BUILDING AN EQUITABLE RECOVERY: THE ROLE OF RACE, LABOR MARKETS, AND EDUCATION

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

The present economic downturn is unique among modern recessions. In response to the emergence of COVID-19, policymakers shut down large portions of the economy, leading to layoffs and cascading economic problems in order to save lives. Health concerns also led individuals to significant shifts in economic behavior. This report explains how this recession is different from past recessions — and how it is similar.

In at least one respect, the current calamity falls well within the trends of American history: it is plagued by racial inequity. In most recessions, unemployment increases most among Black people, followed by Latinx people.[1] In this recession, mortality and morbidity have increased in a similar fashion. Indeed, in most recessions, the primary risk facing workers is unemployment; in this crisis, workers may also face potential exposure to COVID-19. This report examines how Black and Latinx workers are unequally distributed in various job categories, compared to White workers, and shows that differences in educational attainment fail to explain the disparities.

This finding has important implications. Firstly, it implies that increasing the educational attainment of Black and Latinx workers is insufficient to eliminate racial disparities. To demonstrate this, we look at past recessions. We find that disparities between Black and White Americans persist even when comparing persons at the high end of the skills distribution — those with a college degree. We find that across groups during recessions, Black workers with a college degree are actually most harmed relative to similarly qualified White workers. Education is no protection against racial inequity, especially during economic downturns.

We conclude with twelve recommended actions that would promote a more equitable recovery from the COVID-induced collapse:

- Invest in ending the pandemic
- Expand the social safety net
- Provide massive additional federal aid to state and local governments
- Expand public sector employment
- Restore labor power and stop low-road employment practices
- Reduce intergenerational wealth inequality
- End inequitable tax policies
- Harness the education system to empower public problem-solving
- Break the connection between local property taxes and school funding
- Restore state-level and federal support for higher education
- Measure how policies impact racial equity
- Support Black, Latinx, and Indigenous organizations, leaders, and researchers

1 Data limitations constrain full analysis of the conditions of Indigenous and Asian people in this report.

BACKGROUND

Understanding the 2020 Pandemic Recession

The collapse of the U.S. economy in 2020 is unlike previous recessions in at least four respects.

- **Cause**

  This economic collapse was a deliberate policy choice, informed by the public health imperative to slow the spread of the virus. Previous recessions since World War II have generally resulted from a determination by the Federal Reserve that inflation was out of control (the cause of several recessions up to and including the one in 1981-82) or from the collapse of an asset price bubble (such as the tech bubble in 2001 and the housing bubble in 2007).

- **Rapidity of Onset**

  In just one month—from March to April of 2020—more jobs disappeared from the nation's payrolls than were lost over the entirety of the Great Recession by a factor of nearly two-and-a-half.[2]

- **Distribution of Employment Losses Across Industries**

  In an ordinary recession, "cyclically sensitive" industries like manufacturing and construction are hardest hit. In this economic collapse, as shown in *Figure 1* (on the following page), employment losses in service industries such as accommodation (hotels and motels) and food services and drinking places (restaurants and bars) were—at their worst—three to four times proportionately more severe than the losses in manufacturing and construction. Perhaps even more surprising, employment dropped sharply for some types of healthcare workers (for example, those who worked in the offices of physicians or dentists).

- **Gender**

  Women suffered a larger two-month increase in unemployment (12.8 percentage points from February to April 2020) than did men (9.9 percentage points from February to April 2020), likely because women are overrepresented in service-sector jobs. In a "normal" recession, men suffer a larger increase in unemployment because they are overrepresented in manufacturing and construction.[3]

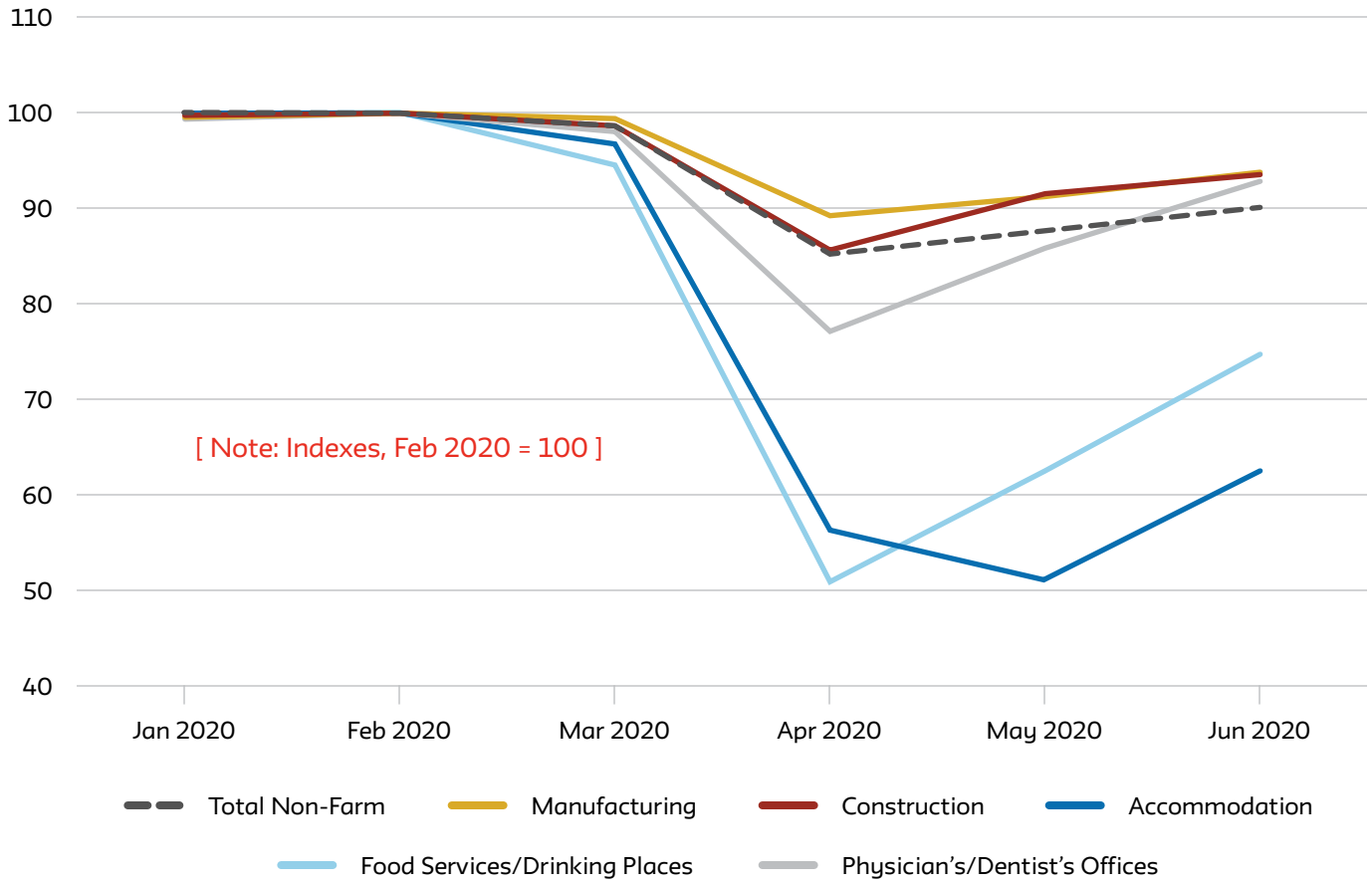
The collapse of the U.S. economy in 2020 is unlike previous recessions in at least four respects: Cause, Rapidity of Onset, Distribution of Employment Losses Across Industries, and Gender.

This economic collapse is also unlike the economic experience of common natural disasters. A tornado, earthquake, or hurricane may create temporary devastation, but even the worst of those events affects only a geographically limited area and lasts for only a few days at most, after which cleanup and repair can begin, and the rest of the nation

2 According to the Bureau of Labor Statistics, employment declined by 8.7 million between August 2008 and February 2010. By contrast, the decline from March to April 2020 was 20.7 million. Similarly, in the two months from February to April, the officially recorded unemployment rate moved from its lowest level in 50 years to its highest level since measurement on the modern basis began in 1948. And there is widespread agreement—including from the government agency that generates the data—that the officially recorded unemployment rate understates the severity of ground truth due to what has been termed a "misclassification error." Data accessed from https://fred.stlouisfed.org/ on June 28, 2020.

3 As of this writing, the gender-related inversion of unemployment relative to usual experience has narrowed but has not disappeared.

Figure 1: Employment by Industry



Source: *Bureau of Labor Statistics, by way of https://fred.stlouisfed.org*

(in some cases, the rest of the world) can come to the aid of the affected region. In contrast, the COVID-19 shock hit essentially every economy worldwide simultaneously—leaving no country well-situated to pull the rest of the world toward recovery—and has already lasted more than three-quarters of a year.[4]

The influenza pandemic of 1918-19 might seem a closer analogy, but in that episode, the public health response was even more haphazard than in the current one. A century ago, there was no notion of playing for time until a vaccine or effective treatment could be developed and no coordinated national shutdown. As a practical matter, the only available strategy was to endure until a sufficiently large portion of the population had been exposed to the disease and developed immunity to it.[5]

4 As the crisis continues, regional and international differences have emerged with states like Florida and Arizona and nations like the United States and Brazil experiencing larger levels of illness and death and overtaking places where the pandemic arose faster, like New York, Italy, and South Korea. Predicting long-term regional and global trends is difficult, although regions with robust public health infrastructures clearly have advantages. Much uncertainty stems from the possibilities of emerging vaccines and treatments, which may have differing levels of effectiveness and different availability across nations and regions.

5 Disparities in health experience by race and ethnicity are hardly new in the United States. For example, Feigenbaum, Muller, and Wrigley-Field (2019) find that, as bad as the influenza of 1918-19 was, Black Americans in southern cities experienced *higher* rates of infectious disease mortality from 1906 to 1920 than urban Whites experienced during the influenza pandemic. Økland and Mamelund (2019) find that Black people were less likely to contract influenza than Whites but were more likely to die from it if they contracted the disease.

Just as the causes and dimensions of the current economic collapse are unlike anything ever seen before, the basis of a durable recovery will differ from that of any prior recession. In a typical post-WWII recession, there was no unequivocal "all-clear" signal for the economy to shift back to a growth trajectory. This time, the decisive factor will be either (a) the widespread administration of safe, effective, and widely available vaccines; (b) the development of a safe, effective, and widely available therapy; or (c) the grimmest possibility, the attainment of herd immunity via mass infection (the approach taken by default in 1918-19). Until one of those three conditions is achieved, a complete recovery will be impossible. Worse yet, progress toward even an incomplete recovery may be significantly inhibited.

The start of a complete recovery will be impossible unless an effective vaccine or therapy is made widely available or until herd immunity is achieved at the cost of many more deaths.

The collapse in the labor market has departed less sharply from historical norms on the dimension of race and ethnicity. In line with historical norms, the unemployment rates for Black and Latinx workers were higher than the rate for Whites before the collapse, and these rates increased more cumulatively from February through June 2020.[6] As such, even though history provides no exact precedents, racism is a through line. Based partly on that through line, it is possible to anticipate some of the consequences of the economic collapse for racial equity in economic well-being in the United States. On the eve of the economic collapse, certain preconditions were in place that allow us to know, with high confidence, that the hardships of this episode will fall most heavily on Black and Latinx people and on the communities in which they live.[7]

In line with historical norms, the unemployment rates for Black and Latinx workers were higher than the rate for Whites before the collapse, and these rates increased more cumulatively from February through June 2020.

6 Initially, it appeared as if the increase in unemployment was distributed surprisingly equitably across Black, Latinx, and White workers. That initial appearance may have been created by the fact that whole sectors of the economy were substantially shuttered at first, leaving no room for the usual practice of "last hired, first fired" to be applied. Since April, however, the unemployment rate for White workers has come down proportionately more than the rates for Black and Latinx workers.

7 While the empirical work presented here focuses on the disproportionate effects of economic downturns on Black and Latinx people, based on existing research (see for instance Muhammed 2009), the economic inequities facing Indigenous people in the United States are likely similar to the racial disparities we document. More data and research into the experience of Indigenous communities during recessions is merited.

Roadmap

This paper proceeds in this way:

- We begin with a discussion of the labor market, first with an overview of the different experiences of Black and Latinx people during recessions compared to Whites.

- Next, we explore occupational crowding in the recession and pandemic. Occupational crowding measures the degree to which a group is over-, under-, or proportionally represented in an occupation given the group's educational attainment and the educational requirement for jobs. We show that, as compared to White men, Black women, Latinx women, and Latinx men are crowded into essential work, and White men are crowded out. As the economy opens up, we know that workers in jobs with high physical proximity to customers or colleagues face great risk. We find that, as compared to White men, Black women, Latinx women, Latinx men, and White women are overrepresented in roles with high physical proximity.

- We document differential returns to education and rising disparity with education by race across three key determinants of life outcomes: assets and debts, labor markets, and health outcomes.

- We then use Blinder-Oaxaca decompositions to explore the ways in which various factors, including race and education, contribute to economic well-being, showing that, compared to their White counterparts, higher levels of educational attainment do not protect Black workers during recessions.

- Then, in a brief sidebar, we consider the case of Millennials, who have now experienced two major economic calamities during their relatively short careers.

- Finally, we conclude with an exploration of ways that government, philanthropy, and research can attempt to better understand and address these challenges and advance economic racial equity.

RACE, GENDER, AND COVID-19 HEALTH RISK

The 2020 economic crisis is unlike most recent recessions because, in addition to the harms of unemployment, in many cases, those who continue to work are at higher risk of illness and death due to COVID-19 exposure. In this section, we examine how race and gender groups—specifically Black women, Black men, Latinx women, Latinx men, White women, and White men—are differentially exposed to the risk of COVID-19 in "essential" and "nonessential" work and occupations with high physical proximity to colleagues and customers.[8, 9]

Methodology

There is no one definition of essential work (Tomer & Kane, 2020). For this analysis, we modified essential work categories established by Celine McNicholas and Margaret Poydoc's Economic Policy Institute (EPI) report on essential workers and unionization. We ended with 13 essential sectors based on a combination of census occupations and industries (see Appendix 2 for details).[10]

Barbara Bergmann's (1971) crowding theory held that Black workers, as a result of labor market discrimination, are largely excluded from high paying jobs and systematically sorted into lower paying, less desirable jobs. This report uses an update to Bergmann's method as described in Hamilton (2013) that more explicitly controls for education by limiting the pool of eligible workers for a particular job to those with the prerequisite degree attainment. We measure occupational crowding as the degree to which workers are over-, under-, or proportionally represented in essential work sectors based on their race and gender and prerequisite educational attainment for particular categories. To do so, we count as eligible for a particular sector only those individuals whose educational attainment fits between the 20th and 80th percentiles of the educational distribution for that category.

Reflecting on Mary King's (1993) "access model" that posits a social hierarchy where White men have the most access to desirable jobs, for most of our analyses, White men are positioned as the reference by which we compare race, gender, and their intersections. When focusing on White men, we compare them to a baseline of all workers to measure their degree of "advantage" in the economy overall.

We also compare Black women and Latinx women to White women to isolate racial disparity, particularly in "gendered" sectors such as healthcare. (See Appendix 2 for a more detailed description of occupational crowding.)

8 In this paper we use the Census variable "sex" as a proxy for "gender." The Census does not currently ask participants about gender identity and acknowledges that the gender of the respondent may not correspond to sex. This also reduces our analysis to a binary that is not indicative of the full range of gender. For more information, see the Census glossary here: https://www.census.gov/glossary/#term_Gender

9 Given time and data limitations, we did not consider other important cases, like those of Indigenous people and Asian Americans; nor did we consider the comparisons of immigrants from a wide variety of nations of origin versus native-born Americans. Given ongoing demographic change and the extent to which historical migration patterns and experiences in the United States are tied to contemporary group outcomes, considering Black, Latinx, and White populations as homogenous categories is far from ideal. For a fuller explanation of the need to better collect data disaggregated by ancestral origin in the U.S. context, see Muñoz, Chang, Jackson, Hamilton, and Darity, The Color of Wealth in Boston (2015).

10 Our categorization of what is and is not "essential" work is not based on a qualitative assessment of social value. Instead, this is our attempt to operationalize essential work, modifying categories defined in Celine McNicholas and Margaret Poydoc's Economic Policy Institute (EPI) report and following the guidance from the Department of Homeland Security's initial recommendations during the pandemic.

Vast Disparities in Essential Work and Pay

In *Table 1* (below), we show occupational crowding indices—the degree to which workers are over- (x > 1.1), under- (x < .09), or proportionally (x >= 0.9 & x <= 1.1) represented given their educational attainment—for essential work in any of the 13 essential sectors.[11] We find that White men are crowded *out of* essential work, even after considering the educational levels of each race and gender group. In comparison to White men, Black women, Latinx women, and Latinx men are crowded *into* essential work. White women and Black men are proportionally represented in essential work (crowding index of 1.0 and 1.10 respectively). Black and Latinx women are also crowded into essential work in comparison to White women. All groups—*with the exception of White men*—earn below average annual wages with Latinx women and Black women earning the least in essential work (54 cents and 61 cents on the dollar respectively as compared to White men), followed by Latinx men (68 cents), Black men (69 cents), and finally White women (83 cents).

Table 1: Occupational Crowding and Essential Work

Reference Group	Crowding Index	Share of Average Wages*	Change in Crowding as Wages Increase by $10K
Black Women v. White Women	1.20	0.81	–.04***
Black Women v. White Men	1.30	0.61	–.16***
Black Men v. White Men	1.10	0.69	–.09***
Latinx Women v. White Women	1.20	0.72	–.04***
Latinx Women v. White Men	1.30	0.54	–.16***
Latinx Men v. White Men	1.40	0.68	–.06***
White Women v. White Men	1.00	0.83	–.05***
White Men v. Everyone	0.87	1.30	.07***

Crowding Index: <0.9 = Underrepresented; 0.9–1.1 = Proportionally Represented; >1.1 = Overrepresented
(* p<0.05 ** p<0.01 *** p<0.001)
* Note: The share of average wages refers to the average annual wages of the two comparison groups (e.g., Black Women and White Men)
Data Source: *American Community Survey 2018 Five Year Estimates. Minneapolis, MN: IPUMS, 2020.*

11 Black women and Black men are crowded out of nonessential work while other groups are proportionally represented. See Appendix 2 for information on nonessential work.

Within essential work, the highest paying work is dominated by White men. We identify more than 400 unique occupations within the 13 essential sectors listed in Appendix 2. We estimated bivariate regressions of occupational crowding on average occupational wages (measured in $10,000 increments) to examine the relationship between crowding and wages across the various essential worker occupations (*Table 1* on the previous page; see Hamilton, 2006 for more information on this approach).[12] For every $10,000 increase in average occupational wages for Black and Latinx women respectively, there was an estimated 16 percentage point reduction in their representation in each essential occupation category relative to White men. Similarly, there were decreases of nine percentage points for Black men, six percentage points for Latinx men, and five percentage points for White women in their respective representation in comparison to White men with every $10,000 increase in wages in a particular essential work occupation.

Conversely, there is a *positive* relationship between wages and crowding for White men (compared to all workers) — as wages of a particular occupation increase by $10,000, the estimated proportion of White men in that occupation rises by seven percentage points. All findings were statistically significant. To summarize, not only are White men less exposed to the coronavirus as a result of their underrepresentation in essential work, when they are employed as an essential worker they tend to work in occupations with higher wages. On the other hand, Black and Latinx women are not only more likely to be sorted into essential work, and thereby vulnerable to greater COVID-19 exposure, they are sorted into essential work occupations that receive the lowest wages. In contrast, White men are less likely to be exposed to the virus as essential workers, and when they are employed as essential workers, they work in occupations with relatively higher wages.

Black and Latinx women are not only more likely to be sorted into essential work, and thereby vulnerable to greater COVID-19 exposure, they are sorted into essential work occupations that receive the lowest wages.

Inequalities in the Food and Agriculture Sector

The food and agriculture sector is worthy of particular scrutiny. In our analysis, the food and agriculture sector has the lowest average annual wages of any sector — just $32,000. Advocates and researchers have spotlighted the dangers facing workers in that sector, including deplorable working conditions, limited personal protective equipment, low pay, and few benefits (Romero, 2020; Douglas, 2020a; Fremstad et al., 2020). Many of these workers have contracted COVID-19 (Mazzei, 2020 & Douglas, 2020b).

We find that Latinx women and men—and to a lesser extent Black men—are crowded into this sector as compared to White men. White men are underrepresented in food and agriculture and still earn 30 percent above average wages in the sector (see Appendix 2, *Table 2C*). There is also variation for Latinx workers by citizenship (*Table 2*).

12 Each occupation included in the analysis had at least 30 unweighted observations of employed individuals. If there were no unweighted observations of a particular race/gender group in an occupation, we did not include that occupation in the regression analysis for the relevant group. The number of occupations used for each group were as follows: Black women: 363 occupations in comparison to white women and 398 in comparison to White men; Black men: 408 occupations; Latinx women: 365 occupations in comparison to White women and 398 in comparison to White men; Latinx men: 411 occupations; White women: 428 occupations; White men: 440 occupations.

For example, noncitizen Latinx women are 250 percent more likely than White women and 290 percent more likely than White men to work in food and agriculture (crowding indices of 3.5 and 3.9 respectively). In contrast, Latinx women who are citizens are nearly proportionaly represented with White women and just 20 percent more likely to work in food and agriculture than White men (indices of 1.1 and 1.2). Latinx women who are not citizens receive significantly lower wages than citizens relative to both White men (just 50 percent of average wages for noncitizens compared to 64 percent for citizens) and White women (72 percent of average wages for noncitizens compared to 91 percent for citizens). In comparison to White men, Latinx men who are not citizens earn 71 percent of average wages in food and agriculture compared to 84 percent for citizens.

Table 2: Latinx Citizens' and Noncitizens' Occupational Crowding in the Food and Agriculture Sector

Noncitizens	**Crowding Index**	**Share of Average Wages***
Women v. White Women	3.5	0.72
Women v. White Men	3.9	0.50
Men v. White Men	3.4	0.71
Citizens		
Women v. White Women	1.1	0.91
Women v. White Men	1.2	0.64
Men v. White Men	1.3	0.84

*Note: The share of average wages refers to the average annual wages of the two comparison groups (e.g., Black Women and White Men)
Data Source: *American Community Survey 2018 Five Year Estimates. Minneapolis, MN: IPUMS, 2020.*

Work and the Risk of COVID-19

We next examine racial and gender differences in essential work sorting by extent of possible exposure to COVID-19 (*Table 3* on the following page). Within the category of essential work, some workers are at even greater risk of illness and death due to their physical proximity to other workers and/or customers. Using listings of physical proximity from the U.S. Department of Labor Employment and Training Administration's O*NET OnLine, we designated occupations with a rating of 75 and above—those "moderately close [that is] at arm's length" or closer—as "high physical proximity" and all others as "low proximity." We found that about 20 percent of occupations that fell into one of the 13 essential sectors and had information available from O*NET had high physical proximity. The majority of these occupations are in healthcare. Across all occupations in this category, Black women (as compared to White men) and Latinx women (as compared to White men) had the highest average crowding scores (2.2 for each, making them 120 percent more likely to occupy these occupations than White men). Black men (crowding index of 1.4), Latinx men (crowding index of 1.2), and White women (crowding index of 1.2) were also overrepresented. Only White men were underrepresented (crowding index of .88). White men earned the highest share of average wages in essential occupations with high physical proximity (120 percent) while Black women earned the least (82 percent in comparison to White men).

Table 3: Essential Work with High Physical Proximity and Occupational Crowding

Reference	Crowding Index	Share of Average Wages*
Black Women v. White Women	1.80	1.00
Black Women v. White Men	2.20	0.82
Black Men v. White Men	1.40	0.90
Latinx Women v. White Women	1.10	0.97
Latinx Women v. White Men	2.20	0.79
Latinx Men v. White Men	1.20	0.90
White Women v. White Men	1.20	0.88
White Men v. Everyone	0.88	1.20

*Note: The share of average wages refers to the average annual wages of the two comparison groups (e.g., Black Women and White Men)
Data Source: *American Community Survey 2018 Five Year Estimates. Minneapolis, MN: IPUMS, 2020.*

As the pandemic proceeds, state and local governments have to decide when to relax or tighten shelter-in-place orders and when to allow various businesses to resume operations. These decisions are shaped by science, economics, and politics, and have disparate impacts across race and gender. As the country continues to "reopen," many more workers will be at risk of contracting COVID-19. To explore this risk, we classified all occupations, both nonessential and essential, into "high physical proximity" and "low proximity." Among the 435 occupations that were matched to O*NET, 26 percent had high physical proximity to colleagues and/or customers. High proximity occupations include occupations in fields like healthcare, as well as nonessential roles like hairdressers and waiters and waitresses. Occupations in the high physical proximity category have lower average wages ($47,614) than those with low physical proximity ($59,986).

As shown in *Table* 4 on the following page, White men are underrepresented in high physical proximity occupations as compared to everyone else. All groups in comparison to White men—with the exception of Black men, who are proportionally represented—are crowded into occupations with high physical proximity. The crowding index is highest for Black women (1.8), who are 80 percent more likely than White men to be in an occupation with high physical proximity, followed by Latinx women (1.7). Black women and Latinx women are proportional compared to White women. In high physical proximity occupations, White men are paid the highest share of average wages (140 percent of average wages for all workers), while Latinx women and Black women are paid the least (57 percent and 63 percent of average wages compared to White men). In contrast, in lower physical

Black women and Latinx women are respectively 80 percent and 70 percent more likely than White men to be in an occupation with high physical proximity.

proximity occupations (*Table* 4), Black women are crowded out as compared to White men. All other groups are proportionally represented.These findings are of particular concern for Black and Latinx workers as more individuals return to work. A survey from the National Employment Law Project (2020) found that Black workers are more likely to "work under conditions that are both hazardous and repressive" and are more likely to face retaliation if they raise concerns about safety.

Table 4: Physical Proximity and Occupational Crowding (All Occupations, including Nonessential)

	High Physical Proximity		Lower Physical Proximity	
	Average Income: $47,614[13]		Average Income: $59,986	
Reference Group	**Crowding Index**	**Share of Average Wages***	**Crowding Index**	**Share of Average Wages***
Black Women v. White Women	1.10	0.86	0.90	0.82
Black Women v. White Men	1.80	0.63	0.80	0.58
Black Men v. White Men	1.10	0.72	1.00	0.64
Latinx Women v. White Women	1.00	0.79	1.10	0.71
Latinx Women v. White Men	1.70	0.57	1.00	0.50
Latinx Men v. White Men	1.40	0.72	1.10	0.64
White Women v. White Men	1.40	0.84	0.90	0.80
White Men v. Everyone	0.60	1.40	1.00	1.30

Crowding Index: <0.9 = Underrepresented; 0.9–1.1 = Proportionally Represented; >1.1 = Overrepresented
*Note: The share of average wages refers to the average annual wages of the two comparison groups (e.g., Black Women and White Men)
Data Source: *American Community Survey 2018 Five Year Estimates. Minneapolis, MN: IPUMS, 2020.*

13 For both high and lower physical proximity occupations, people in the 20th percentile of educational attainment hold a high school degree or a GED; in the 80th, they hold a four-year college degree.

THE DIFFERENTIAL EXPERIENCE OF BLACK AND LATINX WORKERS

Black and Latinx workers routinely experience a starkly different and distinctly worse version of the labor market than do White workers. This disadvantage manifests itself in several ways.

- First, the average unemployment rate is much higher for Black and Latinx workers than it is for White workers. Since 1972, when the relevant data series began, the unemployment rate has averaged 11.8 percent for Blacks, 8.7 percent for Latinxs, and 5.5 percent for Whites. Prior to April 2020, the unemployment rate for White workers had never been as high as 11.8 percent—the rate it has averaged for Black workers. And the unemployment rate for Whites has been as high as 8.7 percent (the average rate for Latinxs) less than 5 percent of the time.

- Second, Black and Latinx workers experience a higher-amplitude version of the business cycle than do White workers. Valerie Wilson (2015) estimates that, on average, when the national average unemployment rate has increased 1 percentage point, the rate for Black workers has increased 1.7 percentage points, while the rate for White workers has increased only 0.91 of a percentage point.[14] Aaronson et al. (2019) show that a similar amplification—though not quite as large—exists for Latinx workers.[15] Similarly, when the labor market tightens, it tightens more for Black and Latinx workers than for White workers. This amplified experience of the business cycle underscores why it is so important that fiscal and monetary policymakers fight recessions as vigorously they can and facilitate periods when the labor market is very tight to the greatest extent possible.

The average unemployment rate is much higher for Black and Latinx workers than it is for White workers.

It is important to note that these labor market differences cannot be fully explained by education or any other individual characteristics typically controlled for in empirical studies. One strong hint that the differences in unemployment rates cannot be fully attributed to differences in individual characteristics such as educational attainment is implicit in the fact that since 1992, the unemployment rate for Black workers with a college degree or more has averaged 4.1 percent, while the unemployment rate for similarly credentialed White workers has averaged 2.6 percent.

The most plausible explanation for the portion of unemployment differentials that cannot be explained based on observable characteristics such as educational attainment is discrimination. Wilson and Rodgers (2016) provide one articulation of this view. Employers may have an underlying proclivity toward racism and other forms of discrimination. When labor markets are slack, employers are able to exercise that proclivity and still find enough candidates to fill the positions they wish to fill. As the labor market tightens, the cost of exercising a proclivity toward discrimination progressively increases. As a result,

14 Wilson's sample period ran from 1979 to 2014. Aaronson et al. (2019) report similar relative amplitudes using updated data.

15 Other researchers also have observed the fact that when the labor market improves, it improves most for groups who are relatively marginalized. Arthur Okun (1973) focused on the fact that tight labor markets created opportunities for women and teenagers not available to them when the labor market was more slack. Katz and Krueger (1999) were a direct precursor to Aaronson et al. (2019) and looked at differences in labor market experience over the business cycle by race as well as by educational attainment (though they did not examine the intersection of those two characteristics).

gaps in labor market experience narrow until the business cycle peak is reached. However, members of relatively marginalized groups tend to be the first fired when the business cycle inevitably turns.[16] Moreover, racism undoubtedly explains more than just the portion that observable characteristics cannot explain because racism played a role in generating the differences in observables.

Conventional wisdom holds that education is the "great equalizer" for economic security and social mobility. Yet, in many dimensions of life, racial disparity persists or worsens with higher levels of education, including college degree attainment. In the subsections that follow, we consider differential returns to education by looking at wealth, employment, and health.

Wealth

Wealth is arguably the paramount indicator of economic security and financial agency. We often think of wealth as an outcome, but its true essence is functional. Wealth enables families to absorb financial shocks and recessions. It empowers individuals to consume and invest in different ways. And wealth is iterative: wealth often generates more wealth over time, both within and across generations (Hamilton, 2017). Indeed, economic research indicates that inheritance, bequests, and extended family financial position in general explain more of the racial wealth gap than demographic and socioeconomic indicators combined (Hamilton & Chiteji, 2013).

Race matters. The wealth position of similarly educated Black and White families is dramatically different. Hamilton et al. (2015) showed that the median Black family headed by a person with a college degree has only two thirds of the wealth of the median White family headed by a high school dropout. Higher education is associated with greater wealth within race groups, but it is apparent that for Black individuals, acquiring a college degree is far from sufficient to close the racial wealth gap.

For Black individuals, acquiring a college degree is far from sufficient to close the racial wealth gap.

The role of education is further complicated by the differential financial burdens of attending college. Black college students are more likely to take on debt for higher education and are more likely than White students to drop out of university *because of financial concerns* — at least in part because of inadequate household wealth for Black families (Zewde & Hamilton, 2019; Paul et al., 2016; Shapiro et al., 2013).[17]

Although not widely known, social science research confirms that Black students and their families are doing more with less when it comes to educational attainment. Research by economist Mason (1997) and sociologists Conley (1999) and Mangino (2010) demonstrates that Black students attain more years of schooling and credentials than White students from families with comparable resources. There is scant evidence to support the canard that

16 For evidence that Blacks are "the first fired as the business cycle weakens," see Couch and Fairlie (2010).

17 It is also noteworthy that, despite limited financial resources, Black families appear to have a greater intensity of support for their adult children's higher education (Nam et al., 2015).

Black families value education less than White families. In its own way, the notion that education can serve as a panacea to address socially established structural barriers to racial economic inclusion—including the racial wealth gap—is similarly pernicious since it leads to incomplete and incorrect prescriptions.

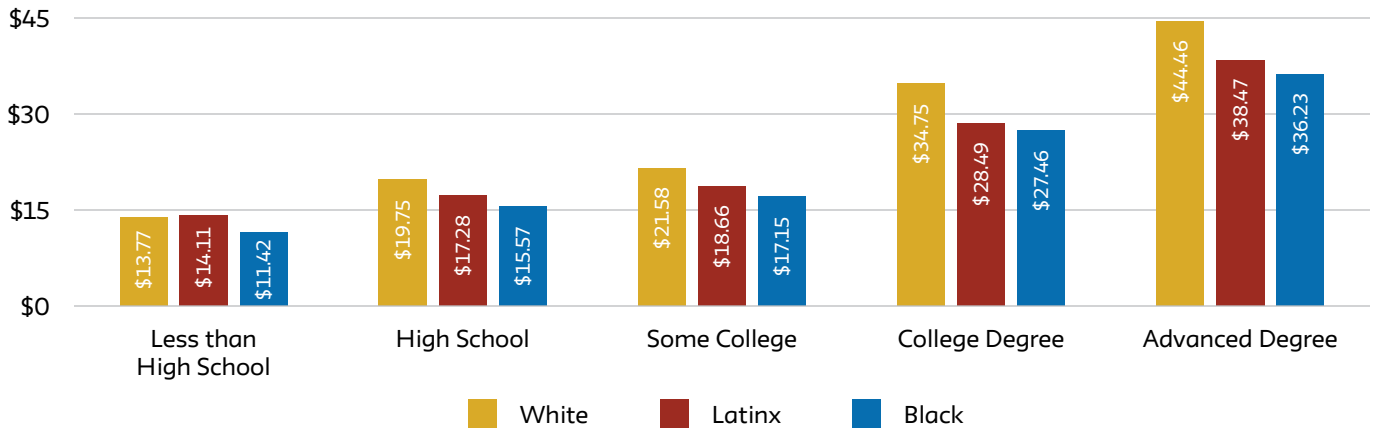
Labor Market Outcomes

In the U.S., in both good times and bad, there is a persistent and approximate 2:1 ratio of Black to White unemployment rates. This occurs at every level of degree attainment (Hamilton, 2017). In 2019, according to calculations using data from the Bureau of Labor Statistics, the rate of Black unemployment for college graduates dipped to 3.1 percent, which was still an entire percentage point higher than the rate for White college grads that year (2.1 percent) and nearly as high as the 3.2 percent rate for White workers with a high school degree and no college. Similarly, in recent years, the unemployment rate for White workers who had not completed high school has at times been lower than the unemployment rate for Black workers that had completed some college or earned an associate degree.[18]

It is unlikely that racial unemployment disparities across educational degree attainment can be addressed via worker incentives. On the high end of the educational spectrum, a report by Jones and Schmitt (2014), aptly titled "A College Degree is No Guarantee," indicated that the unemployment rate for Black recent college graduates exceeded 12 percent and was as high as 10 percent for Black recent grads with science, technology, engineering, or math-related (STEM) majors, which at that time was higher than even the White unemployment level at large.

In terms of wages, an *Economic Policy Institute* report reveals that in 2018, White workers had about a 20 percent advantage in hourly wage at every level of education. Notably, from 2000 to 2018, the Black-White racial wage gap grew at every level of educational attainment.

Figure 2: 2018 Average Hourly Wages by Race/Ethnicity and Education



Source: EPI Analysis of Current Population Survey Outgoing Rotation Group Microdata from the U.S. Census Bureau, *Economic Policy Institute, www.epi.org*
Calculations: https://docs.google.com

18 The unemployment rates cited in this paragraph all pertain to people aged 25 and over.

Health Outcomes

The relationship between socioeconomic status and health is well-documented across time and place (Kitagawa & Houser, 1973; Marmot, 1994; Rogot et al., Eds, 1992; Deaton, 2002; and many others). Generally, as socioeconomic status rises, health improves. Based on the relationship between socioeconomic status and health, one would expect that people with more education would have lower mortality rates than those with less, and that the benefits of education would be shared regardless of race. In fact, since Black people have worse health and lower educational attainment than White people overall, some sound as if they believe that Black people would have larger health benefits from increased educational attainment, and that racial disparities in health would narrow with higher levels of education. Yet, in many mortality-related diseases, the reverse is true (see for instance Williams & Mohammed, 2013).

Jemal et al. (2008) examined the amount of race disparity across a range of mortality outcomes—including cancer, heart disease, stroke, and HIV-related causes—and find that when comparing those with less than a high school degree to those with at least a bachelor's degree, the Black-White disparity grows larger (also, see Hamilton, 2017b). Consistent with Jemal et al., Hamilton, Cohen, and Siddiqi (forthcoming) find that, among those with less than a high school diploma, Black women had a 50 percent greater mortality rate than their White women peers, whereas Black women with a bachelor's degree had nearly a 70 percent (68 percent) greater mortality rate than their White peers.

Summary

Racial disparities in wealth, labor market experiences, and health outcomes remain substantial even amongst highly educated adults. Education matters within a group, but, since social structures do not permit Black Americans to convert education into desired outcomes at the same rate as White Americans, they are not protected by education in the same way that White Americans are. In the section that follows, we consider how the labor market is functioning during the pandemic for Black and Latinx Americans and women workers in comparison to their White men counterparts.

THE BLACK-WHITE WAGE DISPARITY ACROSS BUSINESS CYCLES

It is commonly thought that Black workers perform worse across business cycles because of the way in which they are positioned in the distribution of labor market skill requirements, specifically with regard to educational attainment. To better understand how business cycles affect wage disparity, we examine how the demographic and socioeconomic attributes of individuals explain wage disparity during the 1990-91 recession, the 2001 recession, and the 2007-09 Great Recession.

Methodology

We utilize repeated Blinder-Oaxaca decompositions, as adapted by Jann (2008), to understand what portion of the Black-White wage disparity over the last three decades can be empirically attributed to discrimination or structural barriers versus the portion of disparity that can be attributed to an individual's socioeconomic and demographic characteristics, including education (Blinder, 1973; Oaxaca, 1973; Jann 2008).[19]

We use data from the Current Population Survey's Annual Social and Economic Supplement (CPS-ASEC) from 1988 to 2017 (Flood et al., 2019) to perform repeated cross-sectional decompositions to demonstrate the trend in labor market discrimination during this roughly 30-year period. We decompose annual wages, converted into log form (to generate a more normal distribution), with controls for worker characteristics including education, age, family structure, metropolitan area designation, region, occupation, and industry. Next, we isolate highly educated Black and White workers to examine if wage disparities and differential labor market treatment persist across business cycles even for those with a college degree.[20] The final set of results repeats the analysis for men only in order to isolate race effects from potentially confounding gender effects.

Below, we report the findings from our decompositions of wage disparity between Black workers and White workers. We also report descriptive findings on the Black-White wage disparity across the period studied. We focus our analysis on four groups: (1) all workers, (2) workers with a college degree or more, (3) men workers, and (4) men workers with a college degree or more. In all four analyses, we find that Black workers see a lower return to their labor market characteristics during recessions—and this finding becomes more pronounced for Black workers with a college degree.

19 Blinder-Oaxaca decompositions decipher which portion of the difference in wage (log wage) is due to: (a) average racial differences in wage-related characteristics vs. (b) racial differences in the manner in which a given level of characteristics are translated into a given wage (also referred to as racial differences in wage regression coefficients). The latter component, the way in which the coefficients are translated into wages, is indicative of structural and uncontrolled racial differences in wages. For this exercise, we complete these decompositions annually and present trends across decades analyzed.

For more information about the measurement of racial disparity and the associated use of Blinder-Oaxaca decompositions, see Hamilton (2000). There is some debate if the uncontrolled difference after controlling for various indicators of wage is indicative of discrimination. The "clear and convincing evidence" generally comes from experimental or audit studies. Two relevant studies that use experimental methods to evaluate labor market discrimination are Bertrand and Mullainathan (2004) and Pager, Bonikowski, and Western (2009). For a review of the literature, see Fix, Galster, and Struyk (1993). Moreover, what is particularly relevant for this paper are the trends in the component not explained by observable characteristics (e.g. what we are interpreting as labor market discrimination) across business cycles. Hence, even if there is concern with regard to point-in-time measurement error to the extent that this potential measurement error is time irrelevant, our analysis regarding the extent of racial inequality across business cycles not explained by observable characteristics remains valid.

20 As part of our robustness checks, we ran decompositions that specifically analyzed: (1) college graduates with no advanced degree or additional years of schooling beyond four years of college, and (2) college graduates with advanced degrees or more than four years of tertiary education. We find that the trends demonstrated for college graduates (below) are not substantially different from the trends produced by our supplemental analyses, especially in regard to trends around the 2007-09 Great Recession.

Note: a more complete analysis would include an intersectional account of gender. For example, an examination of the wage difference between Black women and White men could capture both gender and race effects, especially if contextualized in particular labor market domains. Conversely, an examination of Black women in relation to White women might presume to indicate a race effect but might ignore the ways in which White women's wages are shaped by gender discrimination.[21] For this reason, and given the ubiquity of patriarchy in the American context and the complicated ways in which gender and race interact, as well as time and resource limitations in the production of this paper, we did not conduct those analyses in this section. More research is merited to address these questions and will be forthcoming.

Illustrating Black-White Wage Disparities During Recessions

Consider *Figure 3* and *Figure* 4 (on the following page). We find that wage disparity between Black and White workers is persistent from 1988 to 2017. While the wage disparity is narrower among Black and White workers with a college degree, relative to that of all Black and White workers, we find that among college-educated workers the wage disparity is: (1) considerably more volatile across the period studied and (2) noticeably more sensitive to recessions. In other words, while the wage gap between Black college graduates and White college graduates is smaller relative to all Black and White workers, wages for Black college graduates tend to be more unstable and take a more substantial hit during economic downturns.

In other words, while the wage gap between Black college graduates and White college graduates is smaller relative to all Black and White workers, wages for Black college graduates is smaller relative to all Black and White workers, wages for Black college graduates tend to be more unstable and take a more substantial hit during economic downturns.

In *Figure 3* and *Figure* 4, we demonstrate the above trends by plotting average Black wages as a percent of White wages across the period studied. In each chart, we pull out workers with a college diploma to examine the degree to which higher levels of educational attainment might impact Black-White wage disparity. Specifically, in Figure 3, we provide both a trendline of the wage disparity among all Black and White workers and a trendline of the wage disparity for all Black and White workers with a college degree. In *Figure* 4, we repeat the above analysis, focusing specifically on men workers.

21 A study that may be helpful to consider in reference to this analysis is Chetty, Hendren, Jones, and Porter (2018), which found that Black men raised in higher income households—with access to plentiful local resources, such as quality schools—have lower earnings in early adulthood than White men raised in similar environments. Chetty et al. also found that Black men grow up to work in substantially different occupations than White men, while on the other hand, Black women grow up to work in similar occupations and make similar salaries relative to White women. However, their analysis does not consider how Black women are situated in the labor market relative to White men, which, as we state above, would offer a point of comparison that would capture both race and gender effects. Other scholars have argued that Chetty et al.'s analysis might have considered more deeply the costs—in regard to physical and mental health—of the diminished returns to social and economic resources for Black people relative to White people. For instance, see Hamilton and Cohen (2018).

Figure 3: Average Black Wages as a Percent of White Wages (1988–2017)

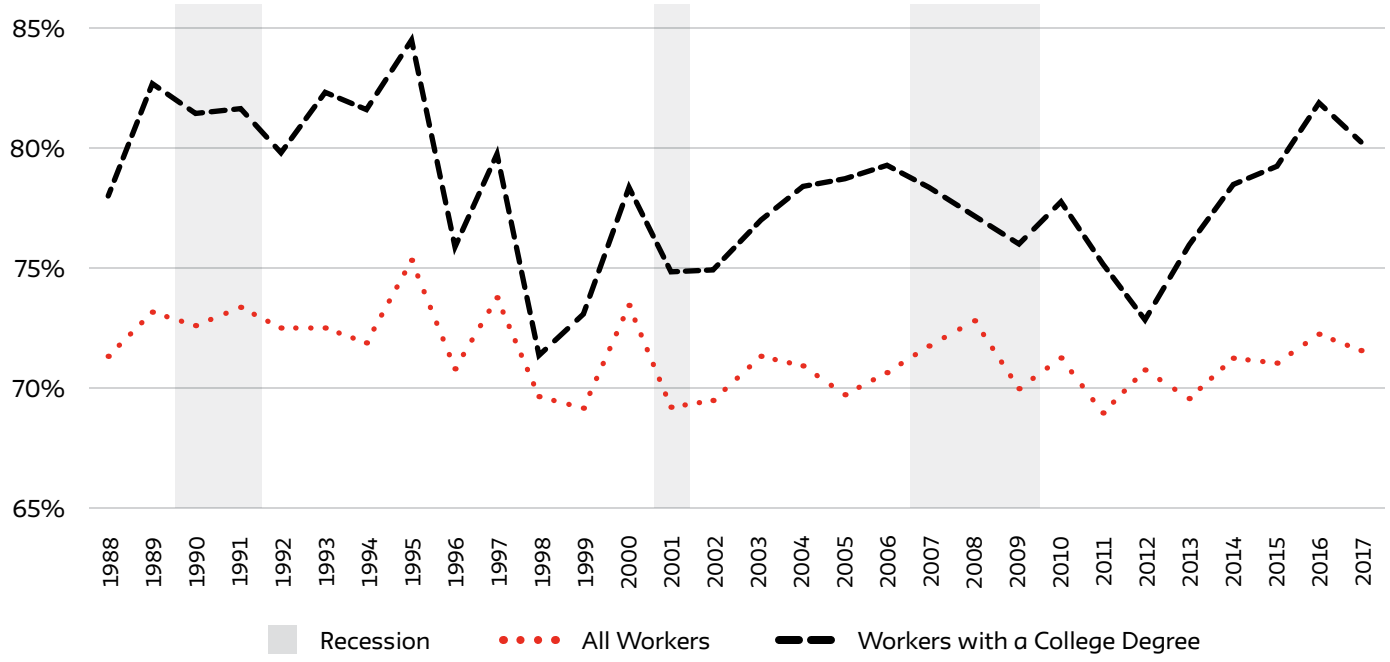
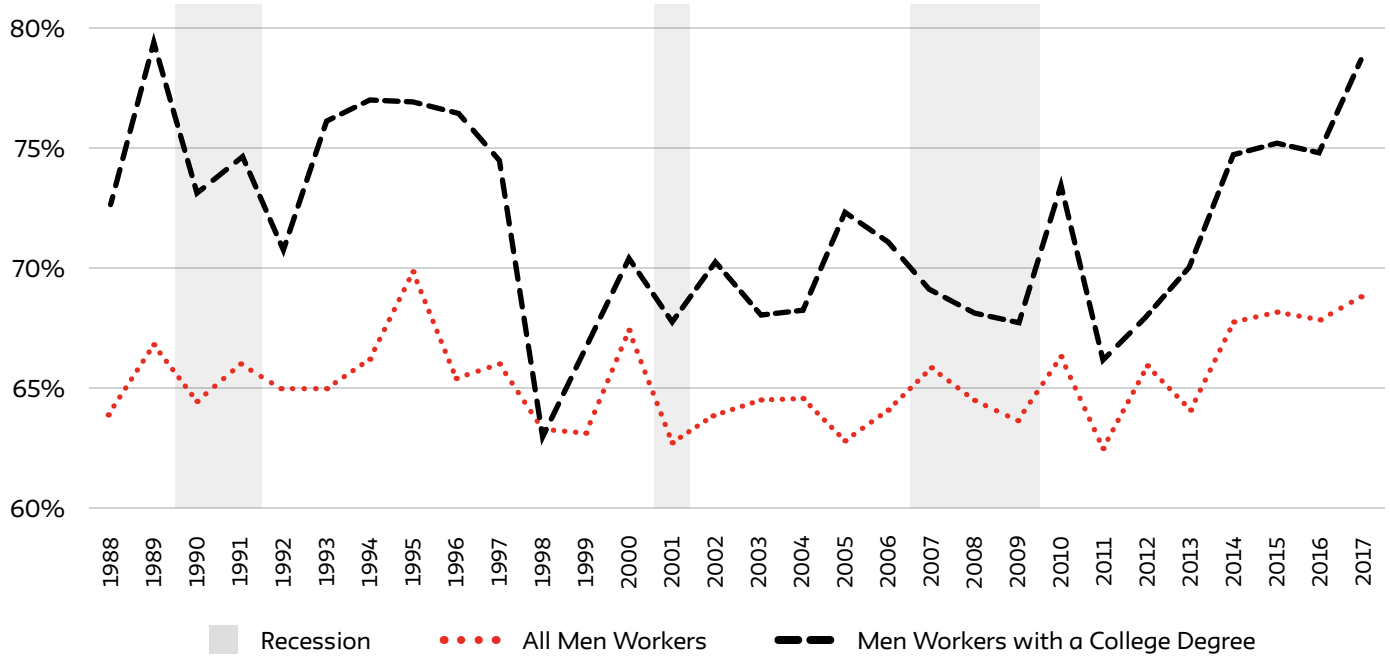


Figure 4: Average Black Men's Wages as a Percent of White Wages (1988–2017)



Trends are based on estimates from repeated cross sections of CPS-ASEC, 1988 to 2017. Analysis is of postive wage earners.

Source: *Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles, and J. Robert Warren (2020). "Integrated Public Use Microdata Series, Current Population Survey: Version 7.0)" [dataset]. Minneapolis, MN: IPUMS.*

In both *Figure 3* and *Figure 4*, whether for all workers or men workers, we find that a college degree tends to lower wage disparity. In both charts, we also find that Black college graduates face unique declines in their relative wage position, as compared to White graduates, around recessions (shaded grey in the chart). An overarching finding from our descriptive analysis of wage disparity is that Black workers with a college degree suffer more around recessions than their White counterparts.

For instance, in *Figure 3*, we demonstrate that among all Black and White workers with a college degree, wage disparity increased around all three recessions since 1988 with a pronounced and persistent increase in wage disparity during and after the Great Recession. In the same chart, when looking at all Black and White workers, we find similar but markedly less-pronounced increases in wage disparity around economic downturns.

Further, for *Figure 4* (shown on the previous page), the general shape of our findings in regard to men workers reflect those described for all workers. We find that the wage disparity among Black and White men with a college degree is both more volatile and more responsive to economic downturns relative to all men workers. We also find that the Great Recession had a particularly damaging and persistent effect on wage disparity among Black and White men with a college degree.

Differences in Labor Market Treatment by Race

Below, we examined annual wage decompositions across business cycles to demonstrate trends in racial differences in the rates of return to labor market characteristics. Racial differences in labor market treatment are presented as trend lines in *Figure 5* on the following page.[22] Among Black and White workers with a college degree, we find that the percentage of wage disparity that is not explained by the characteristics of workers increases dramatically around recessions. In other words, around recessions, labor markets offer Black workers less efficacy, relative to White workers, in converting their labor market characteristics into labor market returns as measured by wage. This is suggestive that labor market discrimination intensifies around recessions, particularly for Black workers with a college degree.

> Among Black and White workers with a college degree, we find that the percentage of wage disparity that is not explained by the characteristics of workers increases dramatically around recessions.

We performed decompositions of wages for (1) all Black and White men workers and (2) Black and White men workers with a college degree.[23] The results show that the portion of the Black-White wage disparity attributable

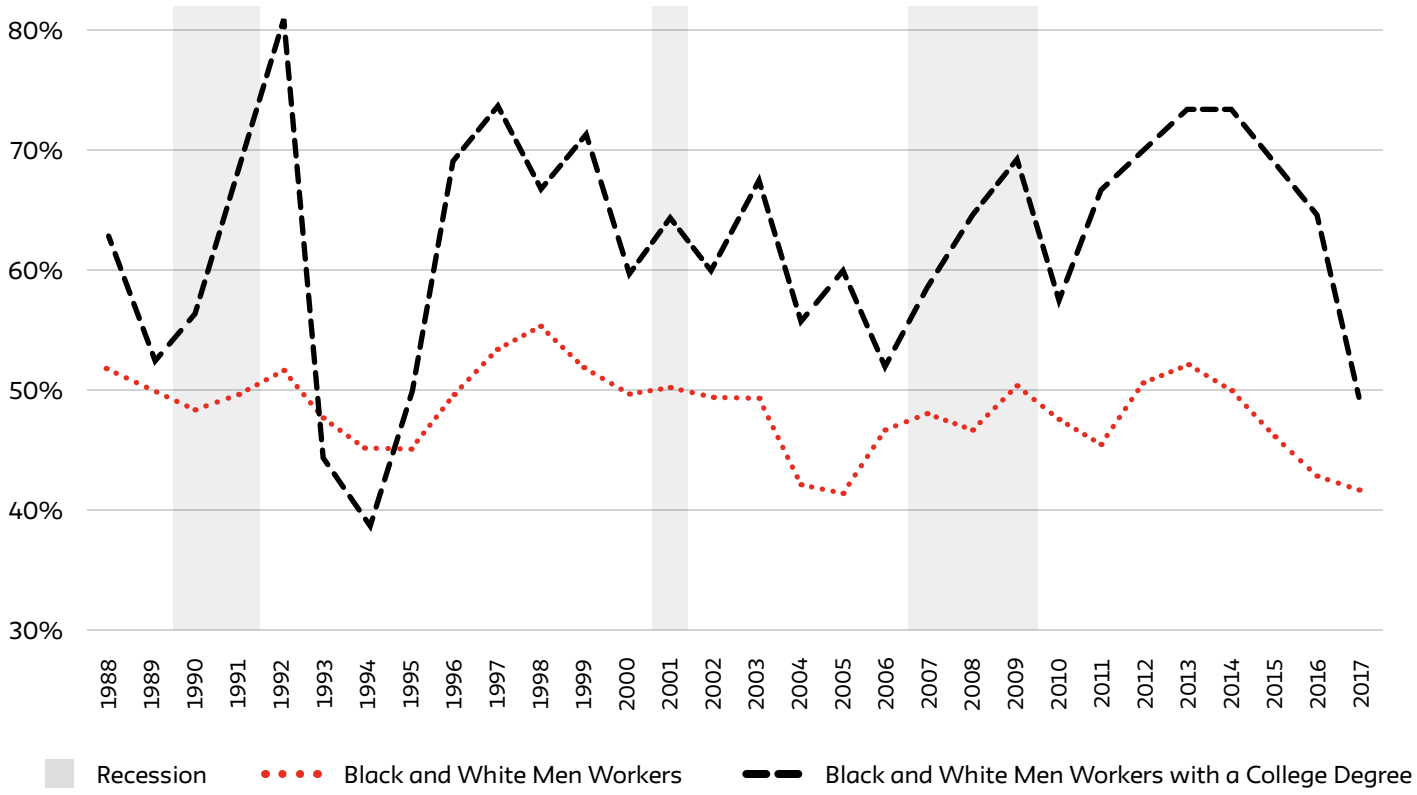
22 Our analysis includes controls, specifically variables indicating a worker's industry and occupation. Including these controls is likely to lower estimates of discrimination because the racial sorting across industry and occupation itself could be indicative of discrimination (making our estimates arguably conservative). What is most relevant to our decompositions of wages, and central to our investigation of labor market discrimination, is how trends change over time and vary in regard to discrimination. See Hamilton (2000) for a general discussion of debates around statistical methods for examining racial disparity.

23 Appendix 1, *Figure A*, exhibits the decomposition of wage disparity for (1) all Black and White workers and (2) all Black and White workers with a college degree. While this broader analysis of Black and White workers—overall and with a college degree—demonstrates that Black workers face enhanced levels of racially differential treatment in the labor market during recessions, the results are confounded by gender effects. That is, the pattern is similar, but the results do not isolate the specific effect of race on differential labor market treatment.

to how characteristics are treated in the labor market increases during recessions. These effects are especially pronounced for Black men with college degrees. Increases are dramatic and persistent during and after the Great Recession. We also find that the portion of the disparity attributable to differential labor market treatment increased during both the 2001 recession and the 1990-91 recession—with the increase being more notable for the latter.

With regard to Black and White men overall, *Figure 5* demonstrates that the trend is similar, but the magnitude is not as severe.

Figure 5: The Component of Racial Wage Disparity Due to Differential Treatment of Labor Market Characteristics (1988–2017)



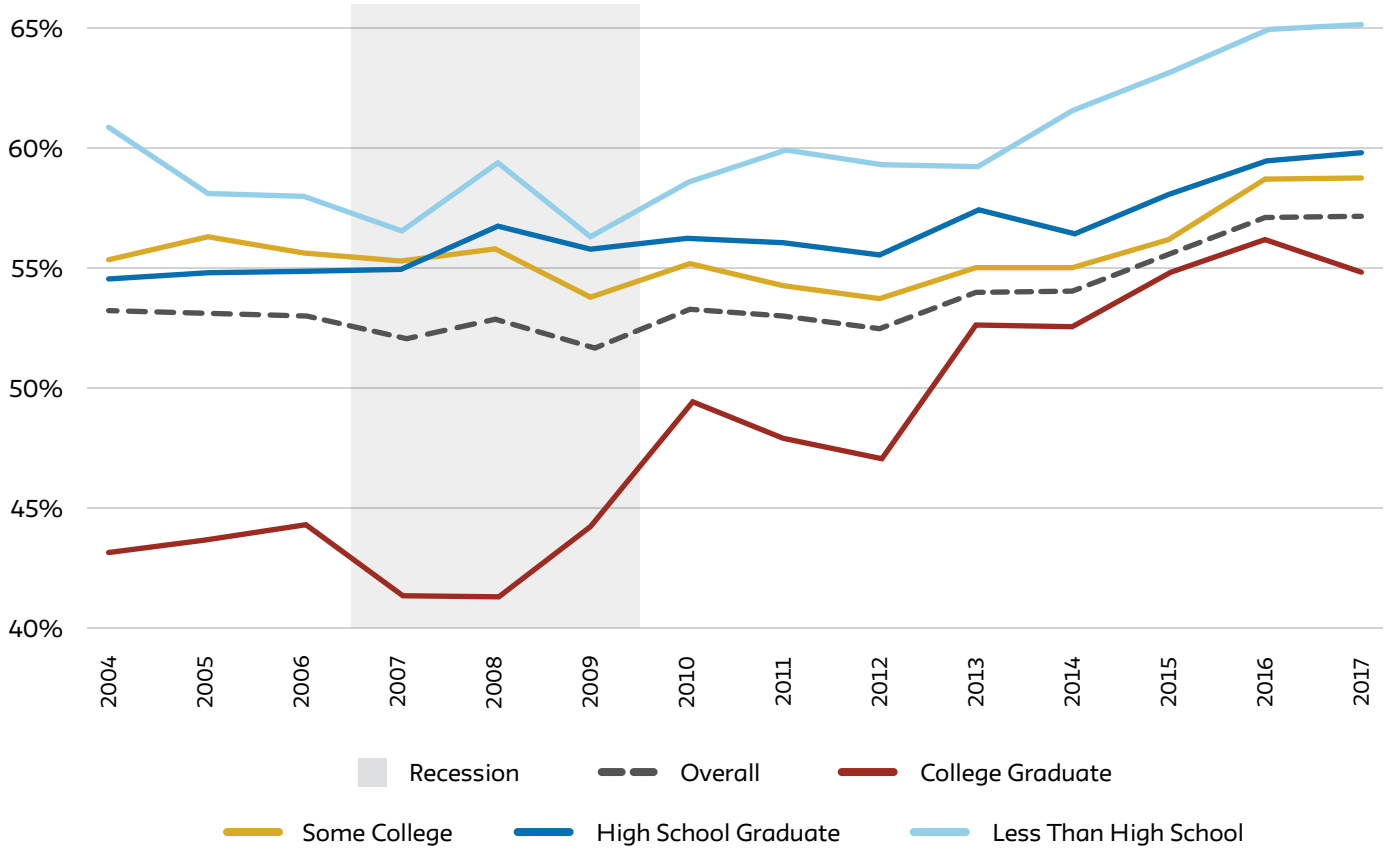
Trends are based on estimates from repeated cross sections of CPS-ASEC, 1988 to 2017. Analysis is of postive wage earners.
Source: *Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles, and J. Robert Warren (2020). "Integrated Public Use Microdata Series, Current Population Survey: Version 7.0)" [dataset]. Minneapolis, MN: IPUMS.*

Overall, the results indicate that Black workers, relative to White workers, have a lower rate of return to their labor market characteristics and that the intensity of this lower rate of return worsens during recessions. Furthermore, this phenomenon is more pronounced amongst highly educated workers, or those with a college degree. Unsurprisingly, within each group, more education is associated with better outcomes. However, the irony is that across groups, Black workers with a college degree are most harmed relative to similarly qualified White workers during recessions.

Trends in Homeownership Disparity and the Great Recession

The pattern of results above are replicated for racial differences in homeownership, a key indicator of wealth, after the last Great Recession. Famighetti and Hamilton (2019) used Blinder-Oaxaca decompositions to examine Black-White homeownership disparity before and after the Great Recession and found that the demographic and socioeconomic characteristics of Black household heads, especially those with a college degree, explained a diminishing portion of the homeownership gap in the period following the Great Recession. Simply put, Black college graduates faced the largest increase in disparate treatment in the housing market relative to any other educational attainment group over the course of the last Great Recession (see *Figure 6*, below).

Figure 6: The Component of Homeownership Disparity Due to Differential Treatment of Housing Market Characteristics (2004–2017)



Trend-based estimates from repeated cross sections of ACS-1 Year Samples from 2004 to 2017. Analysis is of household heads.

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.*

In the section that follows, we turn to the experience of Millennials.

MILLENNIALS: DISPARITIES WITHIN AND ACROSS GENERATIONS

Born between 1981 and 1996, Millennials entered young adulthood in the aftermath of the Great Recession. Today, they face a second major economic crisis as a result of the pandemic. Millennials have invested time and money in higher education but are finding that education may not be an economic panacea.

Relative to prior generations, Millennials are both highly educated and overleveraged (Bialik & Fry, 2019; Hamilton & Zewde, 2020). On average, Millennials have $33,000 in student debt (Whistle, 2019). Despite Millennials' high levels of education, research by Rinz (2019) and Rothstein (2019) shows that young workers have suffered reduced earnings and employment through "scarring" effects associated with the Great Recession.

The higher levels of debt incurred by Millennials make it harder for them to accumulate wealth, and indeed, research indicates that Millennials have substantially lower median and average levels of wealth than Generation Xers and Baby Boomers (Jeszeck et al., 2019). Relative to the four preceding generations, Millennials also have historically low levels of home ownership, which is troubling because home ownership is a primary way in which Americans store and grow wealth.

Millennials have faced generational challenges and recessionary scarring. Even worse, when we disaggregate Millennials by race, we find stark racial disparities. According to an analysis of 2008 graduates by Brookings, at the mean, Blacks held far more student loan debt: over $50,000 in student loan debt compared to less than $30,000 for Whites (Scott-Clayton & Li, 2016). Equally concerning is that for Black and White Millennials, the racial homeownership gap is greater than in any of the preceding four generations at a similar stage of the life course (Hamilton & Famighetti, 2019).

Millennials experience broader racial wealth gaps, too (McIntosh et al., 2020). Black Millennials hold just 22 percent of the wealth of White Millennials. Latinx Millennials hold 56 percent of the wealth of their White counterparts (Addo & Zhang, 2019). If past research is any indication, the racial wealth disparities among today's young adults are likely to widen over the life course (Herring et al., 2020). Overall, the experience of Millennials is a sobering one, indicating that recessions can have worrisome long-term negative impacts and that providing access to education is insufficient to confer a comfortable life and inadequate to achieve racial equity.

DISCUSSION

This report makes clear that education is far from a panacea to address long-standing and socially and politically deeply entrenched racial economic disparity, especially during recessions. The 2020 recession, like others before, is marked by inequity across race, ethnicity, and gender, even among those with high levels of education, although in this case, harms include both unemployment and increased risk of sickness and death from COVID-19. In fact, structural components of racial inequality widen the most amongst those with a college degree around recession. Racism is not an individual quirk nor a random taste preference, but rather a structural force in American life.

If education is insufficient to build racial equity, what can do so? In international comparison, Alesina and Glaeser (2006) argue that nations with higher levels of racial resentment redistribute less, have less generous welfare states, and tolerate higher poverty and lower levels of social mobility. Why? How is racial inequity functioning in the United States, and how can racial equity be advanced?

If education is insufficient to build racial equity, what can do so?

To identify ways forward, we must investigate the processes that exacerbate racial inequities in education, the economy, politics, policy, culture, and society. Understanding those processes requires a wide variety of disciplinary tools and investigative techniques, drawing not just from education and traditional economics, but also from political science, policy analysis, and sociology. Indeed, stratification economics predict that racial discrimination is likely more pronounced amongst the highest educated because it is in that stratum that Black people pose the greatest threat to the most desired outcomes—and therefore, it is in this stratum that discriminatory structures and actions are most relevant to the preservation of social hierarchy (Hamilton, 2017).

Nobel Laureate economist W.A. Lewis (1985) argues that White people maintain their top position in the economic hierarchy in two ways. First, policies and practices limit Black people from accessing credentials that may be rewarded in the marketplace, preventing many from competing in the first place. Lewis refers to this as rendering them "noncompeting." Then, for those who are able to overcome structural impediments and acquire "competing" credentials (for the purpose of this analysis, a college degree), outright discrimination is deployed. His proposition predicts that highly educated Black people, those who pose the greatest threat to the preferred economic position of White people, are likely to face the greatest relative extent of labor market discrimination.

In the U.S. context, economics, policy, and politics cannot be separated from race. The current recession itself, as we show above, was created by policy choices with racially disparate impacts. Recovery, too, will be shaped by policy choices. The key question is whether those policies will build an equitable or inequitable recovery. In the recommendations that follow, we suggest that those interested in reducing inequality use a broader variety of disciplinary approaches and be open to using other levers, beyond education, to advance justice.

RECOMMENDATIONS

Given that approaches that emphasize training and skill acquisition are laudable but inadequate, what can be done to spur an equitable recovery? We agree with Ibram Kendi, who argues for a new approach that actively puts racial equity at its center. Kendi argues that it is naive to think that anything is "race neutral" in the United States since the political economy of the nation has been intricately linked with race since its inception.[24] We present below 12 recommendations.

Invest in Ending the Pandemic

Investment in development, testing, production, and distribution of effective therapies and vaccines could speed both the end of the pandemic and the restoration of a tighter labor market; so could funding for COVID-19 testing and contact tracing and improved public health communications to fight misinformation help individuals make decisions based on science. Attention must be placed on ensuring that the benefits of such investments, including profits, are shared with Black and Latinx communities.

Expand the Social Safety Net

Safety-net programs can reduce suffering and support recovery. Since the onset of the pandemic, federal leaders have wrestled with when and how much to expand safety-net funding as applications soared for unemployment insurance, food assistance (primarily the Supplemental Nutrition Assistance Program), housing assistance, and more. Additional funding is needed now. For the long run, many of these programs could be redesigned to automatically expand when recessions occur. Immediate financial relief during the recession is urgently needed to assist school districts, too, especially those with large numbers of Black and Latinx students and low-income families.

Provide Massive Additional Federal Aid to State and Local Governments

Because state and local governments cannot borrow to support operating expenses, the federal government has a unique and essential role to play. State and local government services that are essential to recovery include health and public health programs and elementary and secondary schools and institutions of higher education. Further, Black and Latinx workers have disproportionately found employment in the public sector, where equal opportunity and affirmative action hiring and employment practices have been comparatively prevalent, and these workers and their communities are disproportionately harmed by cuts in state and local budgets.

24 These points are vividly made by historian Ira Katznelson (2005) in his aptly titled book, "When Affirmative Action was White." Katznelson describes how New Deal and post-war policies were largely responsible for generating an asset-based White middle class, and these policies were designed and implemented in racist ways that largely excluded Black people. For instance, Social Security initially excluded both domestic and agricultural workers at a time when those sectors employed about 90 percent of Black women workers and over half of Black men workers. Moreover, much of the implementation of the New Deal was left to local bureaucrats, even in the Jim Crow context, with little to no federal oversight or antidiscrimination enforcement.

Expand Public Sector Employment

Monetary policy is already working to encourage private sector hiring by holding interest rates at record low rates. This should continue. But more is needed. Large public sector program expansions could directly employ thousands or even millions of Americans in good-paying jobs to improve public health, conduct contact tracing, care for human beings, respond to climate change, and address other pressing challenges. As a side benefit, these public sector jobs would increase private sector labor bargaining power for better wages, benefits, and working conditions. The same low-interest-rate environment that prevents monetary policy from doing even more to fight the recession implies that the cost of spending more fiscal resources is historically low.

Restore Labor Power and Stop Low-Road Employment Practices

For decades, the power of unions has been declining in the United States, and no clear path to restoring labor power has yet been identified. Researchers and workers' organizations, supported by philanthropists, could work to test, improve, and scale innovations to rebuild worker power. Promising ideas include increasing worker ownership of businesses, improved labor union organizing, putting workers on corporate boards, and bringing together workers, management, and shareholders at the sectoral level. At the same time, policies like higher minimum wages, paid sick leave, fair scheduling laws, and the robust enforcement of health, safety, environmental, wage, and anti-discrimination law could prevent private sector employers from relying on low-road business models. Vigorous action is also necessary to reduce the risk of exposure to COVID-19, especially for low-wage essential workers. Revitalized antitrust enforcement and support for small and new businesses could also help. As Hamilton and Neighly (2019) explain, corporate consolidation of product and labor markets contributes to racial disparity.[25]

Reduce Intergenerational Wealth Inequality

There are many ways in which policy can help reduce the intergenerational racial wealth gap.[26] Initiatives could ensure that all children are provided with capital and, by extension, the choices to engage in asset markets and take advantage of asset-building opportunities. By instituting Baby Bonds, for example, the United States government could provide an account, with up to $60,000 held in public trust, to every one of the four million children born each year in the United States (Hamilton, Nieves, Markoff, Newville, 2020). Children whose families have the least wealth would receive the largest trust. In doing so, Baby Bonds use the universal provision methodology that has undergirded popular programs like Social Security and Medicaid to meaningfully address the economic gap between the rich and poor, and the ever-growing wealth gap between White, Black, and Latinx households (Hamilton et al., 2020).

25 See Hamilton and Neighly's report, published by the Roosevelt Institute. https://rooseveltinstitute.org/wp-content/uploads/2019/11/RI_Racial-Rules-of-Corporate-Power_Issue-brief_201911-1.pdf

26 Direct wealth transfers by race could be a direct and parsimonious approach. Although recently there has been some momentum with regard to political discourse around reparations, daunting political challenges remain.

End Inequitable Tax Policies

Many parts of the tax code serve to exacerbate economic inequality and racial disparity year in and year out. In 2017, the top 20 percent of families by income captured nearly 73 percent of the tax benefit of the mortgage interest deduction and nearly 67 percent of the tax benefit of the deduction for state and local income taxes. These two tax expenditures alone cost the U.S. Treasury an estimated $97 billion in 2017. Both programs, as well as preferential tax treatment of capital gains income and so-called "carried interest," primarily benefit persons at the top of the economic ladder, a stratum that is disproportionately White.[27] Such tax provisions could be repealed or phased out, and associated revenues could be used from programs like those above that help close racial gaps in economic well-being.[28] More generally, the tax code could be reexamined to identify and reform or repeal innumerable provisions that are disproportionately used by the well-connected and privileged, most of whom are not Black or Latinx. Recent tax changes have gone in the wrong direction. See Hamilton and Linden (2018) for a discussion of ways in which the Tax Cuts and Jobs Act of 2017 exacerbates racial disparity.[29]

Harness the Education System to Empower Public Problem-Solving

W.E.B. Du Bois (1935) wrote that "the Negro needs neither segregated schools nor mixed schools. What he needs is Education." Education that supplies only job skills and college degrees is clearly insufficient. Rather, education must also provide students with tools to analyze and take on social, economic, and political problems, including structural racism — and this work must be a priority, not a sideline, for educators. Curricula for everyone should support civic engagement, help students understand power and history, learn how to combine into groups for effective action, evaluate sources, think creatively and scientifically, and use evidence. Curricula also needs to be relevant to students' lived experiences and delivered by trained, well-supported, empathetic educators. Education research, philanthropy, innovation, and public investment have often focused on job readiness and college access and completion. Empowering the nation's school systems to educate students in civic skills in rigorous ways—the ways required to build a flourishing, inclusive, and antiracist United States—would require a vast infusion of research, development, stakeholder input, experimentation, and evaluation. Such a moonshot could only work with major support from educators, researchers, parents, students, philanthropists, and policymakers.

27 According to data from the Survey of Consumer Finances, Blacks or African Americans were 14.6 percent of all families in the United States in 2016 but comprised only 5.5 percent of the top 20 percent of families. Similarly, Hispanic or Latino families were 10.2 percent of all families in 2016 but comprised only 4.3 percent of the top 20 percent of families. Source: Tabulation generated by one of the authors based on data from the 2016 Survey of Consumer Finance, accessed at the following site on June 25, 2020: https://sda.berkeley.edu/sdaweb/analysis/index.jsf

The results were generated by cross tabulating RACECL4 (row) by INCCAT (column) by YEAR (control variable).

28 Data on tax expenditures come from the Urban Institute: https://apps.urban.org/features/wealth-inequality-charts/, accessed June 24, 2020. The Urban Institute source does not provide distributional estimates for the preferential treatment of capital gains or carried interest.

29 https://rooseveltinstitute.org/hidden-rules-new-tax-law/

Break the Connection Between Local Property Taxes and School Funding

The use of local property taxes to fund education perpetuates racial, economic, and political inequality. Breaking schools free from dependence on local property taxes would require a large-scale, long-term commitment by major civic actors, anchored by philanthropy. Many strategies, including litigation, legislation, ballot initiatives, and state constitutional change, should be explored with objectives ranging from incremental to transformative.

Restore State-level and Federal Support for Higher Education

In a recession, many people seek higher education to get marketable skills and credentials and await a labor market rebound. Over the past 40 years, the reduction in the share of post-secondary education costs paid by state and federal government has made this shelter less useful. Student debt has increased (including the number of students who get debt without achieving degrees) just as the student body has grown more diverse. Leaders should advance much larger allocations by states and the federal government to public higher education, advance new and significantly targeted direct four-year scholarships for Black and Latinx students, and advance progressive taxation, especially on corporate profits, wealth, and estates, to fund the first two. More broadly, we agree with those who advocate making the first two years of college free at all public institutions. Such a program makes even more sense in the wake of the pandemic — with an added recognition that funding for remedial education may be necessary for millions of students impacted by the pandemic.

The final two recommendations consider what we know about what works—and who has power and resources — when it comes to shaping an equitable recovery.

Measure How Policies Impact Racial Equity

Jared Bernstein and Janelle Jones recommend that the Federal Reserve Act be amended to require that the Federal Reserve include a discussion of "the extent of racial employment and wage gaps, and what the central bank is doing to reduce them" in its semiannual Monetary Policy Reports.[30] Such reporting would no doubt help the Fed recognize that restoring employment to high levels as soon as possible is essential to racial equity. This sort of innovative measure—and the related accountability—could be put in place in many levels of government. Researchers have already begun to measure the impacts of various policies and practices across racial groups. With support from philanthropy, measures of racial equity could be developed and tested, similar to cost-benefit analyses used in some budgeting processes and effectiveness rankings used to evaluate educational curricula. Once developed, these measures could be adopted at the federal level by the Office of Management and Budget and the Congressional Budget Office, and in state government as well (Hamilton & Neighly, 2018). These offices could be required to estimate the influence that policy proposals would have on wealth and income differentials between major racial and ethnic groups. Instituting such requirements might also drive an improvement in data availability and methodological innovation in this area.

30 See Bernstein and Jones in the Washington Post, June 15, 2020. https://www.washingtonpost.com/outlook/2020/06/15/federal-reserve-could-help-make-job-market-fairer-black-workers/

Support Black, Latinx, and Indigenous organizations, leaders, and researchers.

The analysis and recommendations above suggest important steps toward an equitable recovery. As researchers, we are grateful for the opportunity to present our findings and perspectives — and also deeply aware of the ways in which philanthropy and policy determine who gets to do research and who is empowered to govern and lead. As the occupational crowding analysis above implies, White people disproportionately occupy positions of power and control in government, nonprofits, advocacy, philanthropy, research, and industry. Conscious, persistent, systematic effort is necessary to reduce these inequities, not just because they are unjust, but also because doing so is essential to progress. In the words of Raikes Foundation founder Jeff Raikes (quoted in Dorsey et al., 2020), "Philanthropy is overlooking leaders of color who have the most lived experience with and understanding of the problems we are trying to solve." It is essential to recognize that all scholarship, policy, and practices are rooted in norms (Hamilton, 2017). Yes, good policymaking entails application of methods grounded in rigor and objective analysis of data, but it also entails ideas, theories, and hypotheses that are shaped, at least in part, by human experience. If society is to generate innovative new ideas to reduce economic inequality significantly—and to disrupt unjust, persistent structures of racial and gender stratification—the inclusion of scholars, practitioners, and policymakers who come with backgrounds and experiences that have been largely excluded is a critical ingredient. In the era of Black Lives Matter, allyship requires a willingness to provide support to organizations peopled by and led by Black, Latinx, and Indigenous individuals, and, dare we add, Black, Latinx, and Indigenous researchers.[31]

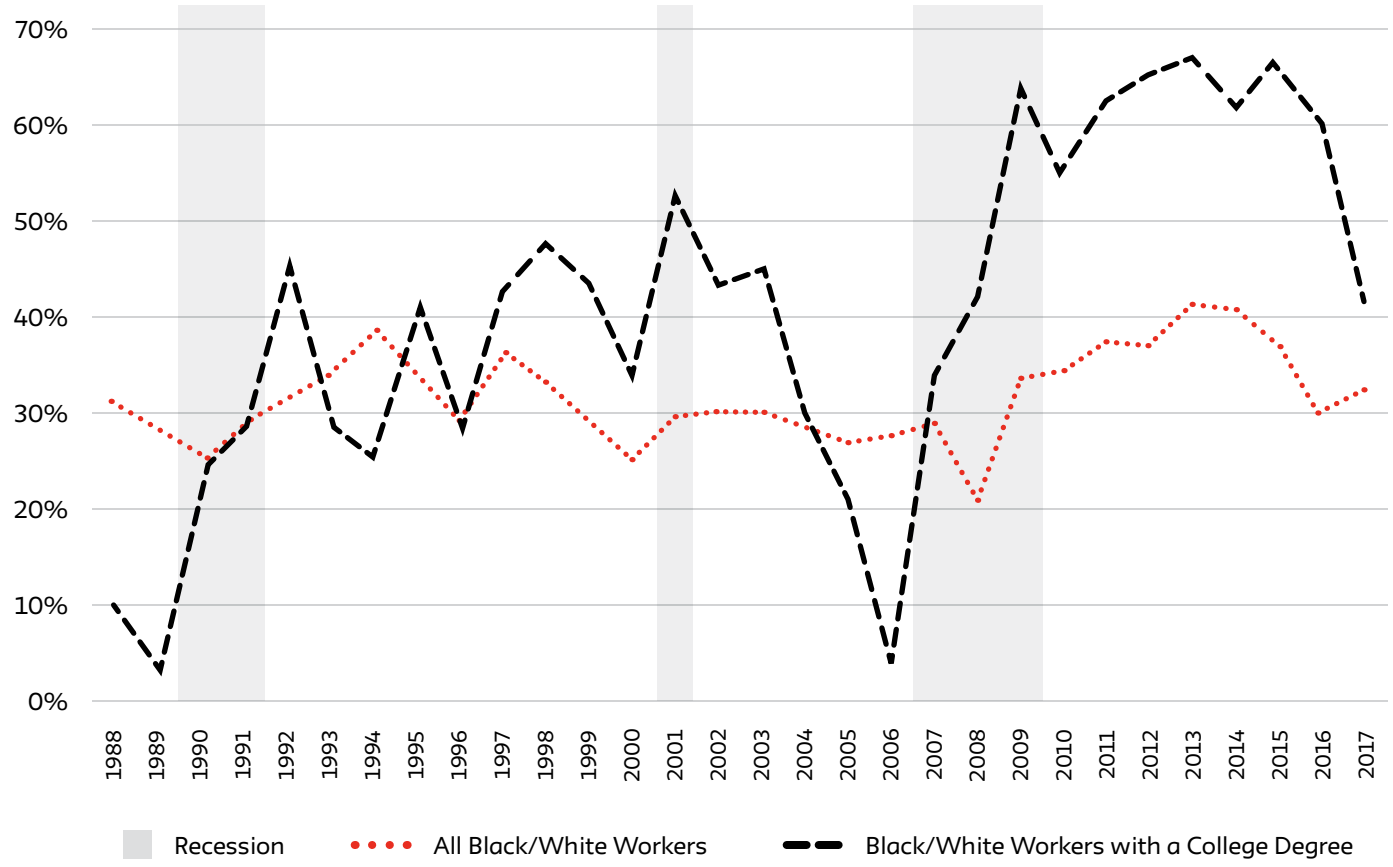
31 It is worth noting that it is the one Black economist who has won a Nobel prize, W.A. Lewis, whose work explains the phenomenon that racial disparities remain or grow with higher levels of educational attainment.

APPENDIX 1:

Notes and Figures for "Black-White Wage Disparity Across Business Cycles"

Figure A shows the decomposition trend of wage disparity for (1) all Black and White workers and (2) all Black and White workers with a college degree. Similar to the findings from our decompositions of wage disparity for Black and White men college graduates, we find that Black and White workers with a college degree see an increase in the portion of the wage disparity attributable to differential labor market treatment during recessions. The trend is especially pronounced during the Great Recession and the 1990-91 recession. While instructive on its face, we should note that the trend exhibited in *Figure A* is confounded by gender effects, and as such, does not isolate the unique effects of race.

Figure A: The Component of Racial Wage Disparity Due to Differential Treatment of Labor Market Characteristics (1988–2017)



Trend-based estimates from repeated cross sections of CPS-ASEC, 1988 to 2017. Analysis is of postive wage earners.

Source: *Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles, and J. Robert Warren (2020). "Integrated Public Use Microdata Series, Current Population Survey: Version 7.0)" [dataset]. Minneapolis, MN: IPUMS.*

APPENDIX 2:
Essential Work and Occupational Crowding

A. Defining Essential Workers

For this analysis, we modified essential work categories established by Celine McNicholas and Margaret Poydoc's Economic Policy Institute (EPI) report on essential workers and unionization. EPI modeled their definitions of essential workers after a Center for Economic and Policy Research report, adding occupations required in Executive Orders in Maryland and California.

We modified the EPI designations based on the guidelines from the Department of Homeland Security's initial critical infrastructure workforce recommendations. We excluded occupations that likely would be considered nonessential regardless of the sector (e.g. barbers and manicurists). We also removed other occupations that may not widely be considered essential, added occupations/industries to existing categories (e.g. ensuring more healthcare workers were deemed essential), and added a Defense sector.

Below are examples of industries and occupations within each sector:

- **Chemical Sector**
  Includes chemical engineers, chemical technicians, hazardous waste removal workers, and chemical processing workers.

- **Commercial Services**
  Includes workers in waste management and remediation services industry and services to buildings and dwellings industry, and workers in occupations such as laundry and dry-cleaning service workers, construction workers, and construction laborers.

- **Communications and IT**
  Includes workers in broadcasting and telecommunications industries, and workers in occupations such as switchboard operators, telecommunications line stallers, and telephone operators.

- **Critical Manufacturing**
  Includes workers in occupations such as sheet metal workers, metal furnace operators, engine and other machine setters, and tool and die makers.

- **Defense**
  Includes workers in industries such as the U.S. Air Force, U.S. Navy, and Military Reserves or National Guard.

- **Emergency Services**
  Includes occupations such as police officers, firefighters, emergency medical technicians, and emergency management directors.

- **Energy**
  Includes workers in industries such as coal mining and gas extraction, and workers in occupations such as electrical engineers, electrical power-line installers, and extraction workers.

- **Financial Sector**

  Includes workers in occupations such as financial analysts, tellers, credit authorizers and clerks, and credit counselors.

- **Food and Agriculture**

  Includes workers in industries such as supermarket and grocery, convenience stores, and pharmacy and drug stores, and workers in occupations such as farmers, butchers, and food processing workers.

- **Government and Community-Based Services**

  Includes workers in industries such as individual and family services and community food, housing, and emergency and childcare industries, and workers in occupations such as social and community services managers, probation officers and correctional treatment specialists, and legal support workers.

- **Healthcare**

  Includes workers in all healthcare industries and workers with healthcare occupations, including respiratory therapists, physicians, occupational therapists, and nursing assistants.

- **Transportation, Warehouse, and Delivery**

  Includes workers in industries such as postal service, warehousing and storage, bus service and urban transit, and workers in occupations such as couriers, postal service workers, and bus drivers.

- **Water and Wastewater Management**

  Includes workers in the water and wastewater treatment plant and system operator occupations.

- **Nonessential Industry/Occupation**

  Includes all workers not captured in the sectors above and excludes other workers in occupations that would not be considered essential regardless of sector (e.g. a barber who works in a healthcare setting).

Table 1A: Distribution of Workers Age 25–64 Across Essential and Nonessential Sectors

Sector	Total Employed (in millions)	Share of Workers
TOTAL	112.82	1.000
Nonessential	62.79	0.560
Essential	50.03	0.440
Chemical	0.22	0.002
Commercial Services	4.84	0.040
Communications and IT	3.53	0.030
Critical Manufacturing	1.64	0.010
Defense	1.23	0.010
Emergency Services	1.41	0.010
Energy	1.13	0.010
Financial	2.38	0.020
Food and Agriculture	8.27	0.070
Government and Community-Based Services	2.83	0.030
Healthcare	17.02	0.150
Transportation, Warehouse, and Delivery	5.45	0.050
Water and Wastewater Management	0.08	0.001

Data Source: *American Community Survey 2018 Five Year Estimates. Minneapolis, MN: IPUMS, 2020.*

Table 2A: Share of Essential Workers by Race and Gender

Workers Aged 25–64	Share of Nonessential Workers	Share of Essential Workers	TOTAL
BLACK	0.11	0.15	0.13
▪ Women	0.06	0.09	0.06
▪ Men	0.05	0.07	0.06
LATINX	0.17	0.21	0.18
▪ Women	0.07	0.09	0.08
▪ Men	0.09	0.12	0.10
WHITE	0.72	0.64	0.69
▪ Women	0.34	0.32	0.33
▪ Men	0.38	0.32	0.37

Data Source: *American Community Survey 2018 Five Year Estimates. Minneapolis, MN: IPUMS, 2020.*

Table 3A: Share of Workers Who Are in Essential Work by Race and Gender

Workers Aged 25–64	Share in Essential Work
BLACK	0.52
▪ Women	0.55
▪ Men	0.50
LATINX	0.50
▪ Women	0.48
▪ Men	0.52
WHITE	0.42
▪ Women	0.43
▪ Men	0.40

Data Source: *American Community Survey 2018 Five Year Estimates. Minneapolis, MN: IPUMS, 2020.*

B. Measuring Occupational Crowding

We calculate a crowding index for employed individuals who work for wages as follows: Black non-Latinx women, Black non-Latinx men, Latinx women, Latinx men, White non-Latinx women, and White non-Latinx men between the ages of 25-64. Future research could also explore workers who are self-employed.

Occupations in which the actual share of a given group exceeds the expected share by more than 10 percent are considered to be cases of overrepresentation (crowding score of more than 1.1) while occupations in which the actual share falls short of the expected share by more than 10 percent are considered to be cases of underrepresentation (crowding score of less than 0.9). Occupations where the expected number of the relevant group does not exceed nor is less than 10 percent (between 0.9-1.1) are considered proportionally represented.

$$CROWD\_INDEX_{x} = \left\{ \frac{Actual\ Share_{X}^{i}}{Expected\ Share_{X}^{i}} \right\} = \left\{ \frac{\frac{X^{i}}{Y^{i}}}{\frac{X k^{i}}{Y k^{i}}} \right\}$$

C. Essential Work

Table 1C: Occupational Crowding and Essential Work

	Essential Work		Nonessential Work	
	Average Income: $54,362		Average Income: $59,153	
Reference Group	**Crowding Index**	**Share of Average Wages***	**Crowding Index**	**Share of Average Wages***
Black Women v. White Women	1.20	0.81	0.80	0.85
Black Women v. White Men	1.30	0.61	0.78	0.56
Black Men v. White Men	1.10	0.69	0.83	0.64
Latinx Women v. White Women	1.20	0.72	0.99	0.76
Latinx Women v. White Men	1.30	0.54	0.97	0.50
Latinx Men v. White Men	1.40	0.68	0.98	0.66
White Women v. White Men	1.00	0.83	0.99	0.76
White Men v. Everyone	0.87	1.31	1.00	1.30

*Note: The share of average wages refers to the average annual wages of the two comparison groups (e.g., Black Women and White Men)
Data Source: *American Community Survey 2018 Five Year Estimates. Minneapolis, MN: IPUMS, 2020.*

Table 2C: Essential Sectors and Occupational Crowding

Sector		Black Women v. White Women	Black Women v. White Men	Black Men v. White Men	Latinx Women v. White Women	Latinx Women v. White Men	Latinx Men v. White Men	White Women v. White Men	White Men v. Everybody
Chemical	Crowd Index:	0.89	0.28	0.75	0.87	0.27	0.84	0.42	1.6
Average Income: $72,049 P20 Education: HS/GED P80 Education: BA/BS	Share of Avg. Wages:*	0.8	0.6	0.8	0.8	0.7	0.8	0.8	1.1
Commercial Services	Crowd Index:	1.1	0.2	0.7	2.4	0.7	1.8	0.2	1.3
Average Income: $41,419 P20 Education: Grade 10 P80 Education: Some College	Share of Avg. Wages:*	0.8	0.5	0.7	0.8	0.4	0.8	0.6	1.3
Communications and IT	Crowd Index:	1.3	1.3	1.1	1.1	1.2	1.0	1.0	0.9
Average Income: $54,598 P20 Education: HS/GED P80 Education: BA	Share of Avg. Wages:*	0.8	0.6	0.7	0.8	0.5	0.7	0.8	1.3
Critical Manufacturing	Crowd Index:	1.1	0.2	0.7	1.4	0.3	1.0	0.2	1.7
Average Income: $44,393 P20 Education: HS/GED P80 Education: Some College	Share of Avg. Wages:*	0.9	0.7	0.8	0.8	0.6	0.9	0.7	1.1
Defense	Crowd Index:	1.9	0.6	1.4	1.3	0.4	1.2	0.4	1.5
Average Income: $71,737 P20 Education: Some College P80 Education: MA/Prof	Share of Avg. Wages:*	0.9	0.9	0.9	0.8	0.8	0.9	1.0	1.1

*Note: The share of average wages refers to the average annual wages of the two comparison groups (e.g., Black Women and White Men)
Data Source: *American Community Survey 2018 Five Year Estimates. Minneapolis, MN: IPUMS, 2020.*

Table 2C: Essential Sectors and Occupational Crowding (cont.)

Sector		Black Women v. White Women	Black Women v. White Men	Black Men v. White Men	Latinx Women v. White Women	Latinx Women v. White Men	Latinx Men v. White Men	White Women v. White Men	White Men v. Everybody
Emergency Services	Crowd Index:	1.5	0.3	0.8	1.1	0.2	0.8	0.2	1.8
Average Income: $73,116 P20 Education: HS/GED P80 Education: Some College	Share of Avg. Wages:*	0.9	0.8	0.9	1.0	0.9	1.0	0.9	1.0
Energy	Crowd Index:	0.7	0.0	0.5	0.9	0.0**	0.9	0.1	2.0
Average Income: $68,457 P20 Education: HS/GED P80 Education: Some College	Share of Avg. Wages:*	0.9	0.8	0.8	0.8	0.7	0.8	1.0	1.0
Financial	Crowd Index:	0.8	0.9	0.6	1.0	1.1	0.8	1.1	1.0
Average Income: $96,916 P20 Education: Some College P80 Education: BA/BS	Share of Avg. Wages:*	0.8	0.4	0.6	0.8	0.4	0.7	0.7	1.5
Food and Agriculture	Crowd Index:	1.0	1.1	1.2	1.5	1.7	1.7	1.1	0.8
Average Income: $32,015 P20 Education: HS/GED P80 Education: Some College	Share of Avg. Wages:*	0.9	0.6	0.7	0.8	0.6	0.8	0.8	1.3
Government and Community-Based Services	Crowd Index:	1.2	2.0	1.2	1.3	2.1	1.0	1.3	0.7
Average Income: $75,067 P20 Education: Some College P80 Education: MA/Prof	Share of Avg. Wages:*	0.8	0.4	0.5	0.7	0.4	0.6	0.7	1.7

*Note: The share of average wages refers to the average annual wages of the two comparison groups (e.g., Black Women and White Men)
** Crowd Index = 04
Data Source: *American Community Survey 2018 Five Year Estimates. Minneapolis, MN: IPUMS, 2020.*

Table 2C: Essential Sectors and Occupational Crowding (cont.)

Sector		Black Women v. White Women	Black Women v. White Men	Black Men v. White Men	Latinx Women v. White Women	Latinx Women v. White Men	Latinx Men v. White Men	White Women v. White Men	White Men v. Everybody
Healthcare	Crowd Index:	1.2	2.9	1.3	0.9	2.5	0.9	1.6	0.4
Average Income: $59,266 P20 Education: HS/GED P80 Education: BA/BS	Share of Avg. Wages:*	0.8	0.6	0.6	0.8	0.5	0.7	0.8	1.7
Transportation, Warehouse, and Delivery	Crowd Index:	1.4	0.5	1.4	1.0	0.4	1.1	0.5	1.3
Average Income: $45,554 P20 Education: HS/GED P80 Education: Some College	Share of Avg. Wages:*	1.0	0.7	0.9	0.9	0.6	0.9	0.8	1.1
Water and Wastewater Management	Crowd Index:	0.5	0.0	0.5	0.0	0.4	0.5	0.1	2.2
Average Income: $53,040 P20 Education: HS/GED P80 Education: Some College	Share of Avg. Wages:*	0.8	0.7	0.9	0.7	0.6	1.0	0.9	1.0
Nonessential Industry/Occupation	Crowd Index:	0.8	0.8	0.8	1.0	1.0	1.0	1.0	1.0
Average Income: $59,153 P20 Education: HS/GED P80 Education: BA	Share of Avg. Wages:*	0.9	0.6	0.6	0.8	0.5	0.7	0.8	1.3

*Note: The share of average wages refers to the average annual wages of the two comparison groups (e.g., Black Women and White Men)
Data Source: *American Community Survey 2018 Five Year Estimates. Minneapolis, MN: IPUMS, 2020.*

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