INTRODUCTION

The COVID-19 pandemic has exposed acute and deep-rooted connections between physical and economic health. Many of the same places hit hardest by the pandemic are reeling concurrently from the health crisis, business closures, and job losses. These communities are disproportionately communities of color.¹

The effects of the pandemic on small businesses amid forced closings, modified re-openings, and weakened demand, are well documented. Nationally representative data on small businesses indicate that the number of active business owners fell by 22 percent from February to April 2020—³—the largest drop on record. While the overall decline is noteworthy, differences among closure rates across racial and ethnic groups are even more striking. Black businesses experienced the most acute decline, with a 41 percent drop.⁴ Latinx business owners fell by 32 percent and Asian business owners dropped by 26 percent. In contrast, the number of white business owners fell by 17 percent.⁵

This brief examines reasons why Black firms have been almost twice as likely to shutter as small firms overall.⁶ We draw on epidemiological data on COVID-19 cases, Census data on business locations, data on the geographic reach of the Paycheck Protection Program (PPP), and data on small firms’ financial health from the Federal Reserve’s Small Business Credit Survey to examine connections between COVID-19 incidence, policy interventions, and business survival rates.⁷ Overall, we find:

• Volumes of COVID-19 cases coincide with Black-owned business locations: two-thirds of counties with high levels of Black business activity pre-COVID-19 are in the top 50 COVID-affected areas. Data from counties nationwide show Black-owned firms are more likely to be located in COVID-19 hot spots, whereas white-owned firms are less likely to be in the most heavily affected areas.

³ Data from the U.S. Census Bureau’s Current Population Survey indicate that the decline was uneven across states, with hardest hit areas like CA (27% drop), MI (33% drop), NV (35% drop), and NY (36% drop) experiencing steeper declines. In contrast, states like KS (2% drop), ME (2% drop), and TN (0% change) saw very little change in active business ownership.
⁶ See https://www.reuters.com/article/us-usa-fed-smallbiz/fed-hoped-to-skirt-a-second-virus-wave-small-businesses-may-sink-in-it-idUSKCN24P139. Certainly, many closures to date have been temporary and owners may decide to reopen when conditions improve. Nonetheless, differential closure rates highlight differential vulnerabilities across communities and segments of business owners.
⁷ We use county-level data when possible, but also examine state and national differences for some measures, such as monthly business closures and financial health when more granular data are not available.
• The Paycheck Protection Program, the federal government’s signature relief program for small businesses, has left significant coverage gaps: these loans reached only 20% of eligible firms in states with the highest densities of Black-owned firms, and in counties with the densest Black-owned business activity, coverage rates were typically lower than 20%.$^8$^9^$

• Weaker cash positions, weaker bank relationships, and preexisting funding gaps left Black firms with little cushion entering the crisis: even the healthiest Black firms were financially disadvantaged at the onset of COVID-19.

BLACK BUSINESS ACTIVITY IS GEOGRAPHICALLY CONCENTRATED

Black business activity is geographically concentrated in the U.S. and is correlated with Black population density.$^{10}$ Research shows that Black populations are typically clustered in metropolitan hubs$^{11}$ and the number of cities that are majority-Black has grown over the past decade.$^{12}$ Forty percent of receipts from Black-owned businesses are concentrated in just 30 counties, roughly one percent of all counties in the country. Examining the same 30 counties,$^{13}$ we find that roughly two-thirds (19 of 30) are areas with the highest numbers of COVID-19 cases.$^{14}$ Given the high geographic concentration of firm activity and the Black population in general, business disruptions in these particular places can have outsized effects on African American well-being at large.$^{15}$

COVID-19 CASES COINCIDE WITH BLACK BUSINESS LOCATIONS

A broader analysis of counties across the United States shows a correlation between Black business density and COVID-19 incidence. Figure 1 displays the share of businesses in a county that are Black-owned and COVID-19 cases per 1,000 residents through the end of June. There is a positive relationship between COVID incidence and the share of a county’s businesses that are Black-owned, an indication that areas with higher concentrations of Black businesses are more likely to be facing larger direct (longer forced closures, COVID-19 symptoms) and indirect (social distancing, fewer customers) effects of the pandemic.$^{16}$

---

9 This figure is consistent with testimony from Ron Busby, President of the U.S. Black Chamber of Commerce, who reported that 70% of his members who applied for PPP loans were denied. See https://www.sbc.senate.gov/public/ cache/files/c/a/caabbb6f-cbe1-44c1-b804-21a5158c1d9b/529d75000e736363cb2a6d7506f7335.busby-testimony.pdf.
10 The correlation coefficient between the share of a county’s population that is Black and the share of a county’s businesses that are Black-owned is 0.94. (Sources: U.S. Census Bureau, 2014-2018 American Community Survey & 2012 Survey of Business Owners.) While the total number of employer firms grew between 2012 and 2017 from 5.4 million to 5.7 million, the share of Black-owned employer firms rose only marginally from 2.0% to 2.2%. (Sources: U.S. Census Bureau, 2012 Survey of Business Owners & 2017 Annual Business Survey.)
13 U.S. Census Bureau, 2012 Survey of Business Owners.
14 John’s Hopkins University Coronavirus Resource Center, Top 50 Confirmed Cases by County (updated July 5 2020).
15 The U.S. unemployment rate for May 2020 was 13.3%. Among the total labor force in the 30 counties that account for 40% of all Black business receipts, the unemployment rate was 15.7%. Source: Bureau of Labor Statistics: Labor force data by county, not seasonally adjusted, April 2019-May 2020 (preliminary; published June 26, 2020).
16 The correlation coefficient for this relationship is 0.30.
To probe whether there might be a general connection between business activity and COVID-19 cases that is not specific to Black businesses, we also plot white business density and COVID incidence in Figure 2. The relationship is negative (with a correlation coefficient of -0.36), meaning that areas with higher shares of white-owned firms tend to have lower shares of COVID-19 cases.
LIMITED PAYCHECK PROTECTION PROGRAM REACH

The geographic concentration of Black-owned firms and heightened incidence of COVID-19 cases in these same geographies has implications for how relief programs can best reach communities at risk.

PPP Overview

The Paycheck Protection Program (PPP) allocated significant federal funds for temporary relief to small firms. Importantly, both firms with employees on payroll (employer firms) and those without payroll employees (nonemployer firms) were eligible, with applications open to employer firms on April 3 and nonemployer firms on April 10. Inclusion of nonemployer firms in the program was significant, since these firms represent roughly 80% of all small businesses and 96% of Black-owned businesses.17

The first round of PPP allocated $349 billion for forgivable government-guaranteed loans to small businesses to cover costs related to payroll, salaries, and benefits, as well as utilities, and mortgage and rent payments. The program was oversubscribed by April 16. To meet the significant and unmet demand, lawmakers authorized a second allocation of $310 billion for the program later that month, and the Small Business Administration (SBA) started approving loans again on April 27.

In total, between April and June, nearly 5,500 lenders distributed $521 billion in the form of 4.9 million loans with an average loan size of $107,000. According to the SBA's estimates, these loans went to small businesses that supported over 51 million jobs nationwide, or 84% of the nation's small business payroll.18

Recent analysis of the geographic distribution of PPP loans, however, shows that aid has not reached many if not most of the hardest hit areas.19 For example, research from the New York Fed and the University of Chicago found that loans from the first round of PPP were not correlated with the number of COVID-19 cases in a state. Instead, more likely reasons for businesses receiving these loans included having a prior banking relationship as well as community banks’ market share. A recent paper from The Brookings Institution also shows significant variation in PPP coverage across metro areas, with remaining coverage gaps for the hardest hit metros.20

A Deeper Look at PPP Coverage by County

Looking at PPP loan reach through June 2020, we continue to see coverage discrepancies. We examine county-level counts of PPP loans for a consistent comparison with COVID-19 case counts and Black-owned business receipts. In the 30 counties we note as particularly vulnerable to the effects of Black business closures, most counties have seen about 15%-20% of their total businesses receive PPP loans. Figure 3 shows this data for the top 10 counties by Black business receipt size. The number of firms (“total firms”) includes both employer firms and nonemployers, since both types of small businesses were eligible for PPP.

17 U.S. Census Bureau, 2012 Survey of Business Owners.
20 Joseph Parilla and Sifan Liu, 2020. Across metro areas, COVID-19 relief loans are helping some places more than others. The Brookings Institution. Available at: https://www.brookings.edu/blog/the-avenue/2020/07/14/across-metro-areas-covid-19-relief-loans-are-helping-some-places-more-than-others/.
The average coverage rates shown in Figure 3 are not too different from the national business coverage estimate for PPP loans of 17.7%. However, there is significant variation across counties. Of note, among the top 30 counties (measured by Black business receipts) only 7% of firms in Bronx, NY; 11.3% of firms in Queens, NY; 11.6% of firms in Wayne County, MI; and 12.2% of firms in Prince George's County, MD received PPP loans.

**FIGURE 3**  
PPP LOAN COVERAGE IN TOP 10 U.S. COUNTIES BY BLACK BUSINESS RECEIPTS

<table>
<thead>
<tr>
<th>County</th>
<th>Total black-owned firms (2012)</th>
<th>Total number of firms (2012)</th>
<th>Total number of PPP loans (through June 2020)</th>
<th>PPP firm coverage (PPP loans/ Total firms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles County, CA</td>
<td>81,563</td>
<td>1,146,701</td>
<td>176,434</td>
<td>15.4%</td>
</tr>
<tr>
<td>Cook County, IL</td>
<td>110,155</td>
<td>549,686</td>
<td>84,256</td>
<td>15.3%</td>
</tr>
<tr>
<td>Harris County, TX</td>
<td>71,564</td>
<td>438,793</td>
<td>70,058</td>
<td>16.0%</td>
</tr>
<tr>
<td>Prince George's County, MD</td>
<td>45,115</td>
<td>77,204</td>
<td>9,420</td>
<td>12.2%</td>
</tr>
<tr>
<td>Wayne County, MI</td>
<td>59,706</td>
<td>151,746</td>
<td>17,610</td>
<td>11.6%</td>
</tr>
<tr>
<td>District of Columbia, DC</td>
<td>22,097</td>
<td>63,408</td>
<td>12,484</td>
<td>19.7%</td>
</tr>
<tr>
<td>Fairfax County, VA</td>
<td>8,832</td>
<td>115,917</td>
<td>17,921</td>
<td>15.5%</td>
</tr>
<tr>
<td>Manhattan, NY</td>
<td>24,859</td>
<td>315,399</td>
<td>61,687</td>
<td>19.6%</td>
</tr>
<tr>
<td>Fulton County, GA</td>
<td>44,574</td>
<td>125,745</td>
<td>26,189</td>
<td>20.8%</td>
</tr>
<tr>
<td>Miami-Dade County, FL</td>
<td>51,285</td>
<td>468,185</td>
<td>70,447</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

County-level PPP loan counts are calculated based on aggregated zip code data. In cases where zip codes match to multiple counties, the county with the highest share of that zip code’s business addresses is used.  

**WEAKER FINANCIAL CUSHION AND WEAK LONGER-TERM BANKING RELATIONSHIPS**

The coincidence of these coverage gaps, along with a large sum of remaining PPP dollars—more than $130 billion remains available through August 8th—presents a puzzle about why Black firms are not accessing PPP loans.

One consideration is that a large number of Black firms entered the crisis in a weakened position and may have been reluctant to apply for a PPP loan given uncertainty about future activity. There is some evidence to suggest this played a role. We find that Black employer firms were less likely to enter the pandemic from a strong financial position than white-owned firms, with smaller shares of Black firms operating at a profit, having a high credit score, and using retained business earnings to fund the business. This finding is consistent with recent research. Diana Farrell, Chris Wheat, and Chi Mac. 2020. “Small Business Owner Race, Liquidity, and Survival.” JPMorgan Chase Institute. Available at https://institute.jpmorganchase.com/institute/research/small-business/report-small-business-owner-race-liquidity-survival.

21 Based on a total of 27,626,360 firms in the U.S. and 4,885,388 PPP loans made through June 2020. For consistency with county-level firm estimates, the U.S. total firm count is from the 2012 Survey of Business Owners.
22 See Data Appendix for detailed information about PPP loan coverage in the top 30 U.S. counties by Black business receipts.
Double Jeopardy: COVID-19’s Concentrated Health and Wealth Effects in Black Communities

FIGURE 4  FINANCIAL HEALTH SPECTRUM (PRE-PANDEMIC) FOR WHITE- AND BLACK-OWNED EMPLOYER FIRMS

<table>
<thead>
<tr>
<th></th>
<th>Meet 2 or 3 of below criteria</th>
<th>Meet 0 or 1 of below criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>White-owned</td>
<td>73% Healthy or stable</td>
<td>27% At risk or distressed</td>
</tr>
<tr>
<td>N=3,895</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black-owned</td>
<td>42% Healthy or stable</td>
<td>58% At risk or distressed</td>
</tr>
<tr>
<td>N=833</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Criteria: ☐ Profitable  ☐ High credit score  ☐ Use retained business earnings to fund firm

Source: Federal Reserve Banks, 2019 Small Business Credit Survey.

A second important consideration, however, is that most Black owned firms lack strong bank relationships. In the latest Report on Employer Firms based on the Fed’s 2019 Small Business Credit Survey, we found that fewer than 1 in 4 Black-owned employer firms has a recent borrowing relationship with a bank. This number drops to 1 in 10 among Black nonemployer firms, compared with 1 in 4 white-owned nonemployers. It is important to note these funding gaps are not due to differential rates in Black firms applying for financing. In fact, recent survey evidence indicates that Black-owned firms—both employer and nonemployer—apply for financing at equal or higher rates than white-owned firms but are denied at higher rates.

Black business owners are also more likely than white owners to report being discouraged, or not applying for financing because they believe they will be turned down. Among Black employer firms, 37.9% reported being discouraged, compared to 12.7% of white-owned firms. Perceiving a higher probability of funding success from online lenders, Black-owned employer and nonemployer firms are relatively more likely to turn to online providers for funding. Fintech providers were not initially authorized to lend PPP funds though they collectively dispersed $4.7 billion in funds through June 30th.

Firm financial health certainly plays an important role in the ability to access bank financing. However, racial gaps in banking relationships exist among the financially healthiest firms. When controlling for just those firms that are healthy or stable, we continue to see sizable differences between Black- and white-owned firms in bank funding. Even among the firms that should not have major difficulties accessing credit from a bank (given their business performance and creditworthiness), Black-owned employers were much less likely to have obtained bank financing in the past five years, instead relying most commonly on personal savings or financing from family and friends. Figure 5 shows that 54% of healthy or stable white employers have an existing banking relationship, compared to 33% of healthy or stable Black employers. This finding indicates the role that factors beyond firms’ financial health play in accessing mainstream—and affordable—financing.

28 Federal Reserve Banks, 2019 Small Business Credit Survey.
29 Fintech lenders, including PayPal, Square, Intuit, and Kabbage were authorized late in the first round of PPP and disbursed $4.7 billion through June 30. Source: Small Business Administration. Paycheck Protection Program (PPP) Report: Approvals through June 30, 2020. Available at: https://www.sba.gov/sites/default/files/2020-07/PPP%20Results%20-%20SUNDAY%20FINAL.pdf
Black Business Closures

Since the onset of the COVID-19 pandemic, Black business ownership has sharply dropped. Rob Fairlie at UC Santa Cruz recently estimated the total decline in active business ownership between February and April among Blacks at 41 percent, twice the drop in active business ownership among whites.\(^\text{30}\) We have expanded that analysis for the eight states with the largest numbers of Black owners and found that despite a leveling off in closure rates in the May data, all but two of these eight states (CA and FL) experienced a net decline in Black business ownership between February and June. At the state level, the net numbers of business closures in Ohio and New York are the most acute.

After the declines between February and May, several states saw a resurgence in active Black business ownership in May and June as phased reopening began. In the last column of Figure 6, we have categorized states with respect to early or later reopening dates. In this small sample, most states with earlier re-openings (GA, NC, FL) saw increased active Black business ownership, with Texas as an exception. States with later reopening dates (NY, CA, and IL) saw continued declines in the number of active Black business owners. It should be noted that several of the earlier openings have now been paused or reversed due to heightened health concerns.

Double Jeopardy: COVID-19’s Concentrated Health and Wealth Effects in Black Communities

FIGURE 6  ACTIVE BLACK BUSINESS OWNERS IN STATES WITH LARGEST COUNTS OF BLACK OWNERS

<table>
<thead>
<tr>
<th>State</th>
<th>Active Business Ownership among Blacks, Feb 2020</th>
<th>Active Business Ownership among Blacks, May 2020</th>
<th>Active Business Ownership among Blacks, June 2020</th>
<th>Feb to May, % change</th>
<th>May to June, % change</th>
</tr>
</thead>
<tbody>
<tr>
<td>NY</td>
<td>98,600</td>
<td>43,407</td>
<td>29,479</td>
<td>-56.0%</td>
<td>-32.1%***</td>
</tr>
<tr>
<td>TX</td>
<td>88,574</td>
<td>84,160</td>
<td>77,580</td>
<td>-5.0%</td>
<td>-7.8%*</td>
</tr>
<tr>
<td>GA</td>
<td>87,008</td>
<td>68,457</td>
<td>79,563</td>
<td>-21.3%</td>
<td>16.2%*</td>
</tr>
<tr>
<td>CA</td>
<td>78,826</td>
<td>89,516</td>
<td>81,837</td>
<td>13.6%</td>
<td>-8.6%***</td>
</tr>
<tr>
<td>FL</td>
<td>75,859</td>
<td>38,837</td>
<td>100,328</td>
<td>-48.8%</td>
<td>158.3%*</td>
</tr>
<tr>
<td>NC</td>
<td>75,664</td>
<td>47,539</td>
<td>62,043</td>
<td>-37.2%</td>
<td>30.5%*</td>
</tr>
<tr>
<td>IL</td>
<td>61,201</td>
<td>70,325</td>
<td>57,712</td>
<td>14.9%</td>
<td>-17.9%***</td>
</tr>
<tr>
<td>OH</td>
<td>55,175</td>
<td>22,464 (based on Apr)</td>
<td>35,420</td>
<td>-59.3%</td>
<td>57.7%**</td>
</tr>
</tbody>
</table>

*Reopened late April/early May
**Reopened mid-May
***Reopened late May

Conclusion

Recent research has separately shown an alarming incidence of COVID-19 cases among Blacks, racial disparities in access to federal relief funds, and higher rates of Black business closures. An under-appreciated point, underscored here, is the close ties between the health and economic effects of COVID-19 in specific communities: counties with the highest concentration of COVID-19 are also the areas with the highest concentration of Black businesses and networks. Our analysis shows stark PPP coverage gaps in these hardest hit communities.

These findings have two important implications. To have the greatest impact, the next round of COVID-19 relief should be more targeted geographically to focus on the hardest hit areas and communities that lack critical infrastructure (hospitals, banks) to ameliorate the gaps. Furthermore, the racial disparities in bank relationships prior to COVID-19 detailed here raise structural questions about the presence of banks and access to credit in communities of color, questions that have heightened significance when banks are relied on to administer federal, taxpayer-supported relief programs, as is the case with PPP.

Claire Kramer Mills, Ph.D., Assistant Vice President
Jessica Battisto, Senior Analyst

Acknowledgments
We thank our New York Fed colleagues, especially Janis Frenchak, Rebecca Landau, Haoyang Liu, Michael Nelson, Edison Reyes, Javier Silva, and Desi Volker for their comments on this research. This work benefited greatly from input and insights from policy experts and business leaders, including Ron Busby from the U.S. Black Chambers, Chris Wheat from the JP Morgan Chase Institute, Felicia Brown and Susan Weinstock from AARP, Melissa Bradley from 1863 Ventures, Donnel Baird, Adenah Bayoh, Eda Henries, and Javier Piggee.