

Small Business Credit Survey: COVID-19 AND DISPARATE FIRM CONDITIONS IN THE PHILADELPHIA METRO¹

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Alvaro Sanchez, Analyst, Economic Growth and Mobility Project, Federal Reserve Bank of Philadelphia²

* Note: Since this report's release, changes have been made to the Small Business Credit Survey 2020 weighting scheme, which now more accurately reflect methods used in prior vintages of the data set. While the values in this report have not been updated, we don't expect differences from the new weighting scheme to change the conclusions drawn in this report. However, we advise against comparing values from this report with values in other SBCS products for which the weighting scheme has been updated. For more information, please reference the data appendix for the SBCS 2021 Report on Employer Firms at www.fedsmallbusiness.org/survey.

¹ The views expressed in this report are solely those of the author and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

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Introduction

Small businesses across the Philadelphia metro³ experienced the acute negative effects of the COVID-19 pandemic, similar to what small businesses experienced in the U.S. overall. Recent data from the Small Business Credit Survey (SBCS) revealed that the pandemic's impacts encompassed widespread drops across key firm performance indicators, such as business revenue, employment, and the availability of goods and services at the national level. Moreover, the vast majority of firms sought emergency financing as COVID-19 suppressed consumer demand and decreased the amount of economic activity businesses could safely generate.⁴ Although the national picture is made clear in the SBCS data, there is a need for more local research that focuses on how the COVID-19 recession affected small businesses, with a focus on disparities by race and gender in the Philadelphia metro.

In this report, I will provide an analysis of small business performance and financing outcomes

during the pandemic, along with the economic outlook of firms in the Philadelphia metro. The SBCS is a national convenience sample of small businesses, or firms with fewer than 500 employees, that collects data about their economic conditions on an annual basis. This research is the first metro-level, or regional, analysis completed using SBCS microdata, and it serves as a pilot for regional research using this data set.

In 2020, the survey asked firms a series of questions about how COVID-19 affected their overall performance, revenue, employment, financing and credit needs, and future outlook.⁵ Of the over 15,000 national responses collected through the 2020 survey, the SBCS collected responses from a total of 570 employer firms with paid full- or part-time workers other than the owner(s) in the Philadelphia MSA. Within that sample, 49 percent of businesses were located in the city of Philadelphia and 51 percent were from suburban counties. The demographic distribution of the sample should also be taken into account when considering the representativeness of the survey results. Within the sample, 68 percent of firms are White-owned, whereas the remaining 32 percent of firms were Black-, Asian-, or Hispanic-owned, which we are defining as owned by a person of color. In terms of the gender of the business owners, 51 percent of

³ The Philadelphia metro is formally known as the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD metropolitan statistical area (MSA), which is a geographic area defined by the U.S. Census Bureau. The Philadelphia metro encompasses an 11-county region surrounding Philadelphia across Pennsylvania, Delaware, New Jersey, and Maryland.

⁴ Federal Reserve Banks, *Small Business Credit Survey: 2021 Report on Employer Firms*. Available at www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/2021-sbcs-employer-firms-report.

⁵ For a full discussion of the SBCS methodology, see the Appendix of this report.



firms are men-owned, 27 percent are equally owned, where half of the firm is owned by men and half of the business is owned by women, and 22 percent are women-owned. Most firms that responded to the SBCS were a part of the Professional Services and Real Estate, Leisure and Hospitality, and Business Support and Consumer Services industries (20 percent, 18 percent, and 17 percent, respectively). The Healthcare and Education and Retail industries (14 percent and 12 percent, respectively) made up the next largest share of responses, while the Non-Manufacturing Goods, Manufacturing, and Finance and Insurance industries (9 percent, 8 percent, and 2 percent, respectively) made up the remaining share. Firms with between 1 and 4 employees represented the largest group of respondents at 47 percent, followed by firms with 5 to 9 workers (26 percent). Larger firms, like those with 10 to 19, 20 to 49, or 50 to 499 employees (16 percent, 8 percent, and 4 percent, respectively) represented a smaller share of responses. A majority of firms that responded were also operating on less than \$1 million in annual revenue. Fifty-two percent of firms that responded

to the SBCS had between \$100,000 and \$1 million in revenue and an additional 16 percent had less than \$100,000. About 28 percent of firms in the sample made between \$1 million and \$10 million and the remaining 4 percent had over \$10 million in annual revenue. The estimates presented in this study for employer firms in the Philadelphia MSA were weighted in order to represent the distribution of small businesses in the metro by firm size, age, gender of ownership, and race and ethnicity of ownership.⁶

Interpretations of SBCS results should also consider that the survey was distributed between September 2020 and October 2020, months after COVID-19 caused widespread economic contractions across the United States. Still, the responses collected through the SBCS show how the COVID-19 pandemic adversely affected small businesses in the Philadelphia region, particularly firms owned by people of color and by women.

⁶ For a full discussion of the SBCS methodology, see the Appendix of this report.

The key findings of this report include:

Small Business Revenue and Employment Decreases

- Small businesses owned by people of color and by women (89 percent and 91 percent, respectively) were more likely than White- and men-owned firms (82 percent each) to report a decrease in revenue during the pandemic.
- Employment decreases were more likely to be reported at firms owned by people of color and by women (54 percent and 63 percent, respectively), relative to White- and men-owned firms (49 percent and 48 percent, respectively).

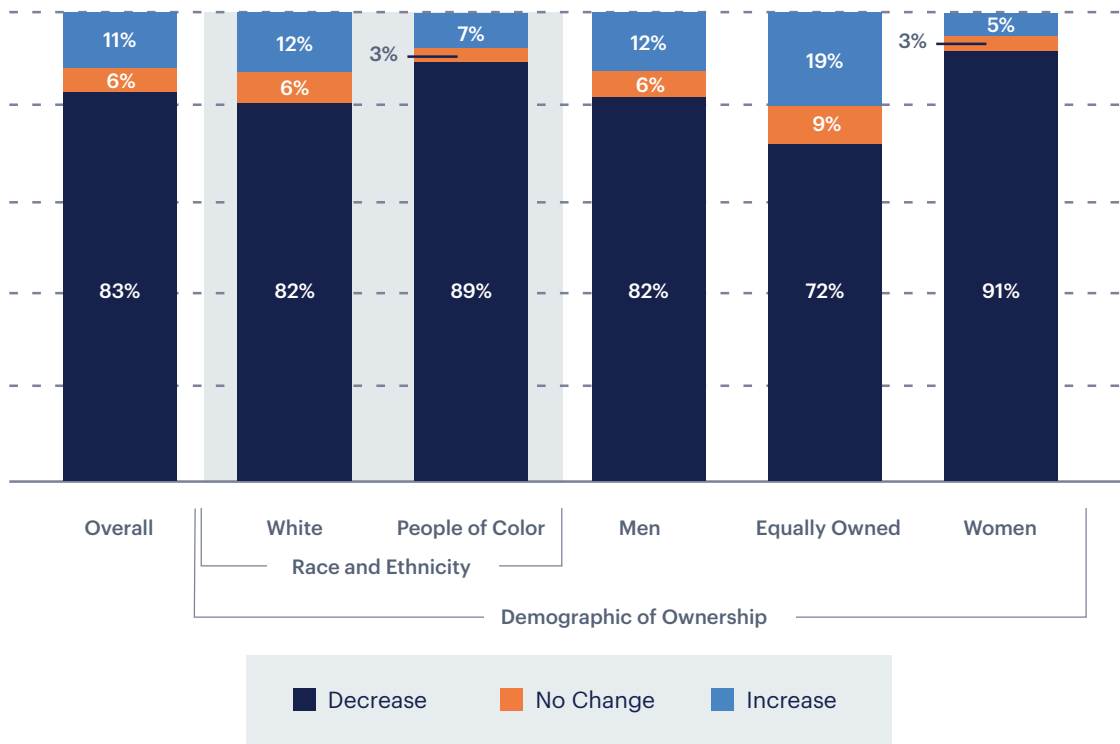
Access to PPP Funding

- Firms owned by people of color were less likely to be approved for the full amount of PPP funding that they sought. Fifty-four percent of firms owned by people of color reported that they received all of the PPP funding for which they applied, compared with 74 percent of White-owned firms.
- Women-owned firms (64 percent) were also relatively less likely to report receiving the full amount of PPP funding that they sought compared with men-owned firms (75 percent).
- One in 10 women-owned firms received none of the PPP financing that they sought, facing higher rates of rejection than men-owned firms and firms owned by people of color.

Firm Expectations for Revenue

- About half of firms owned by people of color and 55 percent of women-owned firms reported expecting their revenue to decrease in the 12 months following the survey, compared with 45 percent of White- and men-owned firms.

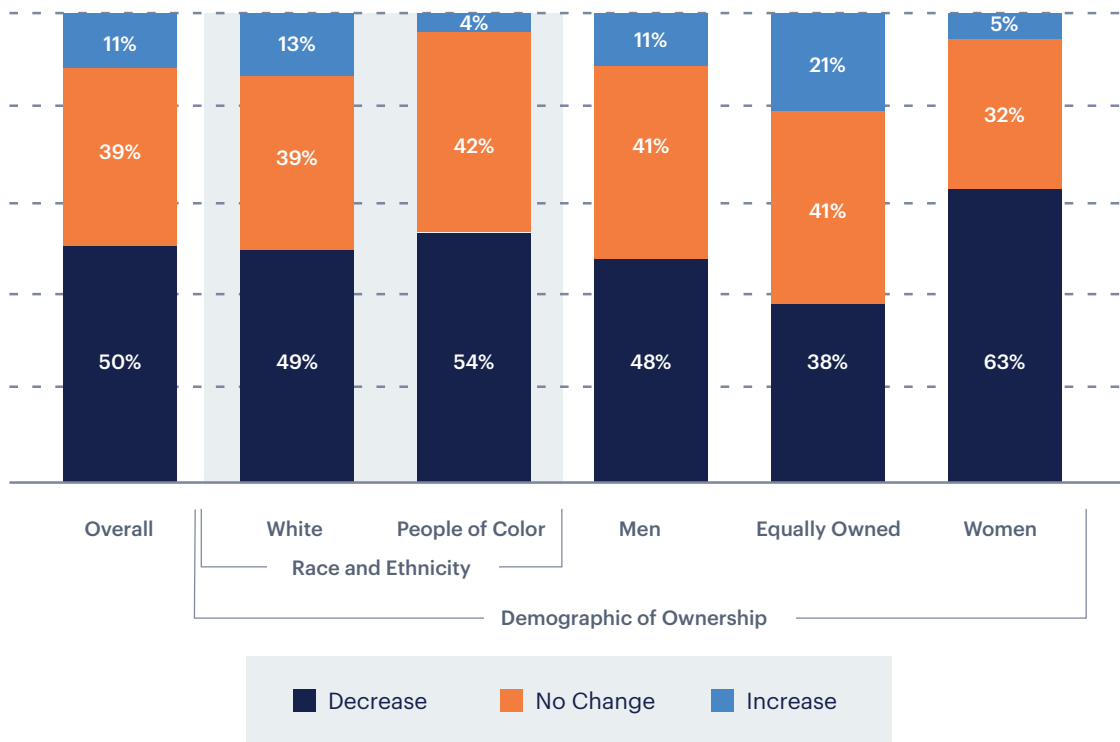
FIGURE 1: Revenue Change Over the Past 12 Months for Small Businesses in the Philadelphia Metro



Note: The sample size for Figure 1 is 564 firms for the Overall, Race, and Gender categories.

Source: 2020 Small Business Credit Survey, Federal Reserve Banks. Percentages may not sum to 100 because of rounding.

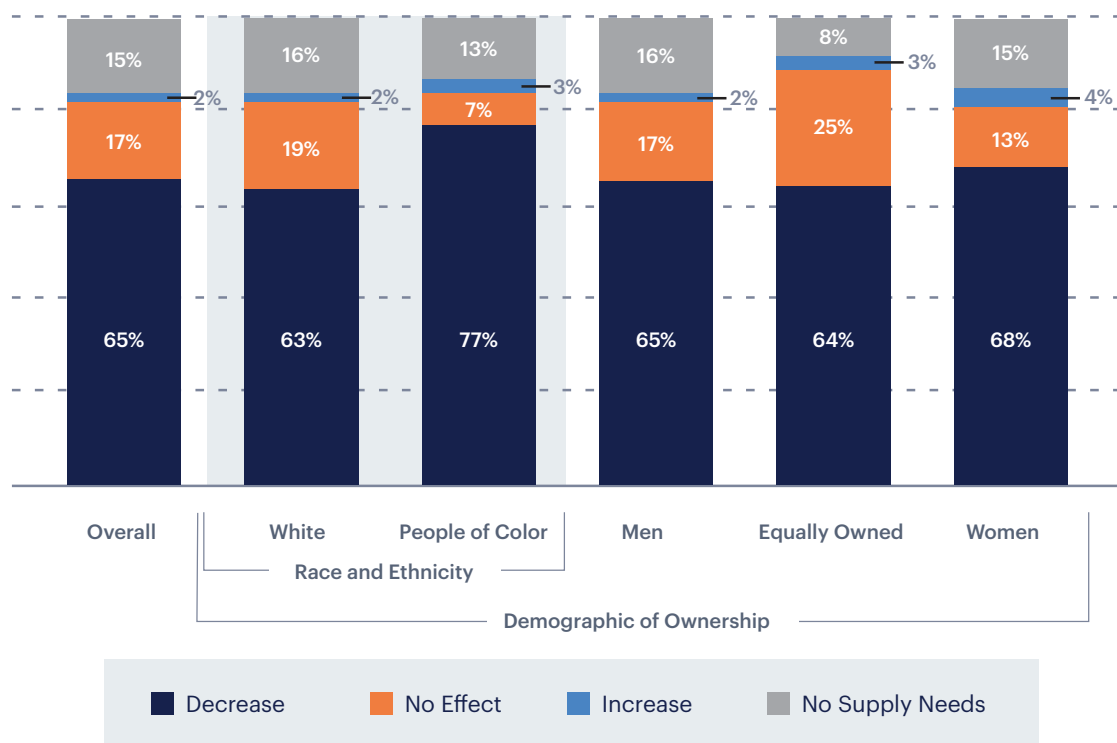
FIGURE 2: Employment Change Over the Past 12 Months for Small Businesses in the Philadelphia Metro



Note: The sample size for Figure 2 is 532 firms for the Overall, Race, and Gender categories.

Source: 2020 Small Business Credit Survey, Federal Reserve Banks. Percentages may not sum to 100 because of rounding.

FIGURE 3: The Effect of COVID-19 on the Availability of Goods and Services for Small Businesses in the Philadelphia Metro



Note: The sample size for Figure 3 is 569 firms for the Overall, Race, and Gender categories.

Source: 2020 Small Business Credit Survey, Federal Reserve Banks. Percentages may not sum to 100 because of rounding.

Small Business Performance and Pandemic-Related Challenges

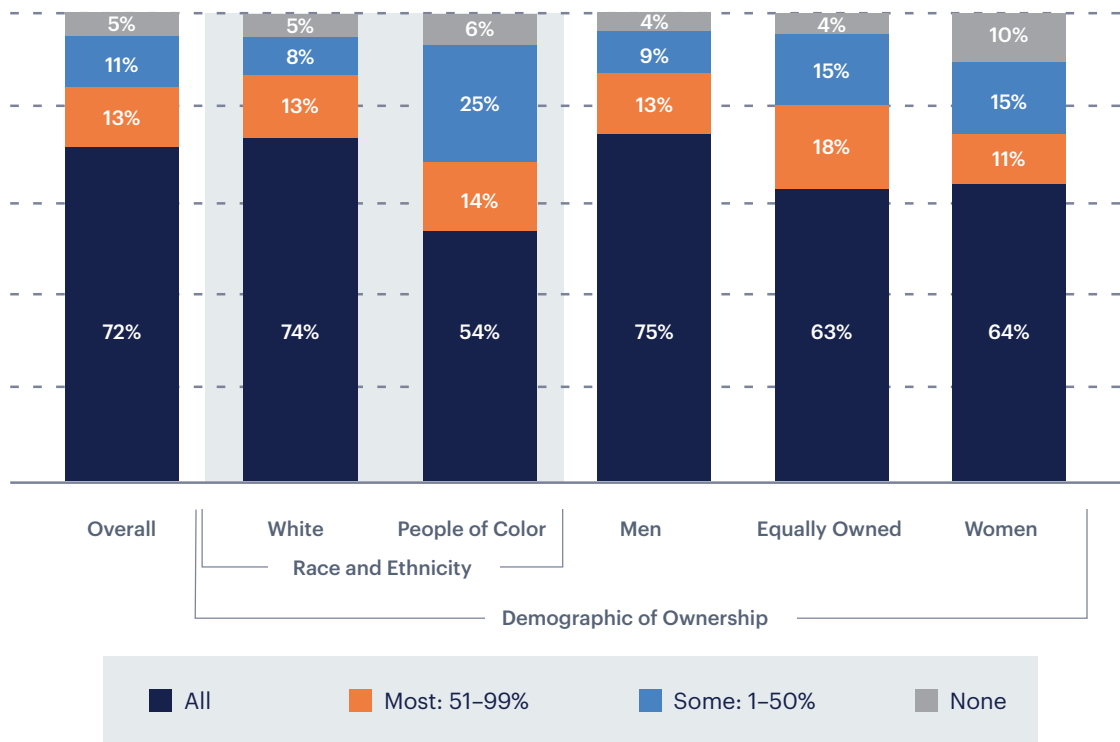
Firms across the Philadelphia metro experienced severe decreases in revenue during the pandemic. These declines were widespread and were experienced by a majority of businesses in the region. However, along each of the aforementioned indicators, firms owned by people of color and by women were relatively more likely to report decreases (**Figure 1**). About 83 percent of firms in the Philadelphia metro overall reported that their revenue had decreased in the 12 months before the survey. Firms owned by people of color were even more likely to report revenue decreases (89 percent), relative to White-owned firms (82 percent). Disparate outcomes in revenue change were also seen, based on the gender of firm ownership. Women-owned firms were disproportionately more likely to report declines in revenue (91 percent) relative to men-owned firms (82 percent).

Similar to the pattern seen for revenue change, between 2019 and 2020, half of firms in the

Philadelphia metro experienced decreases in employment, as shown in **Figure 2**. Another 39 percent of firms overall reported that they experienced no change in employment, while 11 percent said they increased employment. When disaggregated by race and ethnicity, the share of firms reporting decreases in employment is larger for small businesses owned by people of color. Fifty-four percent of firms owned by people of color said they decreased employment, whereas 49 percent of White-owned firms reported employment decreases. Moreover, women-owned firms (63 percent) were even more likely to report that they decreased employment relative to men-owned and equally owned firms (48 percent and 38 percent, respectively).

Firms were asked to report how the availability of goods and services had changed in the 12-month period before the survey (**Figure 3**). These findings are interesting, given the supply shortages that firms have experienced since the onset of the pandemic and that have extended into 2021. At the time of the SBCS, a pattern of widespread decreases in the

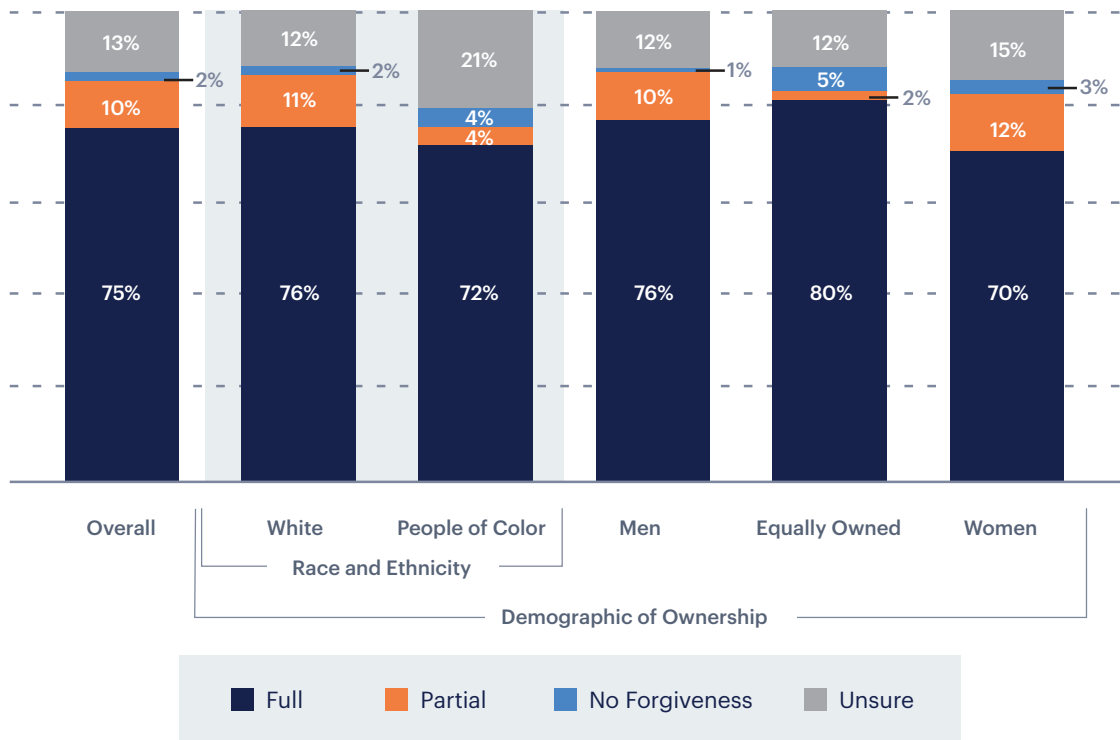
FIGURE 4: PPP Funding Received by Small Businesses in the Philadelphia Metro



Note: The sample size for Figure 4 is 454 firms for the Overall, Race, and Gender categories.

Source: 2020 Small Business Credit Survey, Federal Reserve Banks. Percentages may not sum to 100 because of rounding.

FIGURE 5: Small Business Expectations for PPP Forgiveness in the Philadelphia Metro



Note: The sample size for Figure 5 is 430 firms for the Overall, Race, and Gender categories.

Source: 2020 Small Business Credit Survey, Federal Reserve Banks. Percentages may not sum to 100 because of rounding.

availability of goods and services for small businesses was seen throughout the Philadelphia metro. About 65 percent of firms reported a decrease in availability. Firms owned by people of color and by women were more likely to report a decrease in availability compared with White- and men-owned firms. Seventy-seven percent of firms owned by people of color and 68 percent of women-owned firms described decreases in availability. White- and men-owned firms reported similar shares of decreases in availability (63 percent and 65 percent, respectively).

COVID-19 Emergency Funding and Business Financing

As COVID-19 spread throughout the U.S., government-mandated business closures and declines in consumer demand contributed to the economic hardship small businesses experienced. This resulted in the distribution of a variety of COVID-19 emergency funding measures intended to help firms weather the crisis. In particular, the Paycheck Protection Program (PPP) stood out as the most commonly sought form of small business emergency funding throughout the pandemic.⁷ The PPP is a Small Business Administration (SBA)-backed loan intended to help small businesses retain employees on their payroll through the pandemic. For many firms, the PPP was a financial lifeline that allowed them to stay open when business conditions would have otherwise forced them to lay off workers or shut down entirely. However, disparities in access to PPP funding were stark for firms owned by people of color.⁸

Similar to the story at the national and state level, firms across the Philadelphia metro seeking to weather the pandemic turned to PPP funding. However, it is important to consider the timing of the SBCS in relation to the results presented in the following section. When businesses responded to the SBCS, two rounds of PPP funds had been distributed, through both the Coronavirus Aid,

Relief, and Economic Security (CARES) Act⁹ and the Paycheck Protection Program and Health Care Enhancement Act.¹⁰ Moreover, 82 percent of small businesses in Pennsylvania reported that they applied for a PPP loan, making it the most common form of emergency assistance at the state level, outpacing other forms of funding by 40 percentage points or more.¹¹ At the time of this report's writing, an additional round of PPP had been administered through the Consolidated Appropriations Act.¹² Therefore, data on applications for the third round of the PPP are not represented in the survey.

A substantial majority of firms across the metro (72 percent) reported that they received all the PPP funding for which they applied (**Figure 4**). However, disparities in access to PPP were prevalent for firms owned by people of color and by women. Fifty-four percent of firms owned by people of color reported that they received all of the PPP funding they sought, compared with 74 percent of White-owned firms. Moreover, one in four firms owned by people of color received no more than half of the PPP financing they sought, if they received any at all. Women-owned firms were also relatively less likely (64 percent) to receive all the PPP funding they sought compared with men- and equally owned firms (75 percent and 63 percent, respectively). Meanwhile, one in 10 women-owned firms received none of the PPP financing they sought, the largest share of any firm ownership demographic.

Firms that received PPP loan forgiveness generally anticipated that they would get full forgiveness (**Figure 5**). Overall, 75 percent of small businesses in the Philadelphia metro reported that they

⁷ Nationally, about 82 percent of small business employer firms applied for PPP funding, according to the *2021 Report on Employer Firms*, available at www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/2021-sbcs-employer-firms-report.

⁸ Firms owned by people of color, particularly Black-owned firms, were more likely to not receive all of the PPP funding they sought, or receive none at all, according to the *2021 Report on Firms Owned by People of Color*, available at www.fedsmallbusiness.org/survey/2021/2021-report-on-firms-owned-by-people-of-color.

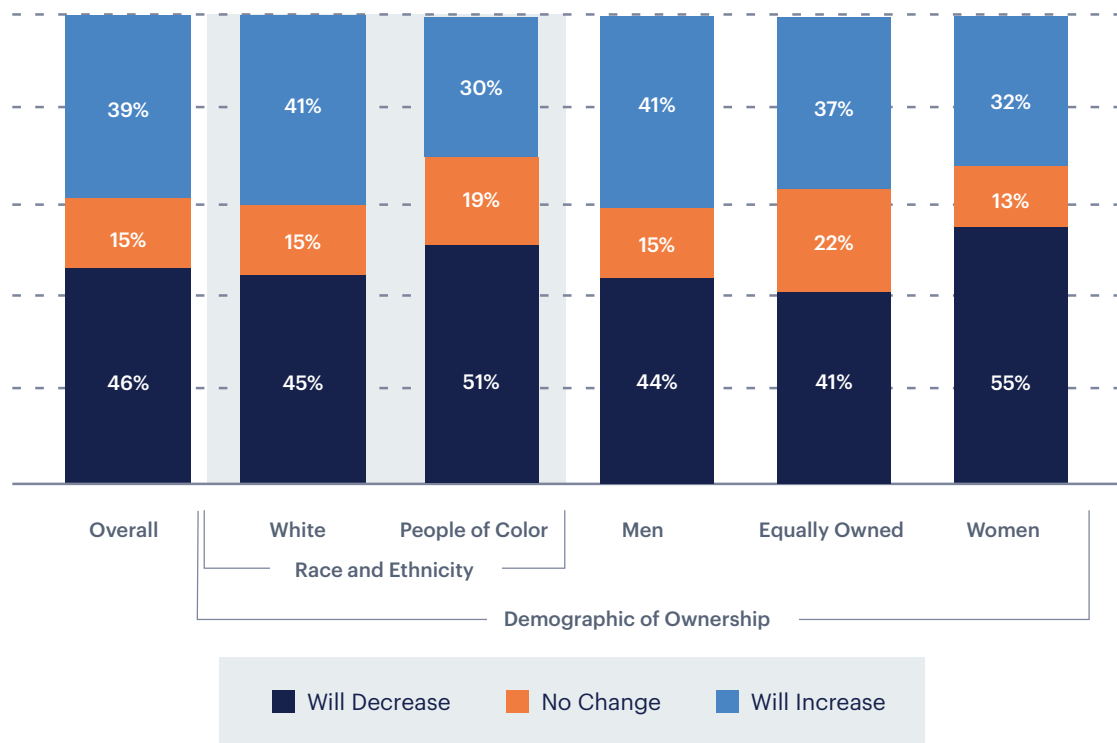
⁹ The Coronavirus Aid, Relief, and Economic Security Act, Pub. L. 116-136, 134 Stat. 281, 2020, available at www.congress.gov/bill/116th-congress/house-bill/748.

¹⁰ The Paycheck Protection Program and Health Care Enhancement Act, Pub. L. 116-139, 134 Stat. 620, 2020, available at www.congress.gov/bill/116th-congress/house-bill/266.

¹¹ In Pennsylvania, PPP loans were the most sought after form of emergency assistance for small businesses. Moreover, PPP applications outpaced other forms of financing, such as grants from state and local governments (42 percent), EIDL loans (41 percent) and EIDL grants (40 percent). In the original questionnaire, survey respondents could choose multiple loans. Therefore, some firms may have also applied for other forms of emergency assistance in addition to PPP loans. For more, see Priya Krishna, *Small Business Credit Survey: Pennsylvania Insights*, Federal Reserve Bank of Philadelphia, June 2021, available at www.philadelphiafed.org/community-development/credit-and-capital/small-business-credit-survey-pennsylvania-insights.

¹² Consolidated Appropriations Act, 2021, Pub. L. 116-260, 2020, available at www.congress.gov/bill/116th-congress/house-bill/133?r=1&s=7.

FIGURE 6: Firm Expectations for Revenue Change Between 2020 and 2021 in the Philadelphia Metro



Note: The sample size for Figure 6 is 565 firms for the Overall, Race, and Gender categories.

Source: 2020 Small Business Credit Survey, Federal Reserve Banks. Percentages may not sum to 100 because of rounding.

expected full PPP loan forgiveness, and another 10 percent expected partial forgiveness. Just 2 percent of firms expected no loan forgiveness; the remaining 13 percent of regional firms were unsure of what they may or may not have to repay.

Although a majority of firms expected full loan forgiveness, regardless of ownership demographic, firms owned by people of color and by women were relatively more likely to anticipate repayment or they remained unsure of their status. For firms owned by people of color, 72 percent expected full loan forgiveness, compared with 76 percent of White-owned firms. Moreover, about one in five firms owned by people of color were unsure of whether they would receive forgiveness. Similarly, 70 percent of women-owned firms expected full loan forgiveness, whereas 76 percent of men-owned firms and 80 percent of equally owned firms expected full forgiveness.

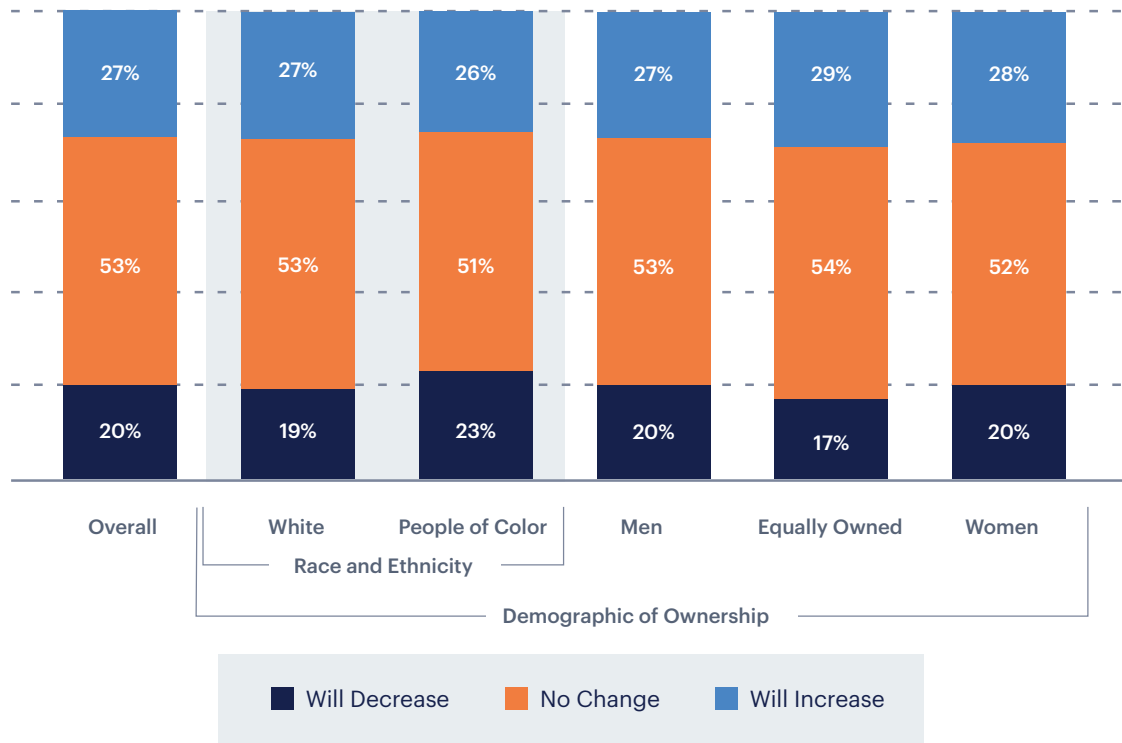
Economic Outlook

When firms responded to the SBCS, they were generally doubtful that they would see key

indicators of firm performance recover. Specifically, most firms reported that between 2020 and 2021, they expected to experience either a decrease in revenue and employment or no change whatsoever. However, the SBCS was fielded from September 2020 through October 2020, after state-mandated business closures in Pennsylvania had ended but about half a year before COVID-19 vaccines became widely available to the American adult-age population. This may have affected the economic outlook that firms held at the time of the survey, particularly for businesses that rely on face-to-face interactions between customers and employees. Nonetheless, across firm demographic groups, firms owned both by people of color and by women had more negative expectations for revenue relative to White- and men-owned firms.

Forty-six percent of firms in the Philadelphia metro overall expected their revenue to decrease between 2020 and 2021, as shown in **Figure 6**. An additional 15 percent of firms reported that they expected no change in revenue, and 39 percent of firms expected revenue to increase. Firms owned by

FIGURE 7: Firm Expectations for Employment Change Between 2020 and 2021 in the Philadelphia Metro



Note: The sample size for Figure 7 is 556 firms for the Overall, Race, and Gender categories.

Source: 2020 Small Business Credit Survey, Federal Reserve Banks. Percentages may not sum to 100 because of rounding.

people of color and by women were less optimistic about how revenue would change in the year following the survey, relative to White- and men-owned firms. About half of firms owned by people of color reported expecting revenue to decrease, compared with 45 percent of White-owned firms. Moreover, 55 percent of women-owned firms expected their revenue to decrease, whereas 44 percent of men-owned firms and 41 percent of equally owned firms expected the same.

Firms generally expected employment to remain stagnant in the 12 months following the survey (**Figure 7**). Over half of firms (53 percent) in the Philadelphia metro overall expected their employment to remain unchanged, while an additional 27 percent reported that they anticipated an increase. Just one in five small businesses expected their employment to decrease between

2020 and 2021. Most firms across both sets of demographic groups expected no change in employment in the 12-month period following the survey. Fifty-one percent of firms owned by people of color and 52 percent of women-owned firms expected no change in employment, compared with 53 percent of White- and men-owned firms. Moreover, 54 percent of equally owned firms expected no change in employment. In regard to employment increases, 26 percent of firms owned by people of color and 27 percent of White- and men-owned firms anticipated such a change. Equally owned and women-owned firms reported similar rates for expectations of an increase in employment (29 percent and 28 percent, respectively). Employment decreases were not as common an expectation across firm demographic groups.



Conclusion

The findings of this report used SBCS data to show that the COVID-19 pandemic had a substantial and negative impact on small businesses conditions in the Philadelphia metro. Moreover, this study found that these impacts were even more pronounced for firms owned by people of color and by women. Small businesses experienced an unprecedented health crisis coupled with an historic economic shock that placed many businesses on the margins. Some firms were forced to shutter for a period of time because of government-mandated business closures, while others saw a drop in consumer demand as the pandemic spread. This study found that during this period, across key performance indicators — such as revenue, employment, and the availability of goods and services — decreases were commonplace across the region. However, firms owned by people of color and by women were even more likely to report declines across each indicator.

Although some small businesses had access to emergency funding to weather the effects of the pandemic, often in the form of PPP loans, firms owned by people of color and by women struggled to be approved for aid. This paper shows that firms owned by people of color in the Philadelphia metro were less likely than White-owned firms to

be approved for the full amount of PPP funding that they sought. Similarly, women-owned firms were also less likely than men-owned firms to receive full PPP funding while also being the group most likely to report that they did not receive a PPP loan. Even if a firm owned by a person of color or a woman was approved for PPP funding, they were more likely to report that they would have to pay back some portion of the loan or that they were unsure of whether they would receive any loan forgiveness. Coupled with the findings in this report that show firms owned by people of color and by women were more likely to have a negative economic outlook for 2021 — related to revenue expectations — it's clear small business conditions in the Philadelphia metro were harsh for these firms.

Certain small businesses, such as those owned by people of color and by women, were even more likely than White- and men-owned firms to describe economic hardship as a result of the COVID-19 pandemic. Additional research and timely data will be necessary to understand if there are any lingering impacts of the recession on small businesses, and therefore what assistance may be necessary to spur economic growth in this critical sector of the economy.

Technical Appendix

Data Set Background

The microdata used throughout this paper are derived from the 2020 Small Business Credit Survey (SBCS), fielded between September 9, 2020, and October 31, 2020. The SBCS is a national nonrandom convenience sample of small businesses, or firms with fewer than 500 employees. Each year, firms are contacted through a network of small business intermediary organizations (i.e., chambers of commerce, community foundations, economic development authorities, etc.)¹³ and asked to complete the survey, primarily through email and social media posts. The actual survey questionnaire is hosted online and typically takes about 15 minutes to complete, with that time heavily dependent on the amount of financing a business applied for in the year prior. Moreover, the survey tailors the questions firms are asked based on prior responses through a method called question branching and flows.¹⁴ This means the number of responses varies by the number of questions a firm may or may not receive based on their financing history.

SBCS Methodology

The SBCS microdata include information on firms that reported that they were operating or temporarily closed at the time of the survey's distribution. Therefore, firms that reported that they permanently closed were cleaned out of the microdata. The data I used throughout the study represent a subset of the responses from firms that reported that their business was located in the Philadelphia MSA. Moreover, the microdata consist of both employer and nonemployer firms. Employer firms are small businesses with paid employees, whereas nonemployer firms have no additional workforce other than the owner(s) of the business.

At the metro level, SBCS responses are weighted to more accurately match the distribution of employer firms by several key firm demographic groups: the

number of employees, age, industry, geographic location (census division and urban or rural location), gender of firm ownership, and the race or ethnicity of firm ownership, broken into White and non-White categories, the latter of which we define as firms owned by people of color.¹⁵ Nonemployer weights are not available at the metro level, which restricted the analysis to a sample of 570 firms in the Philadelphia metro. To produce a series of estimates for the Philadelphia metro, I summed the metro-level employer firm weights for each response to a given question. Afterward, I created the shares seen in each figure by dividing the previously described estimates for each response by the total metro-level aggregated weights represented for that particular question. To produce a series of representative estimates for various firm demographic groups in the Philadelphia metro, I repeated the above exercise with one additional step: summing the metro-level weights for each response to a given question by the firm's gender of owner and race and ethnicity of owner strata.

¹³ For more information on partnerships, see www.fedsmallbusiness.org/partnership.

¹⁴ For more information on the specific questions asked in the 2020 SBCS, see www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/2020-SBCS-Questionnaire.

¹⁵ For a thorough explanation of how the SBCS national and state-level weights were created, using a "raking" statistical technique, see the *2021 Report on Employer Firms*, available at www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/2021-sbcs-employer-firms-report.



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