



Photo: Faina Gurevich/iStock

## Regional Spotlight

# Labor Market Disparities

A region's big businesses can help monitor racial progress in the labor market.

**By**  
**Paul R. Flora**

Manager of Regional  
Economic Analysis  
FEDERAL RESERVE BANK  
OF PHILADELPHIA.

*Thank you to Sydney  
Lodge, who performed  
the initial data collec-  
tion and analysis for  
this research.*

*The views expressed  
in this article are not  
necessarily those of  
the Federal Reserve.*

**I**n the wake of last summer's Black Lives Matter protests, Black CEOs forcefully called on large corporations to act. As Darren Walker, president of the Ford Foundation and a member of the board of Pepsi, told the *New York Times*, "Boards should hold themselves and management accountable for specific objectives around recruitment, retention and promotion of African-Americans and other minorities.... Only when companies and management are accountable in ways that are quantifiable will we see real systemic transformation of corporate America."<sup>1</sup>

Data from large Philadelphia companies do show that when compared with the region's population distribution, non-Hispanic Black workers are underrepresented in high-wage occupations and overrepresented in low-wage occupations.<sup>2</sup> Philadelphia is not unlike other regions in this respect.<sup>3</sup>

Of course, responsibility for these disparities does not lie solely at the door of the business community. Labor market disparities have many causes. Some of these causes may reach back to a person's early life experiences or to those of prior generations. Past lack of access to neonatal health care, insufficient pre-K and K-12 education, or lack of career-training opportunities may limit an individual's life prospects. Moreover, historic patterns of discrimination in employment, housing, lending, and criminal justice have lowered the incomes and wealth of prior generations. These patterns can lower the human capital (and incomes) of subsequent generations and reduce intergenerational wealth transfers. These channels can account for some current labor market disparities.

See **Why Racial Inequality Matters**



Moreover, although a lack of diversity within a region's large-business community, defined as firms with at least 100 employees, may indicate ongoing underlying problems, such disparities might still exist even if we removed all of these causes.<sup>4</sup>

Still, a call to focus on workplace diversity within a region's business community may serve two valuable functions. First, providing firms with a benchmark against which to compare themselves may encourage them to participate in regional efforts to address the underlying causes of these disparities. Second, a well-designed benchmark could serve as a useful metric of overall progress if the region were to adopt a comprehensive plan to address the many complex underlying problems that engender racial and ethnic inequality.

## A Straightforward Measure of Inequality

Fortunately, we already have a straightforward measure of workplace diversity for most of a region's larger businesses: occupational data by race and ethnicity (known as EEO-1 data) from the Equal Opportunity Employment Commission (EEOC).<sup>5</sup>

See **Enforcement Efforts Motivate Basic Data Collection**

EEO-1 data show that Black workers are underrepresented in Philadelphia's higher-paying occupations and overrepresented in lower-paying occupations. According to Census data, Philadelphia's Black population accounted for a little over 20 percent of the region's total population (ages 15 to 74) in 2018, but just 10 to 12 percent of managers, professionals, and craft workers in the EEO-1 data were Black.<sup>6</sup> In Philadelphia, these occupations command annual average salaries of \$140,000, \$86,000, and \$59,000, respectively.<sup>7</sup> And Black workers held just 4 percent of executive positions, which pay an average of \$251,000. In contrast, Black workers held 35 percent of laborer positions, which pay \$35,000 on average, and nearly half of service worker positions, which pay an average of only \$31,000.

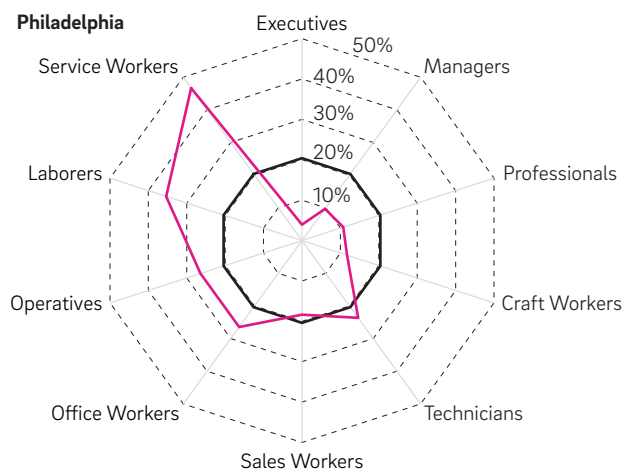
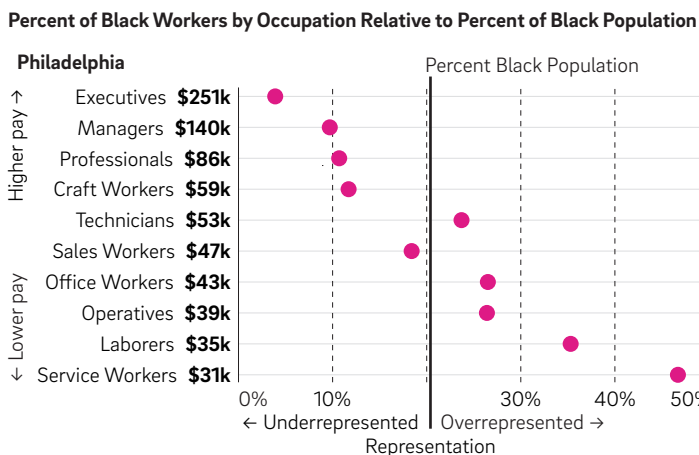
**As of 2018, Black workers were underrepresented in Philadelphia's higher-paying occupations and overrepresented in lower-paying occupations.**

According to the EEO-1 data, Philadelphia's lack of diversity is comparable to that of six other regions of a similar size.<sup>8</sup> The patterns of over- and underrepresentation across the 10 broad occupational categories look very similar in all seven regions (Figure 1). Just like in Philadelphia, Black workers in these other regions are overrepresented in low-wage occupations and underrepresented in high-wage occupations.

FIGURE 1

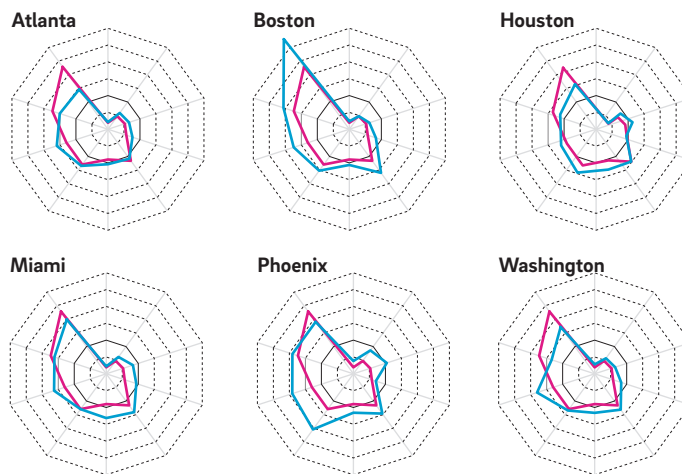
## Philadelphia's Black Workers Are Overrepresented in Occupations with Low Average Salaries

This pattern is comparable to that of six regions of similar size. Percentage of Black workers (ages 15–74) in 10 broad occupational categories with mean annual salary, Philadelphia MSA, 2018



### Other MSAs Relative to Philadelphia MSA

Standardized for differing ratios of percent Black population.



Sources: U.S. Bureau of Labor Statistics (BLS), U.S. Census Bureau, and U.S. Equal Opportunity Employment Commission (EEOC).

## Broad Groupings May Mask Greater Workforce Inequality

Researchers have long used EEO-1 data to study labor market inequality. For example, using this data, sociologists Philip Cohen of the University of Maryland and Matt Huffman of the University of California, Irvine, found that significant underrepresentation of Blacks in management jobs was more likely for firms operating in regions with a high proportion of Black workers in the labor market.<sup>9</sup>

However, EEO-1 data do not reveal how race and ethnicity are distributed within each category's wide range of salaries. Salaries for sales workers, for example, are highly skewed (Figure 2). Retail salespersons and cashiers are the two largest subcategories of sales workers, representing 54 percent of all sales workers. They are also the two lowest-paid subgroups. With an average salary of \$30,810, retail salespersons earn just \$7,600 more than the \$23,240 drawn by the lowest-paid cashiers.

The typical worker in these two subgroups, however, earns far less than the average \$47,056 salary for the sales worker category. Meanwhile, the typical sales representative—the next largest subcategory, with 18 percent of all sales workers—earns more than twice that of retail salespersons and more than three times that of cashiers. If sales representatives are more likely to be white, and if retail salespersons and cashiers are more likely to be Black, then there may be further racial disparities even within this broad category. More-refined occupational categories would help researchers quantify racial inequality within each category.

Still, the EEO-1 data have the significant advantage of being a full count of large employers in a region. For the Philadelphia region, EEO-1 data counted nearly 1.3 million employees in 2018, capturing over 40 percent of the 2.9 million regional employees estimated by the Bureau of Labor Statistics. The next best alternative is occupational data from the American

Community Survey, but its 2018 sample size from the Philadelphia region contained only 36,200 households. The EEO-1 data, despite their limitations, provide the best starting point for tracking economic inequality by race and gender—but greater occupational detail would make them even better.

## Large Businesses Can Be More Transparent

Few firms release their EEO-1 reports. Just Capital, a nonprofit that supports corporate responsibility to the public at large, reports that “as of January 2021, only 6.3% of America’s largest corporations disclosed the type of intersectional data that could be derived from an EEO-1 Report.”<sup>10</sup> (The report does note that out of 931 companies, the number of firms disclosing their employment diversity had nearly doubled from 32 in December 2019 to 59 in January 2021.)

As one example of transparency, the

### Why Racial Inequality Matters

The current pandemic-induced recession has provided a grim reminder that recessions increase hardship for low-wage workers. Because minorities are disproportionately represented in low-wage occupations, they are more vulnerable to the negative impacts of recessions. As Melody Hobson, the co-chief executive of Ariel Investments and a board member at JPMorgan and Starbucks, told the *New York Times* last summer, “We’ve been disproportionately affected in layoffs and unemployment.”<sup>22</sup>

Subsequent research from the Federal Reserve Bank of Philadelphia supports Hobson’s claim. In September 2020, the fourth in a series of COVID-19 surveys of U.S. consumers found that “Black respondents, those who earn less, younger respondents, and women all continue to report experiencing more adverse [economic] effects.”<sup>23</sup>

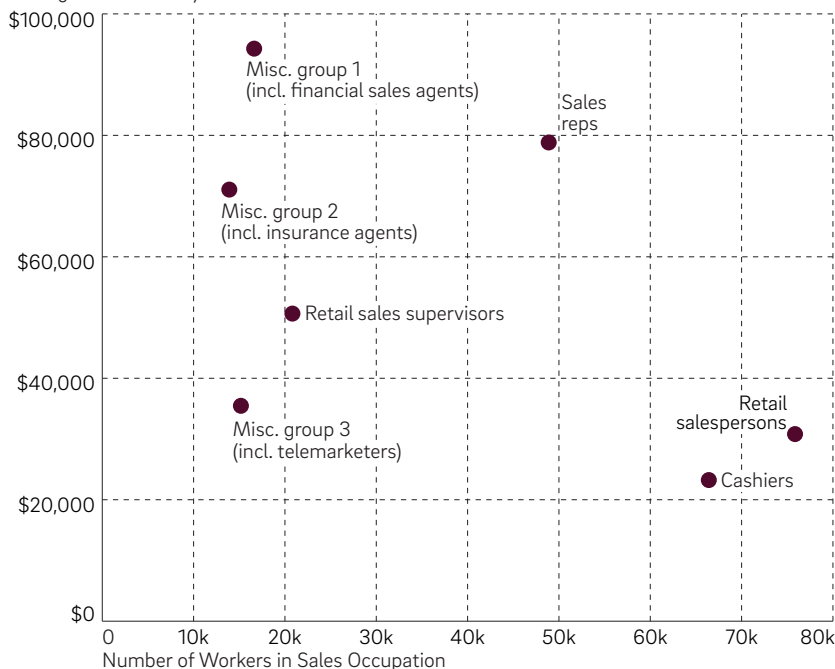
These survey results were further corroborated by research using monthly data for the three states of the Third District. This research found that “three groups of workers with no more than a high school diploma—Black men, Black women, and Hispanic women—have experienced far worse outcomes during the current downturn.”<sup>24</sup>

FIGURE 2

### Average Salaries Vary Within the Sales Workers Category

Without more-refined occupational categories, it’s impossible to know if Black workers are overrepresented in each category’s lower-paying occupations. Average annual salary and number of workers by subcategory within the sales workers occupational category, out of 265,320 sales workers, Philadelphia MSA, May 2019

Average Annual Salary



Source: U.S. Bureau of Labor Statistics.

Federal Reserve Bank of Philadelphia releases its own EEO-1 data as part of an annual Office of Minority and Women Inclusion report. The 2020 report revealed that Black employees make up about 15 percent of the total workforce at the Philadelphia Fed.<sup>11</sup> While the racial and ethnic representation is more balanced than among all the region's businesses, a similar pattern of over- and underrepresentation is present.

## Alternatively, Large Businesses Can Collectively Track Progress

Firms that are reluctant to release their EEO-1 reports can nonetheless collectively track progress—ideally on an annual basis and with greater occupational detail than the EEO-1 data provide.<sup>12</sup> For example, signatories to Boston's 100% Talent Compact, designed in partnership with the Boston Women's Workforce Council (BWWC) to close gender and racial wage gaps, pledge to share their anonymized EEO-1 data for aggregate analysis.<sup>13</sup>

While the Talent Compact ensures anonymity and also requests pay data, firms are only asked to submit data every other year and only for the 10 EEO-1 occupational categories.<sup>14</sup> This prompted the Talent Compact to warn against comparing one year's results against prior-year results<sup>15</sup> and to further warn that wage gaps in any category may be overstated.<sup>16</sup>

For most large businesses, these data are already available

in-house. And the Talent Compact's success indicates a willingness on the part of some large businesses to participate. Adding greater occupational detail would provide a far more accurate picture of equal opportunity in the region, and submitting data annually would increase the metric's value for tracking.

However, while tracking the data is needed to *gaug*e progress, ultimately program efforts will be needed to *make* progress. And these programs would likely benefit by paying close attention to research into the causes of inequality.

## Making Progress

A long literature across multiple disciplines examines the “stubborn persistence of racial differences in socioeconomic outcomes.”<sup>17</sup> This literature attempts to identify the main causes of and most effective remedies for these unequal outcomes.

For example, Harvard economist Roland G. Fryer Jr. argues that most of the racial differences in socioeconomic outcomes would be greatly reduced if educational opportunities and school quality were equalized from early childhood through high school.<sup>18</sup>

Economists Patrick Bayer of Duke University and Kerwin Kofi Charles of Yale note that as earnings inequality has risen in the U.S., the gap has widened further among Black men.<sup>19</sup> Well-educated Black men at the top of the earnings distribution have

## Enforcement Efforts Motivate Basic Data Collection

The EEOC is charged with enforcing laws that prohibit discrimination against employees and job applicants on the basis of race, color, religion, national origin, sex (including pregnancy, transgender status, and sexual orientation), age (40 or older), disability, or genetic information. To assist its investigations into specific allegations of discrimination, the EEOC has collected mandated, basic data from most private and public employers since the mid-1960s. Because EEO-1 data are protected by confidentiality requirements, however, the data have been heavily aggregated to obscure individual firm reports. As a result, publicly available measures of occupational employment diversity are not nearly as precise and robust as they might be.

In September 2016, the EEOC decided to begin collecting more detail on a new EEO-1 form—revised to include employees' earnings and hours worked by pay band. Known as Component 2 pay data, the additional confidential detail provides greater insight into a firm's pay patterns. The EEOC is collecting this data so that it can ensure pay equity on the basis of sex, race, and ethnicity.

In August 2017, the Office of Management and Budget (OMB) under the new administration of President Trump blocked this effort. However, the National Women's Law Center and other plaintiffs took the OMB to court and compelled it to allow the EEOC to resume this data collection.

Component 2 data were collected only in 2018 and 2019; these data are now being evaluated by an expert panel convened by the National Academies of Sciences, Engineering, and Medicine. The panel will assess the quality and value of the compensation data for various uses and will recommend improvements to the methodology.

Although nondisclosure rules prevent the public disclosure of details from the additional data, the panel may identify new summary measures that provide greater insight for a region while preserving employer and employee confidentiality. Meanwhile, further collection of Component 2 data is suspended pending the panel's recommendations.

At the state level, California recently passed legislation to effectively require what the EEOC has suspended. States normally maintain their own body of equal employment opportunity laws, which complement or augment federal laws. In September 2020, California Governor Gavin Newsom signed a law that requires employers to annually submit a report identical to an EEO-1 with Component 2 pay data, beginning in 2021.


However, pay data attached to the current 10 broad occupational categories offer little insight into potential pay inequities for the same reasons that the broad groupings make it difficult to quantify occupational employment diversity.

Moreover, one can't easily test for the presence of pay inequities, much less explicit discrimination. Statistically significant pay inequities by race or gender may be suggestive of discrimination, but they are not definitive without data on additional individual employee characteristics such as education, tenure, and performance assessments.

benefited, as have well-educated white men, while lower-skilled Black men face ever fewer job options and contend with higher incarceration rates than their white counterparts. Because Black men are overrepresented in the lower and middle portions of the earnings distributions, they write, “race-neutral economic changes and related public policy decisions that improve the prospects of all workers in the lower and middle portions of the earnings distributions will have the side effect of reducing racial economic inequality.”

Harvard economist Raj Chetty and his coauthors have documented that Black-white income gaps persist in the U.S. primarily because of significant differences in the outcomes of Black and white men from families with similar incomes.<sup>20</sup> They recommend creating greater opportunities for Black children—especially for Black boys—and fostering substantial improvements in neighborhood environments to increase upward mobility and narrow the outcome gap.

Harvard sociologists Mario L. Small and Devah Pager have gone beyond the traditional economic models of racial discrimination, which focus on preferences for discrimination or on statistical discrimination. They argue that discrimination also arises from unconscious bias and from racism that has become integrated into organizational practices or been written into laws.<sup>21</sup> For example, they have shown that the negative wealth effects from the redlining practices of the past persist across generations in minority neighborhoods. They also note that the cumulative effect of everyday discrimination has negative consequences for physical and mental health, as does the perception (or presumption) of discrimination when the reality itself may be uncertain. Economic research into these and other examples of institutional discrimination, they argue, could uncover still more opportunities to address the underlying causes of inequality.

This and related studies suggest that remedies for these and other factors are needed. If these efforts succeed, improvement should be evident in overarching measures of inequality, such as occupational diversity in a region’s large businesses. 

## Notes

**1** Gelles (2020).

**2** For the remainder of this paper, “Black” will refer to non-Hispanic Black.

**3** Unless otherwise noted, “region” and “metro area” refer to an official metropolitan statistical area (MSA). Analysis in this article is based on data for each MSA as delineated in the Office of Management and Budget Bulletin No. 13-01, issued February 28, 2013. This article truncates these official names to the names of their largest principal cities.

**4** For example, a preference within one demographic group for working in a small business or owning one’s own business might lower the proportional representation of that demographic in large businesses.

**5** EEO-1 reports must be filed with the EEOC each year by employers with at least 100 workers. The data alone cannot prove hiring discrimination or pay inequities.

**6** General population data were drawn from 2018 Census Bureau estimates.

**7** Salaries reported in this article were drawn from 2019 Bureau of Labor Statistics wage data by occupation for the Philadelphia metro area.

**8** In addition to Philadelphia, we examined the next three larger regions (Houston, Miami, and Washington, D.C.), and the next three smaller regions (Atlanta, Boston, and Phoenix) based on population.

**9** Cohen and Huffman (2007).

**10** Vaghul (2021).

**11** Office of Minority and Women Inclusion (2020).

**12** A guarantee of anonymity might encourage reluctant firms to share their data as part of such an effort.

**13** There were 38 signatories at the launch of the Compact in 2013; as of February 2021, there were 250.

**14** Data are shared with Boston University’s Hariri Institute for Computing, which employs a secure multiparty computation process to ensure anonymity and protect private information while it analyzes data for wage gaps.

**15** Since firms are only asked to submit data every other year, but the report is issued annually, the composition of the sample changes year to year, thus weakening its value as a tracking tool. Specifically, “comparing reporting cycles should not be done because of the variation in the number



of employees represented and the types of jobs they fill" (Boston Women's Workforce Council Report, 2019).

**16** As an example, "Our sample likely includes the overrepresentation of women professionals in lower paying professions. This means that even if there were full wage equity in lower paying professions (such as nursing), and full wage equity in male-dominated higher paying positions (such as physicians), our sample might still reflect a larger wage gap than exists in the entire Boston workforce" (Boston Women's Workforce Council Report, 2019).

**17** Bayer and Charles (2018).

**18** Fryer (2011).

**19** Bayer and Charles (2018).

**20** Chetty et al. (2020).

**21** Small and Pager (2020).

**22** Gelles (2020).

**23** Akana (2020).

**24** Wardrip (2021).

## References

Akana, Tom. "CFI COVID-19 Survey of Consumers—Wave 4 Tracks How the Vulnerable Are Affected More by Job Interruptions and Income Disruptions," Federal Reserve Bank of Philadelphia Report (2020), <https://www.philadelphiafed.org/consumer-finance/consumer-credit/cfi-covid-19-survey-of-consumers-wave-4-updates>.

Bayer, Patrick, and Kerwin Kofi Charles. "Divergent Paths: A New Perspective in Earnings Differences Between Black and White Men Since 1940," *Quarterly Journal of Economics*, 133:3 (2018), pp. 1459–1501, <https://doi.org/10.1093/qje/qjy003>.

Boston Women's Workforce Council. *2019 Boston Wage Gap Report* (2019).

Bureau of Labor Statistics. May 2019 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates, Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, <https://www.bls.gov/bls/blswage.htm>.

Bureau of the Census. Annual County and Resident Population Estimates by Selected Age Groups and Sex: April 1, 2010 to July 1, 2018, <https://www.census.gov/data/tables/time-series/demo/popest/2010s-counties-detail.html>.

California. Senate Bill 973, [https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=201920200SB973](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201920200SB973).

Chetty, Raj, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter. "Race and Economic Opportunity in the United States: An Intergenerational

Perspective," *Quarterly Journal of Economics*, 135:2 (2020), pp. 711–783, <https://doi.org/10.1093/qje/qjz042>.

Cohen, Philip N., and Matt L. Huffman. "Black Underrepresentation in Management Across U.S. Labor Markets," *Annals of the American Academy of Political and Social Science*, 609:1 (2007), pp. 181–199, <https://doi.org/10.1177%2F0002716206296734>.

Equal Employment Opportunity Commission. Job Patterns for Minorities and Women in Private Industry (EEO-1), <https://www.eeoc.gov/statistics/employment/jobpatterns/eeo1>.

Fryer Jr., Roland G. "Racial Inequality in the 21st Century: The Declining Significance of Discrimination," in Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics*, Volume 4b. Amsterdam, the Netherlands: Elsevier B.V., 2011, pp. 855–971, [https://doi.org/10.1016/S0169-7218\(11\)02408-7](https://doi.org/10.1016/S0169-7218(11)02408-7).

Gelles, David. "Corporate America Has Failed Black America," *New York Times*, June 6, 2020.

National Academies of Sciences, Engineering, and Medicine. Panel to Evaluate the Quality of Compensation Data Collected from U.S. Employers by the Equal Employment Opportunity Commission through the EEO-1 Form. <https://www.nationalacademies.org/our-work/panel-to-evaluate-the-quality-of-compensation-data-collected-from-us-employers-by-the-equal-employment-opportunity-commission-through-the-eeo-1-form>.

National Women's Law Center. Resource Collection: EEO-1 Pay Data Collection, <https://nwlc.org/resources/resource-collection-eeo-1-pay-data-collection/>.

Office of Management and Budget. Revised Delineations of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas, and Guidance on Uses of the Delineations of These Areas, OMB Bulletin No. 13-01 (February 28, 2013), <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/bulletins/2013/b13-01.pdf>.

Office of Minority and Women Inclusion. *2020 Report to Congress on the Office of Minority and Women Inclusion*, Federal Reserve Bank of Philadelphia, 2020, <https://www.philadelphiafed.org/-/media/frbp/assets/institutional/about-us/philadelphia-fed-omwi-report-2020.pdf>.

Small, Mario L., and Devah Pager. "Sociological Perspectives on Racial Discrimination," *Journal of Economic Perspectives*, 34:2 (2020), pp. 49–67, <https://doi.org/10.1257/jep.34.2.49>.

Vaghul, Kavya. "A Small Fraction of Corporations Share Diversity Data, but Disclosure Is Rapidly on the Rise," *Just Capital*, January 19, 2021.

Wardrip, Keith. "Who's Employed in the Early Months of the COVID-19 Recession? An Analysis by Education, Race, Ethnicity, and Gender," Federal Reserve Bank of Philadelphia Report (2021), <https://www.philadelphiafed.org/community-development/workforce-and-economic-development/whos-employed-in-the-early-months-of-the-covid19-recession>.