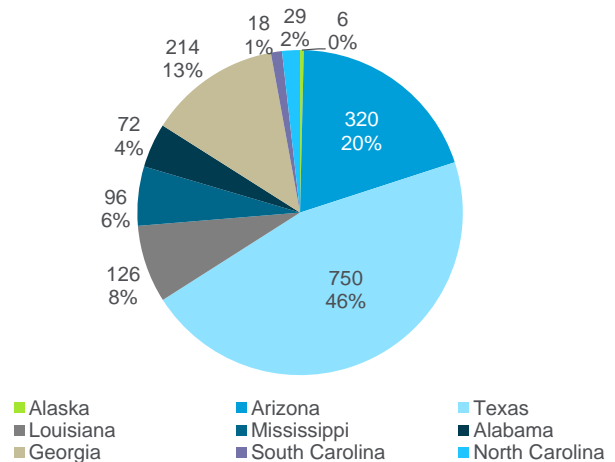
Texas: Number of Handgun Licenses Issued (2018)



Source: Texas Department of Public Safety, Citi Research

Figure 45. Many States with Large Minority Populations in the South and West have Closed Polling Stations

Number of Polling Places Closed (2012-2018)



Source: The Leadership Conference Education Fund, Citi Research

Income and Wealth

Disparities in housing, education, policing, and voting rights plus conscious and unconscious bias have limited access to employment for many Black Americans, and consequently social mobility and wealth accumulation.

Peak Income

Peak earnings are lower for Black and Hispanic males than white males and occur at a younger age

An extended history of job discrimination, plus unequal access to quality education in the U.S., have capped lifetime income prospects for many Black Americans. Census Bureau data reveal that as of 2018, it was still the case that male Black and Hispanic workers would see peak income earlier in their careers (age 40s), and at a far lower level (~\$40,000) than their white male peers (early 50s and ~\$65,000) (Figure 46). The gap between peak income between Black and Hispanic workers is even greater relative to Asian male workers (~\$80,000), even though Asian males experience peak income around the same age. For women the peak age is about the same as males, and the gaps in income between races is smaller. Moreover, peak earnings for Black women are about \$5,000 higher than for Black men. Nonetheless, women in general earn notably less over a lifetime than do men (Figure 47), having significant negative implications for retirement income which must typically be stretched over a longer period for women than for men.

Figure 46. Peak Income Occurs Sooner and Lower for Black Males

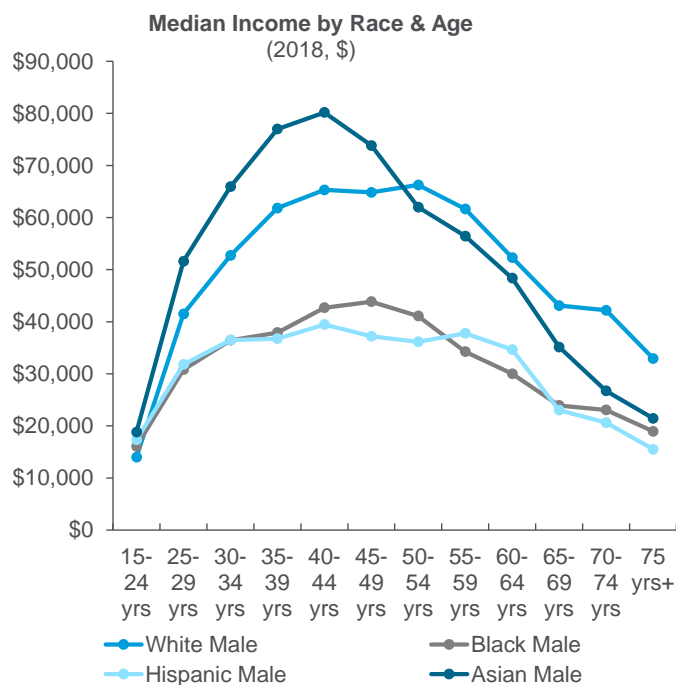
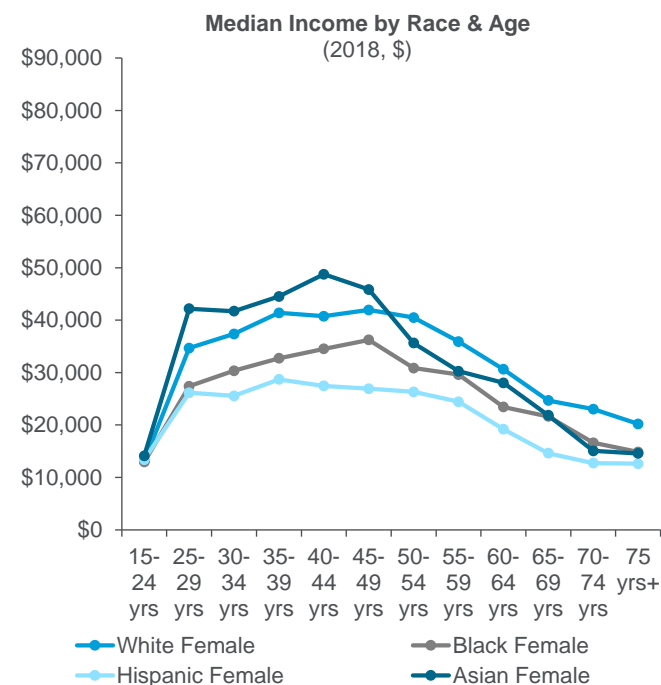


Figure 47. Income Prospects Over a Lifetime are Worse for Women



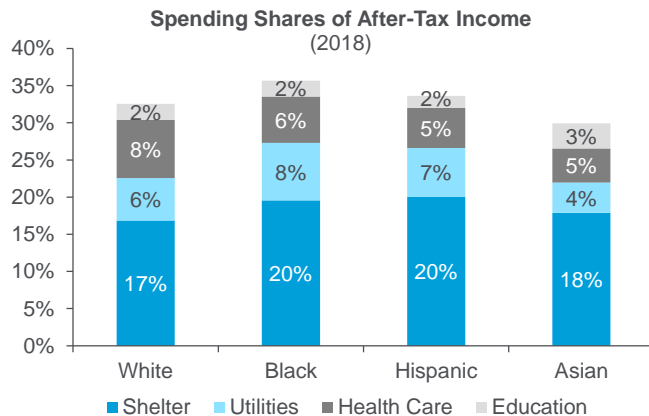
Lower lifetime income for Black families caps retirement funds, limits spending options, and reduces cushions needed during recessions and shocks

Income is key to accumulating liquid assets, which are important for smoothing consumption. Lower lifetime income prospects not only cap retirement funds, but also limit spending options over the course of a lifetime, and especially during economic downturns. The Bureau of Labor Statistics' Consumer Expenditure Survey shows that Black families spend slightly more of their incomes than other ethnic and racial groups on budgetary staples, including on housing (20 percent) and utilities (8 percent) (Figure 48). Black families (69 percent) are highly likely to be faced with unaffordable child care options, as are Hispanic families (72 percent), which can often consume as much as 11 percent of a family's monthly income (Figure 49).³⁰ Importantly, the level of family income is important for creating liquid assets (i.e., savings in the form of cash or easily convertible instruments like certificates of deposit (CDs)).

Savings are paramount for helping families to smooth their consumption over a lifetime, particularly during recessions, and shocks including job loss and illness. According to the Federal Reserve Board's Survey of Consumer Finances, the median amount of liquid assets held by Black families in 2016 (the most recent reading), was \$11,400 (Figure 50). This is roughly one-third of what white families held (\$29,200), suggesting that Black families are potentially more vulnerable to hardship during tough economic times. Hispanic families were worse off, with just \$6,500 in liquid assets.

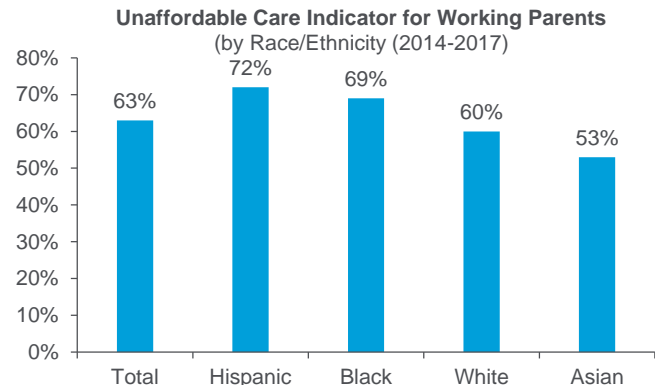
³⁰ Baldiga, M., Joshi, P., Hardy, E., and Dolores Acevedo-Garcia. 2018. "Data-for-Equity Research Brief, Child Care Affordability for Working Parents," Institute for Child, Youth and Family Policy, Heller School for Social Policy and Management Brandeis University; Malik, R. 2019. "Working Families Are Spending Big Money on Child Care," Center for American Progress, June 20, 2019.

Figure 48. Black and Hispanic Families Spend Slightly More on Housing than White and Asian Families



Source: Bureau of Labor Statistics *Consumer Expenditure Survey*, Citi Research estimates

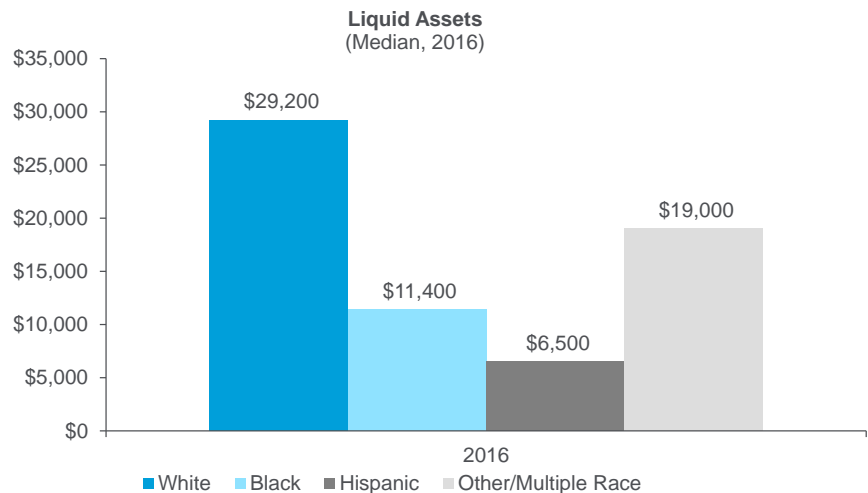
Figure 49. Black and Hispanic Families Are More Likely to Experience Challenging Child Care Options



Note: The sample is parents working full time and year round with four or fewer children and at least one child under age 14 (N=71,981).

Source: Current Population Survey, 2014-2017 March Annual Social and Economic Supplement, Public Use Microdata Files, IPUMS-CPS, University of Minnesota, www.ipums.org.

Figure 50. Black Families Hold Roughly One-Third of the Liquid Assets that Are Key to Smoothing Consumption than White Families Hold



Note: Liquid Assets include transaction accounts, certificates of deposits

Source: Federal Reserve *Survey of Consumer Finances*, Citi Research

Historical gaps in intergenerational wealth accumulation have led to challenges in social mobility for Black Americans

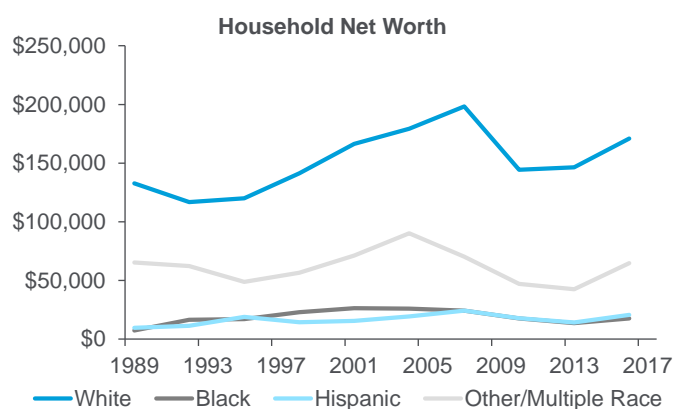
Wealth and Debt Gaps

The Federal Reserve Board's Survey of Consumer Finances reveals that the wealth gap between Black families and white families has remained persistently wide. Among Black families, household net worth, which is defined as total assets less all liabilities, has hovered in the \$15,000 to \$25,000 range over the last thirty years (Figure 51). Net worth for white families has been in the range of \$115,000 and \$200,000. The gap between white and Black familial income is a multiple of eight. Meanwhile, the leverage ratio — debt divided by assets — for Black families has remained stubbornly elevated above 25 percent over much of the last 30 years, while the leverage ratio for white families has held between 10 and 15 percent (Figure 52). These metrics matter as the body of literature suggests that wealth and debt play meaningful roles in social mobility, especially from one generation to the next.

A myriad of factors contribute to the racial wealth gaps in the U.S.

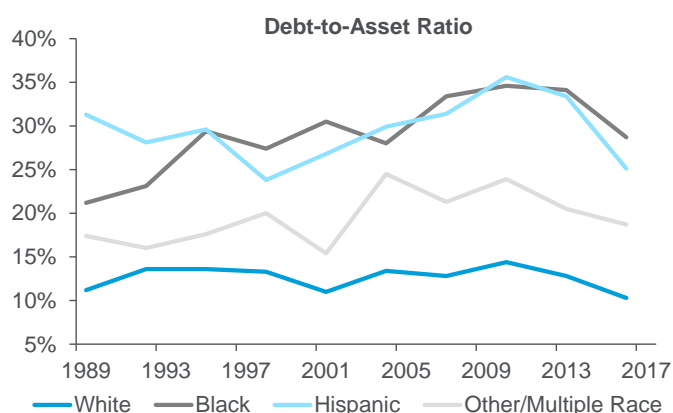
Building wealth is not just a function of higher income, but the ability to save out of income once basic needs are met. The outsized debt-to-asset ratio for Black families indicates that a number of families have insufficient income to meet needs and are financing expenditures with credit. This indicates a lack of disposable income available for saving and investing. Other factors contributing to wealth accumulation include (1) intergenerational transfers of wealth within families; (2) conditions where one lives, such as poverty rates, home values and housing segregation; (3) geographic and financial barriers to human capital formation (e.g., elevated costs for education; limited job prospects in region); (4) discrimination in labor markets and/or racially motivated segmentation; and (5) racial biases in policies and practices of government, institutions, and the private sector.³¹ Without amelioration, each of these factors discussed above will perpetuate racial wealth gaps.

Figure 51. White Families Have 8x More Wealth than Black Families



Source: Federal Reserve Survey of Consumer Finances, Citi Research

Figure 52. Leverage Ratios for Black Families Have Remained Elevated

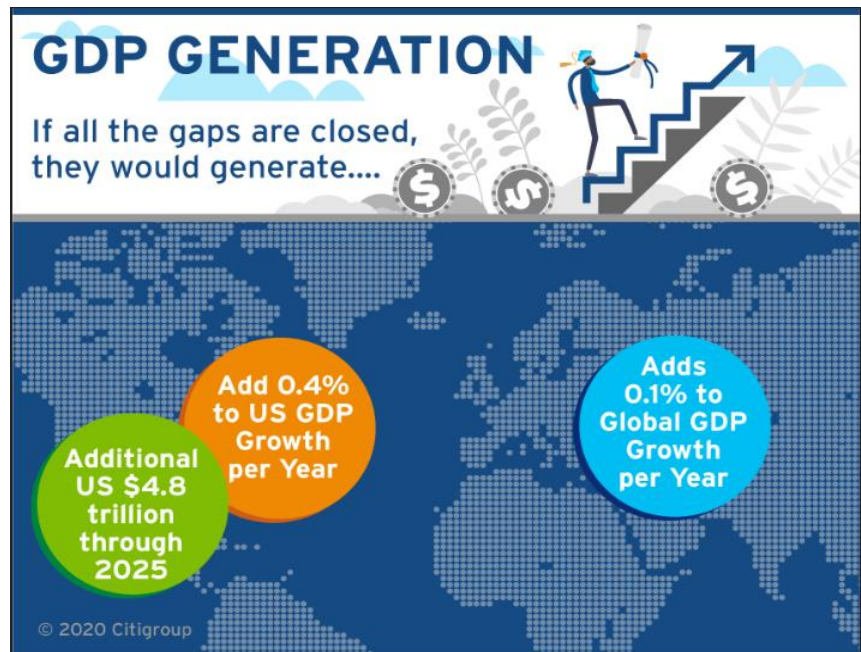


Source: Federal Reserve Survey of Consumer Finances, Citi Research

³¹ (i) (e.g., Meschede et al. 2017; Chiteji and Hamilton 2002; McKernan et al. 2014b); (ii) (e.g., Chetty et al. 2019; Perry et al. 2018); (iii) (e.g., Dobbie and Fryer 2011; Jackson and Reynolds 2013; Addo et al. 2016); (iv) (e.g., Grodsky and Pager 2001; Bertrand & Mullainathan 2004); (v) (e.g., Oliver and Shapiro 2013; Katznelson 2005; Robles et al. 2006; Bayer et al. 2014; Asante-Muhamm).

Closing Gaps Generates Growth

Figure 53. The Economic Case for Closing Racial Gaps in the United States



Source: Citi Research

Amid a once-in-a-century global pandemic that has resulted in staggering economic and job losses, investors should welcome ideas and actions that can add value. Closing racial gaps is one.

The business case for eliminating racial gaps is well established

The business case for eliminating racial gaps is well established. Some firms believe continuing to focus on Diversity & Inclusion (D&I) as part of their COVID-19 recovery strategy is a luxury. However evidence shows firms who do not abandon D&I protocols may fare better. Companies in the top quartile for both gender and ethnic diversity are 12 percent more likely to outperform companies in lower quartiles. Top quartile companies outperformed those in the fourth by 36 percent in terms of profitability (up from 33 percent in 2017, 35 percent in 2014).³²

The economic case for closing racial gaps is equally compelling

The economic case for closing racial gaps is equally compelling. Present racial gaps in income, housing, education, business ownership and financing, and wealth are derived from centuries of bias and institutionalized segregation, producing not only societal, but also real economic losses. However, future gains from eliminating these gaps are enormous: benefiting not only individuals, but also the broader U.S. economy with positive spillover effects into the global economy. If four key racial gaps had been closed 20 years ago, then the additional GDP that could have been added to the U.S. economy might have summed to as much as \$16 trillion. Casting this amount forward into the future, a global economic model suggests roughly \$5 trillion could be added to U.S. GDP through 2025 from closing the gaps. The consequent additions to U.S. and global GDP growth averages roughly 0.4 percentage point and 0.1 percentage point per year, respectively. These gains do not reflect the potential narrowing of the wealth gap experienced by Black persons in the U.S., which would inevitably also lead to additional economic gains.

³² Hunt, V., Layton, D., and Sara Prince "Why diversity matters," McKinsey, January 1, 2015.

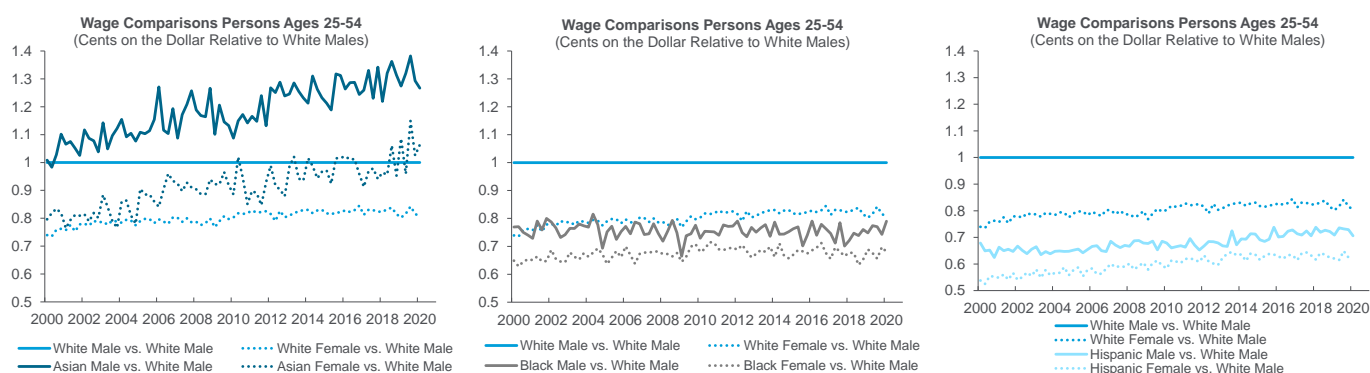
Racial Wage Gap

Opportunity Loss

Racial and gender wage gaps remain wide in the U.S., signaling lost opportunity for income, consumption, investment, and real GDP growth

Racial and gender wage gaps remain wide in the U.S., signaling lost opportunity for income, consumption, investment, and real GDP growth. Typically, wage gaps are measured by comparing the median wage of female and/or non-white workers to that of white males. Over the last 20 years, wages for Asian males have broken significantly above those of white males, and in the most recent two years, wages for Asian women exceed those of white males. However, for white women in general and Black and Hispanic workers in particular, the gaps between white male wages persist. The gap for Black male wages compared to white male wages was 80 cents on the dollar, as of 2020. The gap for Black female wages to white male wages was just below 70 cents on the dollar in 2020. The gaps for male and female Hispanic workers relative to white male wages is even starker at about 70 cents and 60 cents, respectively (Figure 54).

Figure 54. Black and Hispanic Men and Women Make Fewer Cents on the Dollar than White Men and Women



Source: Bureau of Labor Statistics, Citi Research

Individual wage losses over the past 20 years have been substantial — between \$175,000 and \$360,000 — due to racial and gender gaps

Individual wage losses due to gaps over the last 20 years have been substantial. The gap in terms of aggregate income for white female wages (i.e., all white women nationwide) compared to white male wages has been narrowing as a share of U.S. GDP over the last 20 years (Figure 55). Some of this reflects slower GDP growth in general, but also a slight increase in white female wages. However, for Black and Hispanic male and female workers, their gaps as shares of GDP have not improved. The presence of gaps denote significant opportunity loss in terms of wages that could have been used for personal consumption, home buying, or investment in small businesses. As the wage gap with white males was not collapsed for white females 20 years ago, the typical individual white female worker missed out on roughly \$175,000 in additional income. For Black males, the loss was approximately \$225,000, for Black females and Hispanic males about \$300,000, and for Hispanic females roughly \$360,000 (Figure 56).

Figure 55. Wage Gap has Narrowed Somewhat for White Women but Not for Black, Hispanic and Other (Non-Asian) Minority Groups

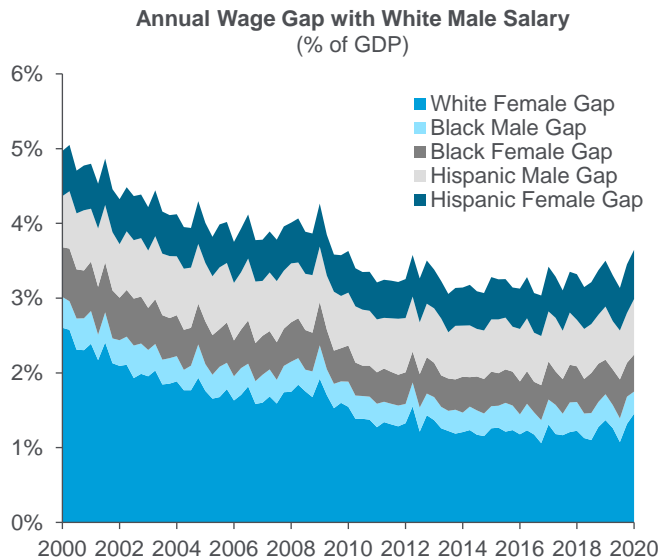
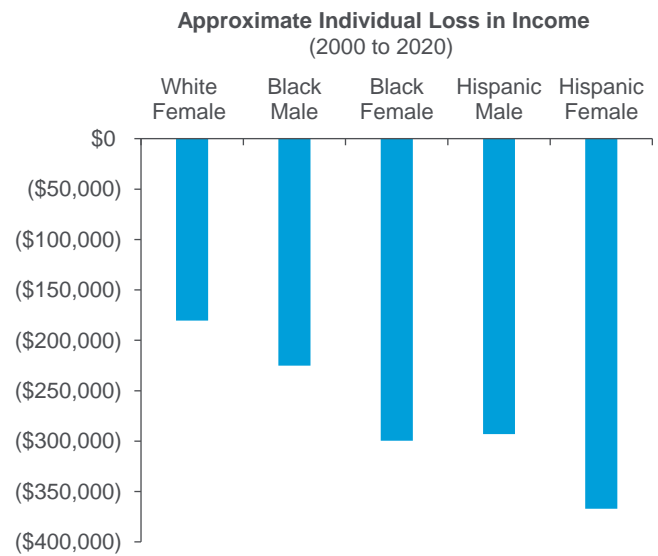


Figure 56. Accrual of 20 Years of Lost Income Due to Wage Gap is Acute for the Representative Black and Hispanic Worker

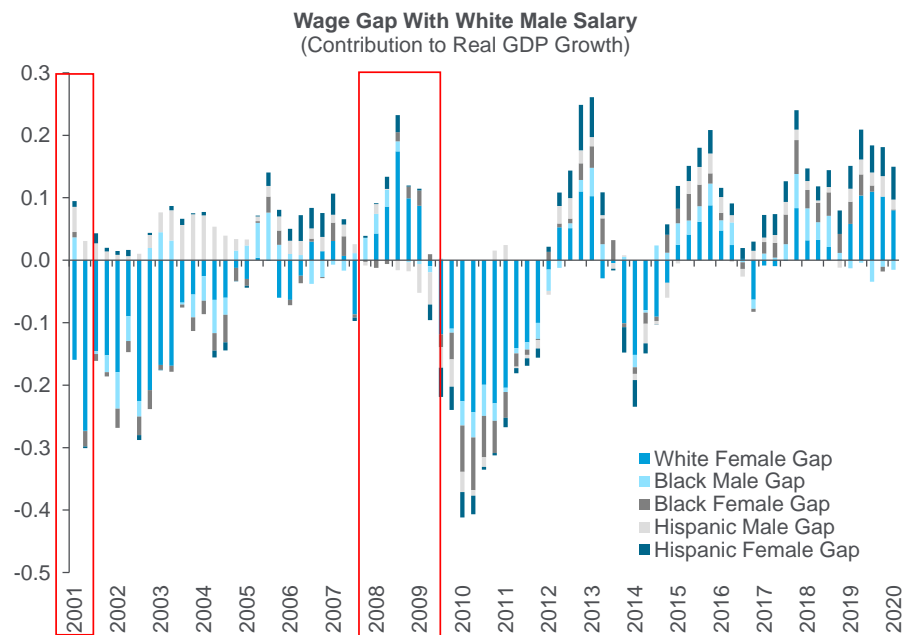


Closing the Gap

Closing the minority wage gap 20 years ago could have generated \$12 trillion in income; \$2.7 trillion for Blacks

The wage gaps between minorities and white males, if closed 20 years ago might have generated \$12 trillion in additional income, and indeed for Black workers an additional \$2.7 trillion. Since the Great Financial Crisis, income inequality expressed in one fashion by wage gaps has worsened in most years. The aggregate amount of income lost due to wage gaps each year is equivalent to a roughly 0.15 percentage point contribution to U.S. GDP growth per year (Figure 57). While that appears to be a nominal amount in comparison to the losses experienced amid the COVID-19 global recession, in “normal” years a nearly 0.2 percentage point add to annual U.S. GDP growth is actually quite substantial. This is especially true as the pre-pandemic economy was on course to slow to a new equilibrium rate of 1.7 to 1.9 percent a year. The total amount of income that could have been generated since 2000 if all income gaps were closed sums to an astounding \$12 trillion, with \$5 trillion from closing the white male-white female gap, and another \$7 trillion from closing the gaps between white males and Black and Hispanic workers. The contribution of closing the Black worker gaps with white male wages is an outsized \$2.7 trillion (Figure 58 and Figure 59).

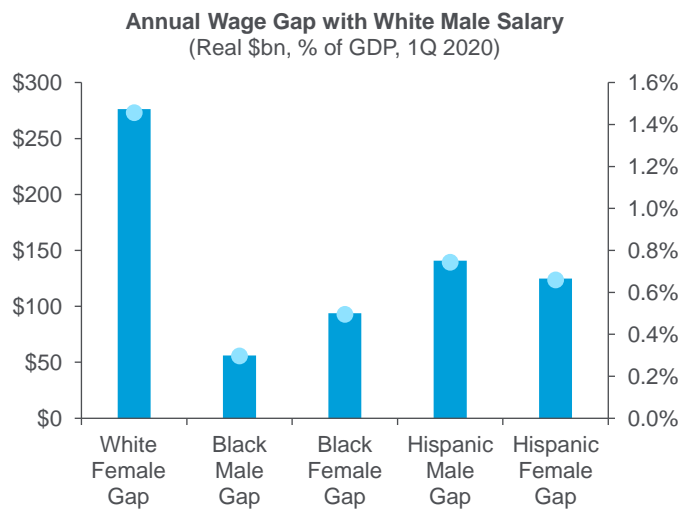
Figure 57. Closing Wage Gaps for White Women and Minorities Could Have Contributed to GDP Growth in Most Years Post-Great Financial Crisis (GFC)



Note: Red rectangles denote U.S. recessions

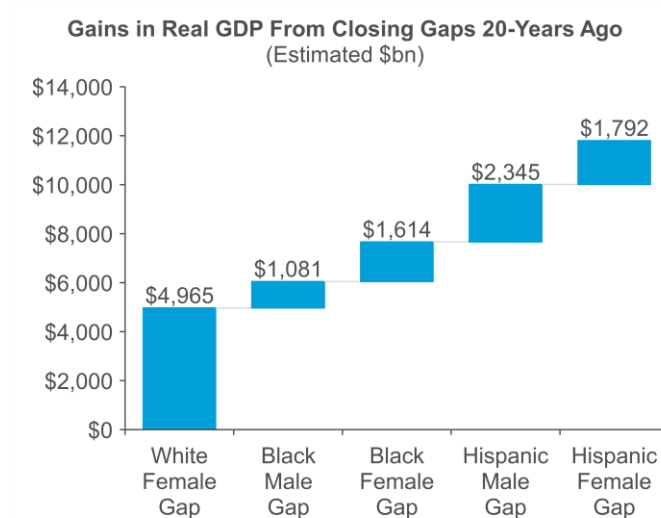
Source: Bureau of Labor Statistics, Bureau of Economic Analysis (BEA), Citi Research estimates

Figure 58. Gaps with White Male Salaries Remain Wide in 2020



Source: Bureau of Labor Statistics, BEA, Citi Research

Figure 59. Lost Wages Add Up to Trillions of Dollars in Foregone GDP



Source: Bureau of Labor Statistics, BEA, Citi Research

Racial Labor Segmentation Gap

Location, Location, Location

Black workers represent 10 percent or less of many of the occupations paying the top wages

Where a person works determines their wage potential. In general, Black workers are underrepresented in management, business, financial, professional and related occupations that pay the highest salaries. The share of Black managers is roughly 10 percent compared to almost 20 percent among white workers (Figure 60). The share of Black professionals is about 20 percent compared to nearly 35 percent among Asian. On balance, Black workers represent 10 percent or less of many of the occupations that pay the top wages, including STEM, finance, legal, medicine, and management jobs (Figure 61). Black workers are, however, overrepresented in sales and services occupations, office and administrative, as well as in transport and material moving occupations (Figure 62).

Almost half of Black workers are employed in jobs potentially subject to automation

Black workers are more likely to be situated in jobs requiring lower skills and/or are more susceptible to automation. Skill requirements and the risk of automation appear to be drivers of wage differences between more technical and less technical occupations. A study by Carl Benedikt Frey and Michael Osborne highlighted in the Citi GPS report [Technology at Work](#) noted that 47% of U.S. jobs were at risk due to automation. Among Black workers, close to half (46 percent) work in jobs that are subject to potential automation compared to those that are not (54 percent), and only 3 percent of Black workers are in technical jobs, leaving the other 97 percent in non-technical jobs that could be automated to some degree (Figure 63).

Figure 60. Black Workers Are Underrepresented in Management, Business, financial, Professional and Related Occupations

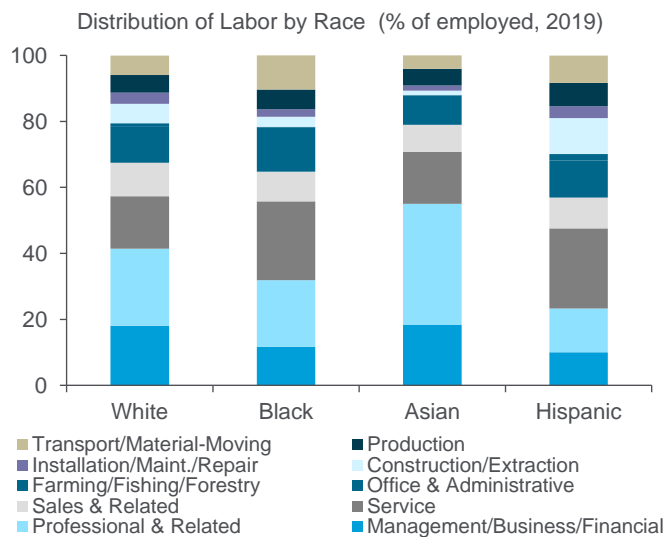


Figure 61. Black Workers Comprise Small Shares of Occupations that Typically Pay Higher Wages Compared to White and Asian Workers

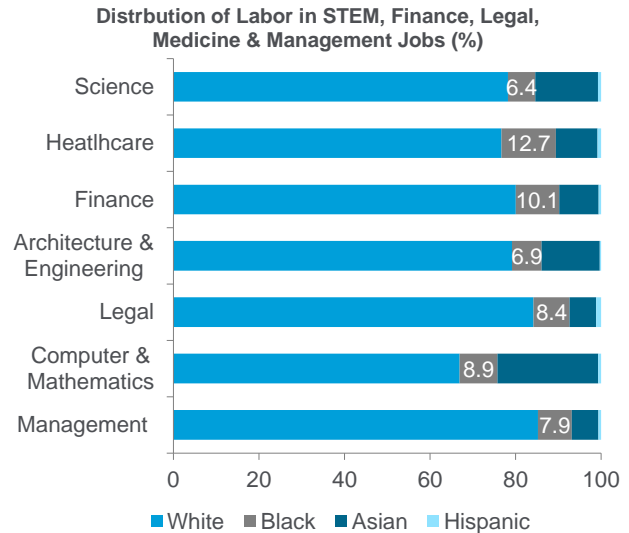
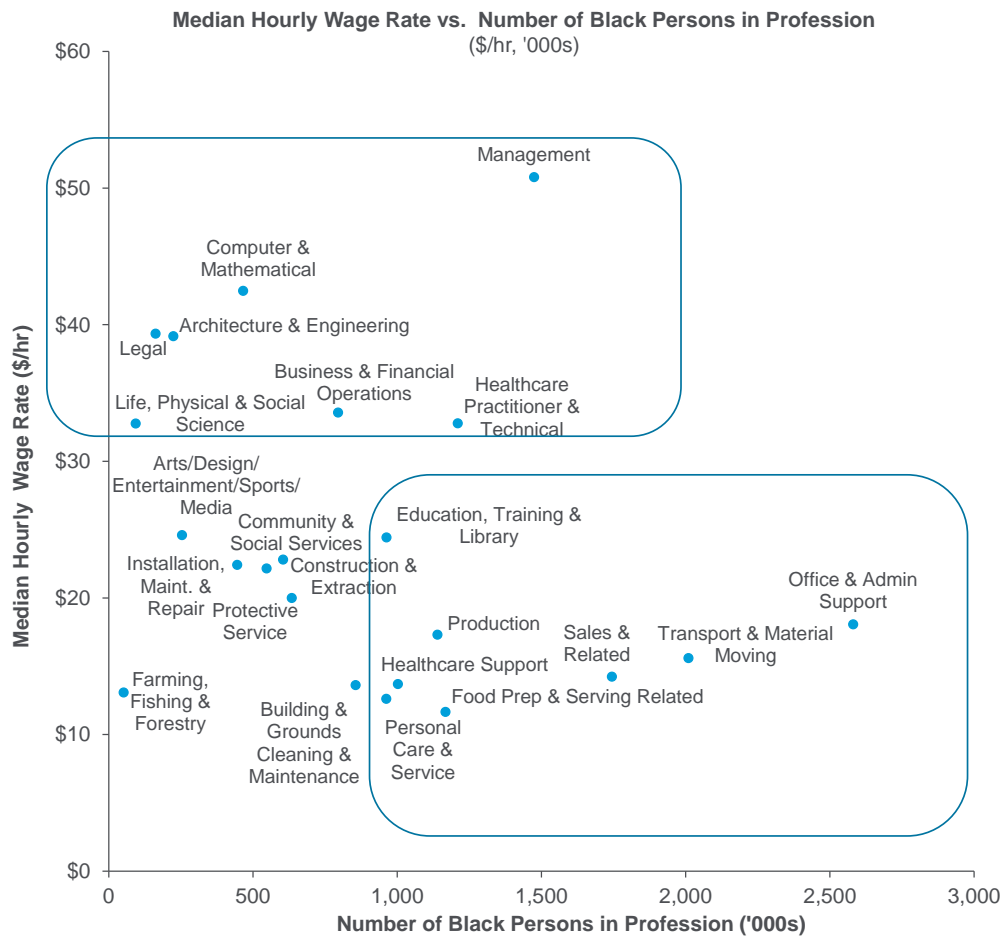


Figure 62. Black Workers Are More Concentrated in Jobs that Pay Less than \$25/hour and May Also Require Fewer Skills



Source: Bureau of Labor Statistics, Citi Research

Figure 63. Black People are More Likely to Work in Jobs That Are Susceptible to Automation

	Workers in Jobs Susceptible to Automation	Workers in Jobs Not Susceptible to Automation	Workers in Tech Jobs	Workers in Non-Tech Jobs
Worker Population	58.7 Million	77.7 Million	7.2 Million	129.2 Million
Number of Workers	39 years	41 years	41 years	40 years
Median Age	\$17.37	\$26.94	\$39.68	\$21.88
Mean Hourly Wage	\$14.26	\$22.06	\$36.76	\$17.16
Percent of workers in the below groups who hold jobs of the specified type:				
Total Workers	43.0%	57.0%	5.3%	94.7%
Male	44.1%	55.9%	8.1%	91.9%
Female	41.9%	58.1%	2.4%	97.6%
Asian, non-Hispanic	35.9%	64.1%	15.9%	84.1%
Black, non-Hispanic	46.4%	53.6%	3.0%	97.0%
Hispanic	54.1%	45.9%	2.3%	97.7%
White, non-Hispanic	40.0%	60.0%	5.6%	94.4%
Other, non-Hispanic	45.2%	54.8%	4.9%	95.1%
Graduate Degree	11.3%	88.7%	10.6%	89.4%
Bachelor's Degree (BA)	26.9%	73.1%	11.3%	88.7%
Some College, but less than a BA	46.7%	53.3%	3.9%	96.1%
High School Degree or Less	60.7%	39.3%	1.0%	99.0%

Source: U.S. Government Accountability Office, BLS and Citi Research

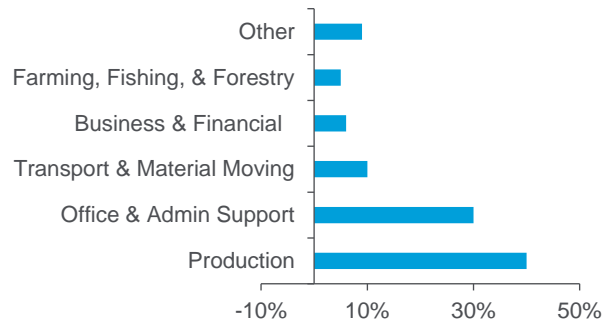
Closing the Gap

Pursuing education and training for more technical and skills-based careers can help close the racial labor segmentation gap

Encouraging Black students and workers to pursue education and training suitable to more technological and skills-based careers can help close the racial labor segmentation gap. The BLS cites literature in labor economics positing that technology has increased the productivity of workers with college educations more than workers with less education. The increase in productivity helps explain the rise of earnings for college-educated workers relative to the earnings of non-college-educated workers, despite the increase in the labor supply of college-educated workers. The BLS notes that since 1980, the relative incomes of college-educated workers have risen compared to high school-educated workers, after adjusting for other observable factors. The phenomenon is called the college earnings premium, which has increased from 34 percent in 1980 to 68 percent by 2018 (Figure 65). One aspect of the widening premium is the share of hours worked by college-educated workers has nearly doubled from 20 percent in 1979 to 39 percent by 2018. In a simple supply-demand framework, this suggests demand for college-educated workers has outpaced the steady increase in supply. Hence, there is plenty of room for more Black college graduates to be absorbed into the U.S. labor market.

Figure 64. Select Occupations Are More Susceptible to Automation

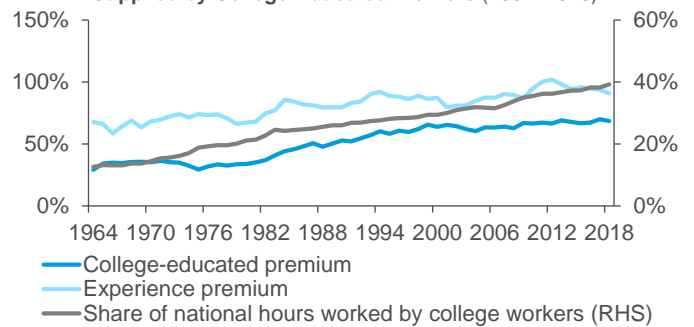
Occupations Projected to Experience Declines in Share of Industry Employment Due to Automation (2016-2026E)



Source: US Government Accountability Office, BLS, Citi Research

Figure 65. College Degrees Produce Notable Wage Benefits

College Wage Premium, Experience Premium, & Share of Labor Supplied by College-Educated Workers (1964–2018)



Source: BLS, Citi Research

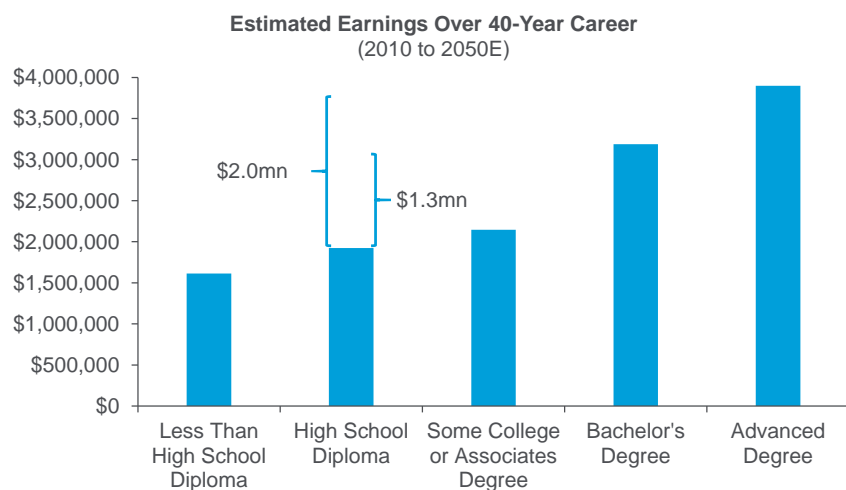
Racial Education Gap

Higher Education

Attainment of higher education can be challenged by lack of access to quality pre-school education and underfunded public schooling in K-12

Encouraging Black students to pursue higher education is a manner in which racial wage and income gaps can be closed, but there are challenges. Plenty of literature and simple calculations affirm that persons with a degree beyond a high school diploma earn more over a lifetime than persons with a high school degree or less. The difference over a 40-year career is upwards of \$1.3 million for a person with a bachelor's (or equivalent) degree and \$2.0 million for a person with an advanced degree (Figure 66). However, the path towards college and advanced degrees for Black students is challenged by lack of access to a quality pre-school education and underfunding of public schools from grades K-12. For Black students who do attend college, which since 1980 has consistently been 10 percentage points below the national average, the occupation chosen after graduating from college or with an advanced degree also determines lifetime income.

Figure 66. Students Earning Bachelor or Advanced Degrees Earn More Lifetime Income



Source: Bureau of Labor Statistics, Citi Research

Access to Pre-School

Black children are more likely to attend full-time pre-school than other children

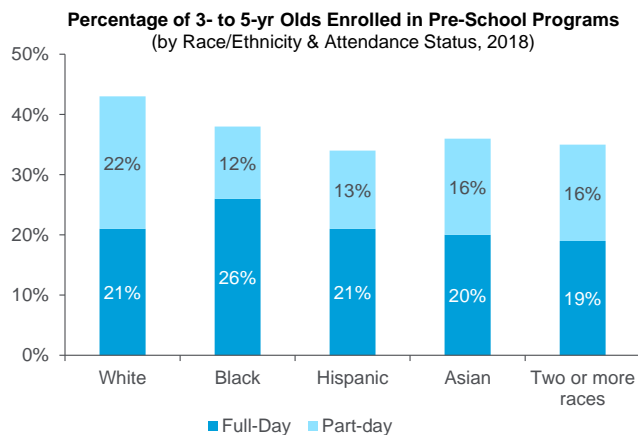
Education literature suggests that children who receive a pre-school education perform better once in grades K-12. Pre-school programs also serve as an important form of childcare for working parents. A [Brookings Institute](#) report summarizing early education studies found that high-quality programs produced short-term gains in cognitive functioning and longer-term gains in school achievement and social adjustment. Moreover, pre-school education yields higher school achievement, fewer children being 'left-back' in a grade, reduced need for special education, and a reduction in neighborhood crime. Early childhood education can also save governments between \$13,000 and \$19,000 per child over and above the cost of the pre-school program. The [National Center for Education Statistics](#) reported that in 2018, 26 percent of Black children aged 3-5 years old attended full-time pre-school, exceeding every other racial group (Figure 67). Slightly more white children overall (43 percent) attended either full- or part-time pre-school, compared to 38 percent of Black children. Nonetheless, a sizable number of Black children overall attend pre-school.

But access to high-quality, adequately-funded pre-school varies by state...and poor funding is directly linked to quality of education

However, access to high quality, adequately-funded pre-school remains challenged in terms of availability, quality, funding, and training of teachers. State-funded (as opposed to private) pre-school programs serve just 22 percent of 4-year-olds and 3 percent of 5-year-olds. Only three states — Florida, Georgia, and Oklahoma — make pre-school available to all 4-year-olds. Twelve states with state-funded pre-school do not offer programs to 3-year-olds, and 12 states have no state-funded pre-school at all (Figure 68). Overall state spending on pre-school is disparate, ranging from \$1,600 per child to \$10,000, and the average amount of spending (\$3,600 per child) is roughly one-third of the average spend on public school students in K-12. Quality of education also varies. The National Institute for Early Education Research (NIEER) reports only 17 states meet eight or more of their ten quality-checklist criteria. Poor funding is directly linked to quality according to NIEER, and programs serving primarily poor students tend to receive less funding than those who serve more middle-class students. Relatedly, while 76 percent of pre-school teachers have a Bachelor's degree, only roughly 56 percent have a teaching certificate to teach young children. Moreover, pre-school teachers earn less than half of that earned by elementary school teachers, and 70 percent report earnings below 200 percent of the Federal poverty guidelines.

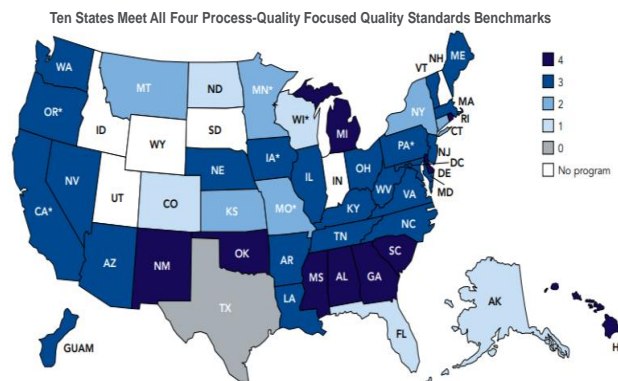
These figures are important, as state programs comprise 70 percent of all early childhood education centers, and the states with the least funding and poorest quality tend to host large Black populations.

Figure 67. Black Children More Likely to Attend Full-Day Pre-School



Source: Census Bureau, Citi Research

Figure 68. Few States Have High Quality Pre-School Programs



Note: Idaho, Montana, New Hampshire, North Dakota, South Dakota, Utah and Wyoming have no state pre-school program.*These multi-program states have programs with different quality standards. Data in map is for largest state program.
Source: National Institute for Early Education, NPR, Citi Research

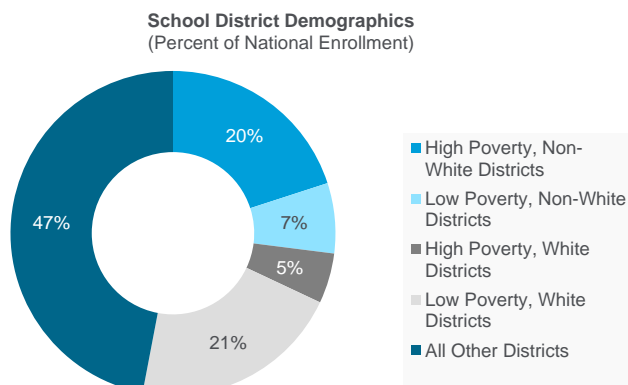
Funding K-12 Schools

The funding gap between white and minority school districts in the U.S. sums to \$23 billion, despite serving the same number of children

The racial education gap begins with widespread underfunding of schools with high concentrations of children of color. The average difference in funding of predominately white school districts and predominately minority school districts sums to \$23 billion, despite serving roughly the same number of children, according to a study by nonprofit think tank EdBuild. In the U.S., 27 percent of students live in non-white districts, while 26 percent live in white districts. In white districts, 5 percent of students live in high-poverty areas, while in non-white districts 20 percent of student live in high-poverty areas (Figure 69). Even relative to high-poverty white districts, well-off non-white districts receive less money.

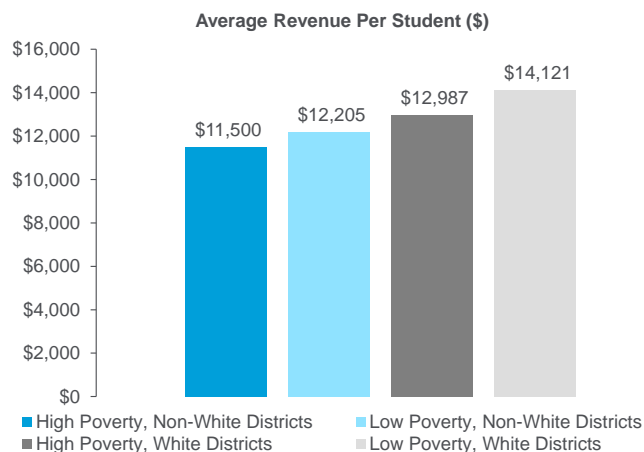
The difference between the revenue received for funding low-poverty white districts (\$14,121 per student) and all non-white districts (\$11,853) is more than \$2,200 per student (Figure 70). EdBuild estimates the national average difference in revenue per student between non-white and white districts is \$2,226. This difference this difference sums to \$22.5 billion (\$2,226 times 10,126,150 affected students). States that stand out in terms of the severity of the funding gap between non-white and white school districts include California, Texas, New Jersey, and Arizona (Figure 71).

Figure 69. White and Non-White Districts Serve Same Number of Kids



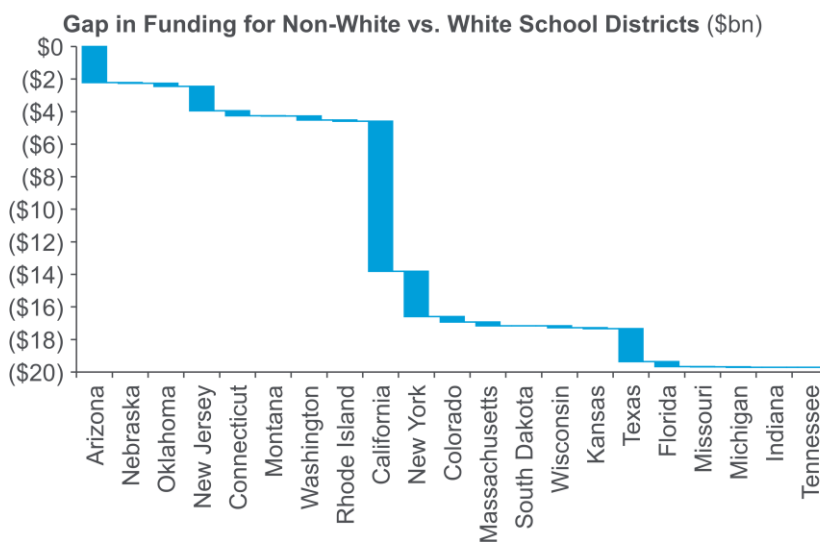
Source: EdBuild, Citi Research

Figure 70. Non-White Districts are Chronically Underfunded



Source: EdBuild, Citi Research

Figure 71. Funding Gaps Between White and Non-White School Districts Remain Wide



Source: EdBuild, Citi Research

Reliance on property taxes for school funding means wealthier municipalities will have potentially greater resources to finance their school districts

Where a student resides can determine whether they will face a funding disadvantage. The Federal government spends roughly \$23 billion a year on K-12 education. While a sizable figure, it only constitutes 10 percent of total funding for public schools. The remaining \$660 billion is raised at the state and local government level. The gap in school funding reflects a combination of past housing segregation policies and a patchwork of current district financing schemes that value local control.

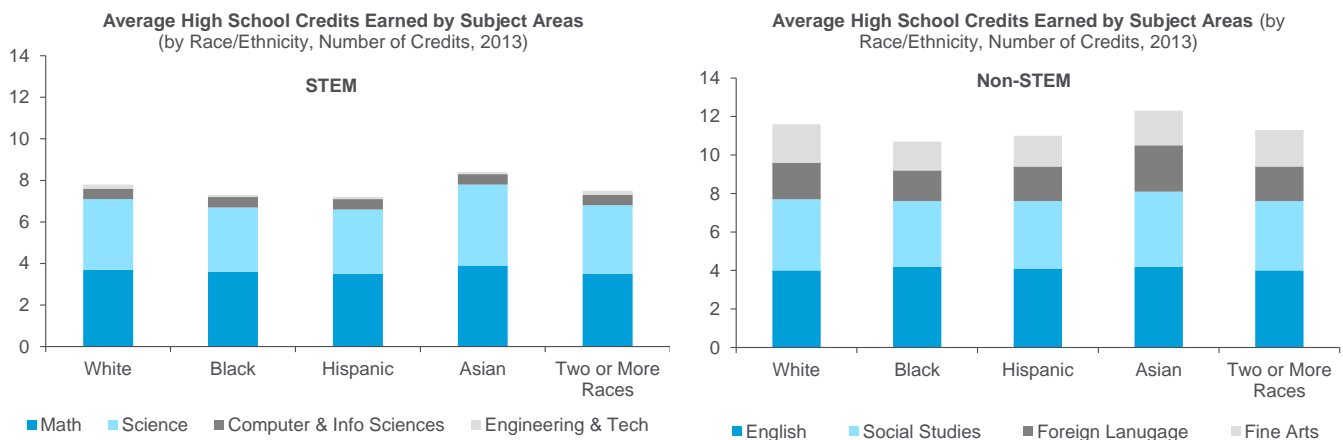
According to EdBuild, nearly all states rely upon property taxes to fund schools. Hence wealthier municipalities will have potentially greater resources to finance their school districts. Fifteen states also generate funds through locally-raised sales taxes, six permit locally-governed income taxes and many states use revenues from lottery gaming programs. Just over half of all states employ a student-based formula, while the remainder fund schools based upon a variety of formulas.

STEM and High-Demand Careers

Only about 20% of students earning university degrees earn degrees in STEM-related fields but Black students only make up 12% of STEM graduates

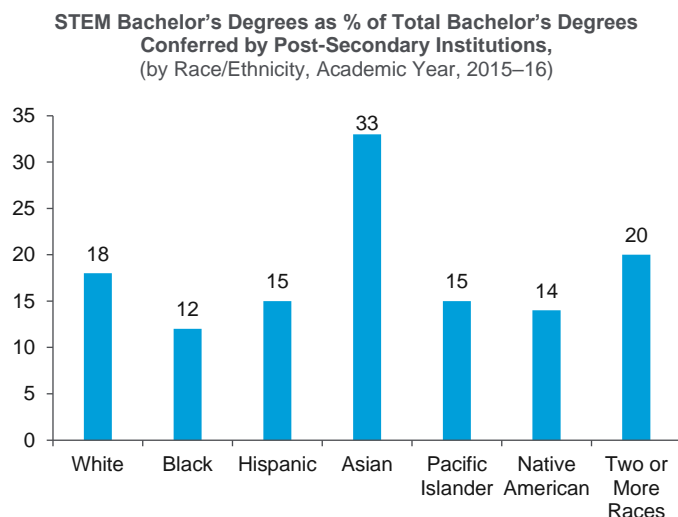
In addition to funding, school curricula and whether students are directed towards high-wage and/or in-demand occupations matters for closing the education gap that can help solve the income gap. Department of Education data from 2013 indicated that U.S. high school students were on average taking fewer course credits in STEM (Science, Technology, Engineering, and Mathematics) disciplines than in humanities and arts. Even among those taking STEM coursework, Black students took slightly fewer credits than their white and Asian counterparts (Figure 72). More recent data from 2015-16 show that among students receiving university degrees few — 20 percent or less — earn degrees in STEM-related fields, which typically have elevated wages and lifetime earnings potential. Asian students were the exception, with 30 percent of all degrees from STEM programs. Among all other students, Black students produced the least STEM graduates at 12 percent (Figure 73).

Figure 72. U.S. Students in General Are Taking Fewer Credits in STEM Courses than Non-STEM Courses

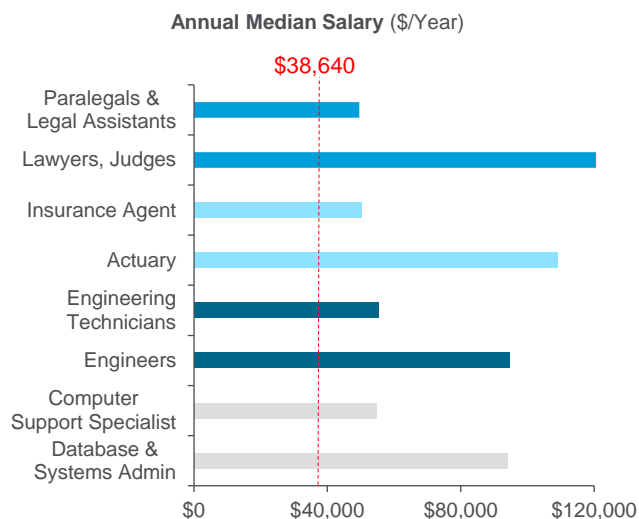


Source: National Center for Educational Statistics, Citi Research

STEM jobs generally pay more than many 'middle-class' non-STEM jobs. Even within the STEM fields, jobs requiring greater skills pay notably more than the U.S. national median annual salary of \$38,640 (Figure 74). It's logical for young students, to not only pursue more difficult jobs in the STEM, finance, and legal fields, but to also aim for those requiring greater mental and/or technical acuity within these fields given the enhanced potential for increased lifetime earnings. Access to high quality education and opportunities throughout one's academic career, as well as guidance by mentors and exposure to higher paying occupations early in one's working career are key to closing the gap.

Figure 73. Black People Have the Smallest Share of STEM Graduates

Source: National Center for Educational Statistics, Citi Research

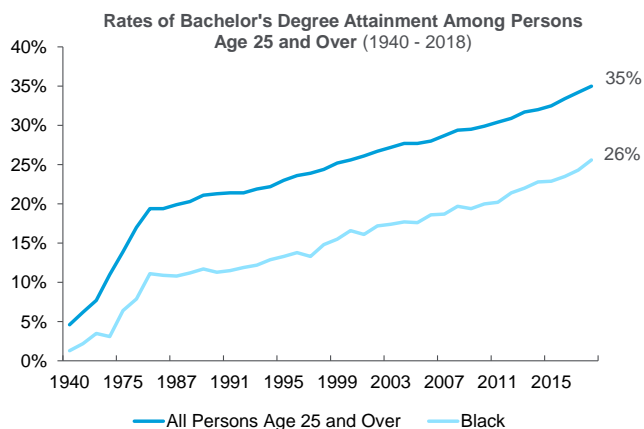
Figure 74. STEM Jobs Pay More than Many Middle-Class Jobs

Source: National Center for Educational Statistics, Citi Research

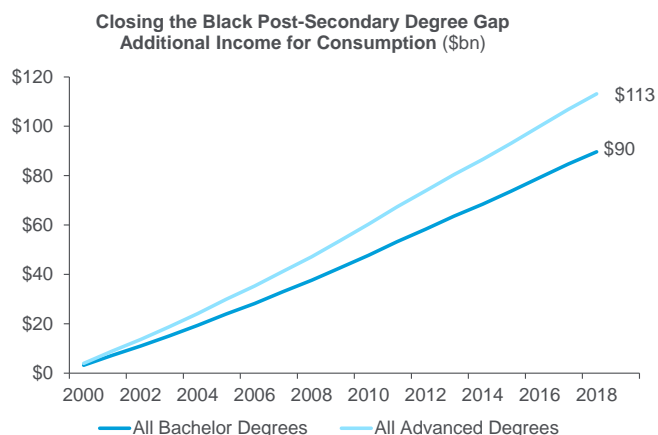
Closing the Gap

Closing the gap in advanced degrees between Blacks and the national average 20 years ago would have produced an additional 1.7 million Black university graduates

Closing the college/advanced degree racial gap 20 years ago might have generated up to \$113 billion in additional income for saving, investing and consumption. Since the early 1980s, the proportion of Black people aged 25+ who obtain a bachelor's degree has persistently been about 10 percentage points below the U.S. national rate (Figure 75). If this gap was closed back in 2000, then over the last 20 years there might have been an additional 1.7 million Black university graduates. If these graduates earned the median income that bachelor degree holders made, as described above, the equivalent additional income generated might be roughly \$90 billion. If all of those graduates obtained advanced degrees, the figure might increase to \$113 billion (Figure 76). This is not a recommendation for students to only pursue college or graduate school. It is saying that any degree — college, graduate, associate, technical — in excess of a high school degree typically signals greater lifetime income.

Figure 75. The Gap Between Black and National Degree Attainment Has Been Fairly Steady at Around 10 Percentage Points

Source: National Center for Educational Statistics, Citi Research

Figure 76. Closing the 10 Percentage Point Gap 20 Years Ago Might Have Generated an Additional \$90 to \$113 Billion in Black Income

Source: National Center for Educational Statistics, Citi Research

Racial Wealth Gap

Black and Hispanic families continue to trail white and Asian families in accumulating wealth

Black and Hispanic families continue to trail white and Asian families in accumulating wealth. Issues like lack of inheritances and barriers to entry, including to income and access to credit, appear to be working against the ability of Black and Hispanic families to amass wealth required for acquiring assets for personal financial security and community investment. Data from the Federal Reserve's 2010 and 2013 Surveys of Consumer Finances, while dated, reveal that inherited wealth significantly bolsters familial wealth, particularly for white families (Figure 77). Black families are less likely to receive (10.6 percent) or expect an inheritance (5.9 percent) relative to white families (22.9 percent and 18.8 percent). Meanwhile, easier avenues toward the accumulation of generational wealth, like home ownership and retirement benefits, are littered with obstacles for minorities, especially Black and Hispanic families.

Figure 77. Inheritance Can Meaningfully Bolster Familial Wealth

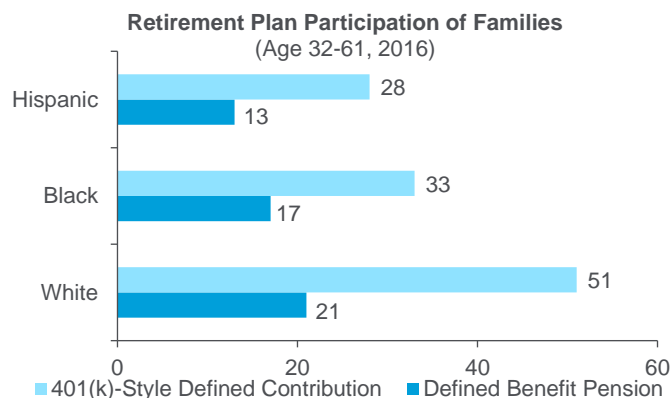
	Including Households With Inheritances		Only Households Without Inheritance	
	Mean Wealth	Median Wealth	Mean Wealth	Median Wealth
White	\$ 1,152,818.00	\$ 287,457.00	\$ 742,627.00	\$ 183,050.00
Black	\$ 168,238.00	\$ 38,174.00	\$ 85,702.00	\$ 33,969.00
Hispanic	\$ 399,498.00	\$ 65,960.00	\$ 196,541.00	\$ 38,125.00

Source: Federal Reserve Board, Citi Research

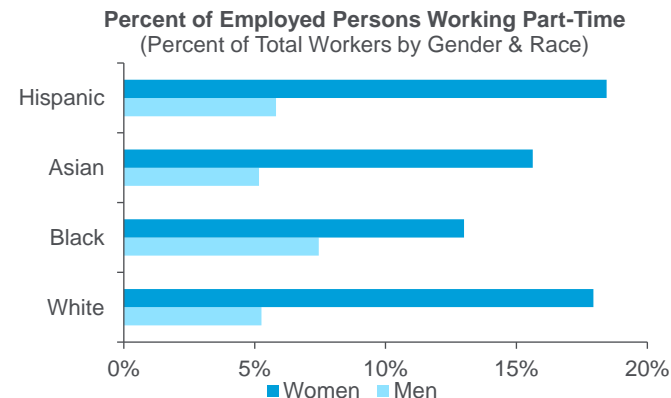
Financial Assets

Black families have one-third, and Hispanic families one-fourth the financial assets of white families

Black families have one-third, and Hispanic families one-fourth the financial assets of white families. Financial assets are dependent on income, job benefits, the ability to accumulate savings, and generational (inherited) wealth. The ability to invest depends on initial conditions including inherited wealth, the ability to work in a high wage job that facilitates savings needed for investment, a higher tolerance for risk, and financial savvy. The sections above explain the challenges for Black and Hispanic families regarding inheritances and high wage employment. Linked to high wage employment are benefits including retirement benefits and pooled investment funds like 401K plans, which are an easy way to accumulate financial wealth. Black and Hispanic workers are almost equally likely to participate in traditional pension plans, but less likely to participate in 401K plans relative to their white counterparts (Figure 78). Jobs that have unions which bargain for pensions may explain some of the similarity in rates of participation among racial groups. Greater labor force participation in jobs that are non-unionized, part-time and/or lacking in benefits among Black and Hispanic workers may explain the disparity for 401K plans (Figure 79).

Figure 78. Black and Hispanic Workers Are Less Likely to Participate in 401(k) Plans

Source: Federal Reserve Survey of Consumer Finances, Citi Research

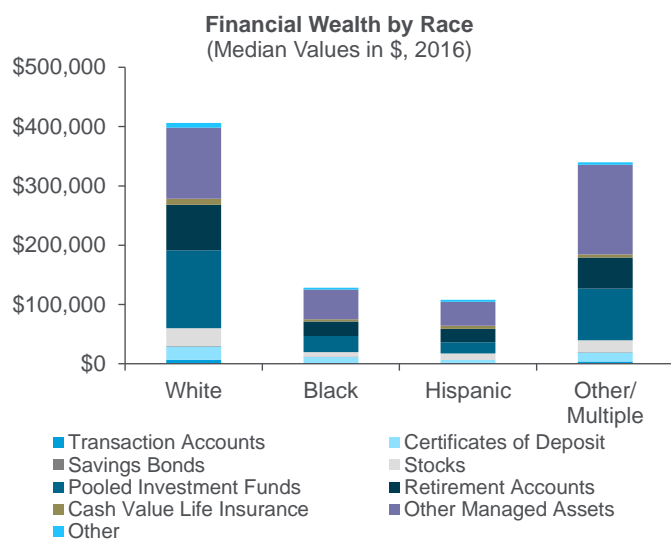
Figure 79. Black Men are Slightly More Likely to Work Part-Time than White Men; Black Women More Likely to Work Part-Time than Men

Source: Bureau of Labor Statistics, Citi Research

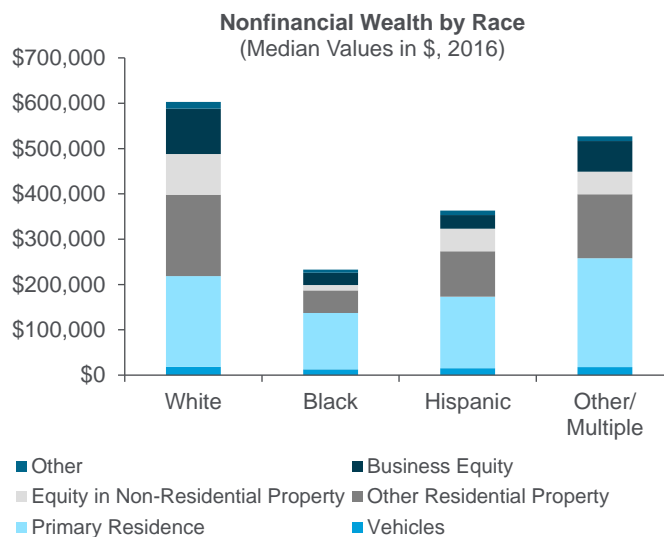
Nonfinancial Assets

Black families have fewer assets in every category of nonfinancial wealth compared to other races

Black families have fewer assets in every category of nonfinancial wealth compared to other races, with elevated barriers to attaining such wealth via property holdings. Nonfinancial assets depend upon income and wealth (Figure 80), but also equal access to credit. The largest contributors of nonfinancial wealth are related to real estate (primary residence, other residential property and nonresidential property). Property is typically acquired through inheritance, or a combination of savings (from earned income and financial assets) and access to credit, which is often dependent upon one's savings, proof of a perpetual source of income (wages), and credit history. Black families are trailing other races on nearly all of these fronts, rendering the path towards building wealth through nonfinancial assets difficult to attain (Figure 81).

Figure 80. Black Families Have One-Third of the Financial Assets of White Families

Source: Federal Reserve Board, Citi Research

Figure 81. Black Families Have Fewer Assets in Every Category of Nonfinancial Wealth Relative to Other Races

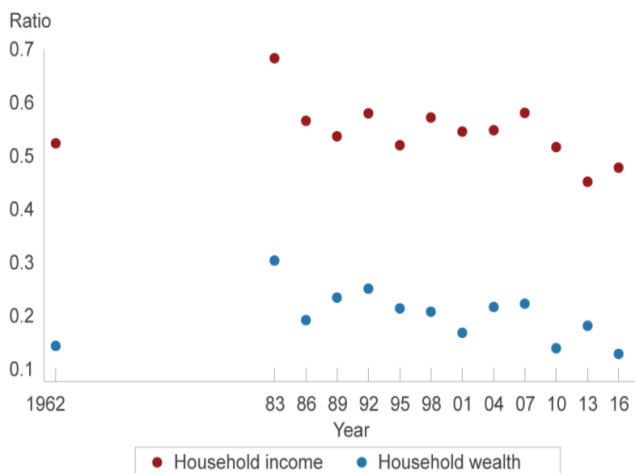
Source: Federal Research Board, Citi Research

Hard and Soft Barriers

The primary driver behind the wealth gap is the income gap, therefore policies designed to speed the closing of the racial wealth gap should focus on closing the racial income gap

The Federal Reserve found the primary driver behind the wealth gap is the income gap. Moreover the income gap is large enough to explain the persistent difference in wealth accumulation between different racial groups in the United States. The key policy implication of this finding is that policies designed to speed the closing of the racial wealth gap should focus upon closing the racial income gap. Looking at the Federal Reserve's Survey of Consumer Finances dating back nearly 40 years reveals that while wealth and incomes have fallen, the ratio of both wealth and income of Black and white families remained persistently wide (Figure 82). Looking ahead, the Federal Reserve estimates the wealth gap can be eliminated if the racial income gap is closed (Figure 83). This effect would eventually negate the influences of unequal bequests, initial conditions, and unequal returns. The downside is that this might take roughly 200 years to achieve.

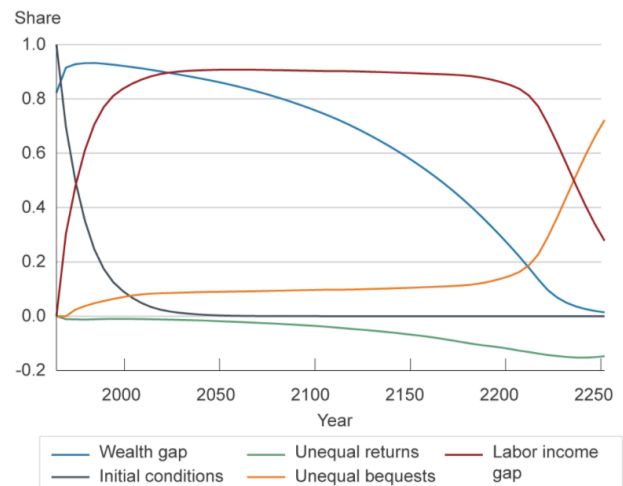
Figure 82. Wealth and Income Ratios of Black and White Means in the Survey of Consumer Finances Reveal Persistently Wide Gaps



Source: [Federal Reserve Bank of Cleveland: What Is Behind the Persistence of the Racial Wealth Gap?](#)

Intangibles also matter significantly for wealth accumulation

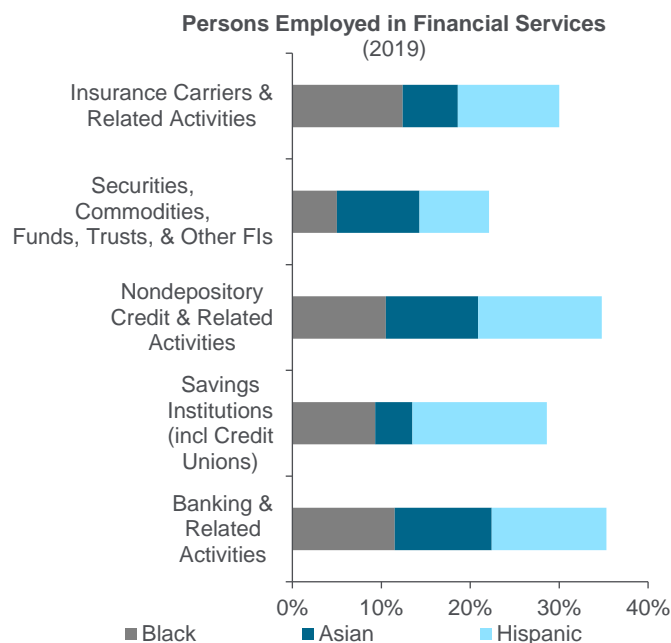
Figure 83. Contribution to Factors of Wealth Gap Over Time



Source: [Federal Reserve Bank of Cleveland: What Is Behind the Persistence of the Racial Wealth Gap?](#)

Black and Hispanic families are less likely to have exposure to financial markets and peer groups of successful investors, which help provide the financial literacy required to make informed decisions. Black and Hispanic people are few and far between in finance jobs, which would facilitate education and access to peer groups (Figure 84). Moreover, financial literacy coursework is still far from fully included in academic curriculums, which is problematic for all students, not just for students of color. According to the [Council for Economic Education](#), only 21 states require high school students to take a course in personal finances, and only a handful of states require standardized testing around financial literacy (Figure 85). Compounding these barriers are the lower levels of tolerance for risk among Black and Hispanic families which is strongly associated with the level of net worth (i.e., higher net worth allows for a higher risk tolerance) (Figure 86 and Figure 87).

Figure 84. Black People Represent Small Share of Financial Workers



Source: Bureau of Labor Statistics, Citi Research

Figure 85. Few States Mandate Financial Literacy Coursework

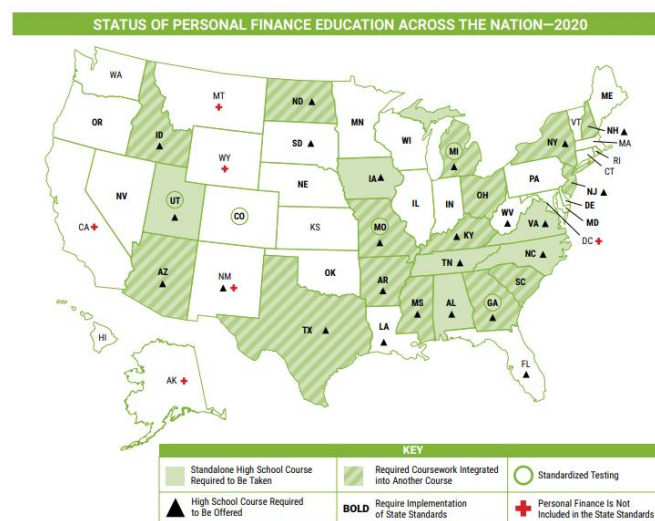
Source: [Council for Economic Education](#)

Figure 86. Average 2013 Family Wealth by Attitudes Toward Saving and Investing (Family Head Ages 35 to 59)

	Net Worth
Tolerant of risk	\$ 1,079,478.00
Not tolerant	\$ 375,608.00
Long time horizon for saving and investing	\$ 748,093.00
Short or medium time horizon	\$ 183,354.00
Approve of borrowing for vacations or luxuries	\$ 435,134.00
Do not approve	\$ 532,150.00

Source: [Federal Reserve Board: Exploring the Racial Wealth Gap Using the Survey of Consumer Finances](#)

Figure 87. Wealth, Race, and Attitudes Toward Saving and Investing: Distribution of Attitudes by Race

	Risk Tolerant	Long Horizon	Luxury Borrower
White	23%	71%	18%
Black	15%	53%	21%
Hispanic	15%	52%	17%
Total	21%	67%	18%

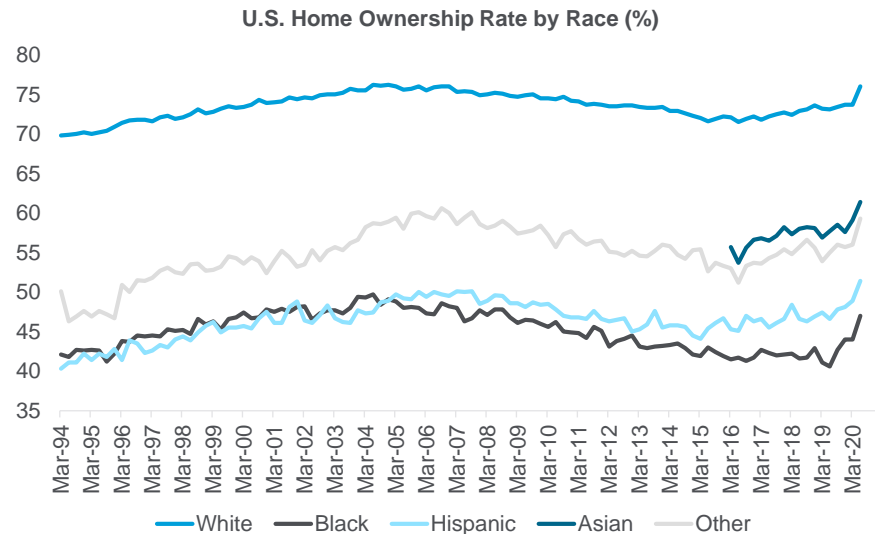
Source: [Federal Reserve Board: Exploring the Racial Wealth Gap Using the Survey of Consumer Finances](#)

Racial Housing Gap

Black families have the lowest rate of home ownership among different racial groups

Housing is the largest stock of wealth most families hold, with Black families facing the greatest obstacles to home ownership. At 47 percent as of the first quarter of 2020, Black families have the lowest rate of home ownership among different racial groups (Figure 88). Income and wealth gaps contribute to lower levels of homeownership, but so do other factors, including access to credit, outstanding debt, and a short supply of affordable housing options.

Figure 88. Black Homeownership Rates Are Below That of All Other Racial Groups

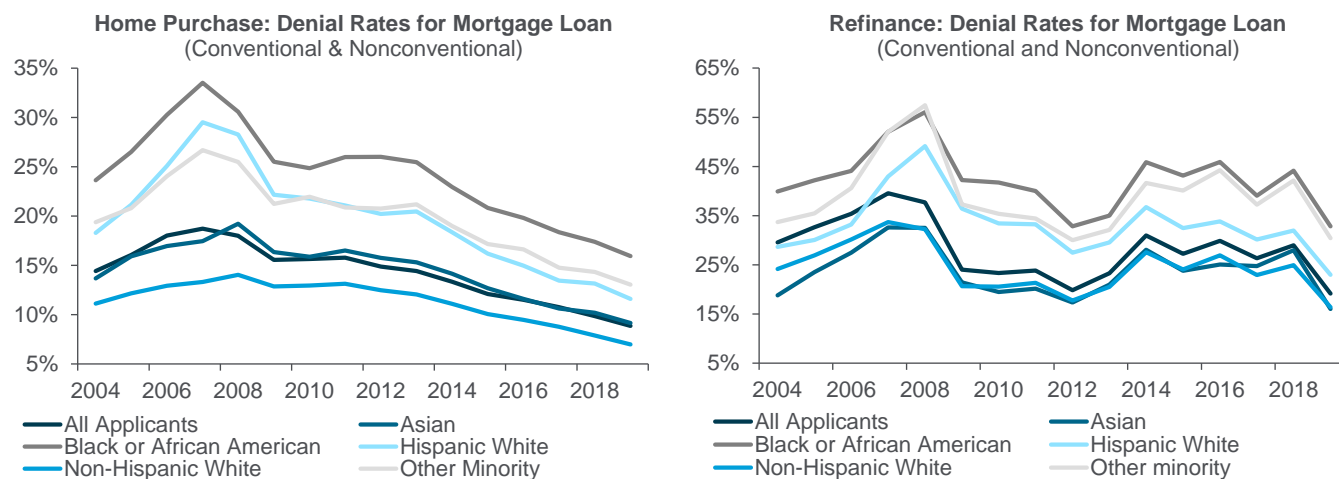


Source: Census Bureau, Citi Research

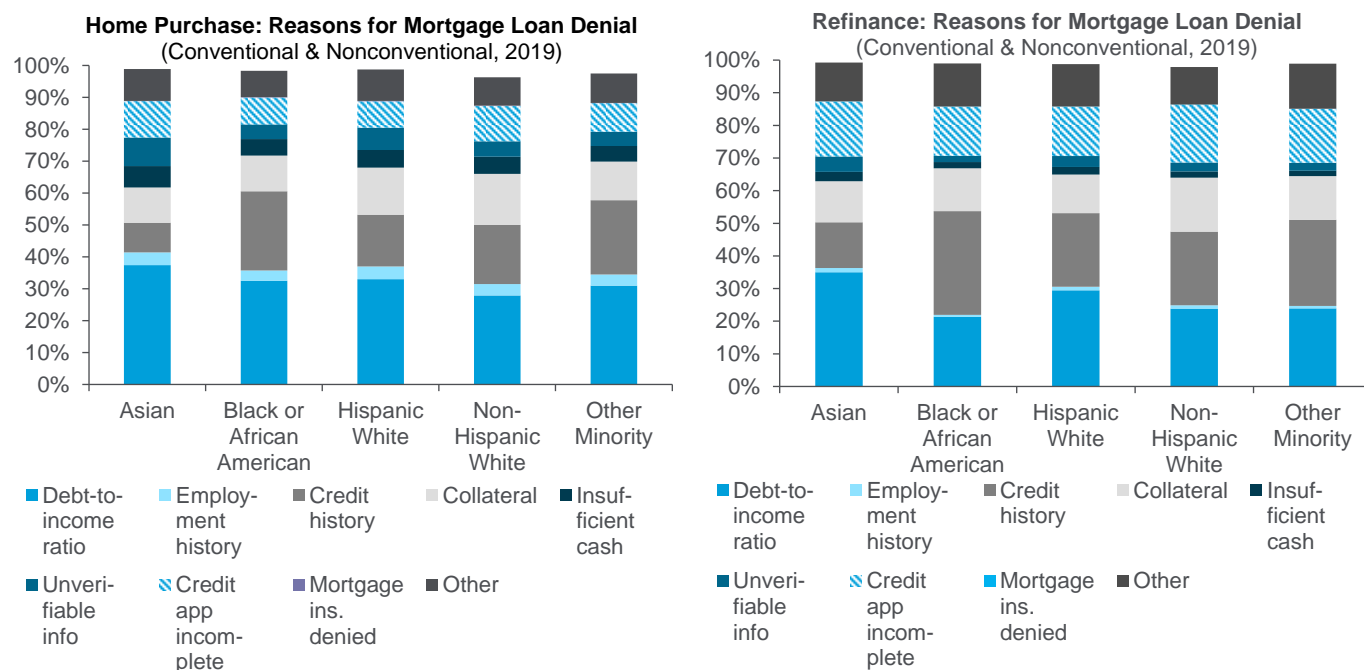
Access to Credit

Black families continued to be the most likely racial group to be denied a conventional or nonconventional mortgage

The path towards Black family home ownership is limited by reduced access to credit. The Consumer Financial Protection Bureau (CFPB) reported in 2019, Black families continued to be the most likely racial group to be denied a conventional or nonconventional mortgage for home purchase or refinance (Figure 89). The denial rate for Black families remained above 15 percent for home purchase and was roughly 35 percent for refinance, compared to just above 5 percent and 15 percent, respectively, for white families. The higher denial rate for Black families largely reflected elevated debt-to-income ratios, poor credit histories, and incomplete applications (Figure 90).

Figure 89. Black People Continue to Experience the Highest Level of Mortgage Loan Denials

* Consists of applications by American Indians or Alaska Natives, Native Hawaiians or other Pacific Islanders, and borrowers reporting two or more minority races.
 Source: Consumer Financial Protection Bureau, Citi Research

Figure 90. Elevated Debt-to-Income Ratios, Poor Credit Histories, and Incomplete Applications Are the Main Drivers of Loan Application Denials for Black Homebuyers and Mortgage Loan Refinancers

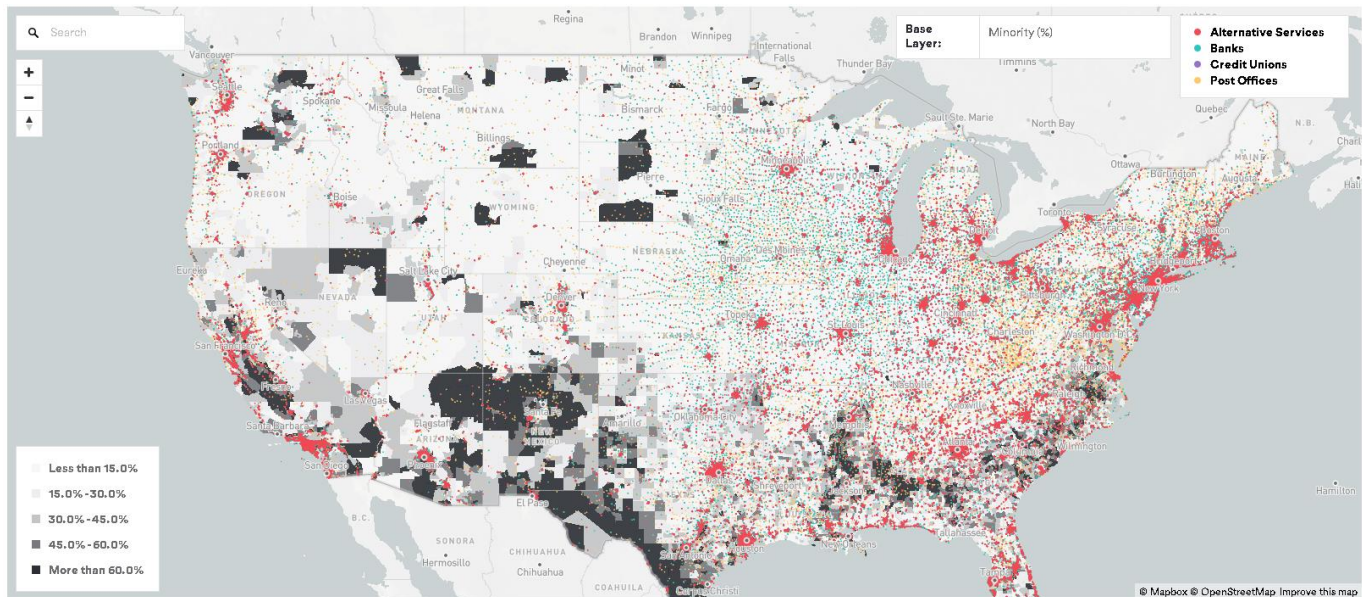
* Consists of applications by American Indians or Alaska Natives, Native Hawaiians or other Pacific Islanders, and borrowers reporting two or more minority races.
 Source: Consumer Financial Protection Bureau, Citi Research

Access to Financial Services

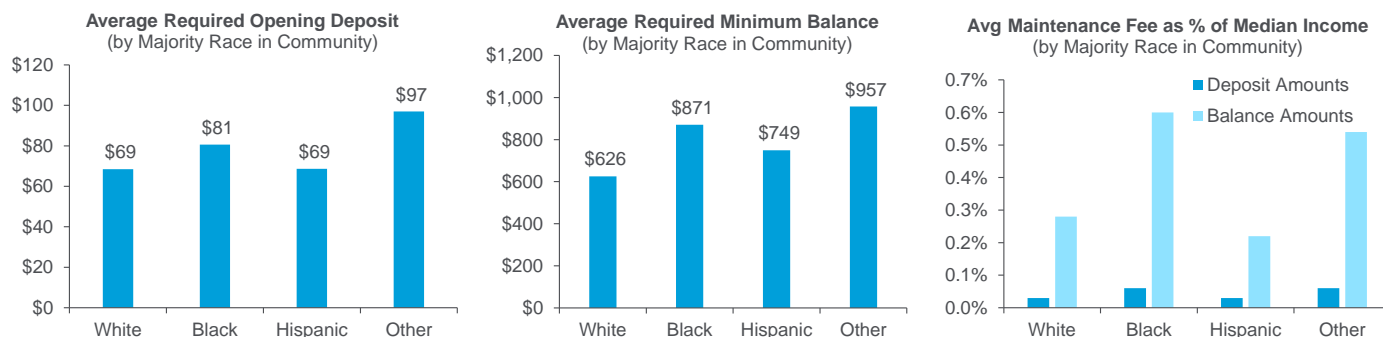
Lack of access to traditional financial services in Black neighborhoods, plus higher account requirements drive Black families to alternative financial institutions which are costly

Lower credit scores among Black families can be partially explained by the forces of structural racism in the financial system. Research shows the legacies of redlining, community segregation, and few traditional financial institutions in predominately Black neighborhoods have limited access to traditional credit for Black borrowers' and exposed them disproportionately to predatory lending sources. A study by think-tank [New America](#) reveals that alternative financial institutions predominate in states where more Black people tend to reside. An overlay of the 16 states (IL, MI, AR, LA, MS, AL, TN, GA, FL, SC, NC, VA, MD, DE, NJ, NY) where Black people represent a greater percent of the population than the national average, maps nearly one-to-one with the elevated number of alternative banking institutions (Figure 91). Moreover, traditional banks in predominately Black neighborhoods, tend to require higher initial opening deposits, higher minimum balances. This translates into Black accountholders needing to deposit a higher percentage of their paychecks into accounts to avoid fees or closure (Figure 92). Higher costs contribute to the elevated number of unbanked individuals who are forced to turn to alternative financial institutions like check cashing outfits and payday lenders, which carry higher interest rates and fees (Figure 93). McKinsey estimates the average person could save as much as \$40,000 over a career by switching from check cashing places to a traditional bank account. Fines, fees, and subprime borrowing erode credit scores and consequently reduce access to credit for home ownership (Figure 94).

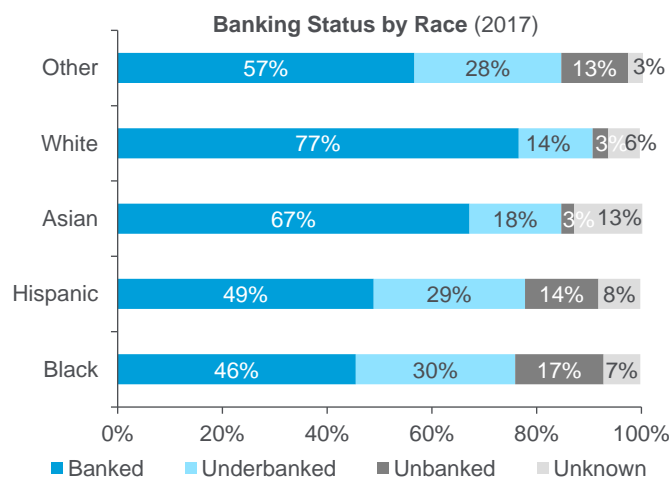
Figure 91. Traditional and Nontraditional Banking Services by Concentration of Minority Populations



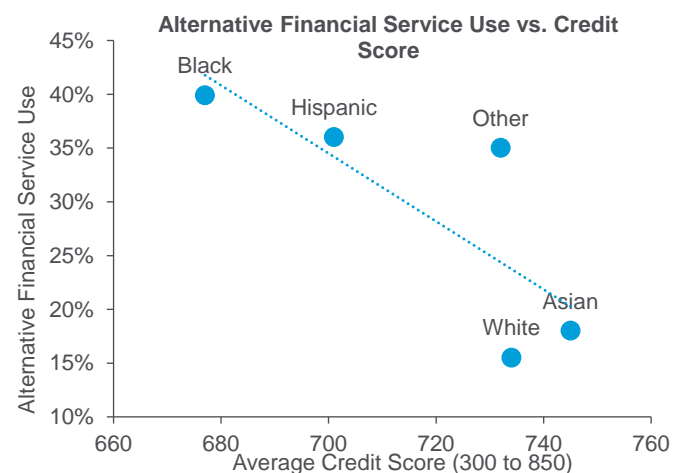
Source: New America

Figure 92. Even Traditional Banking Can Cost More for Minority Communities

Source: New America (David H Montgomery/Bloomberg CityLab)

Figure 93. Black Consumers Are More Likely to be Unbanked or Underbanked

Source: FDIC National Survey of Unbanked and Underbanked Households

Figure 94. There is a Notable Relationship Between Alternative Financial Services Use and Low Credit Scores

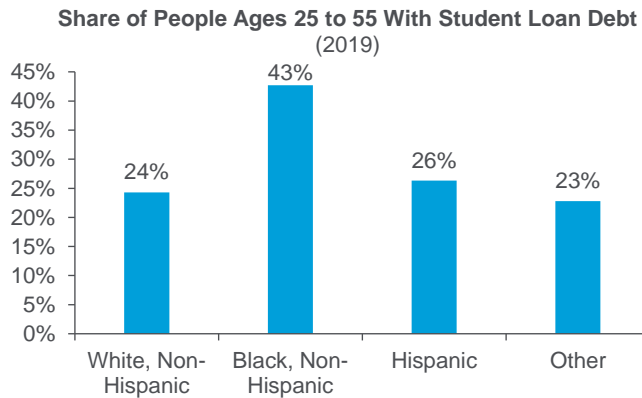
Source: FDIC National Survey of Unbanked and Underbanked Households, Shiftprocessing.com, Citi Research

Student Loan Debt

Elevated student loan debt and high debt-to-income levels inhibit Black homeownership

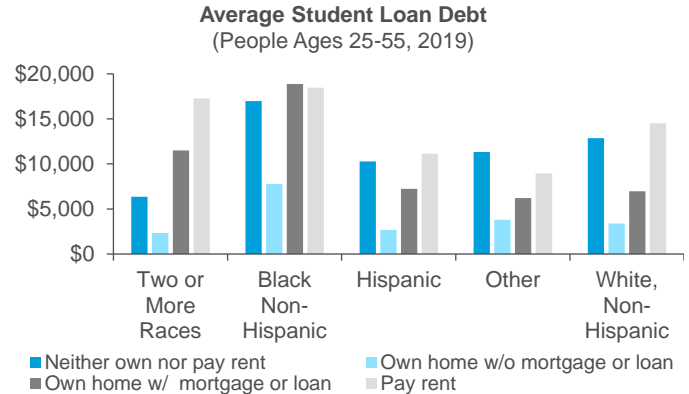
Elevated debt-to-income levels and poor credit histories linked to student loan debt are also likely inhibiting Black homeownership. The Urban Institute found that African Americans with four-year college degrees have a lower homeownership rate than white Americans without a high school diploma — 56.4 percent vs. 60.5 percent (Figure 95). Of all racial groups, the Federal Reserve Board's Survey of Household Economics and Decisionmaking reveals Black persons (43 percent) are more likely to have student loan debt than white persons (24 percent), and have more student loan debt on average regardless of housing situation (Figure 96). The income and wealth gaps contribute to the sizable amount of student loans Black persons borrow and ultimately carry as debt. Also according to the [Center for Responsible Lending](#), Black persons with a college degree are five times more likely to default on their student debt than white Americans, which is also associated with the wealth gap. The presence of elevated student loan debt and/or defaults render a person less likely to meet mortgage lending standards.

Figure 95. Black Persons Are More Likely to Have Student Loan Debt Than Other Racial and Ethnic Groups



Source: Federal Reserve Board *Survey of Household Economics and Decisionmaking*, Citi Research

Figure 96. Black Persons Tend to Have Higher Average Student Loan Debt Regardless of Housing Situation



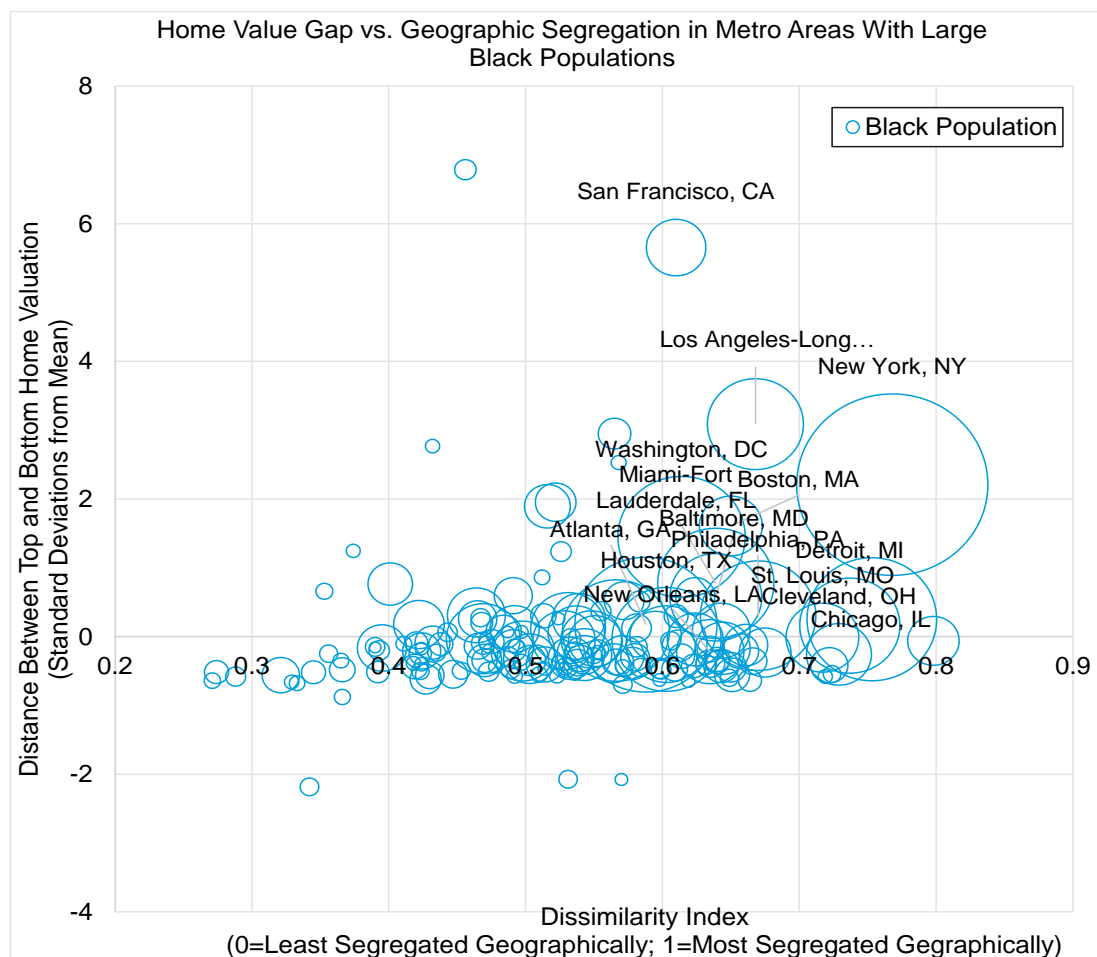
Source: Federal Reserve Board *Survey of Household Economics and Decisionmaking*, Citi Research

Affordable Housing

In many metropolitan areas with large Black populations, geographic segregation is compounded by lack of available affordable housing

Even when income and credit conditions are met, lack of affordable housing remains a major constraint to homeownership for many Black families. Data from the Census Bureau and real estate agency Zillow reveal that in many metropolitan areas with large Black populations, geographic segregation is compounded by lack of available affordable housing. The dissimilarity score is a metric that measures the extent to which racial groups are clustered in geographic areas. Again, many of these clusters are a result of past policies including housing discrimination and redlining. Cities with sizable Black populations including New York, Los Angeles, Washington DC, Boston, Miami, Philadelphia, Atlanta, Houston, and Detroit are not only quite segregated (dissimilarity scores closer to 1 than 0.5) but also have wide gaps between the least and most expensive homes (Figure 97). A Trulia real estate agency study also revealed the widening gap between the median home valuation and most homes in large metro areas appeared to be occurring at the lower end of the market. In other words in most markets affordable housing is disappearing.

Figure 97. Affordable Housing Gap is Highly Pronounced in Metro Areas with Large Black Populations



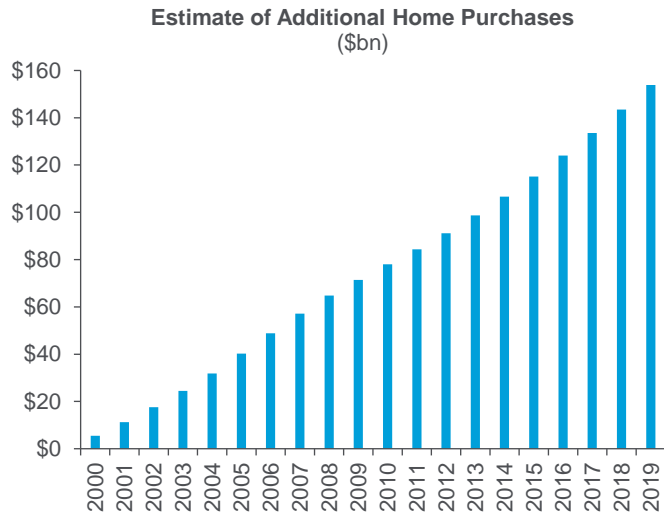
Source: Census Bureau, Zillow, Blackdemographics.com, Citi Research

Closing the Gap

If the Black home ownership rate were returned to the 2000 level, there would be an estimated 770,000 additional Black homeowners

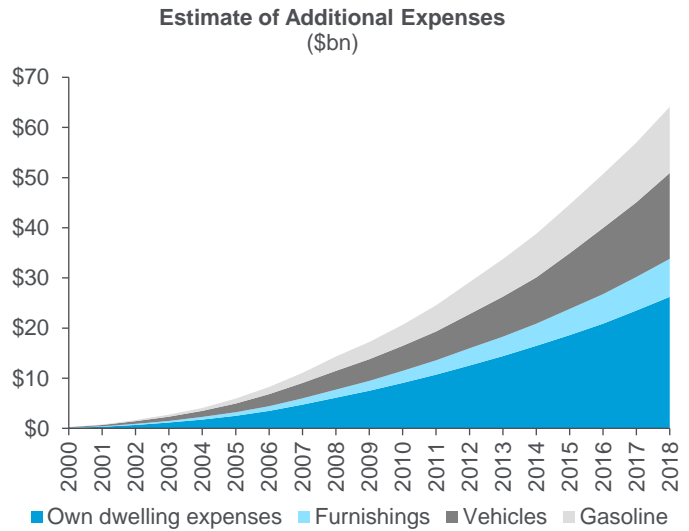
Closing the Black family housing gap 20 years ago might have generated \$218 billion in additional U.S. consumption. According to the Urban Institute, the current 30 basis point gap between Black and white family home ownership is greater now than before 1968 when housing discrimination was legal. The ownership spread is directly related to the racial wealth gap and the increase in inequality in general post the Great Financial Crisis. If the Black home ownership rate were returned to the 2000 level, there would be an estimated 770,000 additional Black homeowners. Multiplying the National Association of Realtor's median existing home price by this figure equates to \$154 billion in additional home sales over the 2000 to 2019 period (Figure 98). A simple calculation of spending on maintenance, cars, and furniture, which often accompany home buying using the Bureau of Labor Statistics' Consumer Expenditure Survey suggests that there might have been another \$65 billion in consumption over the last two decades (Figure 99).

Figure 98. 770,000 Additional Black Homeowners Might Have Added Another \$154 Billion in Spending on Housing Since 2000



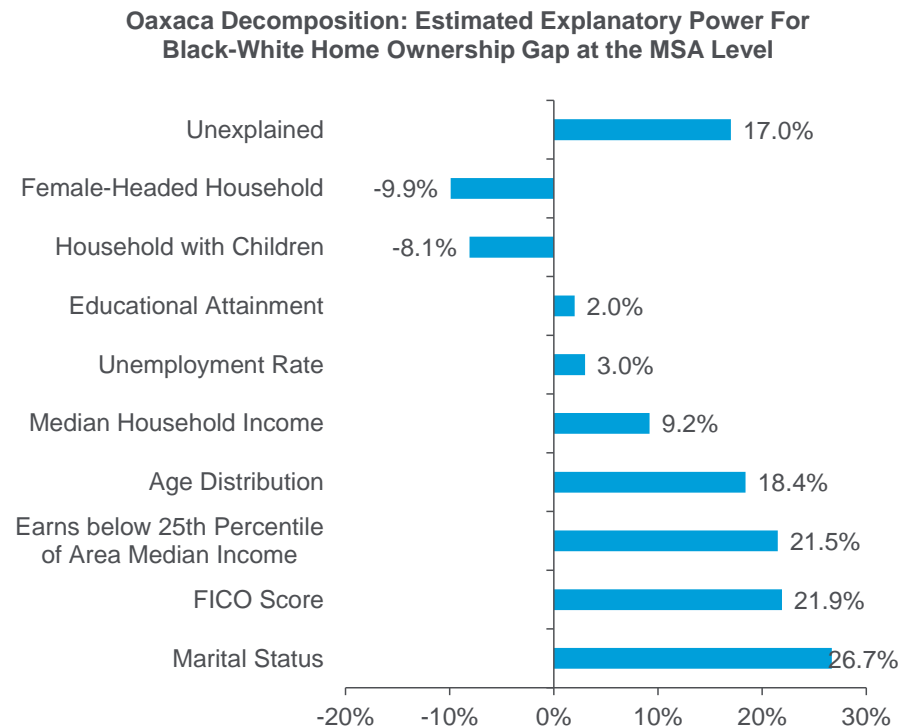
Source: National Association of Realtors, Citi Research

Figure 99. Black Homeowners Might Have Generated an Additional \$65 billion in Consumption on Housing-Related Expenditures



Source: Bureau of Labor Statistics, Citi Research

Figure 100. Seventeen Percent of the Black-White Homeownership Gap Remains Unexplained



Source: Urban Institute, Citi Research

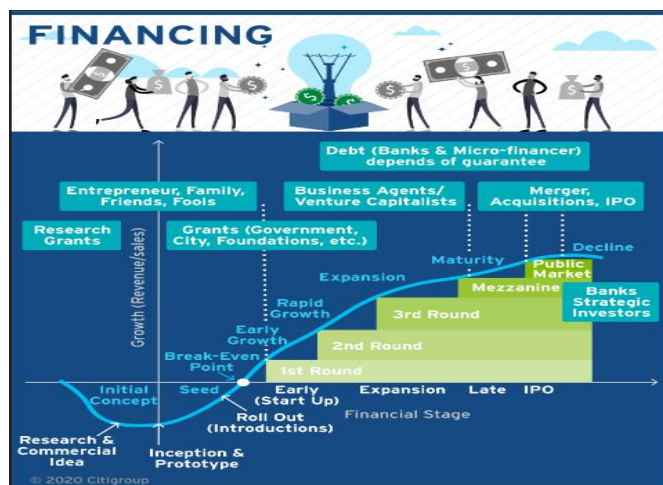
Racial Investment Gap

Capital Deficit

A lack of funding along the investment cycle is an issue for Black entrepreneurs and business owners

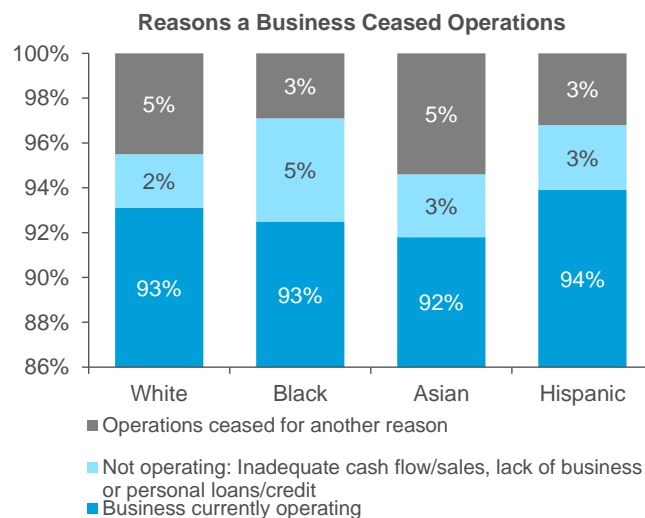
Black entrepreneurs suffer not from a lack of vision, but a lack of funding along every point in the investment cycle. Funding is a challenge over the phases of start-up and as the business matures (Figure 101). Indeed, Black business owners are more likely to cease the operations of their business due to insufficient sales and/or lack of financing than other racial group (Figure 102). During the early stages of funding for a new business, Black founders are more likely to source funds from family, friends, and employees than are white founders. However, funding from friends and family tends to yield \$25,000 or less in capital for Black-owned firms, and even less for white-owned firms (Figure 103). Black founders are more likely to bring their own resources to the table than are white founders, with Black founders more apt to use personal and business credit cards that may have higher interest rates and fees (Figure 104). Black founders are also less likely to receive other forms of financing, including business loans from banks, financial institutions, and friends, grants, and professional investors (e.g., angel and venture capital investors). For Black founders who do gain access to these other types of investment, the percentage receiving loans of \$100,000 or more is somewhat smaller than the size of loans for white founders (Figure 106).

Figure 101. Phases of Private Business Financing



Source: Citi Research

Figure 102. Black Businesses More Likely to Die Due to Inadequate Sales and/or Access to Financing



Source: SBA, Census Bureau, Citi Research

Figure 103. Black Entrepreneurs Are More Dependent Upon Sources of Capital from Friends, Family, and Own Resources for Capital

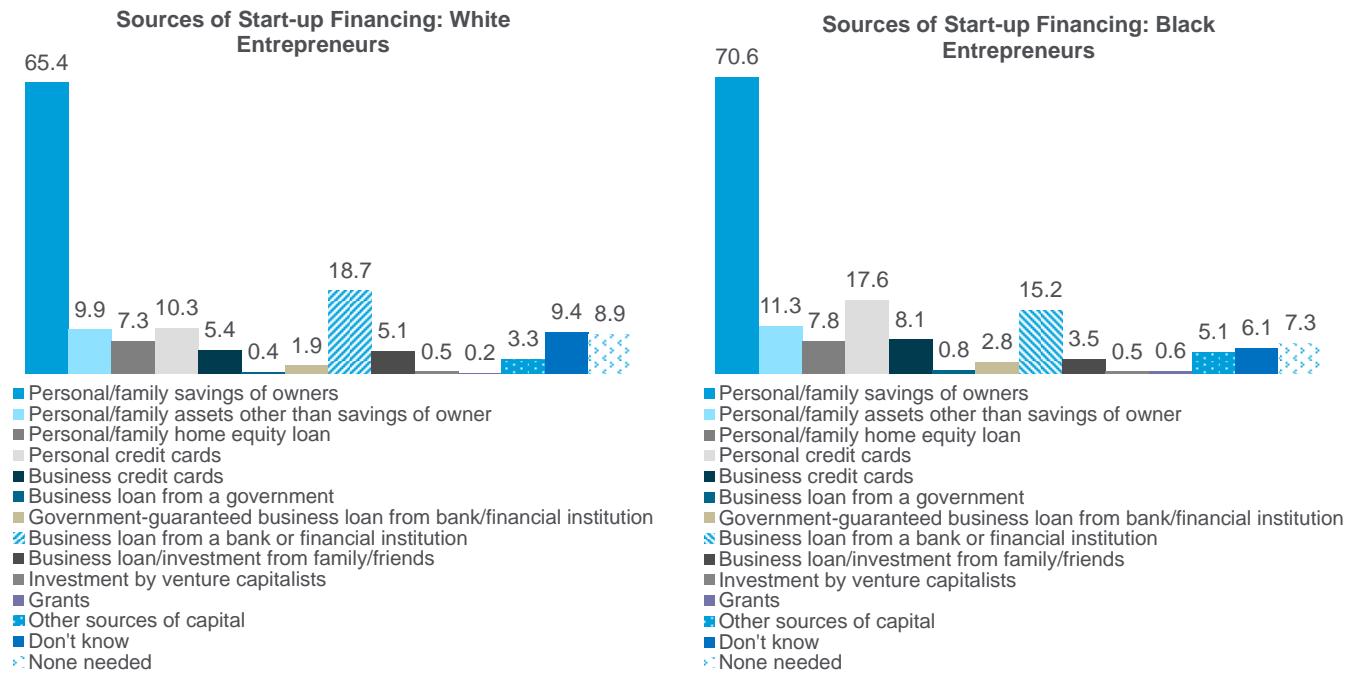


Figure 104. Black Founders Are More Likely to Produce their Own Resources for Start-ups

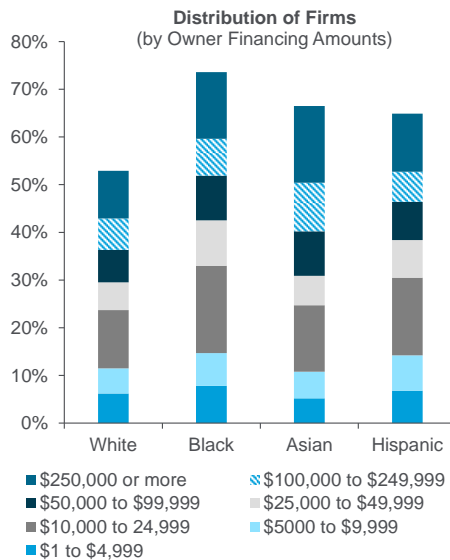


Figure 105. Friends and Family Yield Limited Resources for Both Black and White Founders

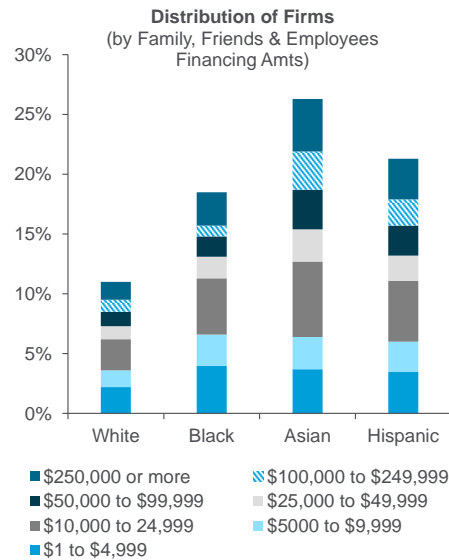
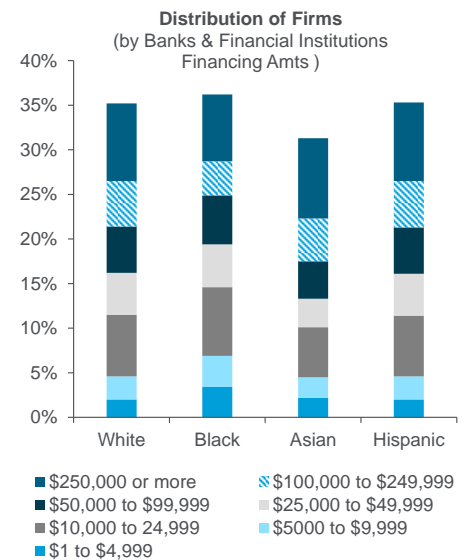


Figure 106. Black Founders Receive Less Funding for Projects Above \$100,000



Bank Loans and Denials

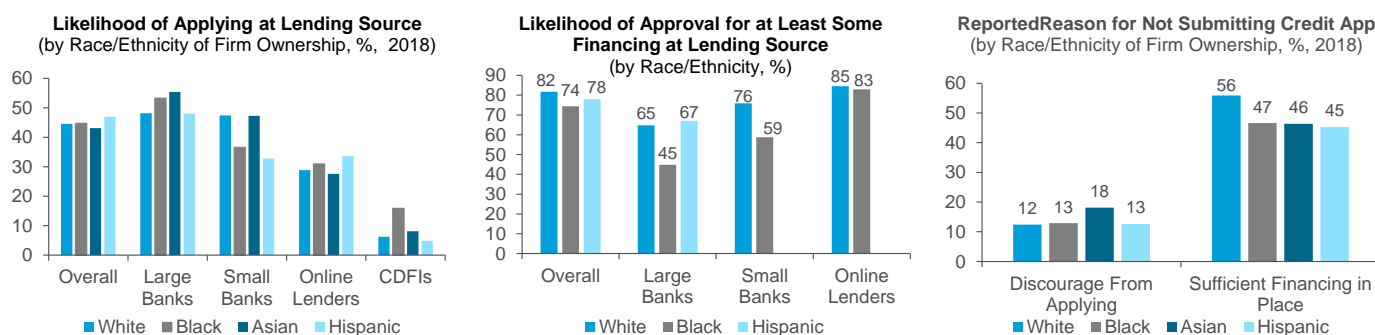
Creditworthy Black-owned firms experience greater challenges raising capital than creditworthy white-owned firms including lower application rate, lower approval rates,

Black entrepreneurs appear shut-out of traditional forms of financing. The reliance of Black founders on less lucrative forms of financing may reflect the difficulty in financing along the investment channel. According to the Fed, creditworthy Black-owned firms experience greater challenges raising capital than creditworthy white-owned firms. Even after controlling for firm characteristics and performance, the Fed finds that approval rates for Black-owned firms still remain lower. Fed data indicate all entrepreneurs are more likely to apply to large banks versus other institutions for financing. However, Black-owned businesses are the least likely to receive approval for loans from large banks (Figure 107). Despite Black-owned firms being less likely to apply for financing at small banks, they are similarly less likely to be approved for loans than white-owned firms at these small banks. Black founders are the least likely to apply to online lending sources, like most other racial groups, but are about equally likely to be approved as white founders at these alternative financial institutions. This suggests there may be critical factors differentiating Black founders in traditional bank lending standards than among alternative financial institutions. If Black-owned firms are passing the gauntlet along myriad metrics, but still not receiving funding, then the epsilon may be bias.

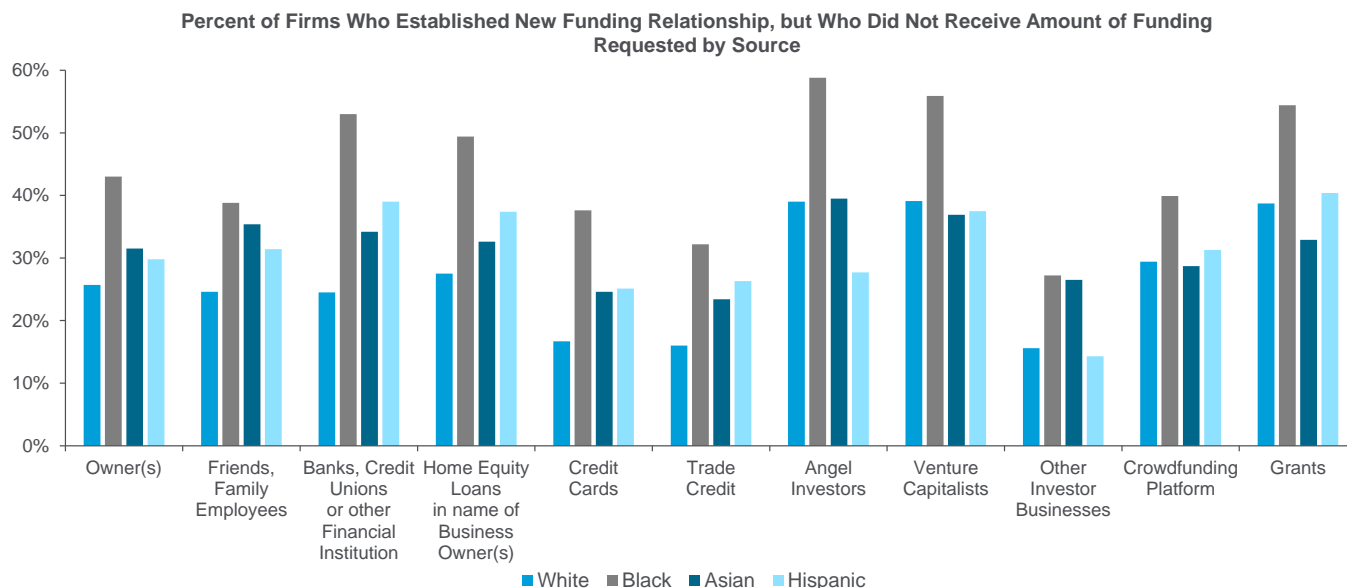
Black-owned firms also tend to receive less in funding than white-owned firms

The Fed also found that underfunding is affecting financing. While Black-owned firms are roughly equivalent with white-owned firms in the percentage who decline to apply for loans due to discouragement, Black founders are still less likely to say that they had sufficient funding in place (Figure 108). The Fed reports that even for those Black-owned firms who are approved for financing, they typically receive less than half of what was requested. According to the Fed, minority-owned businesses in recent times are still facing potentially large unmet financing needs. Census Bureau data confirm this. When complaints of underfunding are tabulated across different types of financing, Black founders routinely state that they received fewer dollars than requested.

Figure 107. Black Entrepreneurs Are Less Likely to Receive Loans from Traditional Banks Despite High Likelihood of Applying to Traditional Banks



Note: CDFI stands for Community Development Financial Institutions
Source: Federal Reserve Board, Citi Research

Figure 108. Black Business-Owners Routinely Receive Less Funding than Requested from Financing Sources

Source: SBA, Census Bureau Annual Survey of Entrepreneurs, Citi Research

Asymmetric Information and Narrow Pipelines

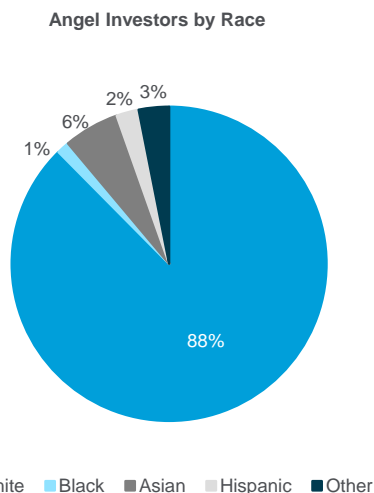
Black investors represent small shares of angel and venture capital investment

Black investors are missing out on an important stage in capital raising. Angel and venture capital (VC) investment are important phases in the private business capitalization pathway, but Black investors represent small shares of these types of investors. Just over 1 percent of all angel investors are Black (Figure 109), while 4 percent of the VC workforce is Black, with just 3 percent in the senior ranks of leadership (Figure 110). The number of Black persons in finance provision positions is important because they can play a pivotal role in directing capital to Black-owned businesses. In the VC space, this is extremely important as the majority of products purchased by consumers received VC funding at some point and these financiers decide which businesses receive funding and ultimately what products go to market.

Asymmetric information and a narrow pipeline limit investment in Black-owned businesses

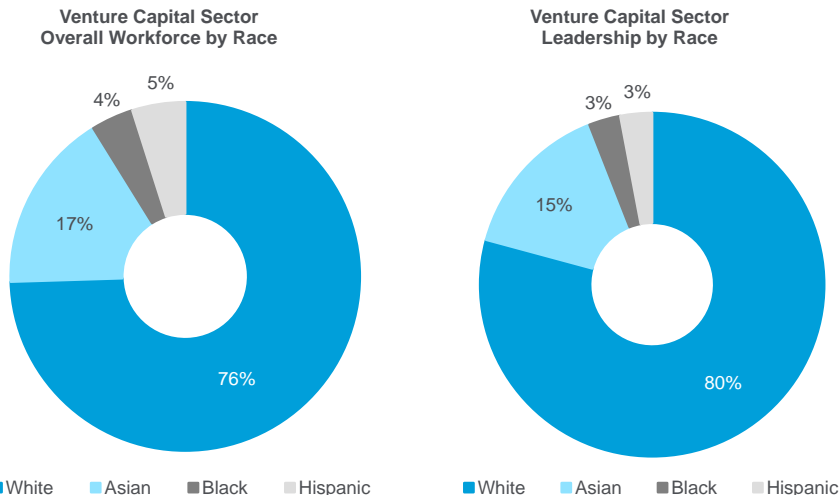
Studies suggest that the sparse amount of investments by Black angel and VC investors reflect a combination of asymmetric information — in that Black entrepreneurs are not aware of these sources of funding — and/or a narrow pipeline of incoming investors. With respect to information, SEC regulation prohibits business founders from publicly advertising fundraising. Communication of these opportunities are limited to a network of accredited investors. Accredited investors must have \$1 million in net worth, not including a home, or income exceeding \$300,000, which can be prohibitive for many would be angel investors. Hence, a lack of information and wealth-limits create barriers for entrepreneurs and potential investors. Regarding the pipeline, many VCs have backgrounds in investment banking, which have struggled with diversity given in part to recruiting from elite schools that are also lacking in diversity. Indeed, 40 percent of venture capitalists attended either Harvard or Stanford University. Over the last 30 years Harvard Business School had a Black population averaging about 5 percent. The high cost of a business school education is one prohibition for Black students.

Figure 109. Black Investors Represent a Nominal Share of Angel Investors



Source: Wharton Entrepreneurship and Angel Capital Association, Citi Research

Figure 110. Black Investors Are Underrepresented in the Venture Capital Space, Both in Leadership and the Overall Workforce



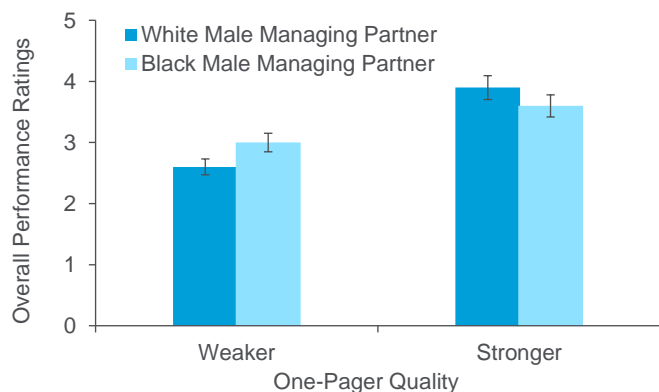
Source: NVCA, Deloitte, Citi Research

Unconscious bias may also be at the root of the dearth of investment in Black-owned businesses

Investor Bias

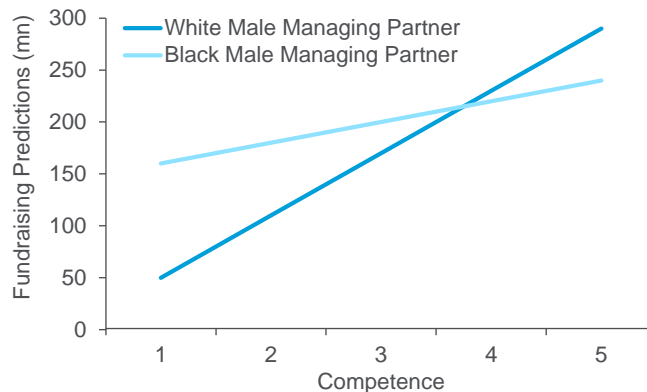
Venture capital is a relationship-based business, so the leaders decide which other investors are invited into the fold, and which firms receive capital. This proves problematic if the perception of Black founders and their business ventures are tinged by unconscious bias. Anecdotal assertions of bias include investors not trusting that Black entrepreneurs have viable and sustainable businesses, and/or lack an understanding of the product or customer Black founders are serving. Even for professional investors choosing to invest in VC funds, data-based evidence of bias is revealed in a Stanford University study which determined when venture capital funds are managed by a person of color with strong credentials, professional investors judge them more harshly than their white counterparts with identical credentials (Figure 111). The study found investors were able to easily distinguish between stronger and weaker white-led teams, where the stronger team received the higher ratings and the weaker team lower ratings. However, investors were unable to distinguish between stronger and weaker Black-led teams. Strong white-led teams were expected to raise more funds than strong Black-led teams, suggesting lower funding prospects for Black-led fund teams, and consequently financing for Black-owned businesses (Figure 112).

Figure 111. Higher Performing Black-Led VC Funds Rated Lower than White-Led VC Funds by Professional Investors



Source: Stanford University, PNAS

Figure 112. Professional Investors Less Able to Distinguish Between Weak and Strong VC Funds, Projecting Lower Funding Prospects



Source: Stanford University, PNAS

Closing the Gap

Increased access to funding and information, alternative measures of credit, and financial education can all help close the financing gap

Increased access to financing and information are tactics that may help close the financing gap for Black-owned businesses. As Black-owned firms appear to invest greater sums of owner-generated financing for start-up projects, this greater level of personal sacrifice should factor more favorably into lending decisions from financial institutions. Experts have also advocated for alternative measures of credit to factor more materially in underwriting decisions, not just FICO scores. Black entrepreneurs are on balance more highly educated than the average small business owner, and are more likely to be Gen X'ers (45 percent) and Baby Boomers (31 percent) than Millennials (22 percent). However, there still appear to be gaps in experience running a firm and/or knowledge about financing options, including angel and venture capital investment. Governments (including the SBA) can make it easier for firms to learn about funding options and/or lowering the barrier for interested investors to become engaged, particularly for angel investors. There is also a market for private firms to educate and counsel Black business owners regarding applying for and obtaining financing via traditional and non-traditional financing channels.

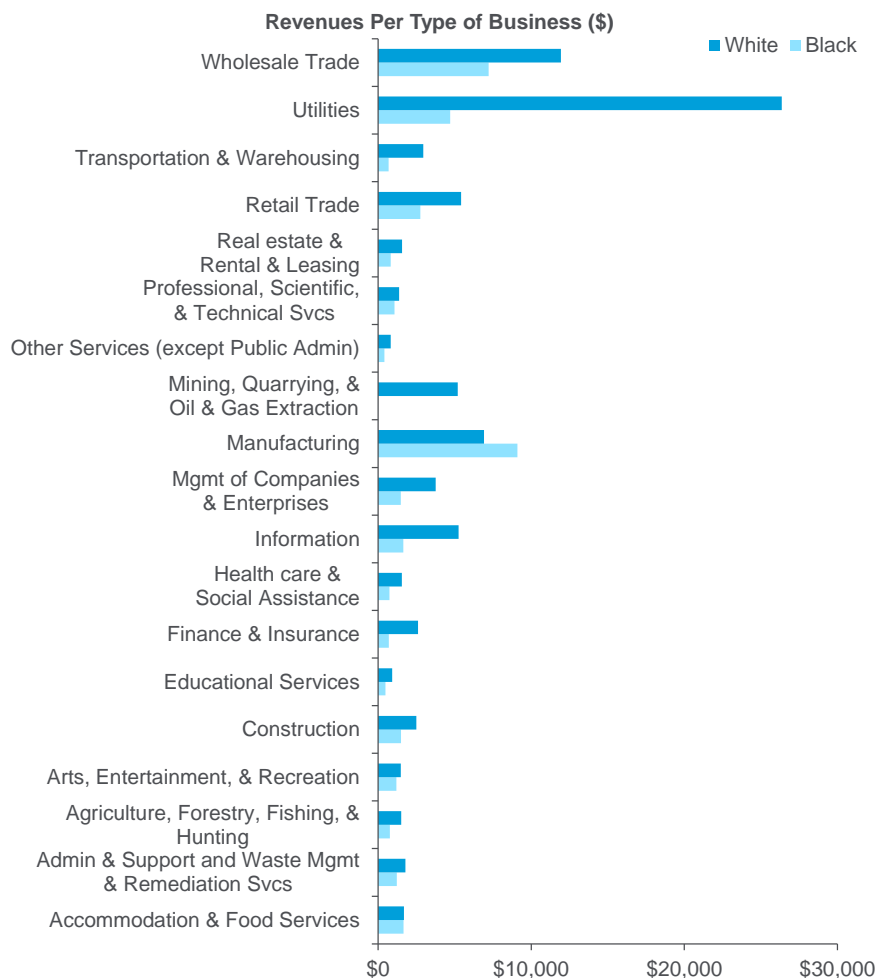
Eliminating bias will be more difficult. However, if lenders and professional investors changed their views towards minority-owned firms, there might be greater access to capital. More capital helps ensure the survival of Black-owned firms, and greater revenue, which currently trails that of white-owned firms in every industry except manufacturing (Figure 113). More revenue leads to greater job creation, and more income which facilitates consumption and real GDP growth. A Fed survey found that 60 percent of Black-owned firms declined to apply for financing, even when needed, due to concern that they would be denied. Increasing applications as well as improving approval rates would be highly favorable for Black-owned firms.

Closing the share of Black-owned firms-gap 20 years ago might have generated \$13 trillion of revenues for investment, 6.1 million jobs per year, and a cumulative \$182 billion in income for consumption

Closing the share of Black-owned firms-gap 20 years ago might have generated \$13 trillion of revenues for investment, 6.1 million jobs per year, and a cumulative \$182 billion in income for consumption. In 2017, there were more than 114,400 small Black-owned firms, employing 1.2 million persons, generating \$121 billion in revenue and \$35 billion in annual payroll. However, the number of Black-owned small businesses represents just 0.6 percent of the Black civilian population age 20 and over (20 million people). This is compared to a 3.6 percent share of white-owned small firms to the white civilian population (122 million).

If the share of Black-owned firms was raised to 3.6 percent of the U.S. Black population, the number of businesses would rise to more than 720,000, or a 6-fold increase. Per year, revenue might increase to \$761 billion, the number of employees to 7.3 million, and payrolls to \$10.8 billion. If this gap were closed two decades ago, then the additional amount of consumption from workers' incomes might have summed to near \$182 billion. Some share of the extra \$13 trillion in revenues over the last 20 years might have also contributed to GDP-enhancing capital expenditure on equipment, intellectual property, and structures (Figure 114).

Figure 113. With the Exception of Manufacturing, White-Owned Firms Generate More Revenues per Business than Black-Owned Firms



Source: Census Bureau Survey of Business Owners, Citi Research

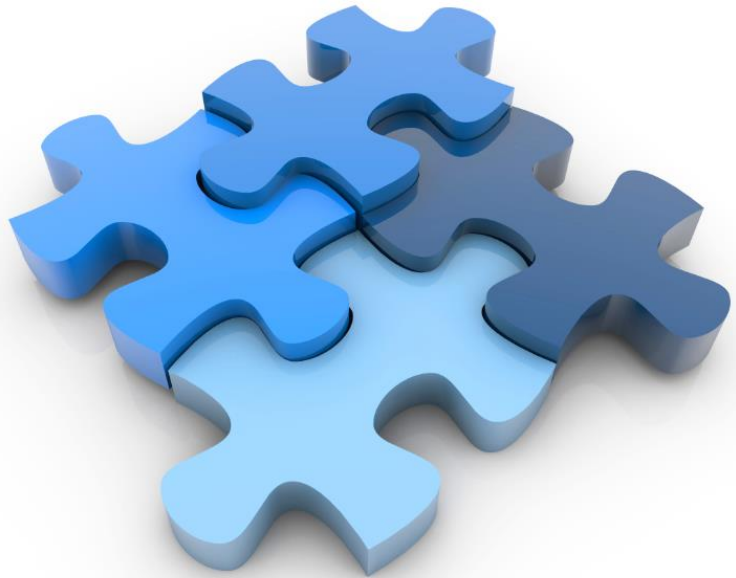
Figure 114. Small Firms, Revenues, Employment and Payrolls: 2017 Actual and Gap Closure Estimates

	Per Year		20 Years	
	2017 Share of Black population (0.6 percent)	3.6 Percent Share of Black Population	2017 Share of Black population (0.6 percent)	3.6 Percent Share of Black Population
Black Small Businesses				
Firms (Number)	114,400	720,069	2,288,000	14,401,386
Revenues (Billions of US\$)	\$121	\$761	\$2,417	\$15,212
Employees (Number)	1,155,344	7,272,095		
Payrolls/Year (Billions of US\$)	\$1.7	\$10.8	\$34.4	\$216.7

Source: Citi Research

How Do We Close the Gaps: Future Policy

Figure 115. Governments, Corporations, and Individuals Can All Work Together to Close Gaps



Source: Shutterstock

Significant and permanent behavioral and attitudinal changes are required to mitigate the number of gaps faced by Black Americans

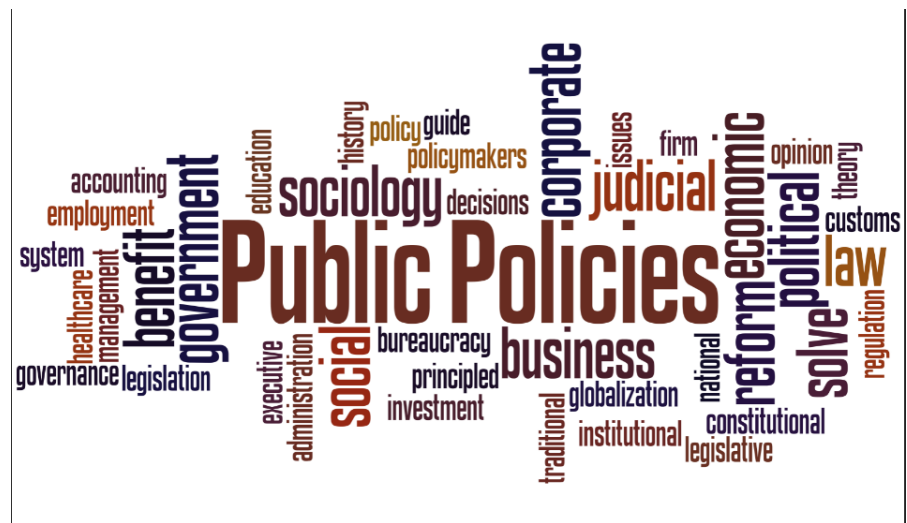
To emerge from a history of entrenched segregation and active discriminatory policy into an era of genuine equity will require conscientious reform at individualistic, corporate, and governmental levels. Although there is much to celebrate regarding renewed interest in closing gaps, there is still considerable work that must be done.

Moreover, given the exacerbation of inequality amid the COVID-19 pandemic, now is an important time to focus on eliminating racial gaps. In the U.S., the sum total of wealth held by U.S. billionaires is equal to three-quarters of all Black wealth (\$3.5 trillion vs \$4.6 trillion). Hence, it is crucial to address severe income inequality as part of the overall economic resolution and to avoid the perpetuation of disparity as seen after the Global Financial Crisis (GFC) of 2008. As of 2016, only 20 percent of Americans are said to have recovered to pre-GFC wealth levels, with Black Americans having suffered a 33 percent decline in wealth between 2007 and 2010. The GFC wealth loss further compounded how the median Black family witnessed their wealth almost halve, once adjusted for inflation, from 1983 to 2016; in comparison to an increase of almost one-third for white households.³³

³³ Dettling, L.J., Hsu, J.W. and Elizabeth Llanes. 2018. "A Wealthless Recovery? Asset Ownership and the Uneven Recovery from the Great Recession," FEDS Notes. Washington: Board of Governors of the Federal Reserve System; Wolff, E. 2017. "Household Wealth Trends in the United States, 1962 to 2016: Has Middle Class Wealth Recovered?", NBER Working Paper No. 24085.

What Can Governments Do?

Figure 116. Public Policies are Required to Advance Racial Gap Closures



Source: Shutterstock

Governments can help reduce racial gaps by eliminating discriminatory barriers and implementing policies that support work, homeownership, entrepreneurship, and well-being

Governments can help reduce racial gaps by eliminating discriminatory barriers and implementing policies that support work, homeownership, entrepreneurship, and well-being. Basic actions, borrowed in part from the literature on gender equity, include (1) adequate race-specific data collection, necessary for identifying, tracking, and ameliorating race-based gaps; (2) prohibiting discrimination in wages, housing, labor, financial services, lending etc. based upon race; (3) facilitating work, including affordable childcare options, quality K-12 education, access to higher education, and paid family leave; and (4) supporting innovation, including enabling access to financing for Black-owned firms and start-ups. Additionally, governments can act to promote access to affordable healthcare and housing, which are paramount for supporting work and innovation. In this paper, we also highlight more unconventional ideas for how governments can contribute to closing racial gaps, from the Fed and Congress, to the state and local level.

Monetary Policy Focus

Voices are calling for the U.S. central bank to include reducing racial inequality as part of its mission

More voices are calling for the U.S. central bank to enhance its focus upon racial economic gaps. Economic gaps produced as a consequence of decades of racial discrimination have been highlighted by Democratic politicians in the U.S. in their proposal for the Fed to integrate racial considerations in its policymaking. Under 'The Federal Reserve Racial and Economic Equity Act', the reduction of racial inequality in the U.S. economy would become an official part of the Fed's mission. Former Vice President, Joe Biden called on the Fed to 'aggressively enhance' its highlighting of 'persistent racial gaps in jobs, wages and wealth.'³⁴ It is worth highlighting that before the pandemic, the Black unemployment rate, concurrent with all other jobless rates, was falling and reached an all-time low of 5.4 percent in August 2019. However, it remained higher than overall unemployment, which troughed at 3.5 percent in February 2020 and the white unemployment rate, which fell to 3.1 percent in January 2020 (Figure 117).

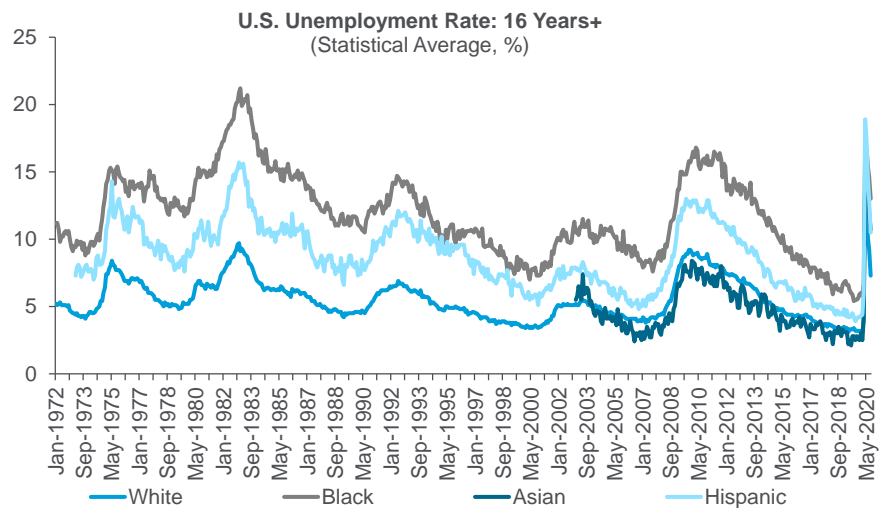
³⁴ Long, H., “Democrats introduce bill to give the Federal Reserve a new mission: Ending racial inequality,” *Washington Post*, August 5, 2020.

The Fed will now focus on broad-based and inclusive job gains and will allow inflation to exceed their 2 percent target for a period

Amid the pandemic, jobless rates across every racial group swelled to nearly four times their pre-COVID levels, but the racial gaps persisted.³⁵

Even in the absence of new legislation, the Fed has signaled a willingness to enhance its focus upon inequality. At the 2020 Jackson Hole Economic Summit, the Fed indicated its policies will focus on “broad-based and inclusive” job gains, language suggesting the central bank’s policies may help disadvantaged Americans in particular, rather than as a consequence of focusing upon maximum employment in general. Practically, [the Fed will now allow inflation to exceed the 2-percent target for a period of time before raising interest rates](#), allowing unemployment rates to fall further. Still Chairman Powell stated that ending racial inequality “is more of an all-government, society project that we need to take on forcefully...It can’t just be the way the Fed manages interest rates.”³⁶ In other words, there is a role for fiscal policies at every level of government. Moreover, a counter argument to the Fed allowing rates to remain lower for longer, is that low rates inflate the prices of asset that do not benefit low income persons on the upswing, but do negatively affect them on the downswing when the owners of capital (employers) respond to financial market crises by cutting labor.

Figure 117. Black Unemployment Rate is Consistently Higher than Other Races



Source: Bureau of Labor Statistics. Citi Research

³⁵ Zeitli, M., “Federal Reserve policy has failed Black Americans for decades. Now is the time to fix that,” *Business Insider*, July 18, 2020.

³⁶ Guida, V., “An activist central bank? Dems push the Fed to fight racial inequality,” *Politico*, August 29, 2020.

Encourage Work

Tax policy, such as EITC and CTC, have proven to reduce poverty as workers keep more of their earnings

Reforming tax benefits and the application of specialized tax reforms can encourage work among lower income families and help reduce racial gaps. One recent study highlighted that of the nearly \$275 billion within the 2018 Tax Cuts and Jobs Act, 80 percent benefited white households; receiving \$2,020 on average in cuts, versus \$970 received by Latino household and just \$840 by Black Households.³⁷ Moreover, households in the highest 1 percentile received 23.7 percent of the law's total tax cuts, in comparison to just 13.8 percent received by the bottom 60 percent. Given that white households are three times as likely as Black or Latino households to be in the top 1%, these racial gaps are further exacerbated.³⁸ Some effective and racially-inclusive tax provisions linked to work such as the Earned Income Tax Credit (EITC), and Child Tax Credit (CTC), have proven to reduce poverty while serving a larger proportion of minority groups, especially Black and Latina Women. Some policymakers would make CTC fully refundable so the benefits reach the poorest children. Indeed, an estimated 17 million Black households would benefit from a fully-refundable CTC.³⁹ Under current law, the Congressional Budget Office (CBO) estimates the share of Federal government spending on these credits is set to tumble over the next decade without Congressional intervention (Figure 118).

How do the EITC and the Child Tax Credit Encourage Work?

- **EITC:** The Earned Income Tax Credit, [EITC](#) or EIC, is a benefit for working people with low to moderate income. To qualify for EITC, tax filers must have earned income from either working for someone or from running or owning a business or farm, in addition to meeting some basic rules. Filers must also either meet additional rules for workers without a qualifying child or have a child that meets all the qualifying child rules. ([Source: IRS.gov](#)).
- **CTC:** The Child Tax Credit (CTC) is designed to give an income boost to the parents or guardians of children and other dependents. It only applies to dependents who are younger than 17 as of the last day of the tax year. The credit is worth up to \$2,000 per dependent, but income level determines the exactly amount of the credit. Tax filers need to have earned at least \$2,500 to qualify for the CTC. Then it phases out for income above \$200,000 for single filers and \$400,000 for joint filers. If earned income is above the applicable threshold, filers will receive a partial credit. ([Source: Smartasset](#))

Provide Guaranteed Wages, Income, and Jobs

Progressive policies to help close gaps include raising minimum wages, introducing income supplements, and guaranteeing jobs

A policy with dramatic implication would be a "living wage." Currently, the Federal minimum wage for tip earning employees at just \$2.13 an hour and \$7.25 for others. Although Black workers make up only 11 percent of the workforce, 38 percent of Black workers currently work for minimum wage and would receive a pay increase under such legislation, helping to address the wage gap (Figure 119).⁴⁰ Another policy gaining traction in U.S. policy circles, which has also been implemented in other nations (e.g., Canada), is that of guaranteed income supports.

³⁷ Institute on Taxation and Economic Policy and Prosperity Now "Race, Wealth and Taxes: How the Tax Cuts and Jobs Act Supercharges the Racial Wealth Divide," October 11, 2018.

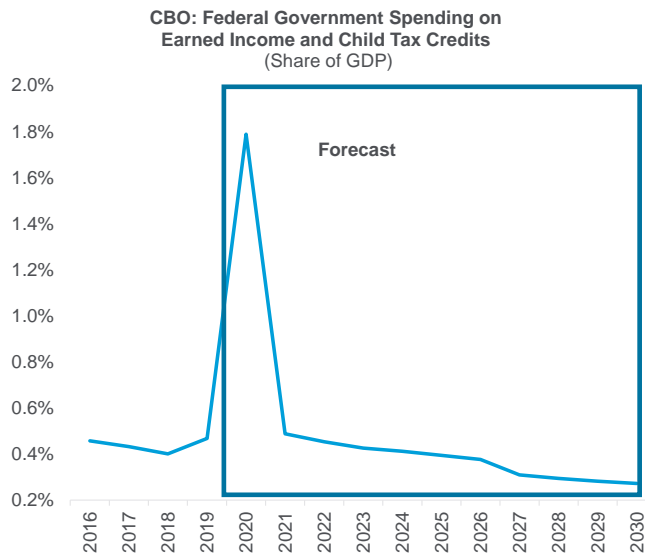
³⁸ Ibid.; Huang, Chye-Ching and Roderick Taylor. "Advancing Racial Equity Through the Tax Code," Spotlight on Poverty and Opportunity, 24 September 2019; Chye-Ching Huang and Roderick Taylor. "How the Federal Tax Code Can Better Advance Racial Equity," Center on Budget and Policy Priorities, July 25, 2019.

³⁹ Marr et al., "Working Families Tax Relief Act Would Raise Incomes of 46 Million Households, Reduce Child Poverty," Center on Budget and Policy Priorities, April 16, 2019.

⁴⁰ Walker, D., "If Corporations Really Want to Address Racial Inequality, Here are 9 Things That Actually Make a Difference." *Time*, August 4, 2020.

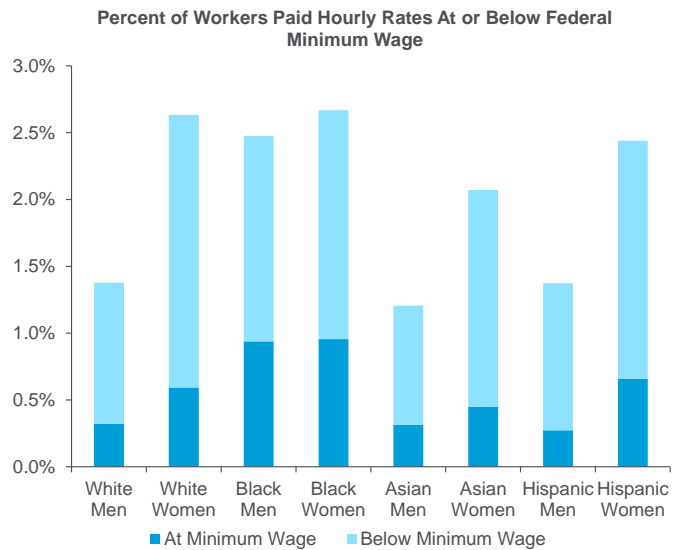
Means-tested, direct government transfers to families, with the potential to expand guaranteed income above the poverty line might help assist families with expenses such as childcare, which is a key enabler of work. A successful basic income program in practice is the Alaska Permanent Fund. The Fund has paid residents a dividend of \$1,600 on average in recent years, with one study showing the program reduced poverty by 20 percent in the state.⁴¹ In a similar fashion, a Federal Job Guarantee has also been advocated as an effective way to decrease the racial income gap. While potentially an expensive proposition, with estimated ranging from \$378 billion to \$543 billion per year, there is some potential to mitigate poverty through work.⁴²

Figure 118. EITC and Child Tax Credit Spending Share Set to Tumble



Source: Congressional Budget Office, Citi Research

Figure 119. Black People More Likely to Make Minimum Wage or Less



Source: Bureau of Labor Statistics, Citi Research

Raising revenue in a more progressive way and moving away from flat income taxes could help close wealth gaps

Implement Tax Reform

Changes to current tax provisions, including a more progressive tax code, might also have a material impact on efforts to close gaps. Some policymakers and experts suggest taxing wealth rather than income, and increasing taxes on inherited wealth — both of which are traditionally areas where Black Americans fall behind their white counterparts. Much of the Federal tax code is designed to offset less progressive state tax codes, which rely heavily on sales and excise taxes; meaning that on average, the lowest-income households pay a higher share of their income than the highest-income households.⁴³ Indeed, 25 of the 50 states in the U.S. plus Washington DC, have combined state and local sales taxes in excess of the national median of 6.98 percent (Figure 120).

Ten of the 50 states (Illinois, Indiana, Kentucky, Massachusetts, Michigan, New Hampshire, North Carolina, Pennsylvania, Tennessee, and Utah) have one income

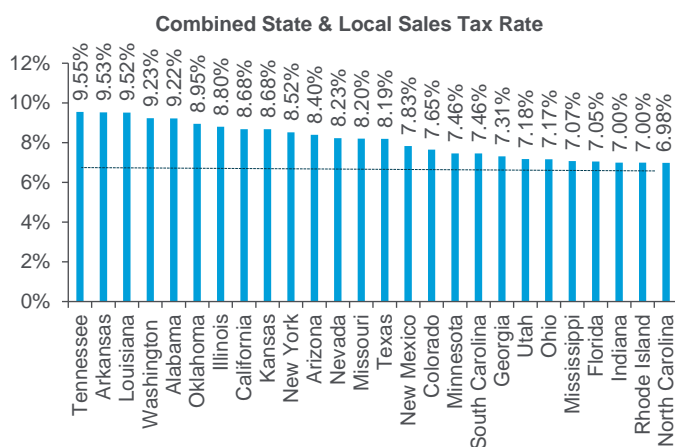
⁴¹ Berman, Matthew and Random Reamey. "Permanent Fund Dividends and Poverty in Alaska." Institute of Social and Economic Research: University of Alaska Anchorage.

⁴² Paddison, Laura. "What is a federal jobs guarantee?" The Huffington Post; Paul, Mark, William Darity, Jr. and Darrick Hamilton. "The Federal Job Guarantee – A Policy to Achieve Permanent Full Employment." Center on Budget and Policy Priorities.

⁴³ Huang, Chye-Ching and Roderick Taylor "How the Federal Tax Code Can Better Advance Racial Equity," Center on Budget and Policy Priorities, 25 July 2019

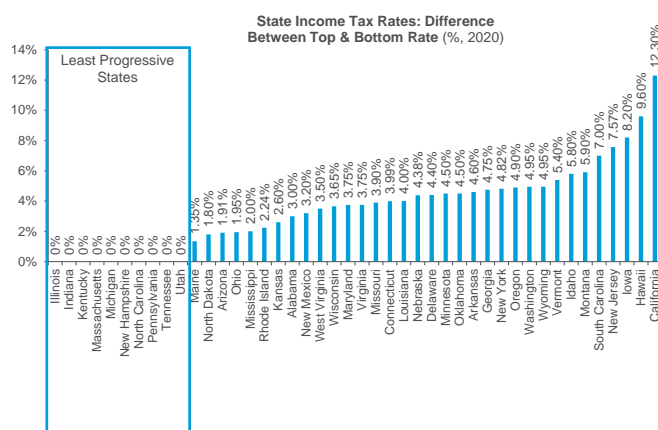
tax rate for all individual tax payers, making them the least progressive (Figure 121). A clear approach the U.S. could take in order to reduce racial inequality would be to raise more revenue overall in a progressive manner, with the revenues then directed to investments which advance racial equity. Indeed, the U.S. system of taxes currently underperforms 27 other high-income countries in regards to reducing post-tax inequality.⁴⁴

Figure 120. 25 States have Combined State and Local Tax Rates Exceeding the National Median of 6.98%



Source: The Tax Foundation, Citi Research

Figure 121. Progressiveness of State Taxes-



Note: States not listed do not have state income taxes.

Source: The Tax Foundation, Citi Research

Promote Financial Inclusion

Increasing access to financial services is key to increasing the amount of Blacks in the financial system

To address racial wealth inequality, the exceptionally high number of unbanked or underbanked Black households (estimated to be 47 percent) also needs to be combatted with Federal banking services. In order to avoid the usual obstacles of traditional for-profit banking of minimum account balances and transaction costs, one study advocates the Congressional strengthening of the U.S. Postal Service (USPS) as an avenue for financial services. At its peak in 1947, the Postal Savings systems held \$3.4 billion in reserves. Enabling the USPS to provide financial services would provide an alternative means of banking for many families, and in tandem allow for more money to circulate within the economies of low-income communities. The immediate need for cash availability, which a Postal Service/FedAccounts proposal would mobilize, has been incredibly apparent during the COVID-19 pandemic. These FedAccounts would enable free and digitized payments, withdrawals, and provide the ability to receive payments such as jobless benefits or stimulus checks without minimum balance requirements or fees.

⁴⁴ Based on reductions in the Gini measure of inequality among 33 countries for which OECD data for 2016 or the latest available year are available (see OECD Income Distribution Database, 2019). The United States ranks above only New Zealand, Israel, Switzerland, Korea, and Chile on this measure. (Data for Mexico, Hungary, and Turkey are unavailable.)

Fintech can also play a critical role in reducing the number of unbanked persons. Ex-JP Morgan Managing Director and founder of Mobility Capital Finance, Wole Coaxum, estimates that “Black and Hispanic people spend 50 to 100 percent more per month for basic banking services, which, over a lifetime, can cost \$40,000 in fees.”⁴⁵ His company, along with a number of others, seeks to tackle this in providing financial services to those on low to moderate incomes. Similarly FS Card provides credit cards with \$500 spending limits as an alternative to payday loan services. In providing these alternative services without the high fees, these fintech firms have the ability to drastically improve access to basic financial services. Moreover, in August 2020, leaders of the fintech industry, including Credit Karma, Monzo, and Stash, announced the creation of the Fintech Equality Coalition. The Coalition will focus on enhancing access to financial services and committing to providing opportunities in recruitment outreach within the Black community.⁴⁷

Decouple Health Care

Providing minimum government-supported healthcare would increase the level of health security for workers in economically-challenged industries

Access to affordable healthcare is a key component of enabling work and wealth creation. Indeed, a Gallup poll found that 9 percent of American adults and 14 percent of non-white American adults would avoid treatment for the coronavirus over concerns over medical expense.⁴⁸ An idea gained greater traction in the U.S. is to decouple healthcare from employment. Most people who have health insurance in the U.S. receive it via their employers (Figure 122). Expansion of Medicaid — public healthcare for persons under 65 years of age — has increased since being implemented under Obamacare (ACA) in 2012, but the private-direct purchase option under the ACA has fallen during the Trump Administration. Given the three groups who saw their unemployment markers spike to elevated peaks in April 2020 were women (15.5 percent), Black Americans (16.7 percent), and Latinos (18.9 percent), there is a clear connection between race/gender and those most at risk from losing their healthcare coverage.⁴⁹ In providing minimum government-supported healthcare, as an additional option to private job-linked health care, those in more economically-challenged industries would have an increased level of health security, with potentially significant benefits to minority groups.

⁴⁵ Rosen, E., “Trying to Correct Banking’s Racial Imbalance”, *The New York Times*, June 30, 2020.

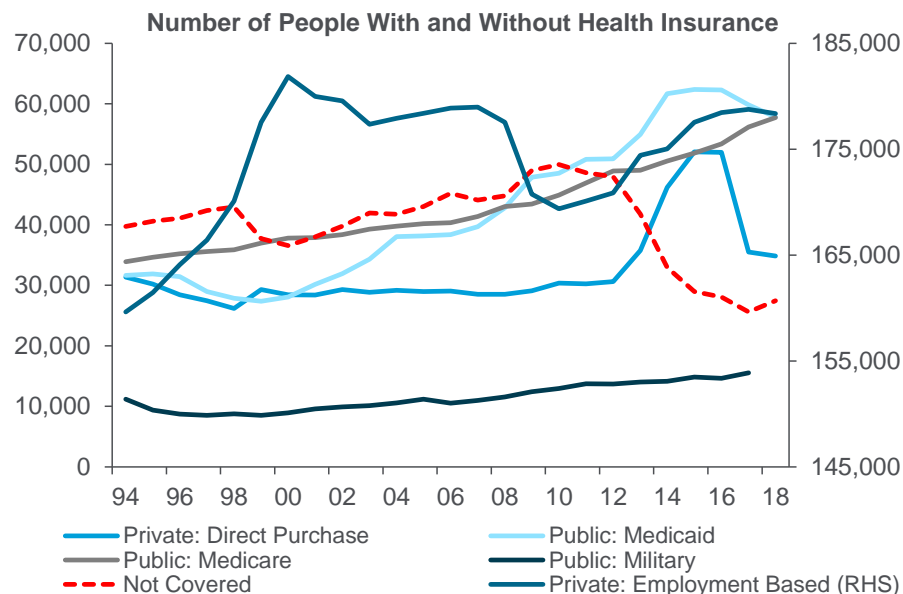
⁴⁶ FDIC National Survey of Unbanked and Underbanked Households, 2017.

⁴⁷ “Fintech Equality Coalition Created to Help Fight Racial Inequality in the Industry,” PR Newswire, August 13, 2020.

⁴⁸ Witters, D., “In U.S., 14% with Likely Covid-19 to Avoid Care Due to Cost,” Gallup, April 28, 2020.

⁴⁹ Tolbert, J., Orgera, K., Singer, N. and Anthony Damico, “Key Facts About The Uninsured Population,” Kaiser Family Foundation, December 13, 2019; Kaiser Family Foundation, “State Data and Policy Actions to Address Coronavirus,” Kaiser Family Foundation, May 13, 2020.

Figure 122. The Majority of U.S. Persons Are Covered by Private-Employed Based Insurance; The Number of Persons in the Private-Direct Purchase Option Has Declined in Recent Years



Note: Some persons may have more than one type of insurance.
Source: Census Bureau, Citi Research

Implement Housing Incentives

Public policy should focus upon housing as a pathway to wealth

Encouraging homeownership is a potential path to intergenerational wealth

Two suggestions proposed for providing affordable housing include: (1) expansion of tax incentives encouraging low-income housing in affluent areas; and (2) low-income community revitalization policies encouraging residential and commercial development in poor and primarily communities of color.⁵⁰ A third avenue for facilitating the path to homeownership for Black families is to close gaps enabling higher earnings and wealth accumulation necessary for home ownership.

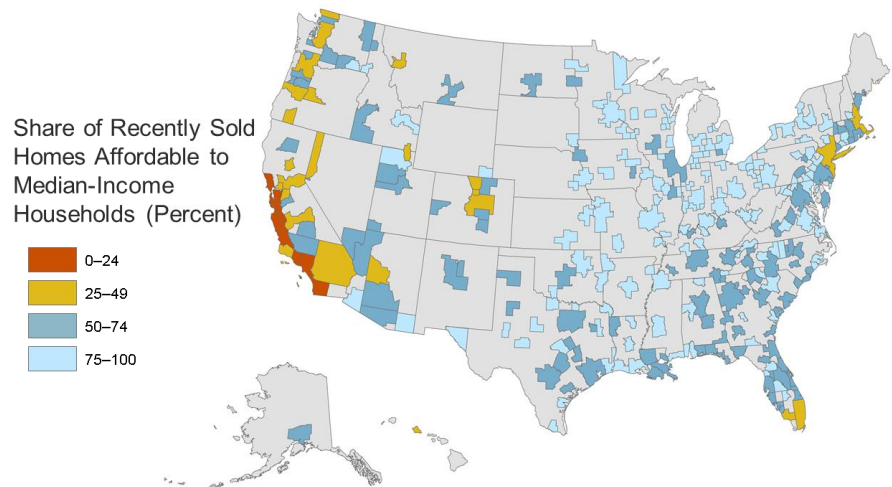
Policy reform of established programs to benefit minority groups, might be instrumental in closing equity gaps. One candidate for reform is the Mortgage Interest Deduction program which currently only benefits 6% of Black families. Enhancing the benefit to Black households requires increased homeownership, but the gap in homeownership rates between white and Black families is significant: the Black homeownership rate is at 44 percent vs. white at 70 percent. Affordable also housing remains a challenge in many local regions with large Black populations (Figure 123). Increasing incentives and access to affordable housing is an avenue towards greater homeownership. With a stark deficiency in affordable housing — in no state can a full time employee on \$7.25 afford a two bedroom apartment — progress in this area is of desperate necessity.⁵¹ The American Housing and Economic Mobility Act provides an initial framework with provisions for down payment assistance for first time buyers living in formerly redlined or officially segregated areas.⁵²

⁵⁰ Fulwok III, S., "The United States' History of Segregated Housing Continues to Limit Affordable Housing," Center for American Progress, December 15, 2016.

⁵¹ National Low-Income Housing Coalition. "Out of Reach 2018: The High Cost of Housing." 2018.

⁵² "Warren Unveils Historic Legislation to Confront America's Housing Crisis." Press release. September 26, 2018.

Figure 123. Many Highly Populated Regions of the U.S. Are Unaffordable Even For Median-Income Households



Notes: Median incomes are estimated at the core-based statistical area (CBSA) level. Recently sold homes are defined as homes with owners that moved within the 12 months prior to the survey date. Monthly payments assume a 3.5% down payment and property taxes of 1.15%, property insurance of 0.35%, and mortgage insurance of 0.85%. Affordable payments are defined as requiring less than 31% of monthly household income. Only CBSAs with at least 30 home sales in the past year are shown.

Source: JCHS tabulations of US Census Bureau, 2017 American Community Survey 1-Year Estimates, and Freddie Mac, PMMS

17 percent of the gap between Black and white homeownership is unexplained

The Urban Institute found intangible factors are contributing to the widening racial housing gap, highlighting the need for targeted policy solutions. According to the Urban Institute, even after accounting for individual factors including marital status, income distribution, FICO scores, age, median household income, and city segregation, approximately 17 percent of the Black-white family home ownership gap remains unexplained (Figure 100). These intangible factors suggest a combination of policies are necessary to narrow the gap, built on a foundation of fair housing and lending, plus new technologies.

- **Advance policy solutions at the local level:** Expand small-dollar mortgages; remove discriminatory terms in home- and condo-association deeds on single family units; property tax relief for low- and moderate-income taxpayers; strengthen lender networks.
- **Tackle housing supply constraints and affordability:** Reform local land-use, building codes and zoning laws; Federal investments in affordable housing; Government-sponsored enterprise (GSE) and Housing & Urban Development (HUD) collaboration with organizations working to make housing affordable.
- **Promote an equitable and accessible housing finance system:** Increase visibility, access, and types of down payment assistance programs; alternative data for credit histories and diverse sources of income for down payments.
- **Further outreach and counseling for renters and mortgage-ready millennials:** Improve and expand financial education and homeownership preparation; expand programs that automate saving for down payments.
- **Focus on sustainable homeownership and preservation:** Strengthen post-purchase counseling; early-warning displacement metrics; mitigation strategies and interventions for homeowners at high risk for flood and disaster events.

Invest in Training

Government investment in training programs can help narrow income and wealth gaps

Government focus on specific skills training with respect to identified occupational availability through either community college courses or named industry training has proven instrumental in combating economic inequality. With over 12 million students enrolling in community colleges each year, and a majority of those enrolled as undergraduates in 2-year public colleges identifying as non-white, funding for these programs is vital in delivering a more equitable workforce. However, without a permanent funding stream, sustainability can be a challenge.⁵³ Though community colleges have been the benefactors of a number of grants, including the Community Based Job Training Grant (CBJTG), which provided \$600 million in three years from 2005-2010, and two Federal grant programs under President Obama — Health Profession Opportunity Grant and Trade Adjustment Assistance Community College and Career Training (TAACCT) — there have been calls to reform the workforce system to move away from presumptions based upon skills narratives.⁵⁵ Skills narratives place an emphasis on skills, which for many workers “fail[s] to recognize the historical and inter-generational way in which multiple systems, including not only workforce, but also education, housing, criminal justice and others, have created an inherent set of disadvantages for people of color.”⁵⁷ Without proper recognition of individual circumstance, and an understanding that a multidimensional, rather than a ‘one-size-fits-all’ approach is far more likely to deliver meaningful results, there is a natural restriction to equity progress.

Public-private partnerships can help narrow training gaps

Public-private partnerships can help narrow training gaps. Notably, white high school dropouts have the same chance of obtaining a job as Black workers who have completed some college or earned an associate degree. In order to address such discrepancies, The Center for American Progress has highlighted four policy features that are essential for developing an equitable design and process for training and job access: (1) expand the share of economic risk by requiring employers of a certain size to pay into the WETF (Workforce Equity Trust Fund); (2) make a suite of wrap-around services (e.g., childcare) and employment benefits standard; (3) improve workforce analytics by creating an accountability dashboard for multiple measures of job quality; and (4) govern the WETF by a multi-stakeholder partnership comprising of business, labor and the public.⁵⁸ There are a number of programs along such guidelines emerging with community-based organizations designing programs to directly train and connect workers to local opportunities.

⁵³ Eyster, L., Durham, C., and Theresa Anderson. “Federal Investments in Job Training at Community Colleges,” Urban Institute, December 2016

⁵⁴ Kilpatrick, S., “A Quick Rundown of Community College Diversity Statistics,” EVERFI

⁵⁵ Anderson, T., Loprest, P., Derrick-Mills, T. Eyster, L., Morley, E., and Alan Werner. 2014. Health Profession Opportunity Grants: Year Two Annual Report 2011–2012. Report 2014-03. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, US Department of Health and Human Services.

⁵⁶ Lam, L. “A Design for Workforce Equity,” Center for American Progress, October 16, 2019.

⁵⁷ Race Forward, “Race-Explicit Strategies for Workforce Equity in Healthcare and IT” (New York: 2017).

⁵⁸ Adams, S. “White High School Drop-Outs Are As Likely To Land Jobs As Black College Students,” *Forbes*, June 27, 2014.

⁵⁹ Lam, L. “A Design for Workforce Equity,” Center for American Progress, October 16, 2019.

Government investment in programs that encourage wealth building can reduce the racial wealth gap

For example, in Detroit, HOPE has incorporated robotics training into its technical training; and in San Diego, the International Rescue Committee has included solar panel installation into training options; connecting a high-growth local industry currently facing a skilled labor shortage with job-seekers.⁶⁰

Invest in Wealth Building

Government investment in building wealth is a radical approach to closing the racial wealth gap. One approach is 'Baby Bonds'.⁶¹ Championed by New Jersey Senator Cory Booker, the bonds would provide every child born with \$1,000 in an interest-bearing savings account that would be added to annually (maximum of \$2,000 based upon family income) up to the age of 18. Upon reaching adulthood, the funds accrued can be accessed for wealth building activities such as down payments on homes, college tuition, or start-up funding.⁶² A study by Columbia University on the effect of instruments such as 'Baby Bonds' estimated that though the racial disparity would persist, it would be substantially narrowed: from a factor of 15.9 to 1.4 at the median, with the median Caucasian adult holding approximately \$79,000 versus \$58,890 for the median Black adult.⁶³ The program is expected to cost \$60 billion per year, and to be funded by modifying the estate tax and closing the tax break for inherited capital gains.⁶⁴ There have also been some successes at the state and local level. In Oklahoma, the Ford Foundation provided over a thousand babies with \$1,000 in state-owned 529 college savings account in 2007. There is evidence to suggest these kinds of programs could have significant impact with young people who, with a college fund, are three times as likely to go to college, and four times as likely to graduate, helping to address future racial earnings gaps.⁶⁵

Invest in Protections

Funding and broadening the scope of anti-discrimination agencies can help lessen inequality in the United States

Established in 1965, the U.S. Equal Employment Opportunity Commission (EEOC) is tasked with enforcing Federal laws preventing discrimination against job applicants and employees based upon race, color, religion, sex, national origin, age, disability, or genetic information. However, as the U.S. population has grown by 44 percent in 40 years to roughly 330 million persons, and become even more diverse, Federal funding for the EEOC has not kept pace. Indeed, funding for the EEOC has shrunk by 8 percent over the same period, and the number of employees at the EEOC fielding discrimination complaints has decreased by 42 percent since 1980. Meanwhile, at the state level, funds for employment anti-discrimination programs are modest and in some cases non-existent. A 2015 census of ten states with the largest Black populations revealed that none of them spent more than 70 cents per resident on employment anti-discrimination programs. Indeed, three states — Mississippi, Alabama, and North Carolina — spent zero dollars on such programs.

⁶⁰ Jones, M., and Ed Skyler. "Here's a solution to economic inequity: Invest more in job training," *USA Today*, March 10, 2020.

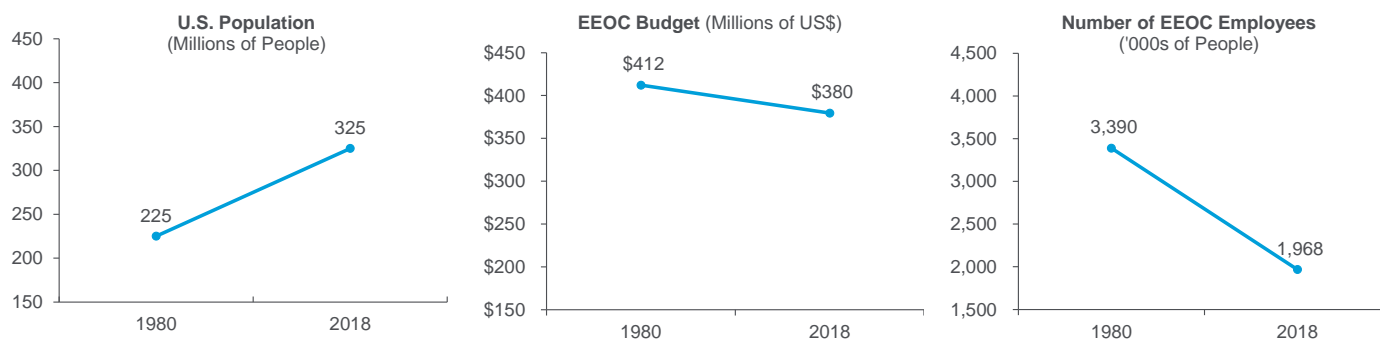
⁶¹ Zwede, N., "Universal Baby Bonds Reduce Black-White Wealth Inequality, Progressively Raise Net Worth of All Young Adults."

⁶² "Interview With Corey Booker: Making real the ideals of our country," *The Economist*, July 14, 2020.

⁶³ Zwede, N. "Universal Baby Bonds Reduce Black-White Wealth Inequality, Progressively Raise Net Worth of All Young Adults."

⁶⁴ Viebeck, E., "Booker wants a 'baby bond' for every U.S. child. Would it work?," *The Washington Post*, August 19, 2019.

⁶⁵ "Baby bonds' proven to boost aspirations and college savings," *Bangor News*, December 11, 2018.

Figure 124. Congress Has Decreased Resources for the Equal Employment Opportunity Commission (EEOC) Over the Last 40 Years

Source: Census Bureau, EEOC, Citi Research

Implement Salary History Bans

Banning employers from asking about salary history helps to stop prior wage discrimination from being perpetuated

Salary history bans are a method to stop the perpetuation of racial wage gaps. With the wage gap between white and Black workers having grown at the median between 2000 and 2019, increasing the discrepancy from 20.8 percent to 24.4 percent, addressing this disparity is particularly important.⁶⁶ One approach that has proven particularly effective is banning employers from inquiring about historical salaries. A study by Boston University found that, following bans, pay for job switchers increased by 13 percent for Black workers and 8 percent for women workers, respectively.⁶⁷ By removing the knowledge of prior salaries, employers are no longer influenced by potential discrimination of previous employers, and hence are less likely to perpetuate the wage gap between white and Black employees by continuing to maintain the difference. Massachusetts, as the first state to impose a ban preventing employers asking candidates their previous salaries in 2016, has been followed by 18 other states, with individual cities nationwide, including Washington DC, also following suit (Figure 126).^{68,69}

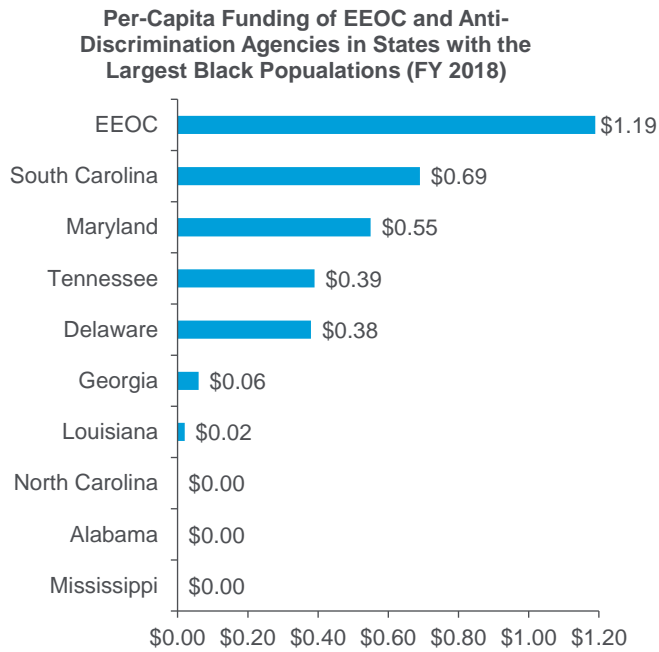
⁶⁶ Gould, E., "State of Working America Wages 2019," Economic Policy Institute, February 20, 2020.

⁶⁷ Bessen, J. E., Meng, C., and Erich Denk. "Perpetuating Inequality: What Salary History Bans Reveal About Wages," SSRN, June 24, 2020.

⁶⁸ "Salary history bans," HRDrive, August 7, 2020.

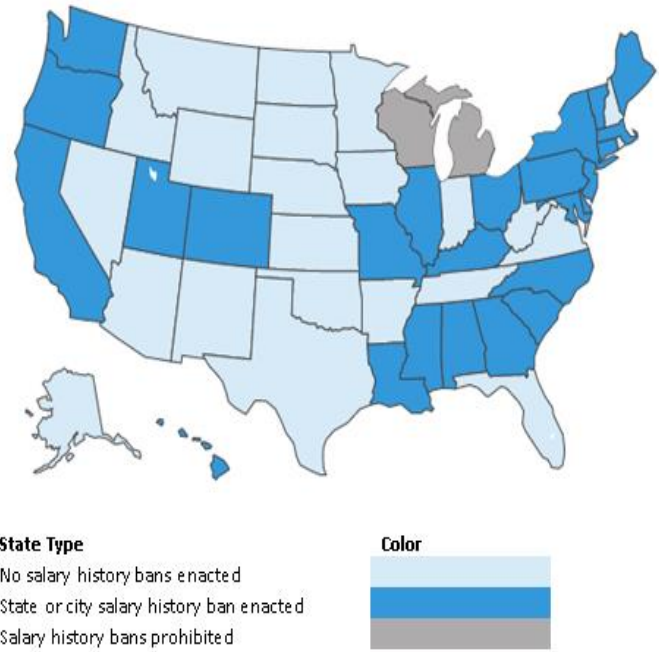
⁶⁹ Ziv, S., "Salary History Bans Reduce Racial and Gender Wage Gaps; Every CEO Should Use Them," *Forbes*, June 23, 2020.

Figure 125. Anti-Discrimination Agency Spending at the State Level is Significantly Underfunded in States with Large Black Populations

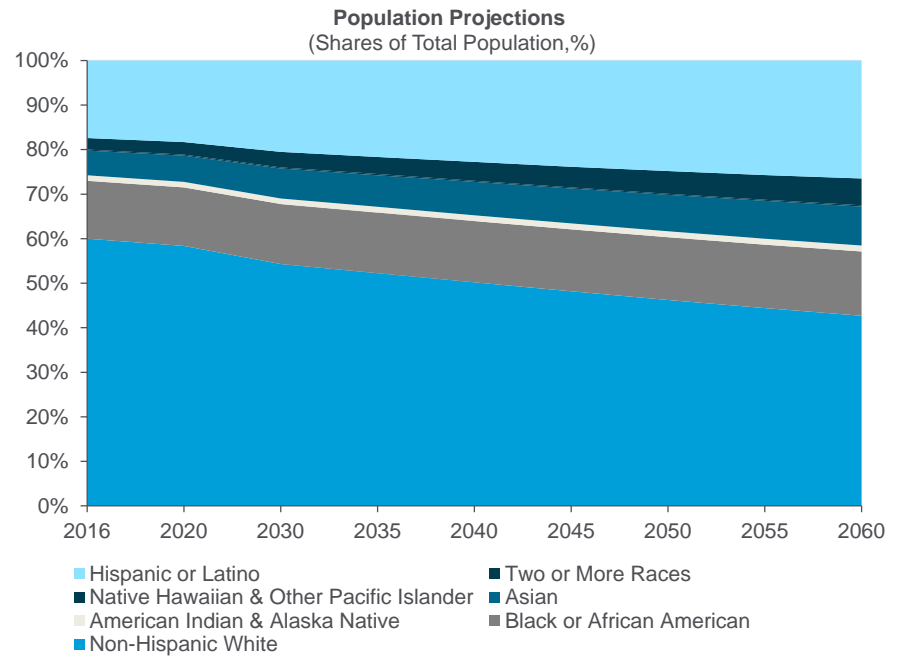


Source: EEOC, Henry J. Kaiser Family Foundation, Citi Research

Figure 126. Only 19 of 50 States Plus Washington, DC, and 20 of Thousands of Municipalities, Have Salary History Bans



Source: AccuSource, HRDrive, Citi Research

Figure 128. The Share of Non-White Hispanic Persons Is Poised to Shrink to 44% by 2060

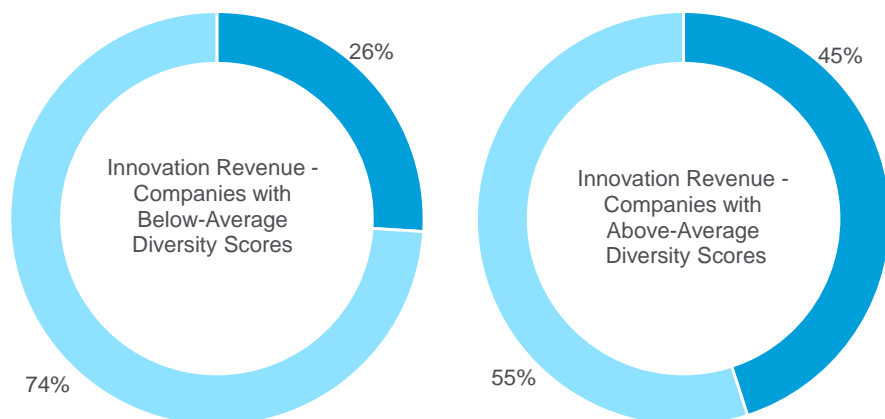
Source: Census Bureau, Citi Research

- Diversity of Perspectives:** Persons from diverse backgrounds and experiences will have a multiplicity of ideas and perspectives. Diversity of perspectives may produce better outcomes as diversity can help avoid “group-think.”⁷² A diversity of opinions can create friction. However, if diverse employees are made to feel included, then outcomes can potentially be positive.⁷³ A Boston Consulting Group (BCG) international survey, including the U.S., revealed a strong and statistically significant correlation between the diversity of management teams and overall innovation. “Firms reporting above-average diversity on their management teams also reported innovation revenue that was 19 percentage points higher than that of companies with below-average leadership diversity — 45% of total revenue versus just 26%.”^{74,75}
- Bolstering the Bottom Line:** Studies suggest that diverse firms may have stronger financial results more generally. A separate McKinsey & Company international survey found that “companies in the top quartile for racial and ethnic diversity were 35 percent more likely to have financial returns above their respective national industry medians.” In the United States, McKinsey found “there is a linear relationship between racial and ethnic diversity and better financial performance: for every 10 percent increase in racial and ethnic diversity on the senior-executive team, earnings before interest and taxes (EBIT) rise 0.8 percent.”

⁷² Sidorenko, V., “The Business Case For Diversity and Inclusion,” TLNT, April 24, 2019.⁷³ Kaplan, S., “Why the ‘business case’ for diversity isn’t working,” Fast Company, February 12, 2020.⁷⁴ Lorenzo, R., Voigt, N., Tsusaka, M., Krentz, K., and Katie Abouzahr. “How Diverse Leadership Teams Boost Innovation,” Boston Consulting Group, January 23, 2018.⁷⁵ Esweraj, V., “The business case for diversity in the workplace is now overwhelming,” World Economic Forum (WEF), April 29, 2019.

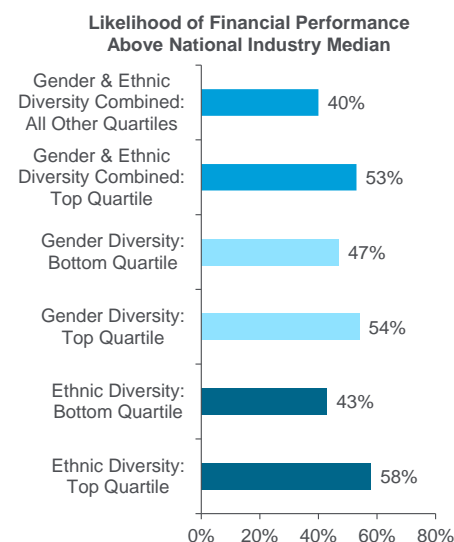
Moreover, that “racial and ethnic diversity has a stronger impact on financial performance in the United States than gender diversity, perhaps because earlier efforts to increase women’s representation in the top levels of business have already yielded positive results.”⁷⁶

Figure 129. Businesses with Diverse Leadership Teams May Generate More Revenue



Source: The Boston Consulting Group, Citi Research

Figure 130. Diverse Firms May Perform Better



Source: McKinsey & Co, Citi Research

■ **A Matter of Talent - Recruiting and Retaining the Best Talent Is Paramount:**

By hiring a limited group of people based upon a specific mold (i.e. white and/or male), companies are foregoing significant segments of talent. Hence, firms should consider directing resources and energy towards recruiting and retaining diverse employees, and creating inclusive workplace cultures where everyone has an equal opportunity to contribute and succeed.⁷⁷ McKinsey & Company posits that more diverse companies, “are better able to win top talent and improve their customer orientation, employee satisfaction, and decision making, and all that leads to a virtuous cycle of increasing returns.”⁷⁸

- **Moral Imperative - It’s the Right Thing to Do:** The Society for Human Resource Management defines inclusion as, “the achievement of a work environment in which all individuals are treated fairly and respectfully, have equal access to opportunities and resources, and can contribute fully to the organization’s success.” Employees who are made to feel like they belong are potentially better performers and happier people.⁷⁹

⁷⁶ Hunt, V., Layton, D., and Sara Prince. “Why diversity matters,” McKinsey & Company, January 1, 2015.

⁷⁷ “The Business Case for D&I: Ask Catalyst Express,” Catalyst, October 4, 2019.

⁷⁸ Hunt, V., Layton, D., and Sara Prince. “Why diversity matters,” McKinsey & Company, January 1, 2015.

⁷⁹ Sidorenko, V., “The Business Case For Diversity and Inclusion,” TLNT, April 24, 2019.

Support Initiatives from the Top

Consumers expect corporations that make statements on racial equality to follow up with concrete action – support must come from the top

Support of Diversity and Inclusion (D&I) initiatives must come from the top. As of 2020, only four CEOs at Fortune 500 companies are Black. This statistic highlights concerns about equity, as management diversity is often reflected at all levels of a company.⁸⁰ Literature suggests that corporations must actively engage in D&I initiatives in order to change the composition and complexion of their firms, but focus must start at the top of the corporate ladder. Indeed, the Edelman Trust Barometer indicates that in the U.S., 63 percent of consumer respondents to their poll believed corporations that make statements in support of racial equality must follow it up with concrete actions in order not to be seen as exploitative or opportunistic (Figure 130).

A number of high profile CEOs support D&I initiatives, including former Xerox CEO Ursula Burns (the first Black female CEO of a Fortune 500 company) who stated that “Business leaders have to start to lead, what has happened in the past, they’ve trailed.” Similarly a number of CEOs have pledged hard dollars to address racial gaps. For example, Comcast pledged \$100 million over three years to accelerate efforts on diversity and inclusion, and Walmart also pledged \$100 million over five years to create a new center on racial equity that would concentrate in four areas: financial, health care, criminal justice and education.⁸¹

Citi's Response

In direct response to the messages from the #BLM Protests, Citi itself has committed to \$10.7 million in donations: \$1 million each to two organizations working to close the Black achievement gap in education in the United States: [UNCF](#) and [Management Leadership of Tomorrow \(MLT\)](#). This is in addition to the \$8 million Citi committed to four leading Black-led organizations addressing voting rights, income and wealth gaps, and housing discrimination (the [NAACP Legal Defense Fund](#), the [Lawyers' Committee for Civil Rights](#), the [National Urban League](#) and the [National Fair Housing Alliance](#)), for a total of \$10,684,000 in charitable contributions, inclusive of employee contributions.

Figure 131. Consumers Expect Firms to Follow up Talk with Action



Source: Edelman Brand Trust Barometer 2020, Citi Research

⁸⁰ Siripurapu, A., “The US Inequality Debate”. Council on Foreign Relations. July 15, 2020.

⁸¹ Stankiewicz, K., “CEOs are offering plans and investments to address racial inequality after George Floyd death”. CNBC. June 11, 2020.

Corporations can implement policies that are more conscious of addressing racial gaps in matters of hiring, retention, and firing

Address Racial Gaps in Hiring, Retention, and Firing

Corporations can implement policies that are more conscious of addressing racial gaps in matters of hiring, retention, and firing. There are several recommendations for the corporate setting:

- **Recruitment and Hiring:** Establishing diverse slates and limiting selection bias is paramount at the recruitment and hiring stage. Analysis by NatGen suggests that there is discrimination and 'ethnic filtering' in the recruitment process. Indeed, National Academy of Sciences data reveal the rate of callbacks for Black candidates is generally lower than that of white candidates, and this rate has been little changed over since the 1970s.⁸² Moreover, businesses may be inadvertently perpetuating wage inequality by asking for salary histories. To enhance motivation for greater minority employment, companies could be subject to mandatory, randomized public diversity monitoring with the intention that in facing potential obligation to publish minority employment statistics this would translate into material change and diversification of the recruitment process. Additionally, a government supported and fiscally incentivized enhancement of online recruitment as a method to further anonymize the hiring process likely would prove instrumental in improving racial equality in hiring practices.⁸³
- **Retention:** With research showing that a professional leaving an organization can cost as much as twice the average associate's salary there is clear economic incentive to improve retention rates, especially among minority employees who are more likely to leave a firm due to mistreatment.⁸⁴ Active consideration of minority interests and implementation of specific programs to address minority representation within a firm are proven avenues to greater retention levels. These include mentoring schemes, with defined commitment from employers to provide clear evaluation tools to deliver tangible advancement of their minority employees; active inclusion in high visibility assignments; and proactive endeavors to provide influential sponsors to minority employees within the firm to support the navigation of corporate ascent.⁸⁵ Firms should ensure that pay and promotion of Black employees is commensurate with other workers.⁸⁶

⁸² Quillian, L., Pager, D., Midtbøen, A., and Ole Hexel. Hiring Discrimination Against Black Americans Hasn't Declined in 25 Years," Harvard Business Review, October 11, 2017.

⁸³ Lloyd, J., "Ending Ethnic Discrimination in Recruitment". The Strategic Society Centre. November, 2010.

⁸⁴ Kapor Center. 2017 Tech Leavers Study.

⁸⁵ Diversity Primer, Diversity Best Practices, September 2009 -

https://www.diversitybestpractices.com/sites/diversitybestpractices.com/files/import/embedded/anchors/files/diversity_primer_chapter_08.pdf.

⁸⁶ Vieux, S., "What Companies Can Do to Combat Systemic Racism Against Black Colleagues in the Workplace," Just Capital, June 4, 2020.

Figure 132. Callbacks of White Applicants Relative to Black Applicants

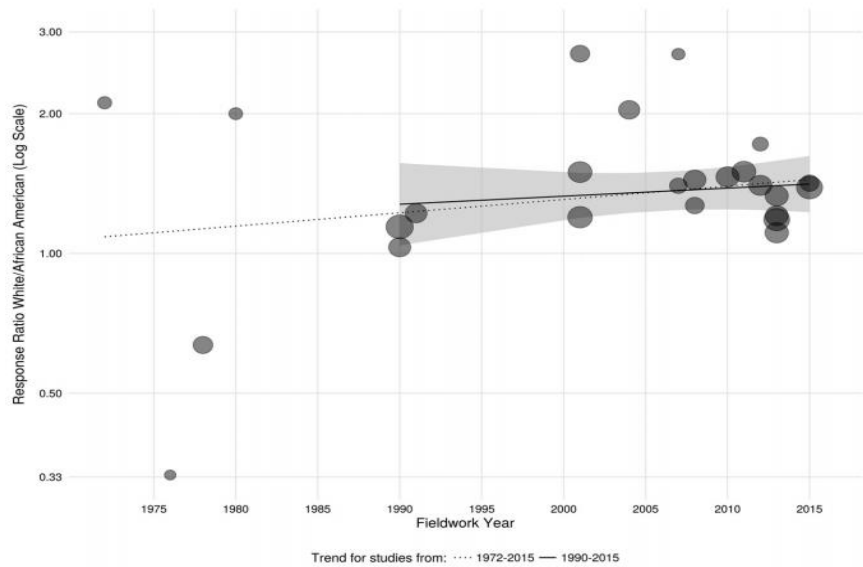


Fig. 1. No reduction in hiring discrimination facing African Americans over time.

Source: Meta-analysis of field experiments shows no change in racial discrimination in hiring over time. Lincoln Quilliana, Devah Pager, Ole Hexela, and Arnfinn H. Midtbøen, Proceedings of the National Academy of Sciences (PNAS), 2017

■ **Layoffs:** Black and Hispanic workers are more likely to be subject to reductions in force (RIF) actions amid economic downturns due to higher labor market segmentation in lower-level or more discretionary jobs. The Harvard Business Review (HBR) suggests employers can consider performance more than position, and cross-training and upskilling workers to help narrow the numbers of minorities reduced. Companies factoring performance into their decision-making, often are able to retain their best performers, regardless of gender and race. Businesses can redeploy workers with transferable skills to other parts of the firm, and/or cross-train employees for other tasks to avoid major labor cuts. Employers can also cut pay and hours, but continue to retain workers.⁸⁷

■ **Lists:** HBR recommends that firms, when releasing employees, maintain lists of persons being let go to note major disparities and to share those lists with other firms that may have job openings. Businesses can draw from these lists of recently unemployed persons to find a diverse set of talent.⁸⁸

Engage in Corporate Social Responsibility

Businesses can engage in corporate social responsibility (CSR)

Bolstering external communities and supporting minority-owned firms can help close gaps at the societal level. Businesses can engage in corporate social responsibility (CSR). CSR is considered a strategic differentiator for firms, which can aid in brand reputation externally and support employee morale and sense of purpose internally. Moreover, corporations can provide direct investments in minority-owned small businesses.

⁸⁷ Kalev, A., "Research: U.S. Unemployment Rising Faster for Women and People of Color," Harvard Business Review, April 20, 2020.

⁸⁸ Morgan Roberts, L., McCluney, C.L., Thomas, E.L., and Michelle Kim. "How U.S. Companies Can Support Employees of Color Through the Pandemic," Harvard Business Review, May 22, 2020.

Firms can also consider public actions to accelerate policies and legal measures to protect and support vulnerable populations. This can include public condemnation of events or legislation that target groups of people based upon race.⁸⁹

Studies have shown CSR is not only for attracting and retaining customers, but also for retaining talent. For example, Millennials are willing to forego an average of 14.4 percent of their expected compensation to work at socially responsible companies. Also 88 percent of Millennials believe a business should be proactively participating in the community. A reported 92 percent of employees involved in CSR programs cite higher rates of emotional and physical health. Moreover, 66 percent of employees report a greater sense of loyalty to their employers as a consequence of participating in CSR programs.⁹⁰

Dismantle Structural Barriers to Hiring Black Talent

Structural barriers to hiring, such as criminal histories, should be addressed to eliminate discrimination

Other structural barriers inhibiting corporations from hiring Black talent must also be dismantled. In a Time Magazine article written by Darren Walker, the President of the Ford Foundation, Walker advocated enforcement of racially diverse candidate pools while also stressing the material impact of engaging fully with Fair Chance Hiring (FCH). FCH is where companies are encouraged to employ qualified job applicants with criminal histories — a group in which Black Americans are overrepresented, as African American men are 11.8 times more likely to be incarcerated than white men of the same age.⁹¹⁹² Policies that might help reduce joblessness among ex-inmates include: (1) temporary basic income; (2) occupational licensing reform; (3) bond insurance and tax incentives for employers who hire ex-offenders; (4) automatic record expungement; and (5) banning employment discrimination subject to Title VII of the Civil Rights Act of 1964.⁹³ Moreover, removing blanket bans on occupational licensing, and following a more bespoke approach. For example, in New Jersey and Oklahoma, a conviction must have a ‘direct, rational, or reasonable relationship’ to the duties of the occupation to be defined for licensing.

Develop Metrics to Analyze, Report, and React

Change can’t happen until metrics are developed to analyze current situations, report and react

In order for firms to begin and/or continue the process of facilitating racial gap closures in the workplace, metrics must be used to analyze, report, and react. The steps towards eliminating wage gaps include: (1) collecting data; (2) analyzing and publicizing the data; and then (3) acting on the results of the data if they reveal that inequity in pay exists for jobs requiring the same qualifications. First, firms can assess current workforce demographics: do the present number of Black employees match national and local population ratios? Second, firms may set recruitment targets to address discrepancies for Black employees. In areas where Black employees are underrepresented, firms can establish recruitment targets with accountability mechanisms like tying executive compensation to meeting targets or holding leaders accountable in performance reviews.

⁸⁹ IBID.

⁹⁰ Civic, B., “CSR – IS IT GOOD FOR BUSINESS?,” February 28, 2018.

⁹¹ Walker, D., “If Corporations Really Want to Address Racial Inequality, Here are 9 Things That Actually Make a Difference.” Time, August 4, 2020.

⁹² Keaveny, P., “Ensuring Racial Equality- from classrooms to Workplaces”. The Conversation. March 6, 2019.

⁹³ Couloute, L., and Daniel Kopf. “Out of Prison & Out of Work: Unemployment among formerly incarcerated people,” Prison Policy Institute, July 2018.

Targets are useful for opening up opportunity for highly qualified underrepresented persons while potentially limiting space for less qualified persons among overrepresented groups.⁹⁴ Third, investigate whether Black employees are compensated for equal work and promoted as regularly as other employees. Following the pay equity study (analyze), firms should be transparent about the results (report), and then create a plan to rectify discrepancies (react).⁹⁵ Business can also hire specialized recruitment and employment firms (e.g., [Jopwell](#)) to assist with diversification initiatives.

Recruit More Black Board Members

More Black executives need to be added to corporate boards

To assist with accountability, companies can add more Black executives to their boards. According to Deloitte LLP “a critical need for inclusive leadership, the shifting U.S. demographics, and investor pressure in the United States have increased the focus on diversity in the C-suite and on public company boards.”⁹⁶ A 2018 Deloitte study found that 34 percent of Fortune 500 seats were held by women and minorities, and 38.6 percent of Fortune 100 board seats were held by women and minorities. This share might increase to 40 percent by 2024 if the rate of increase identified over the 2016 to 2018 period of the study were kept. Notably, Black women gained 32 Fortune 500 seats in 2018, and Black men acquired 26 seats, rates of increase of 26.2 percent and 8.5 percent respectively.⁹⁷ Nonetheless, the study confirmed that many of the Black board members were “recycled,” meaning they had already been board members elsewhere or are currently serving on another board. Hence, while board diversity is increasing, the absolute number and share of Black men and women on boards (9 percent) is lagging relative to the U.S. population (13 percent).

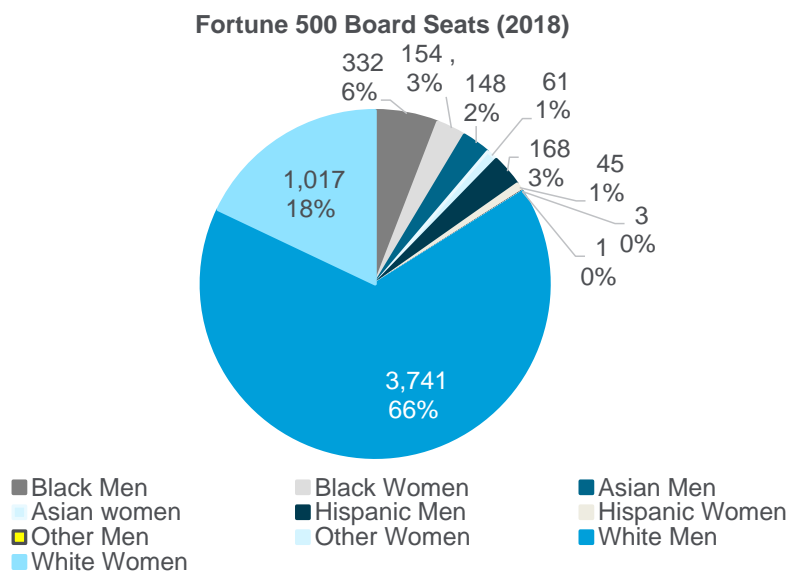
⁹⁴ Kaplan, S., “Why the ‘business case’ for diversity isn’t working,” *Fast Company*, February 12, 2020.

⁹⁵ Vieux, S., “What Companies Can Do to Combat Systemic Racism Against Black Colleagues in the Workplace,” *Just Capital*, June 4, 2020.

⁹⁶ DeHaas, D., Akutagawa, L., and Skip Spriggs. Missing Pieces Report: The 2018 Board Diversity Census of Women and Minorities on Fortune 500 Boards, Deloitte LLP, February 5, 2019.

⁹⁷ Ibid.

Figure 133. Black People Still Underrepresented on Boards (9%) Relative to Population (13%)

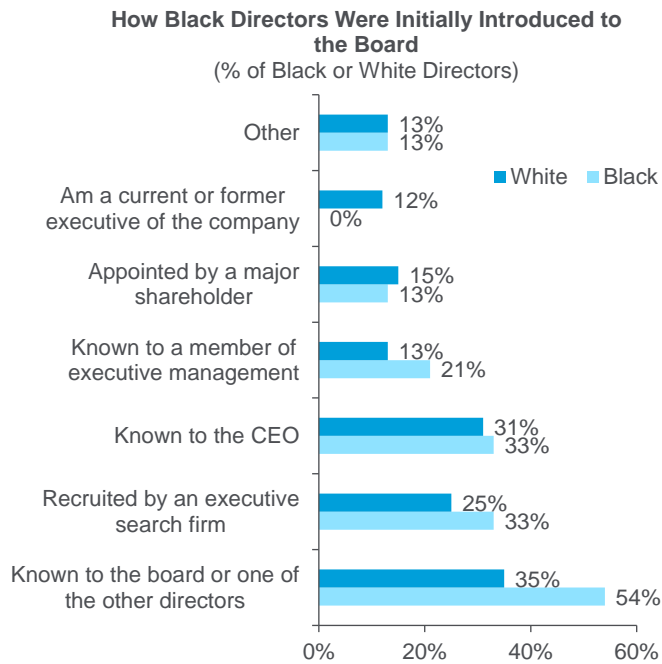


Source: Deloitte LLP, Citi Research

Challenges to adding more Black board directors must be overcome. According to the Harvard Business Review, challenges to adding Black board members include: (1) few existing minority directors to recruit and attract Black board members; (2) a lack of Black persons in the executive pipeline, who are often persons tapped for board seats; (3) an insufficient number of minorities on recruitment slates; (4) homogenous social networks that may have few or no Black persons who might be tapped for board directorships; (5) inadequate director onboarding required for directors to get to know each other and work more effectively; (6) lack of leadership roles on boards for Black directors, making them less effective; and (7) bias, where Black directors, especially women, feel that their ideas are devalued or ignored.⁹⁸ Many of these challenges can be overcome by (1) broadening the search criteria for board members; (2) better leveraging search firms for finding board members; (3) improving on-boarding training; (4) ensuring more leadership roles for Black directors; (5) building up the pipeline of potential directors by addressing problems with retention of Black employees; and (6) valuing the expertise, contributions, and opinions of Black board directors. Diverse boards provide a diversity of perspectives, create a virtuous cycle of greater diversity, and help with recruitment and retention of diverse talent throughout the company.

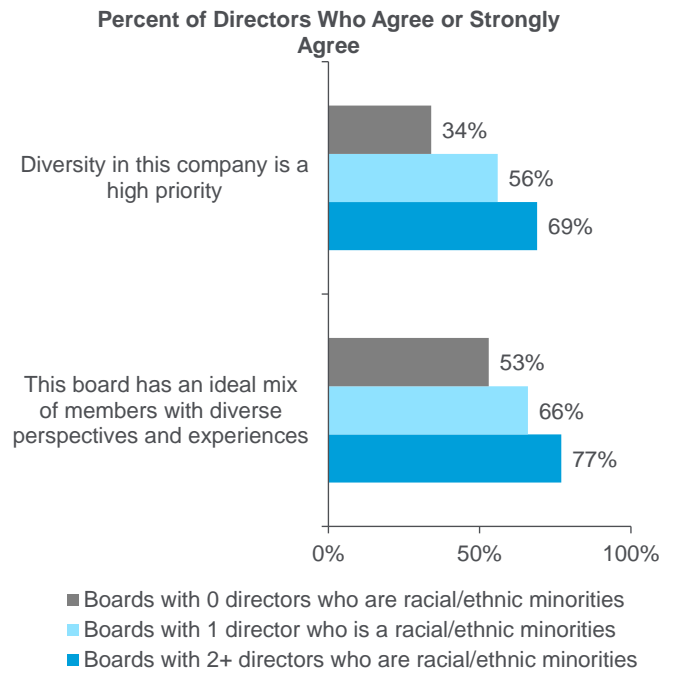
⁹⁸ Cheng, J.Y.-J., Groysberg, B., and Paul M. Healy. "Why Do Boards Have So Few Black Directors?" Harvard Business Review, August 13, 2020.

Figure 134. Social Networking is a Major Factor In Selecting Black Board Members



Source: Harvard Business Review, Citi Research

Figure 135. Racially Diverse Boards Tend to Prioritize Racial Diversity Within the Company



Source: Harvard Business Review, Citi Research

What Can Individuals Do?

Figure 136. Individuals Can Work Towards Eliminating Racial Gaps



Source: Shutterstock

While we argue that structural factors have and continue to play significant roles in perpetuating racial gaps, individuals are far from powerless. Black persons in the U.S. can continue to advocate for themselves in the realms of finances, education, business, and politics. Meanwhile, persons of other races can continue to educate themselves about historical disparities and work towards fixing them.

Use Education as a Pathway for Advancement

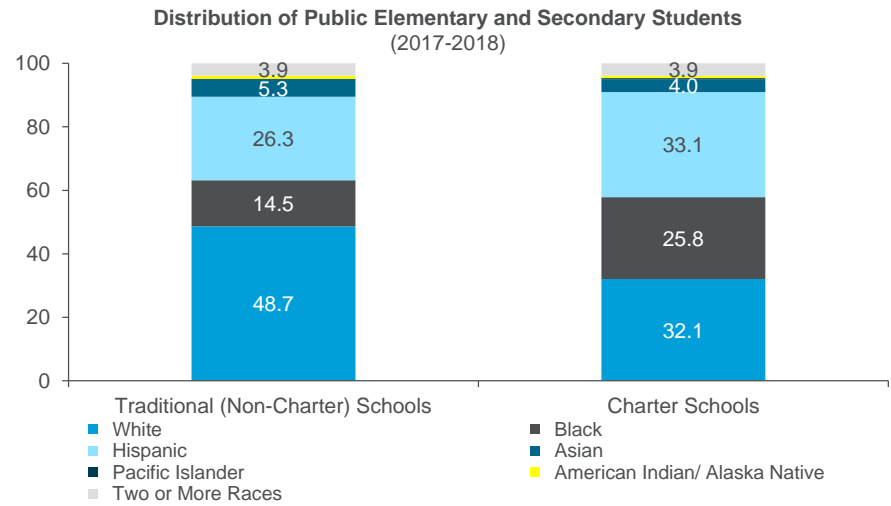
Education is a pathway for advancements and parents can advocate for greater accountability and funding for schools

Parents can advocate for greater accountability from and funding for schools. Although Black parents are less likely to volunteer at school events, often due to work commitments, it does not mean that they are not involved in their children's education. Parents show their activism in their choices for education for their children including charter schools, private schools, and magnet public schools. (Figure 137). On a small scale, one study revealed that 83 percent of Black students had their homework checked by a parent, compared to 57 percent of white students and 59 percent of Asian students.⁹⁹ In terms of more dramatic action, parents have reported willingness to move in order to provide their students with access to a better school district. Parents can continue to take action against unequal disciplinary measures against their children that can disrupt learning and future prospects. Black youth comprise roughly 16 percent of public school students and about 9 percent of private school students. Yet, they account for 35 percent of in- and out-of-school suspensions, and 39 percent of expulsions.¹⁰⁰ Parents can ensure that their children are considered for gifted and talented education (GATE) programs and apply to magnet schools, which have become more racially segregated.¹⁰¹ Finally, parents can use their political power (Decennial Census, voting) to ensure that adequate funding is directed towards their school districts.

⁹⁹ Morris, M.W., *Black Stats: African Americans by the Numbers in the 21st Century*, 2014.

¹⁰⁰ Ibid.

¹⁰¹ Pirtle, W., "The Other Segregation," *The Atlantic*, April 23, 2019.

Figure 137. Minority Students Are More Likely to Attend Charter Schools than Traditional Ones

Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), Citi Research

Students can aim high and utilize resources that promote success

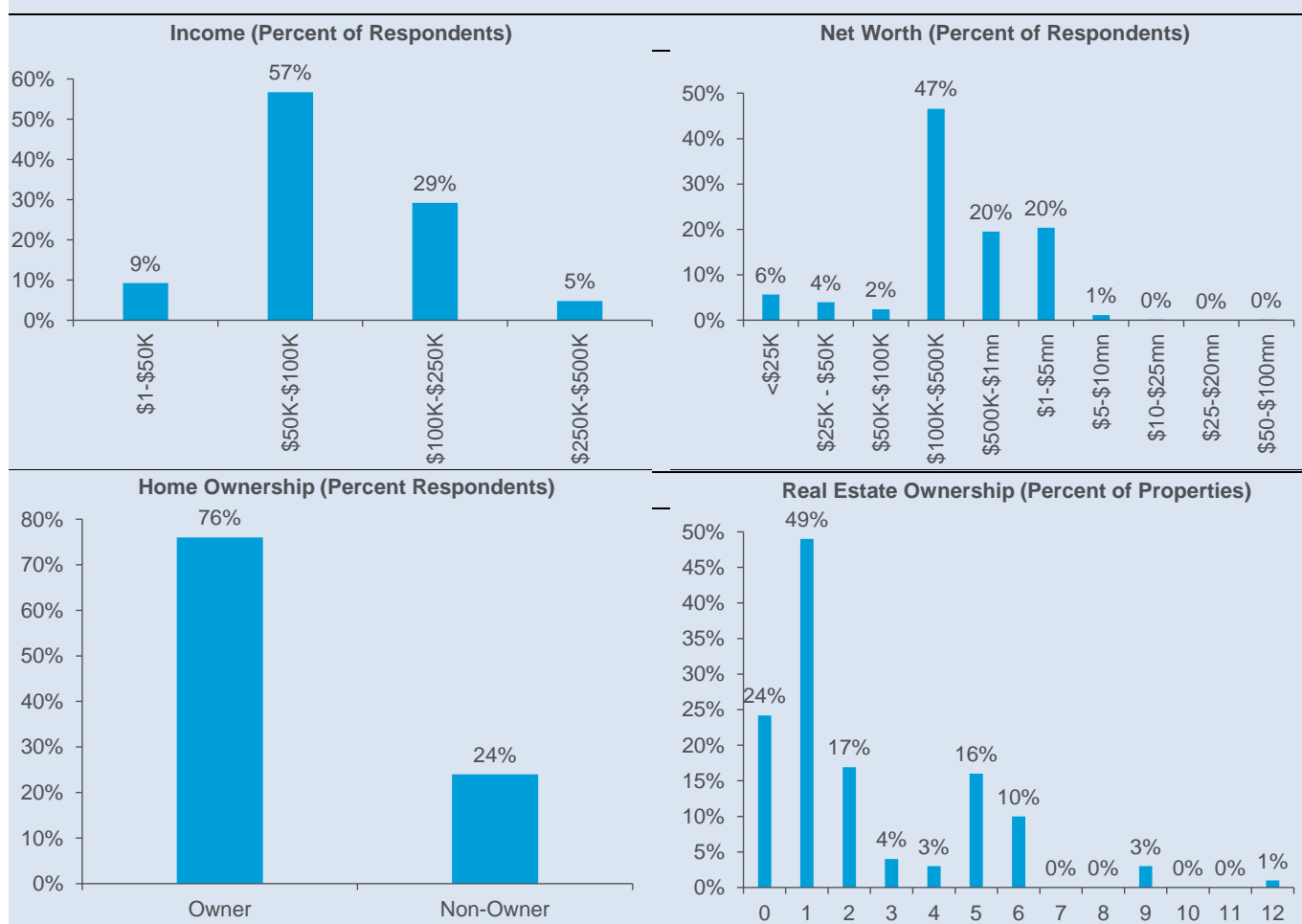
As mentioned above, students can take more courses relevant to STEM fields, and take Advanced Placement courses in high school. Students should seek education beyond a high school degree: college, trade school. Students should also consider advanced and professional degrees even after earning a college degree. Throughout the school career, students can take advantage of organizations that promote academic achievement and stepping stones into business. Notable organization include [Girls Who Code](#), [My Brother's Keeper Alliance](#), [Jack and Jill of America Incorporated](#), [United Negro College Fund \(UNCF\)](#), [Management Leadership for Tomorrow \(MLT\)](#), [INROADS](#), [Toigo](#), [Sponsors for Educational Opportunity \(SEO\)](#), [A Better Chance](#), the [Jackie Robinson Foundation](#), and the [Urban League](#). Funding for education can be tackled in part via familial investments in college savings plans and student applications to scholarships. As discussed above, training and higher education are highly correlated with higher incomes over a lifetime.

Have Non-Profit Organizations Built the Middle Class? Spotlight on MLT and INROADS

Non-profit organizations have existed for more 100 years to help advance the financial and social wellbeing of Black Americans. Two organizations have quantified how their efforts have bolstered the expansion of the Black middle-class.

- **MLT** – Statistics from the MLT website indicate the average starting salary for their Career Prep Fellows is \$75,000, with half of these students coming from homes with annual household incomes of less than \$50,000. Moreover, of their 1,600 scholars per year, 90 percent of their undergraduates receive an offer for a high trajectory job, 90 percent of its MBA Prep students matriculate at top10 business schools, and 90 percent of its first-generation college students are on track to graduate within 4-6 years, compared to the national average of 11 percent.
- **INROADS** –INROADS in partnership with Australian-based non-profit Career Trackers surveyed 1000 INROADS alumni to determine how the organization has helped to narrow racial gaps. Among respondents, 57 percent have incomes in the range of \$50,000 to \$100,000 and 34 percent with incomes exceeding \$100,000. Forty seven percent have net worth in the range of \$100,000 to \$500,000, and 40 percent in the \$500,000 to \$5 million range. Plus, 76 percent own a home. Regarding real estate 49 percent own at least one property and 56 percent own more than one property (Figure 138).

Figure 138. INROADS Scholar Alumni Have Helped to Expand the Black and Minority US Middle-Class



Source: Adam Davids, Fulbright Scholar hosted by INROADS and Director of Learning and Innovation [CareerTrackers](#) Australia, Citi Research

What Is Citi Doing to Help Minority Women Advance in Technology?

Citi Foundation Supports NPower and their report [Breaking Through, Rising Up; Strategies for Propelling Women of Color in Technology](#)

In May 2018, the Citi Foundation awarded a \$1.64 million grant to NPower to increase the enrollment of young women in its program from 25% to 40% by 2022 — now two years into this mission, enrollment rates are at 31%. In September 2020, Citi Foundation announced it was expanding its partnership with NPower, including an additional \$4 million investment, to help advance the careers of young Black and Latinx women in the technology field across six U.S. cities.

To date, the intersection of gender, race, and class in technology has received little attention. NPower seeks to address this discrepancy and highlight the core elements crucial to establishing a more equitable industry; with a particular focus on women of color. Undeniably, achieving this goal will require intention, investment and innovation as well as cross-sector awareness and action by practitioners and executives. With women making up just 26% of the technology workforce and with Black and Latinx women making up just 3% and 1% of the computing workforce, respectively, there is significant progress to be made.

NPower seeks to address inequality in providing free training in technology. Its aim is to correct diminished access to early computing as a result of inequitable funding streams in high-poverty areas disproportionately affecting minority groups. There are four key aspects to the program: (1) focusing on recruitment; (2) support services; (3) instruction; and (4) job placement services. In combining the practical with the personable, the program is able to best approach training for women of color. In using community-based organizations to expand applicant pools whilst providing wraparound support services, the impact of the training and economic mobility provided to alumni can be material. Moreover, in endeavoring to target classroom bias by providing female instructors, the program is also able to provide applicable role models; challenging what is often seen as a barrier to motivation to join an industry. With Citi's support, the instructional staff at NPower has gone from one female instructor in 2018 to recruiting and onboarding six additional female instructors two years later. This trend of inclusion is further emphasized within the job placement aspect of the program, primarily in their drive to create strong partnerships with employers that demonstrate successful and integrated diversity practices.

NPower supports utilization of a number of strategies that practitioners, employers, and funders can apply in order to deliver a successful and minority favorable outcome. Particularly impactful is the suggestion for the provision of flexible training provisions, such as online or at the weekend, whilst considering skill based hiring and embracing non-traditional educational backgrounds. Moreover from a funding prospective, investing in wraparound services such as childcare — with 19% of female and 10% of male students citing managing childcare responsibilities as a significant challenge during the program — and transportation, deliver meaningful differences for participants.

NPower believes a number of policy levers for increasing opportunities for Women of Color in Technology can also be widely applied to the minority population as a whole. Fundamentally, an expansion of funding for apprenticeship programs as well as the expansion of Pell Grants to shorter term training programs would have a positive impact, alongside the increased funding for childcare subsidies, especially during non-traditional hours. To provide sustainability, expanding family leave laws and strengthening pay parity laws would prove instrumental in progressing towards a more equitable workplace, not just in technology, but in every industry.

Don't Ask, Don't Get: Advocate for One's Career

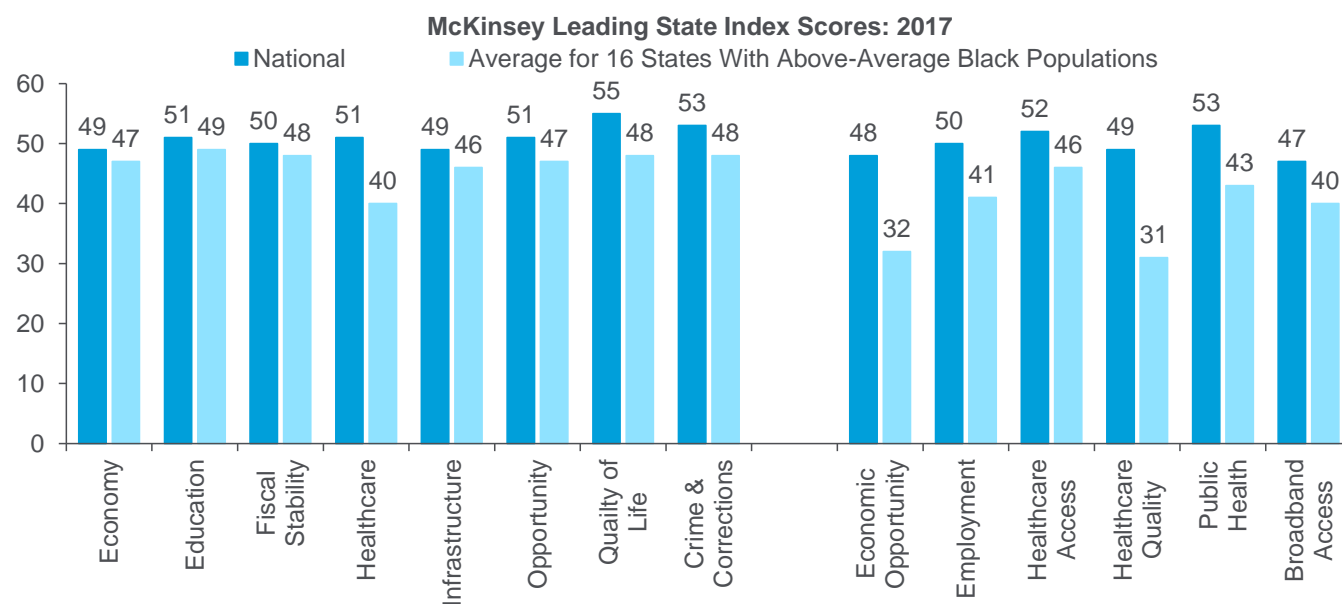
Black workers can enhance their wage and income prospects by advocating for their careers.

Black workers should seek greater opportunities, including stretch assignments and leadership roles. Ask for and accept constructive feedback during reviews in order to identify areas of strength and weakness. Request clear goals that constitute success and review them with managers on a frequent basis. When it comes to compensation ask for the raise, but also arm oneself with a list of accomplishments warranting an increase. Ask employers where your salary lies within the range for your duties. If outside of that range, ask for it to be rectified. Unfortunately, a study by PayScale indicates that "People of color were significantly less likely than white men to have received a raise when they asked for one."

Women of color were 19 percent less likely to have received a raise than a white man and men of color were 25 percent less likely.”¹⁰² Nonetheless, if workers do not ask for a raise, then they lower the likelihood of receiving one. Network and remain visible, highlighting your successes with key stakeholders. Workers should seek mentors, advocates, and sponsors to help navigate their careers within a corporate setting. Join trade unions or professional clubs within your industry. Join or create support groups with colleagues outside of your business to glean knowledge and to build morale. Remain curious and retool one's skillset in order to be prepared for larger roles, greater responsibilities, and new opportunities.

- **Consider starting a business:** The [U.S. Chamber of Congress](#) and the [SBA](#) are resources for Black-owned businesses to find sources for grants, financing, and advice on how to run effective firms.
- **Move:** While a difficult decision, relocation may be the answer to improved jobs prospects. Sixty five percent of the Black population resides in 16 states in the U.S. However, according to a survey by McKinsey and Company, on average these states rank below national averages in metrics that can lead to an improved quality of life and wealth generation. Black workers, especially younger workers can opt to move to states that are generating the most jobs in high paying industries.

Figure 139. Black Workers Are Concentrated in States with Poor Economic Prospects Relative to National Average



Source: McKinsey & Company, Citi Research

¹⁰² “PayScale Research Shows People of Color Up to 25% Less Likely to Receive a Requested Pay Raise than White Men,” PayScale Inc., May 28, 2018.

Figure 140. Black Workers Are Less Likely to Be Located In States With Rapid Growth in High Wage Sectors



Source: BEA, World Population Review, Citi Research

Embrace Delayed Gratification and Risk

Investment is an important tool for generating wealth

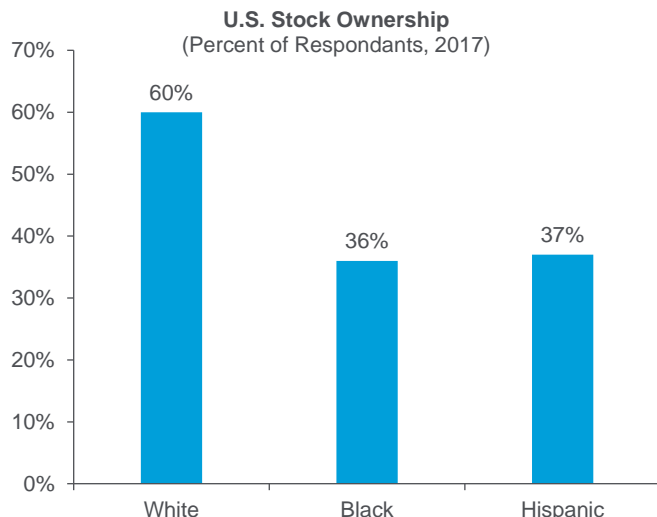
Financial literacy and engaging with more traditional forms of financial services are ways that Black families can learn to budget and adjust spending in order to generate savings. Savings are critical for generating wealth via investments in homes, retirement and college savings vehicles, businesses, and financial assets. Indeed, a 2017 Gallup poll revealed that only 36 percent of Black respondents compared to 60 percent of white respondents cited investments in the stock market (Figure 141).¹⁰³ This is despite one fifth to one quarter of people in the US believing that stocks are a good long-term investment in recent years (Figure 142).¹⁰⁴ Actions that generate wealth require delayed gratification and a measure of risk, but can often lead to positive returns over the longer run.

¹⁰³ Jones, J.M., "U.S. Stock Ownership Down Among All but Older, Higher-Income," Gallup, May 24, 2017.

¹⁰⁴ McCarthy, J., "Stock Investments Lose Some Luster After COVID-19 Sell-Off," Gallup, April 24, 2020.

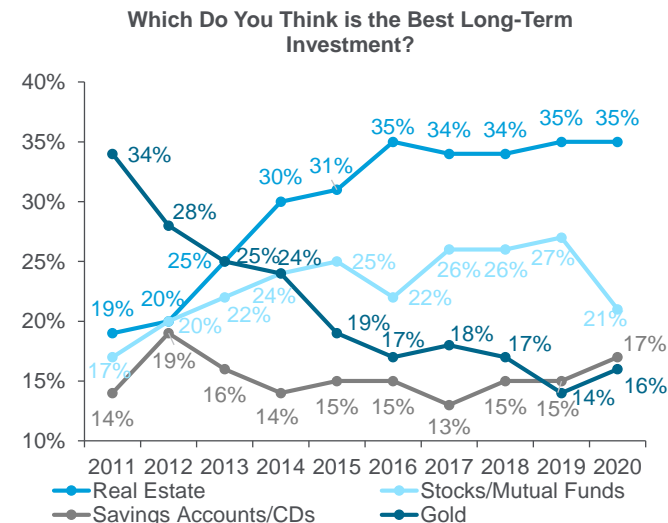
[Operation Hope](#) and [Dfree](#) are notable organizations that advocate financial literacy as an avenue for achieving financial independence, often known as “silver rights.” Online brokerage firms that require smaller initial investments and reduced fees, as well as investment clubs are ways that families with modest incomes can begin to invest in their futures. Families with greater means can seek professional advice from brokers and financial advisors. All persons working at jobs with pension funds and/or retirement savings vehicles (IRAs, 401Ks) should take advantage of them, especially early in one’s career.

Figure 141. Black People Less Likely to Own Stocks than White People



Source: Gallup, Citi Research

Figure 142. A Significant Share of Americans Favor Stock Holdings

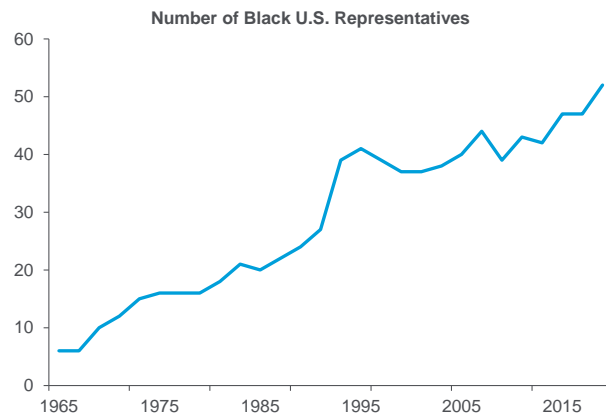


Source: Gallup, Citi Research

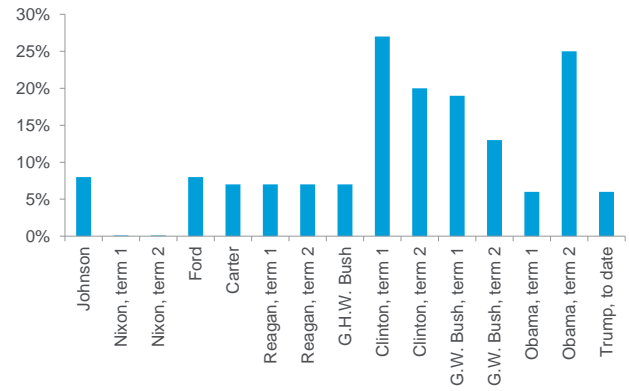
Utilize Political Power

Black persons can use the power of the purse and political activism to advance closure of racial gaps

Many people are utilizing the #BlackLivesMatter movement as an opportunity to speak out against and address racial disparities of all stripes in the United States. Even ordinary persons can use their wallets to challenge firms to change practices that perpetuate inequality. Meanwhile, shareholders can use their influence over corporate executives to advance change. Every citizen having the right to vote should exercise it. Those willing to have a more direct hand in effecting change at the institutional level can engage in political activism by running for office or supporting elected officials with finances and time. While the number of Black politicians, particularly at the Federal level, remains few, the numbers have been on the rise, and likely will continue to do so (Figure 144).

Figure 143. Number of Blacks in Congress is Small but Steadily Climbing

Source: Pew Research Center, Citi Research

Figure 144. Blacks in Federal Positions Have Increased

Source: Pew Research Center, Citi Research

Citi Global Perspectives & Solutions (Citi GPS) is designed to help our clients navigate the global economy's most demanding challenges, identify future themes and trends, and help our clients profit in a fast-changing and interconnected world. Citi GPS accesses the best elements of our global conversation and harvests the thought leadership of a wide range of senior professionals across the firm.



All Citi GPS reports are available on our website www.citi.com/citigps



Negative Interest Rates

Where Is the Real Limit to Cheap Money?
July 2020



ePrivacy & Data Protection

Data Privacy & its Influence on AI Ethics, Competition & Tech Evolution
July 2020



Technology at Work v5.0

The New Normal of Remote Work
June 2020



5G and Mobile Operators

Is Virtual Becoming Real?
April 2020



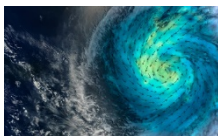
Closing the Loop on Global Recycling

Finding a Global Solution to the Patchwork of Recycling
February 2020



Disruptive Innovations VII

Ten More Things to Stop and Think About
February 2020



Building a TCFD With Teeth

What the Markets Need to Price Climate Risk
February 2020



Banking the Next Billion

Digital Financial Inclusion in Action
January 2020



Experiential Commerce

A Brave New World
January 2020



Investment Themes in 2020

January 2020



Corporate Finance Priorities 2020

January 2020



Car of the Future v4.0 – 2020 Update

The Race for the Future of Networked Mobility
January 2020



The Global Art Market

Drivers of Evolution
December 2019



Education: Power to the People

Exploring Opportunities for Private Capital in Education
November 2019



Digitizing Governments

The Journey to Enacting a Digital Agenda
October 2019



Electric Aircraft

Flightpath of the Future of Air Travel
September 2019



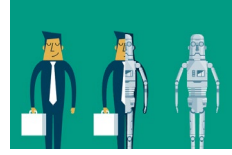
Energy Darwinism III
The Electrifying Path to Net Zero Carbon
September 2019



For Better Or Worse, Has Globalization Peaked?
Understanding Global Integration
August 2019



Factory of the Future
Flexible, Digitized, and Sustainable
July 2019



Technology at Work v4.0
Navigating the Future of Work
June 2019



Video Games: Cloud Invaders
Bracing for the Netflix-ization of Gaming
June 2019



Managing Cyber Risk with Human Intelligence
A Practical Approach
May 2019



Bank X
The New New Banks
March 2019



2019 Corporate Finance Priorities
January 2019



Investment Themes in 2019
January 2019



Car of the Future 4.0
The Race for the Future of Networked Mobility
January 2019



China's Belt and Road Initiative
A Progress Report
December 2018



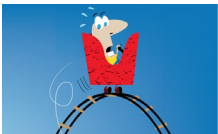
Feeding the Future
How Innovation and Shifting Consumer Preferences Can Help Feed a Growing Planet
November 2018



Migration and the Economy
Economic Realities, Social Impact, & Political Choices
September 2018



Rethinking Single-Use Plastics
Responding to a Sea Change in Consumer Behavior
August 2018



Disruptive Innovations VI
Ten More Things to Stop and Think About
August 2018



Putting the Band Back Together
Remastering the World of Music
August 2018



UN Sustainable Development Goals
A Systematic Framework for Aligning Investment
June 2018



Electric Vehicles
Ready(ing) For Adoption
June 2018

Notes:

Notes:

IMPORTANT DISCLOSURES

This communication has been prepared by Citigroup Global Markets Inc. and is distributed by or through its locally authorised affiliates (collectively, the "Firm") [E6GYB6412478]. This communication is not intended to constitute "research" as that term is defined by applicable regulations. Unless otherwise indicated, any reference to a research report or research recommendation is not intended to represent the whole report and is not in itself considered a recommendation or research report. The views expressed by each author herein are his/ her personal views and do not necessarily reflect the views of his/ her employer or any affiliated entity or the other authors, may differ from the views of other personnel at such entities, and may change without notice.

You should assume the following: The Firm may be the issuer of, or may trade as principal in, the financial instruments referred to in this communication or other related financial instruments. The author of this communication may have discussed the information contained herein with others within the Firm and the author and such other Firm personnel may have already acted on the basis of this information (including by trading for the Firm's proprietary accounts or communicating the information contained herein to other customers of the Firm). The Firm performs or seeks to perform investment banking and other services for the issuer of any such financial instruments. The Firm, the Firm's personnel (including those with whom the author may have consulted in the preparation of this communication), and other customers of the Firm may be long or short the financial instruments referred to herein, may have acquired such positions at prices and market conditions that are no longer available, and may have interests different or adverse to your interests.

This communication is provided for information and discussion purposes only. It does not constitute an offer or solicitation to purchase or sell any financial instruments. The information contained in this communication is based on generally available information and, although obtained from sources believed by the Firm to be reliable, its accuracy and completeness is not guaranteed. Certain personnel or business areas of the Firm may have access to or have acquired material non-public information that may have an impact (positive or negative) on the information contained herein, but that is not available to or known by the author of this communication.

The Firm shall have no liability to the user or to third parties, for the quality, accuracy, timeliness, continued availability or completeness of the data nor for any special, direct, indirect, incidental or consequential loss or damage which may be sustained because of the use of the information in this communication or otherwise arising in connection with this communication, provided that this exclusion of liability shall not exclude or limit any liability under any law or regulation applicable to the Firm that may not be excluded or restricted.

The provision of information is not based on your individual circumstances and should not be relied upon as an assessment of suitability for you of a particular product or transaction. Even if we possess information as to your objectives in relation to any transaction, series of transactions or trading strategy, this will not be deemed sufficient for any assessment of suitability for you of any transaction, series of transactions or trading strategy.

The Firm is not acting as your advisor, fiduciary or agent and is not managing your account. The information herein does not constitute investment advice and the Firm makes no recommendation as to the suitability of any of the products or transactions mentioned. Any trading or investment decisions you take are in reliance on your own analysis and judgment and/or that of your advisors and not in reliance on us. Therefore, prior to entering into any transaction, you should determine, without reliance on the Firm, the economic risks or merits, as well as the legal, tax and accounting characteristics and consequences of the transaction and that you are able to assume these risks.

Financial instruments denominated in a foreign currency are subject to exchange rate fluctuations, which may have an adverse effect on the price or value of an investment in such products. Investments in financial instruments carry significant risk, including the possible loss of the principal amount invested. Investors should obtain advice from their own tax, financial, legal and other advisors, and only make investment decisions on the basis of the investor's own objectives, experience and resources.

This communication is not intended to forecast or predict future events. Past performance is not a guarantee or indication of future results. Any prices provided herein (other than those that are identified as being historical) are indicative only and do not represent firm quotes as to either price or size. You should contact your local representative directly if you are interested in buying or selling any financial instrument, or pursuing any trading strategy, mentioned herein. No liability is accepted by the Firm for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained herein or derived herefrom.

Although the Firm is affiliated with Citibank, N.A. (together with its subsidiaries and branches worldwide, "Citibank"), you should be aware that none of the other financial instruments mentioned in this communication (unless expressly stated otherwise) are (i) insured by the Federal Deposit Insurance Corporation or any other governmental authority, or (ii) deposits or other obligations of, or guaranteed by, Citibank or any other insured depository institution. This communication contains data compilations, writings and information that are proprietary to the Firm and protected under copyright and other intellectual property laws, and may not be redistributed or otherwise transmitted by you to any other person for any purpose.

IRS Circular 230 Disclosure: Citi and its employees are not in the business of providing, and do not provide, tax or legal advice to any taxpayer outside of Citi. Any statements in this Communication to tax matters were not intended or written to be used, and cannot be used or relied upon, by any taxpayer for the purpose of avoiding tax penalties. Any such taxpayer should seek advice based on the taxpayer's particular circumstances from an independent tax advisor.

© 2020 Citigroup Global Markets Inc. Member SIPC. All rights reserved. Citi and Citi and Arc Design are trademarks and service marks of Citigroup Inc. or its affiliates and are used and registered throughout the world.

NOW / NEXT

Key Insights regarding the future of Racial Equality



EDUCATION

Closing the college/advanced degree racial gap 20 years ago might have generated up to \$113 billion in additional income for saving, investing and consumption. / Removing funding gaps from K-12 education funding, focusing on school curricula (including STEM) and directing Black students toward higher wage and in-demand occupations can help close the education gap and solve the income gap.



LABOR MARKET

In general Black workers are underrepresented in management, business, financial, professional and related occupations that pay the highest salaries. They are also more likely to be situated in jobs that require lower skills and/or are more susceptible to automation / Encouraging Black students and workers to pursue education and training suitable to more technological and skills-based careers can help close the racial labor segmentation gap.



POLICY

The current 30 basis point gap between Black and white family home ownership is greater now than before 1968 when housing discrimination was legal. / Public policy should focus upon housing as a pathway to wealth and encourage home ownership as a path to intergenerational wealth.



