Carolina Small Business Development Fund

RESILNC

EXTRAORDINARY TIMES CALL FOR EXTRAORDINARY MEASURES: SMALL BUSINESS ASSISTANCE DURING THE PANDEMIC

A COMPARISON OF LOANS AND GRANTS DEPLOYED IN NC

Jamie R. McCall | Vice President, Economic Development Policy
Carolina Small Business Development Fund

Brittany Bennett Weston | Executive Director
ResilNC

James R. Onorevole | Program Associate, Economic Development Policy
Carolina Small Business Development Fund

John Carter Roberson | Research Fellow, Economic Development Policy
Carolina Small Business Development Fund

Jamie Andrews | Research Fellow, Economic Development Policy
Carolina Small Business Development Fund

ABOUT THIS REPORT

Carolina Small Business Development Fund and ResilNC view research as the foundation of our mission to empower and uplift the communities we serve. This report and brief are reflective of our commitment to identify evidence-based solutions to North Carolina's most enduring policy challenges.

ACKNOWLEDGEMENTS

We are grateful to CSBDF's CEO Kevin Dick, whose advocacy for evidence-based development policy played a pivotal role in shaping the early stages of this project. Additionally, we appreciate ongoing guidance from ResilNC's founders and board members Talib Graves-Manns, Tara Kenchen, Wilson Lester, and Napoleon Wallace. Research of this scope is truly a team effort, and we are thankful for the thoughtful input provided by Michael Eggleston of the Federal Reserve Bank of St. Louis, Lillian Graning of Live Oak Bank, and Tamra Thetford of CNote. Last but certainly not least, this work would not be possible without the contributions of CSBDF staff members Emily Blevins, Darlene Deberry, Diane Lantz, Reginold Jones, Mark Royster, and Amanda Sorrells.

FOR MORE INFORMATION

Jamie McCall
VP, Economic Development Policy
Carolina Small Business Development Fund
jmccall@carolinasmallbusiness.org

Brittany Bennett Weston
Executive Director
ResilNC
brittany@resilnc.org

SUGGESTED CITATION

McCall, Jamie, Weston, Brittany, Onorevole, James, Roberson, John, and Jamie Andrews. 2022. "Extraordinary Times Call for Extraordinary Measures: Use of Loans and Grants for Small Business Assistance During the COVID-20 Pandemic." Raleigh, NC and Durham, NC: Carolina Small Business Development Fund and ResilNC. doi: 10.46712/extraordinary.times.

CONTENTS

EXECUTIVE SUMMARY

The financial losses caused by COVID-19 are extraordinary in scope and have reached into every part of North Carolina's small business ecosystem. For entrepreneurs, pandemic recovery will require similarly extraordinary levels of assistance. In some ways, the emergence of the coronavirus resembled a type of natural disaster, and the normal policy response to such events is emergency loans.

But the unprecedented economic fallout also gave rise to new policy innovations. One novel approach was the widespread deployment of grant aid to small businesses, an intervention that was unheard of at scale prior to 2020. Using survey data from 10 emergency grant and loan initiatives offered by Carolina Small Business Development Fund (CSBDF), we assess the connection between these interventions and a variety of positive community impacts. The results use an equity lens to better understand how the pandemic disproportionately harmed BIPOC entrepreneurs and other historically marginalized constituencies.

At a high level, we find preliminary evidence that both grants and loans were important for small business resiliency. The data suggest grant initiatives are better for short-term financial stability and are likely to position recipients for future financing opportunities. Concurrently, disaster loans are related to higher employment retention and a more favorable business sentiment outlook. The results also show that while the pandemic's economic damage was high across all underprivileged communities, in many cases the damage disproportionately accrued to Black-owned firms.

We recommend small business support programs, disaster-related and otherwise, prioritize equitable aid distribution across BIPOC communities. The need for an equity- focus is especially important for grant assistance as well as interventions that strategically combine loan and grant aid. Reflective of their track record of success with both the public and philanthropic sectors throughout the pandemic, CDFIs and other community entities are ideal partners for providing this kind of support.

OVERVIEW & INTRODUCTION

Carolina Small Business Development Fund (CSBDF) and ResilNC surveyed 1,261 small businesses that received pandemic aid from CSBDF between 02/01/20 and 02/01/22. Program requirements and eligibility for aid were set by funders, but every entrepreneur in North Carolina qualified for at least one of CSBDF's 10 different loan and grant interventions across this period. Our inquiry is designed to assess these initiatives as part of our broader mission to identify holistic and sustainable ways to help small businesses thrive.

Characteristics of Recipients

Are there notable differences in the characteristics of aid recipients based on whether the firm was awarded a loan, grant, or both types of assistance?

Short-Term Impact from Interventions

What are the short-term outputs and outcomes of these programs, and does performance on these metrics vary across the type of aid received? Outputs refers to what occurs immediately after an activity or intervention.[1] In contrast, outcomes are changes at the community level that enhance socioeconomic wellbeing (Bagnoli & Megali, 2011; Becker & Vanclay, 2003b; Gertler et al., 2016; Vanclay, 2003).

Differences Across High Need Populations

Do the data show differential impacts for recipients from historically marginalized constituencies? This lens of analysis is critical because a growing amount of data show how some types of enterprises, in particular those owned by entrepreneurs identified as Black, Indigenous, and other People of Color (BIPOC), have experienced disproportionately severe economic damage throughout the pandemic (R. Fairlie & Fossen, 2022b; Wallace et al., 2020).

The report proceeds as follows. In the literature review, we contextualize the role of CDFIs within the existing policy framework for small business support and assess existing modes of assistance. We then provide an overview of the survey process, the representativeness of the sample, and summarize the limitations of our methodology. The findings are divided into two sections. First, we highlight notable variations in firm and owner-level characteristics across entrepreneurs receiving loans, grants, or both. Second, we examine whether any significant differences are observable across short-term outputs and outcomes by intervention type. We conclude with four recommendations to ensure assistance programs can reach **all** small businesses, especially those owned by historically underserved and/or under-resourced populations.

[1] Across the non-profit sector, output metrics are highly incentivized by both regulators and funders (Bopp et al., 2017; Privett & Erhun, 2011). Many evaluations of community development organizations focus on outputs because it allows for easier quantification of activities in a capacity-constrained environment (Immergluck, 2008).

LITERATURE REVIEW

While the pandemic cast a spotlight on the important role of small firms in community placemaking, entrepreneurs have always been vital parts of regional economies, as small- and medium-sized firm creation is a foundational strategy for community development (Acs, 1999a; Aquilina et al., 2006; Neumark et al., 2006). Small businesses contribute to local economies by promoting innovation (Kirchhoff et al., 2013; Schumpeter, 2008), hiring local residents (N. Miller et al., 2007), providing desirable non- pecuniary benefits (Lans et al., 2015; Pugsley & Hurst, 2011; Storey et al., 2010), and giving local spaces a unique identity (Agnitsch et al., 2006). For all these reasons, communities with high levels of firm size diversity are more likely to enjoy broad-based economic growth (S. Shaffer, 2006).

CURRENT POLICY FRAMEWORK FOR SMALL BUSINESS SUPPORT

Regardless of their socioeconomic value and critical role in shaping a community's identity, small businesses rarely thrive without assistance. In part, this is because a small firm's survival is strongly correlated with the ability to access capital. However, banking institutions are hesitant to lend in this area because it is challenging to assess the prospects for success in a way that is scalable and conforms with traditional underwriting processes (Duarte et al., 2018).[2] Because failure is a natural part of being an entrepreneur, traditional financial entities have little incentive to offer capital to smaller businesses—and when they do, it is rarely on reasonable terms (Jenkins et al., 2014; Plehn-Dujowich, 2010).

Even in the most optimistic of scenarios, accessing capital is difficult for current and aspiring small business owners. Unfortunately, the barriers are even higher for BIPOC entrepreneurs (Bates & Robb, 2016; Blanchflower et al., 2003a), veterans (Boldon et al., 2016), and women (Bird & Sapp, 2004; Strickland & Burr, 1995). Beyond demographic characteristics, there is also substantial evidence that both rural firms and businesses affected by natural disasters face numerous challenges around loan access (Duarte et al., 2018; R. Fairlie, 2020; Portuguez Castro & Gómez Zermeño, 2020; Ring et al., 2010; Runyan, 2006a). Entrepreneurs with these characteristics are declined for small business financing at much higher rates than those

[2] Widespread perceptions of outsized "risk" for community-oriented lending are, importantly, not unique to the small business market. Community development programs designed to bolster capital access in the consumer mortgage market have faced similar issues (Park & Quercia, 2020; Quercia & Riley, 2017).

from less marginalized populations. Multiple policy frameworks have attempted to redress these issues, and one of the most successful is the Riegle Community Development and Regulatory Improvement Act of 1994.[3] The Act created the Community Development Financial Institutions (CDFI) Fund, an agency of the US Department of the Treasury. Community organizations can apply to the Fund to become certified as a Community Development Financial Institution. Certification signifies the entity has a primary mission of providing financial services to disenfranchised people and places (Patraporn, 2015; G. Smith et al., 2009).[4] There are 1,373 certified CDFIs in the United States as of June 2022 (Community Development Financial Institutions Fund, 2022). In addition to Carolina Small Business Development Fund (CSBDF), North Carolina is home to 23 other CDFIs including 13 other revolving loan funds, 9 credit unions, and 1 bank.

USE OF GRANTS AND LOANS TO HELP SMALL FIRM OWNERS

CDFIs and similar entities can act as stabilizing forces in the small business lending marketplace by offering flexible and adaptive financing. The community development goals of CDFIs mean they are less likely to extend credit on unsustainable terms and more likely to work with borrowers who face financial trouble. The pandemic added a new dimension to this stabilizing role via the provision of emergency cash grants. For the first time, CDFIs and other entrepreneurial support organizations offered small business owners direct cash aid with no expectation of repayment. For example, CSBDF drew on its own operating funds to issue almost $1M in emergency aid to its own borrowers via grants during the pandemic.[5]

Providing grant aid is just one example of how CDFIs and other community institutions can act as stabilizing forces. The strong bonds they form with those they help can also be invaluable during times of uncertainty. On a relative basis, entrepreneurs who have received loans from CDFIs and other community financing entities are more likely to proactively ask for help if they are having problems. Reasons for this are complex, but some are related to how much these borrowers feel "invested in" via the social ties they form with the lending organization's staff (Appleyard, 2011; McCall, 2020). Compare this to the typical relationship between a traditional financial institution and a small business borrower. With a normal financing entity, a borrower facing difficulties is unlikely to reach out for help due to fear of adverse action. That could take the form of their financial institution calling a loan, reducing lines of credit, or other punitive measures designed to protect the interest of the lending entity (DeYoung et al., 2008).

[3] Riegle Community Development and Regulatory Improvement Act, 12 U.S.C. 47 § 4701 (1994).

[4] CDFIs must show at least 60% of their financial services are provided to approved target markets. Target markets are defined by federal regulations as either (1) investment area(s) or (2) targeted population(s). (1) Investment areas are economically distressed geographic units under 12 CFR § 1805.201(b)(3)(ii). (2) Targeted populations per 13 CFR § 1805.201(b)(3) are individuals and/or groups that are low income or otherwise lack access to financial products/services.

[5] Pandemic grant assistance from CDFIs (including CSBDF) was primarily via administering grant programs on behalf of individuals, corporate donors, or public entities. But to our knowledge CSBDF was the only CDFI in the nation to engage a high level of direct grantmaking using its own operating funds (and not acting as a passthrough entity).

EXISTING MECHANISMS FOR FINANCIAL SUPPORT FOR ENTREPRENEURS

There is a patchwork array of assistance available to small firms across the federal, state, and local levels. But many state and local programs resemble, sometimes to the point of outright duplication, initiatives offered by the Small Business Administration (SBA) (Brash, 2008). It's important to note, though, that the SBA does not currently engage in any material amount of direct lending.[6] The bulk of its activities revolve around providing guarantees to banks, credit unions, and community lenders (Craig et al., 2004, 2008). These guarantees incentivize credit access by making the transaction less risky for the lender – if the borrower defaults, the SBA will repay some portion of the loan's proceeds (Salway, 2020; Seidman, 2005). The guarantees are an implicit acknowledgment that providing financing to entrepreneurs is an inherently risky affair (B. S. Chen et al., 2017). Among the most popular SBA facilities are 7(a) and, to a lesser extent, 504, named for the sections of the legislation which originated them:[7]

7(a) Program: Allows for the origination of loans of up to $5M that are backed by guarantees ranging from 75% to 85%, dependent on loan size. The 7(a) program also houses the Community Advantage initiative, which likewise offers a 75% to 85% guarantee on loans of up to $350,000. The lower Community Advantage loan size cap enables greater underwriting flexibility, and thus non-profit lenders often utilize the facility to finance higher-risk enterprises (Industrial Economics, 2018).

504 Program: Lenders who are also certified community development corporations (CDCs) can issue loans with SBA guarantees for up to 40% of a project's costs with a $5M maximum. Due to their size, in most cases, 504 loans are funded by multiple lenders as a way to mitigate risk.

From a program evaluation perspective, assessing the community economic development effects of 7(a) and 504 loan guarantees is challenging. The level of detail available about loan recipient outcomes is extremely limited. As Brown and Earle (2017, p. 1040) note, "despite the prominence of SBA programs and the high hopes in their power to stimulate business growth—there have been few attempts to measure their impacts using appropriate data and econometric methods."[8]

Overall, though, what does exist links both 7(a) and 504 to various positive socioeconomic impacts (Craig et al., 2007a, 2007b, 2008; Industrial Economics, 2018).
In general, the agency's lending guarantee facilities appear to boost employment, though a portion of that effect is attributable to job displacement (D. J. Brown & Earle, 2012). Concurrently, other studies show SBA guaranteed loans are less likely to reach firms in low/moderate income BIPOC neighborhoods (Newberger & Toussaint- Comeau, 2014) and may decrease income growth rates (Higgins et al., 2020).

Compared to the large number of loan products available via SBA guarantees, there was little grant aid for small firms before COVID-19. Most federal grants for small businesses are designed to provide incentives for strategic national economic priorities related to research and development, technology innovation, and trade policy. Key initiatives include the Small Business

[6] This could change in the future, as SBA officials have communicated an interest in expanding into more direct lending. The feasibility of this is unclear due to significant opposition from the financial industry (Reosti, 2022).

[7] In addition to 7(a) and 504, lesser-known SBA facilities include microloans geared toward startups and leverage financing for high growth firms through the Debenture Small Business Investment Company (SBIC) initiative (Brash, 2008).

Innovation Research (SBIR) and the Small Business Technology Transfer (STTR) programs. Evaluations of SBIR and STTR generally show grantees have higher growth and firm survival rates versus similar businesses that do not receive an award (Audretsch, 2003; Lanahan et al., 2021; Wallsten, 2000). Importantly though, the eligibility requirements are so narrowly tailored that grant funds are highly inequitable. Awards are overwhelmingly funneled to the technology sector and to firm owners with a postsecondary degree (Galope, 2014).

[8] To be sure, such bleak assessments of evaluation literature are by no means unusual. Measurement difficulties, endogeneity problems, and the tendency of policymakers to use adverse findings as a political bludgeons has made rigorous evaluation the exception to the rule (Corduneanu-Huci et al., 2020; Rossi et al., 2019; Weiss, 1997).

HELPING SMALL BUSINESSES WHEN DISASTER STRIKES

With no historic precedent to compare against, there is no way to benchmark the effectiveness of pandemic-related small business aid initiatives. For that reason, it is necessary to consider analyses involving aid offered in response to hurricanes, earthquakes, floods, and similar natural disasters. Of course, we must caution that such events are fundamentally different from the pandemic. Though they can create widespread destruction, natural disaster impacts tend to be far more localized compared to the pandemic's global effects. Additionally, the adverse economic impacts of natural disasters tend to be most acutely felt for days to months after the event, a duration shorter than the now multi-year pandemic.[9] Finally, disaster relief efforts are designed to mitigate economic damage caused by physical destruction (Dietch & Corey, 2011; Josephson & Marshall, 2016). This is fundamentally different than relief designed to buffer against economic damage caused by a public health emergency.

With such caveats in mind, the research does suggest pre-pandemic disaster financing programs generally improved the chance of small firm recovery (McDonald et al., 2014). On the next page, **Table 1** highlights some of the most frequently cited research in this area. For example, in the wake of 2008's Hurricane Ike, survival rates for SBA loan recipients in Texas were nearly double that of the control group (Watson, 2021). Financing also seems to enable recovery in ways that can enhance firm revenues. Analysis of disaster lending programs for Hurricane Katrina, which made landfall in Louisiana in 2005, showed 7% growth in revenue for financing recipients between 2004 and 2011 (Hiramatsu & Marshall, 2018). This success seems to hold across most disasters, including events impacting large areas of geography for prolonged periods of time (Haynes et al., 2019).

To be clear, though, the consensus is not unanimous. Of note, Tierney and Dahlhamer (1997) document an inverse correlation between disaster assistance and small business recovery after the 1994 Northridge Earthquake in southern California. They theorize lending programs caused undue financial distress because many borrowers had to take on debt service obligations far before the local economic recovery process could truly begin.[10]

Importantly, even when disaster programs are successful, their positive effects are rarely evenly distributed across the small business ecosystem (Domingue & Emrich, 2019b).[11] The data suggest disaster financing is simply less accessible to entrepreneurs

[9] For example, the progression of COVID-19's public health crisis led to extraordinary changes in consumer spending patterns. While some of these changes were short-term and the most dramatic declines were related to early shutdowns of firms, they were still remarkable for their depth and cross-industry impacts (Dunn et al., 2020b; Kim et al., 2020). It remains unclear when or if the shifts in spending patterns caused by the pandemic will return revert to a pre-2020 "normal" (Chang et al., 2022).

[10] A major limitation of this is type of research, however, is selection bias – e.g., businesses that used more financial assistance for recovery could simply have been harder hit than others.

[11] Uneven aid distribution in this sense refers to whether disaster relief delivers an equivalent level of support to historically marginalized populations. It does not refer to geographic distribution of aid. Existing aid programs do tend to operate in a geographically equitable manner, meaning places with the highest physical damage tend to receive the most funding (Domingue & Emrich, 2019a).

who are BIPOC, women, older, and/or from lower income households.[12] When small business owners with these characteristics are approved for aid, the amount of financing is persistently lower compared to other demographics (Josephson & Marshall, 2014). There are also circumstances where disaster aid reaches high need populations in ways that have unintended impacts. As an illustrative example, while financing efforts after Katrina were widely heralded as a success, women borrowers who received disaster loans were more likely to subsequently report revenue declines compared to other types of firms. (Hiramatsu & Marshall, 2018).

[12] A complicating factor is that many firms who apply for SBA disaster loans with these characteristics are often relatively inexperienced borrowers. For example, less sophisticated owners do not always keep electronic copies of key business documents needed for a financing application. As a result they are often declined when they lose these documents in the course of the disaster and thus cannot provide them as part of their financing applications (Runyan, 2006b).

TABLE 1. SUMMARY OF EVALUATION RESEARCH ON SBA DISASTER LENDING

Research Question	Methodology	Data Source(s)	Primary Finding(s)
How did SBA disaster loans impact the survival of small businesses in Galveston, TX, following Hurricane Ike in 2008 (Watson, 2021)?	Logistical regression modeling.	SBA disaster loan microdata, Hurricane Ike flood depth and wind speed GIS data, and business registration records.	**Positive:** Businesses who received disaster loans were twice as likely to survive when compared to the control group.
How did financial resources impact small business success, resiliency, and adaptation following Hurricane Katrina (McDonald et al., 2014)?	Multivariate and probit regression modeling.	Small Business Disaster Resilience Survey, data from a telephone survey of businesses operating in effected areas of Mississippi.	**Positive:** Receipt of insurance payments and/or SBA disaster loans increased overall firm survival. **Positive:** Receipt of insurance payments and/or SBA disaster loans increased adoption rates of disaster recovery mitigation practices. **Positive:** Firms who were approved for an SBA disaster loan were 7.1% more likely to report a subsequent increase in revenues.
What is effect of SBA disaster assistance on the survival and success of family-owned small businesses (Haynes et al., 2019)?	Multivariate and logistic regression modeling.	Small Business Survival and Demise After a Natural Disaster Project (SBSD) Survey, a three-wave panel data source.	**Positive:** Small family-owned businesses who received SBA disaster loans were more likely to survive versus other firms.
How did receipt of SBA disaster aid influence perceived and actual revenue changes before and after Hurricane Katrina (Hiramatsu & Marshall, 2018)?	Multivariate regression modeling with instrumental variables for actual revenue changes and ordered probit regression modeling for perceived revenue changes.	Small Business Survival and Demise after a Natural Disaster Project (SBSD) survey, a three-wave panel data source.	**Positive:** Receiving an SBA disaster loan increased actual revenues by 7.3% on average versus the control group. **Negative:** Women owners were more likely to report a revenue decline after receiving loan, and being female was one of the largest demographic-related factors associated with revenue decline.

CHANGES TO SMALL BUSINESS AID DURING THE PANDEMIC

Compared to the body of literature around natural disaster small business aid, there is still relatively little research on the effectiveness of state and local assistance programs during the pandemic. Due to both their popularity and data availability, our review will focus on the SBA's Economic Injury Disaster Loan (EIDL) and Paycheck Protection Program (PPP).[13]

- **Economic Injury Disaster Loan:** The EIDL is a recurring SBA loan facility offered for disaster recovery, and it was one of the first widely available sources of aid during the pandemic. Like most COVID-19 aid programs, the structure and requirements of the initiative shifted as the pandemic progressed. The final pandemic version of the EIDL offered loans of up to $2M for 30 years at a fixed rate of 2.75% to 3.75% for nonprofits and businesses, respectively. Payments on EIDL loans were deferred for the first 2 years after disbursement and in limited cases up to $15k was considered as a "loan advance" which need not be repaid. The EIDL for COVID-19 was closed on 01/01/22 (Small Business Administration, 2022).

- **Paycheck Protection Program:** The PPP was a first-of-its-kind SBA initiative offered across 2 rounds (or "draws") that concluded on 03/31/21. The program was designed primarily to help employers retain jobs during the worst of the pandemic, and as such awards were available for up to 2.5x an employer's average payroll cost. PPP aid was structured to be a forgivable loan and widely eligible to private and nonprofit entities with less than 500 employees. In cases where an organization that received a PPP award was declared ineligible for forgiveness, it converted to a term loan at a 1.00% fixed rate with a repayment length of 2 to 5 years (Small Business Administration, 2021).

It's also important to keep in mind that both the EIDL and PPP were launched quickly and made SBA aid available at an unprecedented scale (Autor et al., 2022). Despite those challenges approval rates were high from the start – which was laudable, given the level of need. But this effectively masked disproportionately high decline rates in marginalized communities.

[13] Our survey asks about participation in PPP, EIDL, as well as other state and local programs offered during the analysis period.

As outlined by **Table 2** on the following page, it took significantly longer for aid from these programs to be to be disbursed across communities of color as well as neighborhoods with lower incomes (R. Fairlie & Fossen, 2022b).[14] Even when marginalized business owners were approved, they rarely received the full amount they were entitled to. Consider, for example, PPP awards to Black-owned businesses were about half the amount received by White-owned businesses with similar characteristics (Atkins et al., 2022). Later funding rounds made notable improvements in these areas, in part through the strategic use of CDFIs as PPP aid providers (R. Fairlie & Fossen, 2022a).

The reasons for these inequities are complex. Many high-need entrepreneurs were simply unaware of assistance options, meaning that they often did not find out about funding until it was exhausted (Li, 2021). For those that knew about these initiatives, a notable number from historically disenfranchised places did not apply due to cultural concerns over getting a loan and/or skepticism over whether the financing would eventually be forgiven (Nurse, 2022). In other cases, there was awareness and a desire to apply, but small businesses did not have the knowledge or resources to navigate the application system (Granja et al., 2020). And ultimately, even if an underserved entrepreneur did apply, the process to approval had many barriers. For instance, many traditional banking PPP lenders required applicants to have a pre-existing business banking relationship.[15] This may seem reasonable on its face, but BIPOC-owned firms are less likely to use dedicated business banking products (Howell et al., 2021). Compounding the issue, PPP application requirements around being in good standing with taxes often raised additional access challenges (Sabasteanski et al., 2021).

Research on the aggregate economic impacts of EIDL and PPP tends to show contradictory results. For example, according to survey data small business owners receiving EIDL and PPP aid were less likely to experience revenue declines and more likely to maintain payroll hours (Li, 2021). This is bolstered by data from payroll processors like ADP, which show notable increases in employment after initial PPP disbursements started (Autor et al., 2022).[16] Yet other research using a combination of financial and administrative data sources suggests aid recipients saw revenue declines of 7% on average. It may seem strange that disaster aid with this level of flexibility could reduce revenues, but it could be the assistance enabled firms to stay closed **longer (Kapinos, 2021).**

[14] Research around PPP and racial disparities can also show confounding results – although this is often due to nuances around how inequities are measured. Notably, some data suggests firms owned by racial minorities received higher award amounts when located in communities with a high proportion of BIPOC residents (Calem & Freedman, 2020). But other data show on a relative basis funds covered a much lower percentage of pre-pandemic payroll employee costs in Asian (26%), Black (37%), and Latinx (43%) neighborhoods versus White (49%) communities (Pech et al., 2020).

[15] Areas with lower incomes, smaller bank footprints, and larger BIPOC populations were thus more likely to seek and be approved for PPP loans from fintech firms (Chernenko & Scharfstein, 2022; Erel & Liebersohn, 2020). However, caution is needed in this area because much data show this sector is more likely to engage in predatory lending practices (Maggio et al., 2022; Palladino, 2020; Ueda et al., 2022).

[16] Although the positive employment effect quickly seemed to wane, it remains notable because PPP aid was structured around employment *retention*, not job creation.

TABLE 2. SUMMARY OF EVALUATION RESEARCH ON PPP AND EIDL

Research Question	Methodology	Data Source(s)	Primary Finding(s)
How did PPP affect small business employment at PPP eligible firms relative to PPP ineligible firms (Autor et al., 2022)?	Difference-in-differences approach to compare outcomes.	Anonymized ADP payroll data.	**Positive:** PPP increased employment for eligible firms by 2-5% at its peak effect in May 2020, before shrinking to 0-3% by December 2020.
Did federal aid improve the employment resiliency and operations of recipient firms (Li, 2021)?	Descriptive data analysis and multivariate regression modeling.	Census Bureau Small Business Pulse Survey (SBPS) response data.	**Positive:** Recipients of federal aid were less likely to report a decrease in either employee hours or gross revenues. **Negative:** There is no evidence that firms hit harder by pandemic were more likely to apply for federal aid.
How did receiving a PPP award impact small business operations and revenue (Kapinos, 2021)?	Time series modeling using regression impulse response functions (IRF).	Opportunity Insights Economic Tracker data, Federal Deposit Insurance Corporation's (FDIC) call reports, and FDIC survey of deposits information.	**Negative:** Exposure to PPP loans decreased small business revenues by 7% and reduced the number of firms that would otherwise have been open by 4% between January 2020 and June 2020.
Did financial institutions target PPP aid to areas experiencing the highest levels of economic distress (Granja et al., 2020)?	Original measures of relative bank performance created by the authors.	SBA PPP microdata and FDIC call reports information.	**Negative:** Traditional lenders did not provide PPP loans to areas with higher COVID-19 case rates or greater unemployment.
Did FinTechs provide more access to PPP loans in areas experiencing the highest levels of economic distress during the 1st draw of PPP (Erel & Liebersohn, 2020)?	Multivariate regression modeling.	SBA PPP microdata and FDIC call reports information.	**Positive:** FinTech lenders appeared to provide PPP loans to areas with more severe economic "shocks." **Neutral:** Borrowers were more likely to apply to FinTechs in areas with relatively lower incomes, fewer bank branches, and/or a higher proportion of minority residents.

TABLE 2. SUMMARY OF EVALUATION RESEARCH ON PPP AND EIDL (CONTINUED)

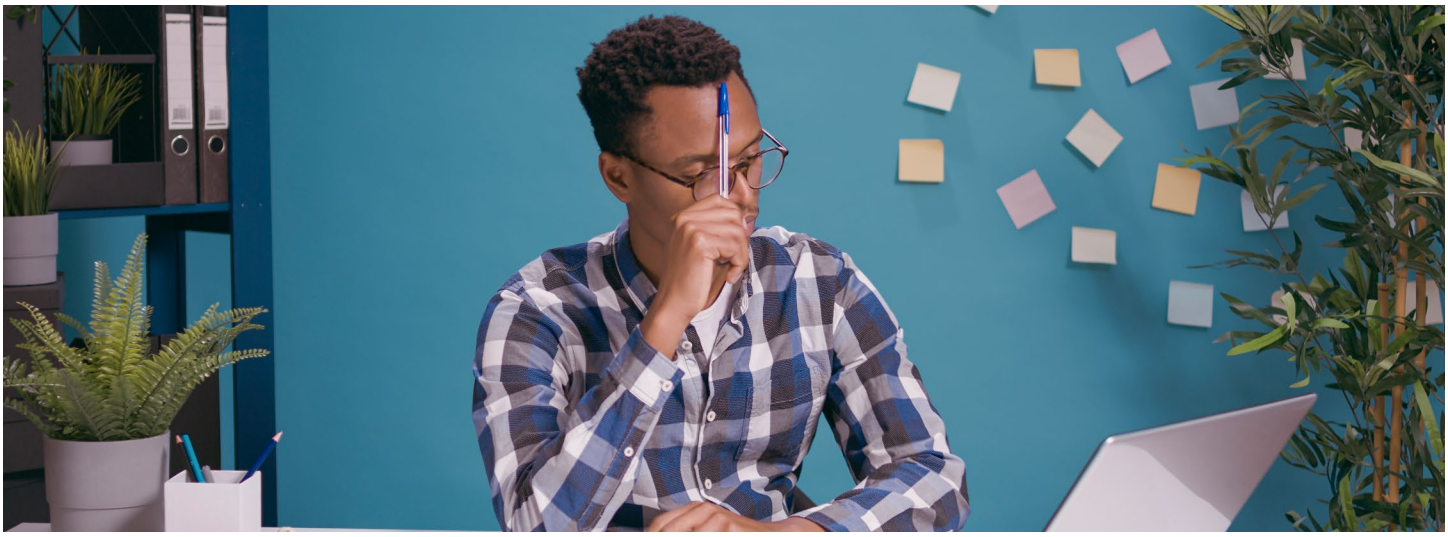
Research Question	Methodology	Data Source(s)	Primary Finding(s)
Are there differences in PPP award amounts based on the racial demographics of a firm's owners (Atkins et al., 2022)?	Multivariate regression modeling.	SBA PPP microdata, FDIC call reports information.	**Negative:** Even after controlling for firm-specific effects and size, PPP loan amounts received by Black-owned businesses were 50% lower than similar white-owned firms.
Within Florida's restaurant industry, are there any differences in PPP application and award data based on the racial demographics of a firm's owners (Chernenko & Scharfstein, 2022)?	Multivariate regression modeling.	SBA PPP microdata, Florida restaurant license and voter registration data, Yelp! reviews, and business registration records.	**Negative:** Black-owned restaurants were less likely to receive PPP loans from traditional lenders compared to non-traditional lenders. **Neutral:** Black-owned restaurants were more likely to apply for PPP loans from non-traditional lenders compared to traditional lenders. **Neutral:** Non-traditional lenders were more likely to approve PPP loans for Black-owned firms when compared to traditional lenders.
Was the distribution of PPP and EIDL aid done on an equitable basis to minority communities (R. Fairlie & Fossen, 2022b)?	Quadratic regression modeling.	SBA PPP and EIDL microdata, Census Bureau County Business Patterns (CBP) information, and Annual Business Survey (ABS) data.	**Positive:** There is a positive relationship between the number of PPP loans within a locale and the minority population share. **Negative:** There was a considerable time lag for PPP aid to reach equitable levels in minority communities versus non-minority communities.
Is there a relationship between an area's status as an Opportunity Zone (OZ) and receipt of PPP aid (Calem & Freedman, 2020)?	Multivariate regression modeling.	SBA PPP microdata, US Treasury tract-level data on designated Opportunity Zones (OZ's), and Zip Code Business Patterns (ZBP) information.	**Positive:** Neighborhoods in OZs which rank in the top 20% of the nation for the percentage of residents that are minority received 50% larger PPP awards versus non-OZ neighborhoods in the bottom 20% of minority population share.
How has the pandemic affected the ability of minority-owned firms to access credit (Federal Reserve Bank System, 2022)?	Descriptive data analysis.	Federal Reserve System's Small Business Credit Survey data.	**Negative:** Firms owned by people of color report a much lower approval rate. **Negative:** Firms owned by people of color were half as likely as their white-owned counterparts to receive the needed amount of financing. **Negative:** Although there was some variation, approval rates for minority firms were generally lower across all types of lenders.

METHODOLOGY & LIMIATIONS

SURVEY DESIGN AND DEPLOYMENT TIMELINE

In the two years between 02/01/20 and 02/01/22, CBSDF awarded 1,410 pandemic-related loan and grant interventions to 1,304 unique firms. Our period of analysis is two years because our research attempts to measure the early short-term output and outcome indicators of COVID-19 assistance programs. In the years to come, additional analysis will be needed to fully understand their scope of impact over the medium- and long-term (Frechtling, 2007). As detailed by **Table 3** on the following page, aid was offered across a combination of 10 different initiatives. Each recipient firm from these programs was invited to complete a survey via email invitation. In 43 cases the initial invitation email was returned as undeliverable, so the total number of firms surveyed is 1,261.

The survey instrument utilized a tailored design approach (Kaplowitz et al., 2004; Stern et al., 2014). Initial invitations were sent on 06/03/22 with follow-up reminders to non-respondents on 06/10/22 and 06/17/22 (Kaplowitz et al., 2004; Stern et al., 2014).[17] The survey closed on 07/01/22, and any incomplete were recorded as partially complete responses. Both the initial invitation and subsequent reminders offered respondents a $10 gift card incentive to complete the survey.[18] A total of 570 responses were received, inclusive of 487 full and 83 partially complete surveys. The overall response rate was 45%, comparatively high for surveys of this type (Bartholomew & Smith, 2006; Baruch & Holtom, 2008). Because incomplete surveys are included in the dataset and not all questions required a response, there is variation in total responses per question (labeled as n). For detailed information about the survey, including a list of questions, see **Appendix II**.



[17] Survey methods research has shown that response rates increase when email reminders (Millar & Dillman, 2012) and participation deadlines (Porter & Whitcomb, 2003) are utilized.

[18] Survey incentives were paid for by ResilNC and are a standard technique to improve response rates. There is a strong consensus in the research methodology literature that use of incentives does not result in lower quality or inaccurate data (Geer, 1988; A. L. Miller & Lambert, 2014; Su et al., 2008).

TABLE 3: LOAN AND GRANTS PROGRAMS INCLUDED IN SURVEY

Program Name & Major Funders	Award Count	Aid Deployed	Average Award	First Award	Last Award[19]
Financing Initiatives					
Mecklenburg COVID-19 Fund Mecklenburg County Government	223	$5,000,000	$22,421	04/20/20	09/29/21
NC Rapid Recovery Program[20] State Government	55	$2,080,646	$37,830	04/06/20	03/29/21
Durham Business Recovery Loans[21] City of Durham	39	$838,850	$21,509	07/21/20	07/22/21
CSBDF Small Business Loan[22] CSBDF's Revolving Loan Fund	14	$2,130,844	$152,203	02/05/20	12/21/21
MeckLending Loan Program[23] Mecklenburg County Government	7	$458,600	$65,514	08/16/21	01/20/22
Grant Aid Initiatives					
RetoolNC Program[24] State Government HUB Office	571	$10,403,291	$18,219	10/25/20	11/04/21
Raleigh COVID-19 Relief Fund City of Raleigh, Private Donors	200	$1,400,291	$7,001	06/02/20	12/02/20
Durham Recovery Grants City of Durham, Duke University	144	$1,101,184	$7,015	07/21/20	01/22/21
CSBDF Borrower Grant State Government CARES Funds	121	$966,819	$7,990	11/20/20	12/21/20
Northeastern Rural NC Grant NC IDEA Foundation	36	$65,930	$1,831	10/05/20	11/15/20

[19] Last award means the last instance of a loan or grant issued before February 1, 2022. In some cases, the program continued to remain open for applications after this date.

[20] Rapid Recovery was a Golden LEAF program utilizing North Carolina state government funding coordinated by the NC Rural Center. CSBDF was part of a network of community lenders offering financing through the initiative, which in total issued 2,266 loans for $139.6M and closed in March 2022 (NC Rapid Recovery, 2022).

[21] Between the close of our analysis period and September 2022, the Durham COVID-19 loan program issued an additional 6 loans for $170k. It remains open for qualifying firms.

[22] CSBDF made a commitment to continue issuing loans where feasible during the pandemic. Lending is now resuming normal operations, and 15 additional loans for $1.4M were closed through September 2022.

[23] This program is the successor to Mecklenburg County's COVID-19 loan fund and continues to offer financing. As of September 2022, an additional 11 loans totaling $600k had been issued.

[24] There were three rounds of funding for the ReToolNC grant, which CSBDF administered in partnership with the Institute for Minority Economic Development on behalf of North Carolina's Historically Underutilized Business (HUB) Office. The analysis period includes the first two rounds, the third and final round concluded in July 2022 when CSBDF awarded an additional 513 grants for $9M.

GENERALIZABILITY OF SURVEY RESULTS

Data on community economic development interventions within a single state are subject to perennial critiques about generalizability. However, there is compelling evidence that single-state studies are indicated when the design allows for the testing of a hypothesis with data that does not exist across multiple states (Nicholson-Crotty & Meier, 2002). The survey data offer a rare opportunity to compare the short-term outcomes of COVID-19 loan and grant programs because CDFIs to offered such a mix of assistance options. The CDFI industry was heavily engaged in Paycheck Protection Program (PPP) loans, especially when changes were made to improve access in later rounds (Eggleston, 2021). But while PPP aid was a critical tool, to our knowledge very few CDFIs had a level of grant activity that would allow for similar research (R. Fairlie & Fossen, 2022b). [25]

Table 4 on the following page shows values for key individual- and firm-level characteristics across both respondents and non-respondents. In most cases, differences between these two groups were significant as measured across various statistical tests.[26] In an ideal case, there would be no difference because the sample would resemble the surveyed population on any dimension that might influence the results. But while our sample does not have the ideal level of generalizability, observed variances are well within generally accepted guidelines for survey-based evaluation research (Sharpe, 2019). Thus, overall, we believe the data are generalizable and provide much-needed insight on the short-term impact of small business loan and grant aid.

[25] However, we would be remiss if we did not note the small number of CDFIs who did act to provide a diverse array of small business aid beyond PPP loans and "traditional" emergency financing. One leader in this area is AltCap, a CDFI headquartered in Kansas City, Missouri, which provided 601 emergency and PPP loans that injected $12.8M into the metro's economy during a period of high economic distress. At the same time, AltCap's affiliated community foundation also provided 96 cash grants for $660k to small businesses throughout the Overland Park, Kansas area in partnership with local municipalities (Community Capital Fund, 2021).

[26] Based on the format of the data, various analyses were used to determine if differences between the characteristics of the respondent and non-respondent group are meaningful (Franke et al., 2012). The analyses included chi-square tests (intervention characteristics, primary owner race), independent sample t- tests assuming equal (firm age) or unequal variances (assistance amount), and two proportion z-tests (BIPOC-owned, veteran-owned, low income-owned, Lainx-owned, and rural location percentages).

TABLE 4: COMPARISON OF SURVEY RESPONDENTS AND NON-RESPONDENTS

Characteristics	Responded (n = 570)		No Response (n = 691)	
	Count	Percent	Count	Percent
Intervention Type***				
CSBDF Grantee	467	81.9%	491	71.1%
CSBDF Borrower	84	14.7%	182	26.3%
Received Both	19	3.3%	18	2.6%
Amount of Assistance				
Mean Aid Amount	$17,673.35		$19,709.24	
Firm-Level Demographics				
BIPOC-Owned**	382	67.0%	422	61.1%
Women-Owned***	308	54.0%	293	42.4%
Veteran-Owned	26	4.7%	31	4.5%
Low Income-Owned**	95	16.7%	153	22.1%
Rural Location**	61	10.7%	50	7.2%
Mean Firm Age[27]	9.10 Years		9.24 Years	
Primary Owner Race***				
Black or African American	319	56.0%	309	44.7%
White	185	32.5%	271	39.2%
Asian	32	5.6%	39	5.6%
American Indian	7	1.2%	6	0.9%
Other or Multiple Races	14	2.5%	36	5.2%
Decline to State[28]	13	2.3%	30	4.3%
Primary Owner Ethnicity[29]				
Hispanic or Latinx**	27	4.9%	73	10.6%

*Note: Statistically significant at ***p < 0.01, **p < 0.05, or *p < 0.10*

[27] Number of years between the respondent firm's start date and the date CSBDF awarded a COVID-19 loan or grant. If the respondent received multiple awards, the date of first intervention is utilized.

[28] There is little research on the topic of why individuals sometimes choose to not self-identify their race or ethnicity. What does exist suggests this can occur for a wide array of reasons. One on end of the spectrum, some don't disclose their race because they already feel extremely marginalized (Cabrera & Holliday, 2017). On the opposite end, others believe disclosure may result in them being seen as coming from a privileged group and cause an unwanted reaction (Rich, 2009).

[29] Reflective of the scholarly consensus, and consistent with the recommendation of the US Census Bureau, CSBDF separates race and ethnicity when collecting demographic data (L. Davis & Engel, 2011).

RESEARCH LIMITATIONS AND GENERAL CAVEATS

Scholars have long noted the flaws and limitations of null hypothesis testing, especially in the context of how statistical tests are interpreted by readers (Albers et al., 2018; Ziliak & McCloskey, 2008). Research in public policy specifically, and the social sciences more broadly, has an unfortunate history of misusing the results of statistical analyses (Gorard, 2014; Hensel, 2021). It is critical to note a lack of statistical significance does not mean a finding lacks importance (McShane & Gal, 2017); and conversely, a statistically significant finding should not be interpreted as proof that the intervention (a loan or grant, in this case) had an effect.

To align with our previous arguments surrounding the need for more rigorous analysis procedures to evaluate CDFI activities (McCall & Hoyman, 2021), our findings test for statistically significant differences at ***$p < 0.01$, **$p < 0.05$, and *$p < 0.10$.[30] This use of statistics applies the standard frequentist lens of analysis to determine the probability of observing the results if the null hypothesis was true (Hubbard, 2011). In this case, significance usually indicates the likelihood the data would consistently present in this manner if there was no difference between small business owners who received a loan, grant, or both types of aid. While the complexity level of a statistical test should never be equated with thoroughness, our approach is rudimentary and offers only minor improvements over existing CDFI analyses.[31] Nevertheless, we believe such testing can be used to better assess the outcomes of community development activities.

[30] We include findings at $p < 0.10$ as marginally significant, though we acknowledge that there is much debate over whether this threshold level is appropriate (V. E. Johnson, 2019; Pritschet et al., 2016).

[31] An assessment of our findings through something like a Bayesian approach would likely yield more robust results (Held & Ott, 2018). Unfortunately, the complexity in both time and cost of such alternative methods means a Bayes factor framework is outside the scope of this project.

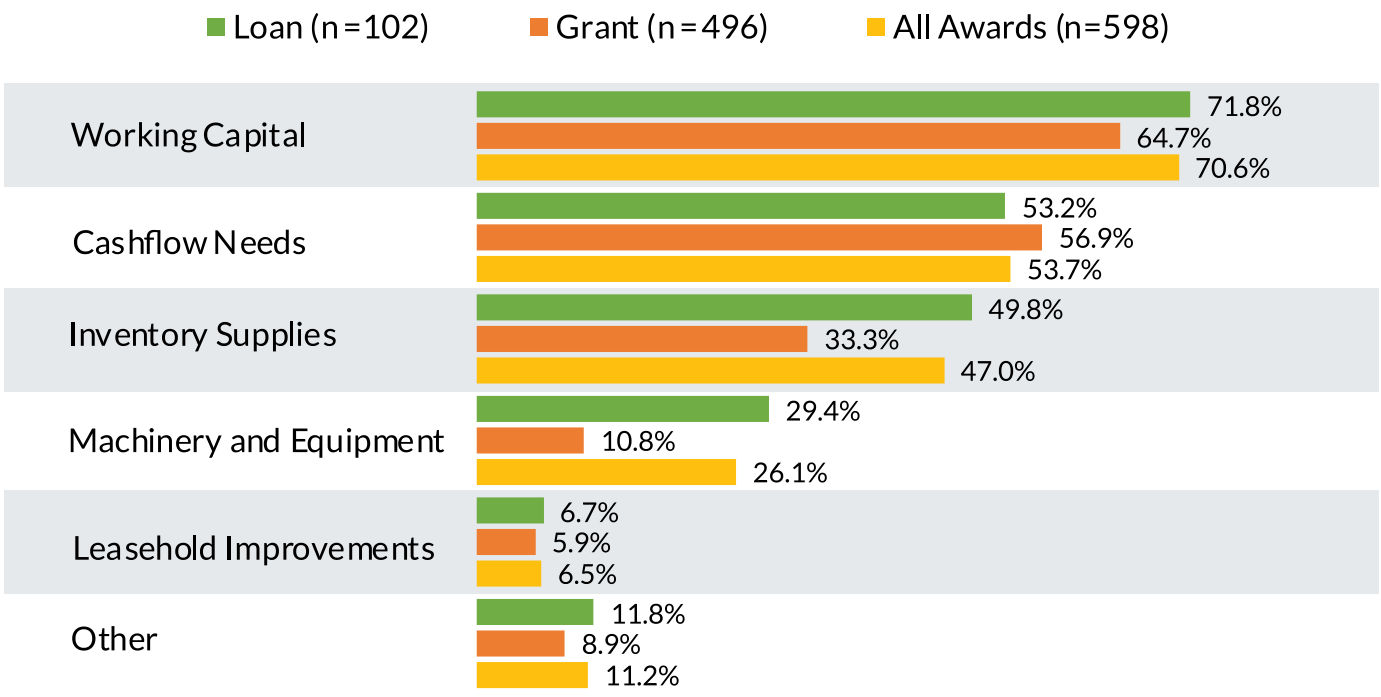
FINDINGS AND ANALYSIS

PART I. CHARACTERISTICS OF RECIPIENT FIRMS

TRENDS IN USE OF LOAN AND GRANT FUND PROCEEDS

Respondents were asked to indicate how the proceeds of their loan or grant award were spent as of the date of the survey. If a firm owner received more than one loan and/or grant, they were asked to indicate how funds were allocated for each individual award. **Figure 1** below indicates the percentage of unique firms utilizing award proceeds for the listed expenditure category. [32,33] There were some differences between intervention types for a few categories of expenses. Most recipients used proceeds for working capital, though the proportion was only slightly higher for borrowers (71.8%) than it was for grantees (64.7%). More notably, a much larger cohort of loan recipients spent funds on inventory (49.8%) and equipment (29.4%) compared to those receiving grants (33.3% and 10.8%, respectively).

FIGURE 1: USE OF AWARD FUNDS BY EXPENSE CATEGORY (N = 597)



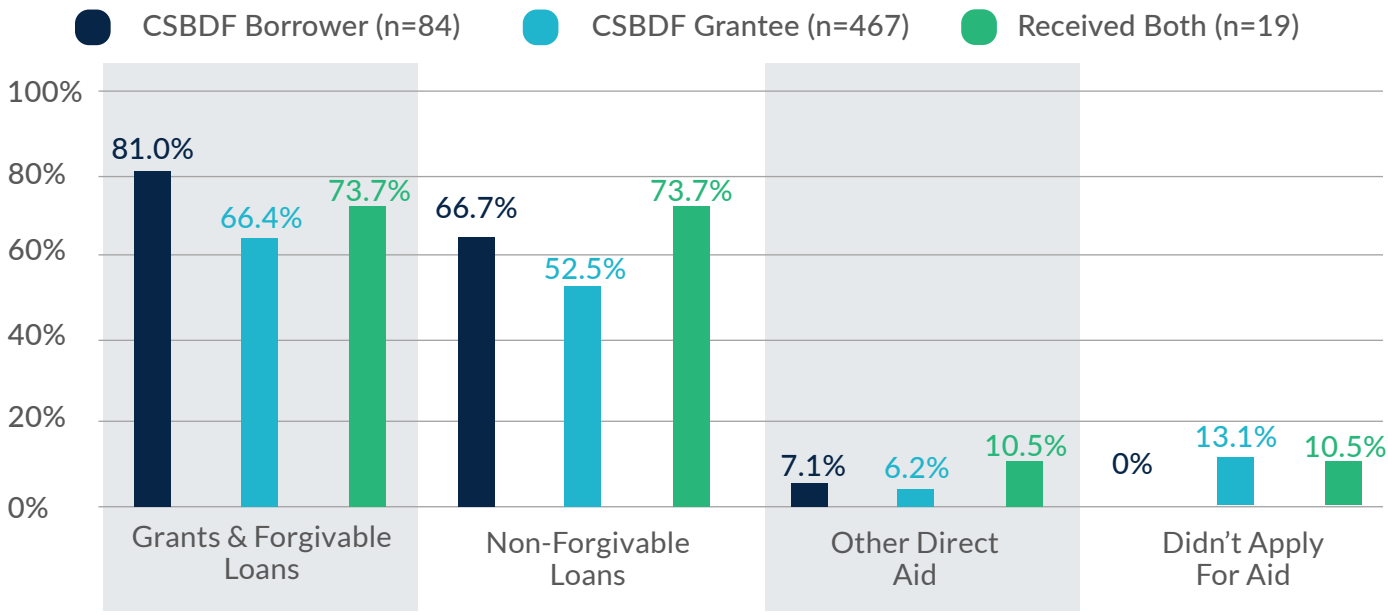
[32] The count (n = 597) exceeds the number of respondents because the unit of analysis is the number of unique grants and loans received. This is different than the total number of unique firms that responded, since some firms received multiple awards.

[33] Data for Figure 1 required extensive recoding because of the "other" option. For 142 awards, the respondent selected other but entered text that reflected a pre-existing category. For example, instead of selecting the cashflow needs category, one respondent selected other and typed "cashflow expenses" as the explanation. The replication data includes a tab that indicates how the data were recoded for Figure 1.

APPLICATIONS AND APPROVALS FOR OTHER COVID-19 AID

Small business owners were asked to indicate what types of other assistance they applied for, excluding any help from CSBDF. At the time of the survey, respondents said they had applied for 1.58 other COVID-19 aid programs on average. However, **Figure 2** shows that CSBDF grant recipients were less likely to apply for other grants or loans. Interestingly, a notable minority of CSBDF's grantees (13.1%) did not apply for ***any*** other small business aid. Comparatively, no borrowers (0.0%) in the survey reported that they did not apply for any other aid program.

FIGURE 2. APPLICATIONS FOR OTHER COVID-19 ASSISTANCE PROGRAMS[34] (N = 570)



In many cases not applying for aid was simply a matter of place luck or serendipity (Reese & Ye, 2011). For example, a business owner who was located just outside of a downtown district would not qualify for grants and loans offered by a downtown development organization. In other instances, applying for aid reflects a small business owner's ability to access information. After all, it is not possible to apply for a pandemic relief program if you don't know about its existence.

[34] *Grants and Forgivable Loans* are categorized as 1st and 2nd draws of the federal Paycheck Protection Program, the federal Restaurant Revitalization Grant, the state Job Retention Grant, the state Business Recovery Grant, and any local government COVID-19 relief grants. *Non-Forgivable Loans* means the federal Economic Injury Disaster Loan Program, the state Rapid Recovery Loan, and any local government COVID- 19 relief loans. *Other Direct Aid* is all other assistance forms, including North Carolina's mortgage and utility rate relief programs, since for many small firm owners their principal place of business is their home.

Throughout the COVID-19 crisis, historically marginalized entrepreneurs often had the highest knowledge gap in terms of available assistance options (Klein & Todesco, 2021; Meurer et al., 2022). In particular, Latinx small business owners were often adversely affected when pandemic aid initiatives failed to use culturally appropriate marketing, did not offer bilingual application options, and/or required proof of citizenship (Kolker, 2020).[35]

Excluding CSBDF's aid, respondents indicated approval for 1.29 other programs on average. As noted in **Table 5** below, the overall reported approval rates were quite high – over 80%. But as we noted in the literature review, high approval rates for COVID-19 assistance masked how funds were failing to flow to people and places with the highest need. One of the most documented examples involves the early rounds of PPP, where Black-owned firms were much less likely to apply for and receive funds. Many of these issues were later rectified through administrative changes in the second draw application process (R. Fairlie & Fossen, 2022b). But in the end, the aid amount Black businesses were approved for was still consistently lower even when controlling for revenues and industry type (Atkins et al., 2022).

TABLE 5: APPROVALS FOR OTHER COVID-19 ASSISTANCE PROGRAMS (N = 570)

Other Financial Assistance Applied For	Applied Count	Approved Count[36]	Approved Percent
Federal COVID-19 Assistance			
Paycheck Protection Program	362	331	91.4%
Economic Injury Disaster Loan	310	260	83.9%
Restaurant Revitalization Grant	39	28	71.8%
State COVID-19 Assistance			
Rapid Recovery Loan	32	22	68.8%
Mortgage, Utility, and Rate Relief Program	12	6	50.0%
Business Recovery Grant	74	31	41.9%
Job Retention Grant	6	2	33.3%
Local Government COVID-19 Assistance			
Local Government COVID-19 Relief Grant	38	28	73.7%
Local Government COVID-19 Relief Loan	8	5	62.5%
Any Other Program Not Listed			
All Other COVID-19 Aid Programs	26	20	76.9%
Total Applications and Approvals			
All Non-CSBDF COVID-19 Programs	906	733	80.9%

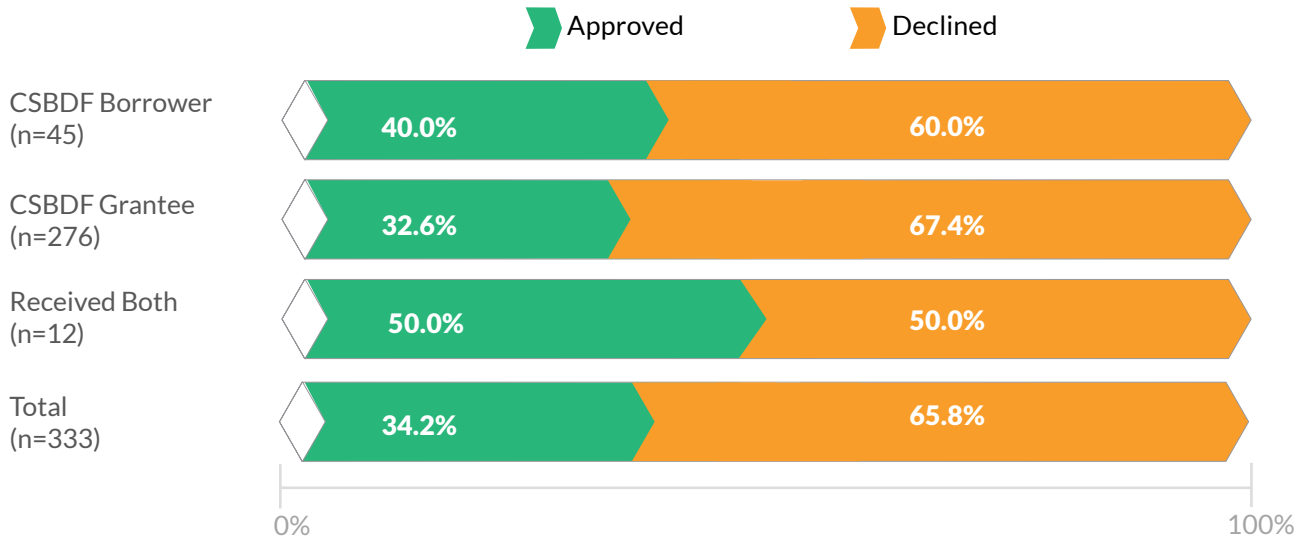
The survey also asked respondents to indicate whether CSBDF's loan or grant represented the first instance of COVID-19 aid received by the firm. Presumably the marginal impact of the intervention could be different for respondents' whose first experience in receiving a pandemic loan or grant came from a CSBDF program. We might hypothesize a lower relative impact in cases where CSBDF's aid was supplementary and in addition to help from other

[35] There is little evidence to support the notion that citizenship screening questions are effective in preventing illegal residents from receiving government aid. Instead, these questions have a chilling effect on Latinx individuals who are citizens, making them less likely to apply for aid (Gonzalez et al., 2020).

[36] A total of 28 respondents indicated they were declined for all COVID-19 aid they applied for.

sources. At the time of receiving a CSBDF grant or loan, 58.0% of firms had applied for assistance from other COVID-19 relief programs. Of the subset of respondents who had applied for other aid, **Figure 3** shows borrowers (40.0%) reported higher approval rates versus grantees (32.6%).

FIGURE 3: RESULT OF RELIEF APPLICATIONS PRIOR TO CSBDF'S INTERVENTION (N = 333)



FINANCING APPLICATIONS & APPROVALS BEFORE THE PANDEMIC

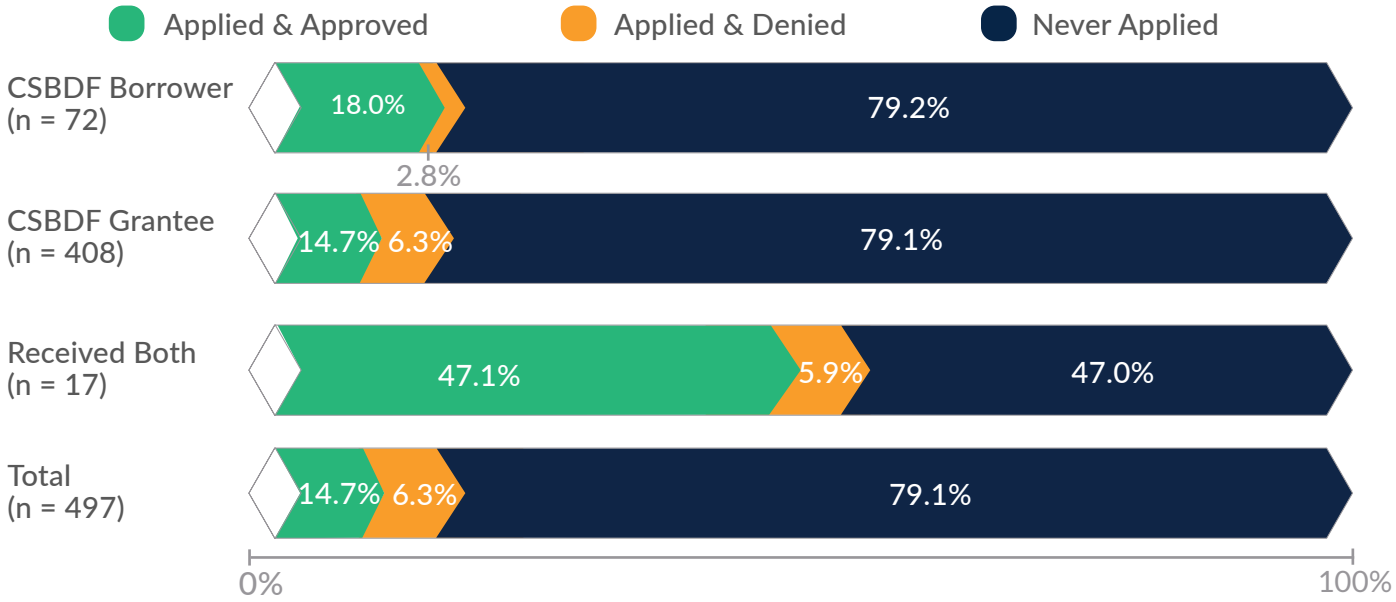
Small business growth is highly correlated with a firm's ability to access financial capital on reasonable terms (Wiklund et al., 2009). On the next page, **Figure 4** shows there was little difference in pre-pandemic application activity across intervention types. Overall, 20.8% of loan recipients and 19.6% of grant recipients said they had applied for loan prior to the pandemic. But while application rates were similar, denial rates were a different story.

Pre-pandemic loan denial rates were notably higher for those awarded CSBDF's pandemic grants (6.9%) versus those receiving loans (2.8%).[37] While this difference could be explained by firm size and financial health, our data suggests this is unlikely. The tendency of grant recipients to be declined for loans before the pandemic remains even when controlling for the respondent firm's age, revenues, and current employment levels.[38]

[37] A chi-square test for approval rates across intervention types shows $p = 0.107$, falling just short of the marginal significance threshold of $p < 0.10$.

[38] We estimated an ordinary least squares regression model with loan application outcomes as the dependent variable and (1) firm age, (2) current FTE count, and (3) annual revenue category as the independent variables. The model was statistically significant ($p < 0.05$) but the independent variables explained a very small portion of the variation in the dependent variable (adjusted $R^2 = 0.127$).

FIGURE 4: PRE-PANDEMIC FINANCING APPLICATIONS AND APPROVALS (N=497)



There is a strong negative correlation between having been declined prior to the pandemic and the firm owner's race.[39] This is consistent with the body of scholarship that shows Black-owned firms are more likely to be denied access to small business credit (Blanchflower et al., 2003a; Meyer & Schweitzer, 2022; Weller, 2009). This is true even if firms owned by Black individuals are financially similar in every other respect to firms owned by White individuals (Mijid & Bernasek, 2013). The consequences of such ongoing disparities are well documented. Not only does a lack of credit inhibit business growth, but it can also contribute to firm failure. Credit denials can often hasten firm destruction when disenfranchised owners turn to predatory financial products to meet their capital needs (Charron-Chénier, 2020; Henderson et al., 2015).

RESPONDENT GROSS ANNUAL REVENUES

CSBDF grant aid recipients were disproportionately more likely to report lower revenues in their most recently completed tax year. On the next page, **Figure 5** shows the plurality of grantees (32.6%) reported annual revenues of less than $50k compared to borrowers (12.9%). This pattern is not due to program design, as CBSDF's COVID-19 aid programs were generally available to all firms with $1M or less in annual revenues. However, this may be a self-selection effect wherein more sophisticated and/or larger firms were more likely to apply for loan aid. It may seem unusual to characterize applying for funds that do not need to be repaid as less sophisticated. But because grant programs had much lower caps ($35,000) versus loan initiatives ($250,000), they rarely provided sufficient funds to make major purchases.

The data again demonstrate a strong correlation between a firm owner's primary race and their level of gross revenues. On the next page, **Figure 6** shows Black respondents indicated gross revenues of less than $50,000 at a far higher rate (40.9%) compared to White respondents (13.8%). This effect holds even when controlling for the respondent firm's age. Admittedly this

[39] There was primary owner race data for 97 respondents who indicated applying for a loan before January 2020. Race data was recoded (BIPOC = 1, all others = 0). The results are significant at $p < 0.01$ with a Pearson's correlation of -0.375. Importantly though, differences by race are statistically significant only across Black and White respondents. For additional details, see Table A1 in **Appendix I**.

may also reflect the industry mix of the sample, which we cannot control for due to incomplete data. Nevertheless, the trend is consistent with research showing Black-owned firms have lower revenues on average, even after controlling for industry mix and time in business (R. W. Fairlie & Robb, 2008a; Freeland & Keister, 2016).

FIGURE 5: DISTRIBUTION OF RESPONDENT GROSS REVENUES (N = 492)[40]

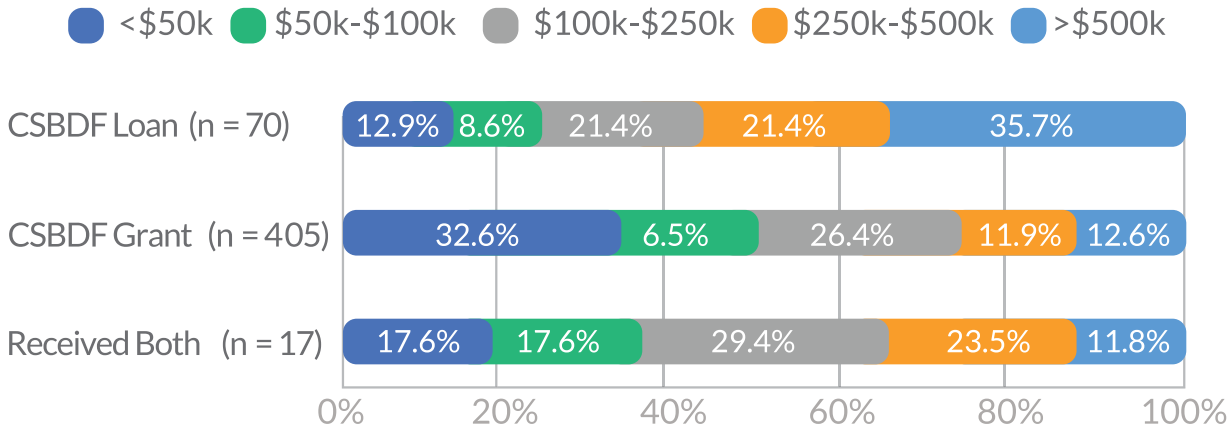
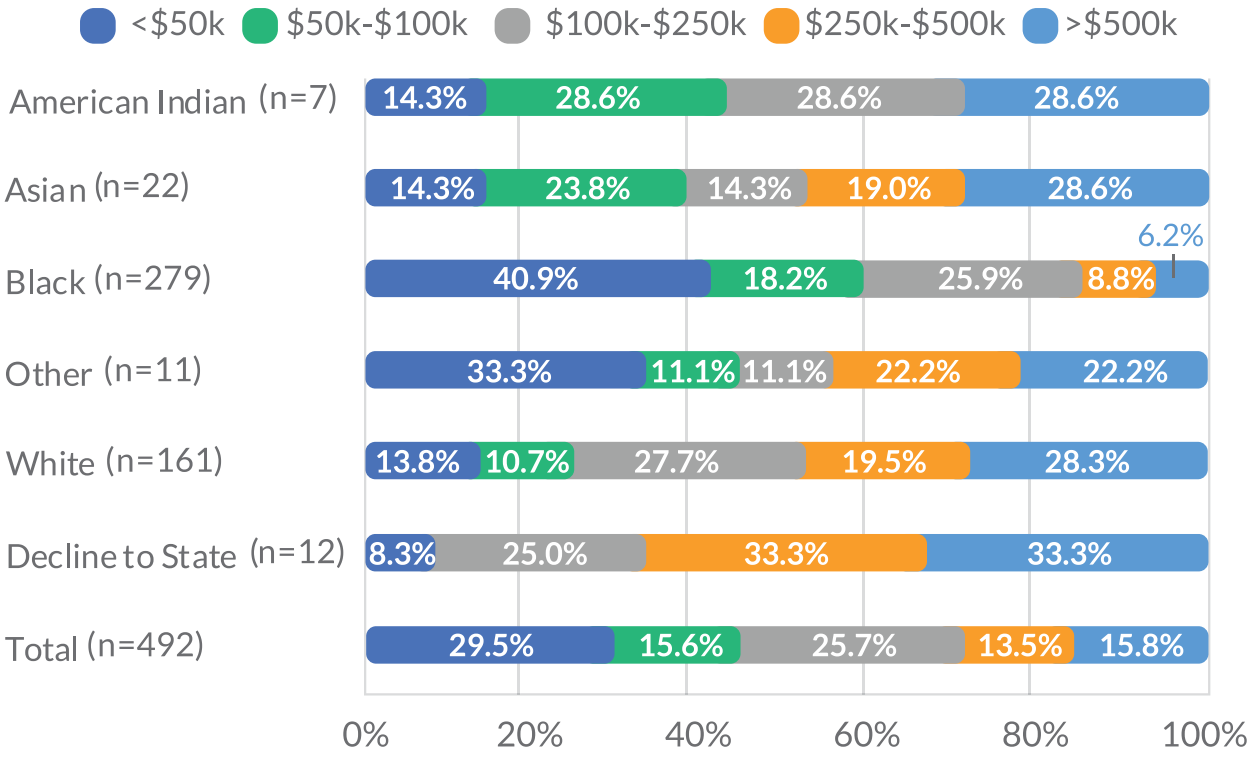


FIGURE 6: DISTRIBUTION OF RESPONDENT GROSS REVENUES BY RACE (N = 492)[42]



[40] A Chi-square test comparison of values across the category of intervention (loans, grants, both) and category of reported revenues suggests differences are statistically significant at $p < 0.01$ with a Cramer's v medium to large effect size of 0.197.

[41] We estimated an ordinary least squares regression model with firm revenue categories as the dependent variable and the (1) primary owner's race, (2) the intervention type (loan, grant, or both) and (3) firm age as independent variables. The overall model has an adjusted R^2 of 0.177 and is statistically significant at $p < 0.01$. All independent variables were statistically significant, but the owner's race had a 58% Johnson's relative weights value, higher than either intervention type (22%) or firm age (20%).

[42] A Chi-square test comparison of values across the primary owner's racial category and level of reported revenues suggests differences are statistically significant at $p < 0.01$ with a Cramer's v large effect size of 0.415.

FINDINGS AND ANALYSIS

PART II. SHORT-TERM IMPACTS FROM INTERVENTIONS

As outlined in **Table 6** below, the remainder of the findings examine variations in the output and outcome goals for CSBDF's COVID-19 aid programs. Like the previous section, our lens of analysis concerns whether there is variation in these metrics by intervention (received a loan, grant, or both) *and* if reported impacts are different for firm owners from historically marginalized constituencies.

TABLE 6. TARGETED OUTPUTS AND OUTCOMES

Category	Short-Term Impact	Surveyed Metric
Outputs	Supports Existing Employment Position(s)	Higher levels of current full-time equivalent employees.
Outcomes	Improves Firm's Financial Stability	More cash on hand to pay for business expenses.
	Creates Higher Levels of Social Capital	Increased bridging, bonding, and linking activities.
	Cultivates Trust in Organizations & Individuals	More likely to trust business support entities.
	Improved Business Sentiment	Favorable perception of local economic conditions.
	Fosters Need for Future Financing	Anticipated need for loan in future.

OUTPUT: SUPPORTS EXISTING EMPLOYMENT POSITION(S)

Since job creation and retention is a desirable outcome of small business support, it is a highly valued output metric by COVID-19 aid funders. Although small businesses make an array of other contributions to their local communities, job creation and retention remains the primary way to measure entrepreneurial success (S. Davis et al., 1996; Decker et al., 2014; Gabe, 2017; McCall & Hoyman, 2021). There were stark differences in the number of full-time equivalent (FTE[43]) employees at the time of the survey across firms, ranging from a low of 0[44] (indicating firm failure) to a high of 252. As shown in **Table 7** on the next page, respondents receiving loans reported 7.7 FTEs on average, higher than the 5.1 FTEs reported by grantees.[45]

[43] We define a full-time equivalent employee (FTE) as one individual working an average of 35 hours per week throughout the year (Carolina Small Business Development Fund, 2022). For example, if a small business reports 4 part-time employees working 17.5 hours each week on average, that is 2 FTEs.

[44] CSBDF's employment definitions were created to aid in the impact measurement process. The framework is different from traditional economic lens and its distinction between employer and non-employer firms (Corcoran et al., 2021). For example, firm owners that receive remuneration through non-payroll means are considered as employed for impact measurement purposes, even if they would otherwise be classified as non-employers.

[45] Ranked ANOVA is statistically significant at $p < 0.05$ with a Cohen's f medium effect size of 0.204. For ranked pairwise test results, see Table A2 in **Appendix I**.

TABLE 7: LEVEL OF FTE EMPLOYMENT AT TIME OF SURVEY (N = 512)

Respondent Category	Count	Median FTEs	Average FTEs	95% Confidence		Standard Deviation
				Minimum	Maximum	
CSBDF Borrower	75	4.6	7.7	5.6	9.9	9.2
CSBDF Grantee	419	2.6	5.1	3.7	6.5	14.5
Received Both	18	2.5	4.7	2.1	7.3	5.2
Total	512	2.9	5.5	4.3	6.7	13.6

We created a simple linear regression model to identify what factors might best explain observed variances in respondent FTE levels. An overview of the results is shown in **Table 8**.[46] Overall, the model shows about 38% of variation in reported FTE levels across respondent firms.[47] Both firms with higher revenues and those who received a small business loan before January 2020 were associated with higher employment levels at the time of survey. Conversely, small business owners indicating no plans to seek financing in the next 12 months were correlated with lower levels of employment. Such results are perhaps intuitive and thus unsurprising, but they do reiterate the importance of access to capital for small business.

TABLE 8: MAJOR INFLUENCES ON VARIATION IN FTE EMPLOYMENT (N = 487)

Notable Factors Influencing Variation in Respondent FTE Levels	Variation Explained	Influence on FTE Levels	Results Confidence
Higher Gross Revenues	74.4%	Increases ⇧	High
Received Both Loan and Grant	5.3%	Increases ⇧	Medium
Previously Received CSBDF Loan	4.3%	Increases ⇧	High
No Future Financing Plans	1.6%	Decreases ⇩	Medium
Explained by Other Variables	14.1%		Low

OUTCOME: IMPROVES FIRM'S FINANCIAL RESILIENCY

As a measure of resilience and the potential effectiveness of relief funds, we asked respondents to estimate how long they could pay for expenses with cash on hand. Smaller businesses rarely have sufficient cashflow to cover expenses for any length of time. In a disaster, this can accelerate the path to permanent closure (Schrank et al., 2013). Even in normal operating conditions, few small businesses can cashflow their expenses for any length of time before having to lay off staff or reduce costs (Farrell & Wheat, 2016). **Table 9** on the next page shows firms receiving grants (32.9%) were more likely than those receiving loans (22.9%) to report less than 30 days of cash on hand to pay for business expenses.[48] This difference is notable and a positive indicator of the effectiveness of the surveyed interventions. Those firms with the highest objective need for urgent assistance, as measured by having very low levels of cash on hand, were more likely to receive a grant.

[46] See Table A3 in **Appendix I** for the full model as well as additional information about the model's assumptions and imputations. In the simplified table presented above, variation explained is Johnson's relative weights (Tonidandel & LeBreton, 2011), influence on FTEs indicates whether the coefficient's value was positive or negative, and results confidence is the variable's level of significance at $p < 0.01$ (high), $p < 0.05$ (medium), $p < 0.10$ (medium), or not significant (low).

[47] R^2 is 0.399 and Adjusted R^2 is 0.380, the overall model is statistically significant at $p < 0.01$.

TABLE 9: CASH ON HAND TO COVER EXPENSES (N = 484)

Category	< 30 Days	30-60 Days	60-90 Days	> 90 Days
CSBDF Borrower (n = 70)	22.9%	28.6%	31.4%	17.1%
CSBDF Grantee (n =398)	32.3%	34.1%	21.1%	12.5%
Received Both (n =16)	37.5%	50.0%	6.3%	6.3%
Total (n = 484)	31.1%	33.8%	22.1%	13.0%

In an emergency, be it natural or manmade, the literature suggests stabilizing smaller firms is critical for the nation's economy, as smaller firms are essential for sustaining a functioning economy and assuring the delivery of goods (Burton et al., 2011) . Yet because many small- and medium-sized firms are concentrated in the service sector, they are the most likely to suspend operations or even permanently shut down during a crisis (Rebmann et al., 2013). These effects were acutely observed during the early period of the pandemic, when catastrophic financial losses occurred after many smaller businesses were shuttered.

Notably, the impact of these closures was again most frequently observed in BIPOC-owned enterprises, with 41% of Black-owned and 32% of Latinx-owned firms shuttering nationwide (R. Fairlie, 2020). Our data provide additional context for why this is an issue by showing a correlation between the respondent firm's level of cash on hand and the primary owner's race. As an illustrative example, **Table 10** shows that Black- owned firms (35.9%) were much more likely to report having less than 30 days cash on hand compared to enterprises owned by Whites (25.2%) and Asians (23.8%).

TABLE 10: CASH ON HAND TO COVER EXPENSES BY PRIMARY OWNER RACE (N = 484) [49]

Primary Owner Race	Count	< 30 Days	30-60 Days	60-90 Days	> 90 Days
American Indian	7	0.0%	42.9%	57.1%	0.0%
Asian	21	23.8%	38.1%	9.5%	28.6%
Black	274	35.9%	34.1%	19.4%	10.6%
Other	11	33.3%	33.3%	11.1%	22.2%
White	159	25.2%	33.3%	26.4%	15.1%
Decline to State	12	16.7%	25.0%	33.3%	16.7%
Total	484	31.0%	33.9%	22.0%	13.1%

[48] Caution is advised in generalizing these results because a chi-square comparison of values across the category of intervention and level of reported cash on hand is not statistically significant.

[49] A Chi-square test comparison of values across the primary owner's racial category and level of reported cash on hand is marginally significant at $p < 0.10$ with a Cramer's v small to medium effect size of 0.142.

OUTCOME: CREATES HIGHER LEVELS OF SOCIAL CAPITAL

The pandemic has magnified the already strong nexus between economic distress and weak social capital networks (McCall & Williams, 2020). Social capital refers to the networks embedded within organizations that facilitate trust and norms to improve the efficiency of society via coordinated action (Putnam et al., 1994). Research suggests the concept has a three-pronged mechanism of action via (1) increasing trust levels, (2) lowering transaction costs, and (3) enabling collective action (Callois & Aubert, 2007). There is a strong correlation between sustainable development and the density of a community's social capital networks (Bjørnskov, 2012a; Casey & Christ, 2005a; Eagle et al., 2010a; Guiso et al., 2004; Putnam, 2001; Westlund & Bolton, 2003).

Network interactions between small firms and those who patronize them helps build trust, which leads to reciprocal positive economic outcomes (Hoyman et al., 2016; Leigh & Blakely, 2016; Malizia & Feser, 1999). For small businesses, engaging in social capital generating activities is correlated with being more innovative, increasing revenues, and firm survival (Kilkenny et al., 1999; Molina-Morales & Martínez-Fernández, 2010). Survey questions asked respondents to measure social capital across three categories: *(1) bridging, (2) bonding, and (3) linking* (Hoyman et al., 2016; Williams, McCall, et al., 2021). **Figure 7** on the following page demonstrates the theoretical framework behind these categories.

1 *Bridging Social Capital*

When small businesses engage in *bridging* activities (see **Figure 7**, Quadrant I), they interact with individual(s) and organization(s) that are fundamentally different from them in some way (Knudsen et al., 2000). This forms strong ties that endure over time which have some level of personal or professional depth (Granovetter, 1973). This might include, for example, a small business owner who sponsors a local recreational sports league.[50]

2 *Bonding Social Capital*

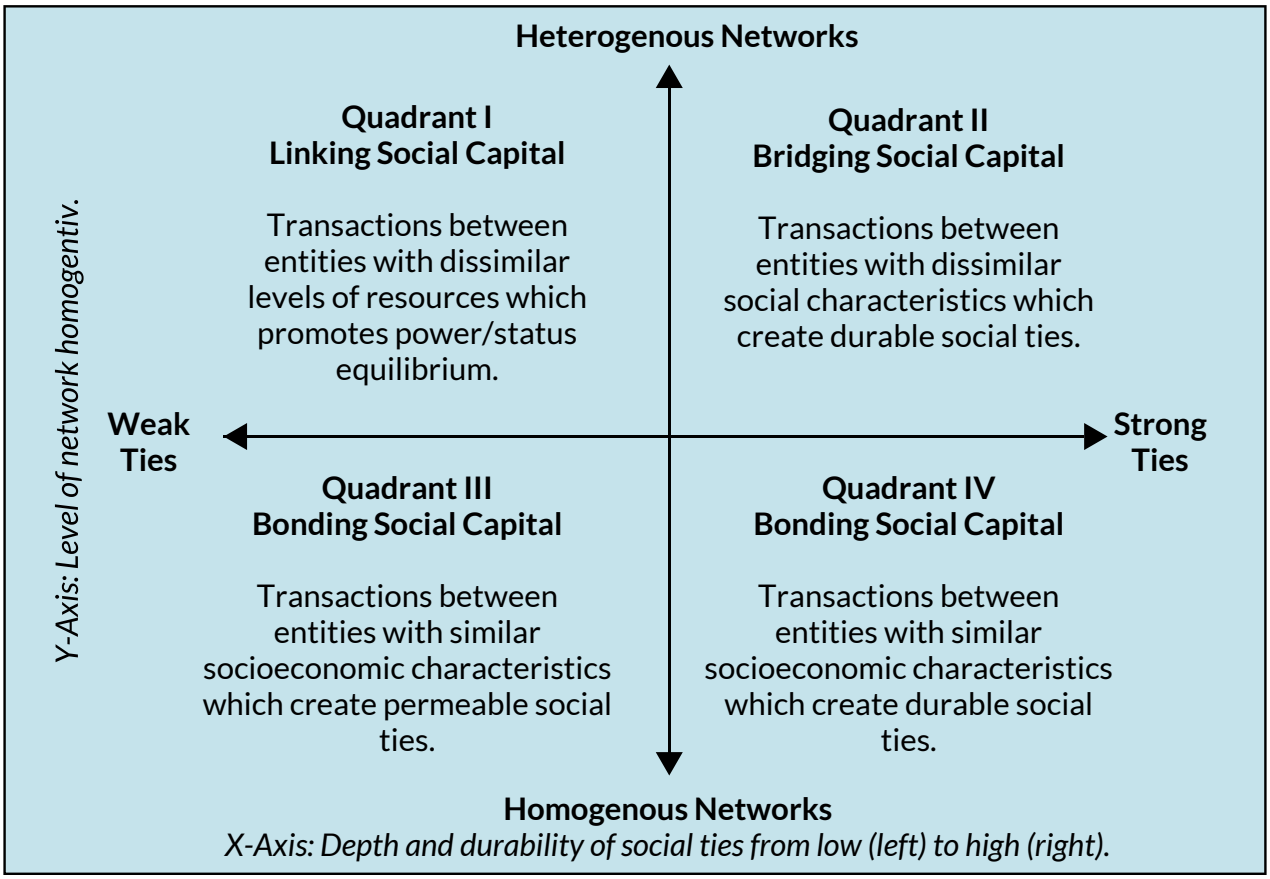
In contrast *bonding* activities (See **Figure 7**, Quadrants III and IV) strengthen relationships between an entrepreneur and individual(s) and/or organization(s) with similar socioeconomic characteristics. This might include business owners who market their services to fellow parishioners at church (Putnam & Campbell, 2012).

3 *Linking Social Capital*

Finally, *linking* capital (See **Figure 7**, Quadrant II) represents associations between organizations or individuals that have disparate levels of influence or power (Macke & Dilly, 2010) Linking transactions are an acknowledgment that networks can grant access to people and institutions that operate at a different level of social or economic status. In this context, an example might be a small business owner who gets preferable terms with a supplier due to a referral from their banker.

[50] To be a bridging social capital interaction, the small business owner's industry would need to be unrelated to the sponsorship. For example, a restaurant owner sponsoring a local volleyball team.

FIGURE 7. SOCIAL CAPITAL TYPES IN COMMUNITY ECONOMIC DEVELOPMENT[51]



We asked the recipients of CSBDF's pandemic aid to indicate agreement with a series of statements that represent bridging, bonding, and linking capital (Berner et al., 2019). As shown in **Table 11** on the next page, there were differences in levels of agreement between loan recipients (54.9%) and grant recipients (46.7%) on issues like knowing where to go for help if needed. Additionally, fewer borrowers (5.7%) disagreed with the idea that most people could be trusted versus grantees (14.7%). If we sum the total level of social capital sentiment reflected in all five statements, loan recipients have a 5.5% higher score than those who received grants.[52] But while this difference is meaningful in a vacuum, it is no longer statistically significant after controlling for the primary owner's racial minority status.[53] In other words, differences are because minority respondents have lower aggregate social capital scores and were more likely to receive grants.

[51] Bridging, bonding, and linking capital are all vital because they shape community economic development outcomes in different ways (Hoyman et al., 2016; Williams, McCall, et al., 2021).

[52] Level of agreement was recoded to numerical values (strongly disagree = 1, disagree = 2, undecided = 3, agree = 4, strongly agree = 5) and resulted in mean sentiment scores of 3.54 for loans, 3.35 for grants, and 3.50 for both. ANOVA differences between mean recoded scores and intervention type is marginally significant at $p < 0.10$ with a Cohen's f small effect size of 0.100.

[53] The mean aggregate social capital score variable was regressed against the intervention type and a dichotomous variable for whether the firm's primary owner was a racial minority. The overall model was statistically significant at $p < 0.01$. But the independent variables explained a very small portion of the variation in the dependent variable (adjusted $R^2 = 0.062$) and intervention type was not significant.

TABLE 11: PERCEPTIONS OF SOCIAL CAPITAL & COMMUNITY[54] SUPPORT NETWORKS

Respondent Category	Agree	Disagree	Undecided
If my business runs into trouble, I know where to go for help.*			
CSBDF Borrower (n = 71)	54.9%	21.1%	23.9%
CSBDF Grantee (n = 394)	46.7%	24.1%	29.2%
Received Both (n = 18)	72.2%	5.6%	22.2%
Most people in my community can be trusted.**			
CSBDF Borrower (n = 70)	65.7%	5.7%	28.6%
CSBDF Grantee (n = 385)	53.0%	14.5%	32.5%
Received Both (n = 17)	47.1%	11.8%	41.1%
If my community has a problem, we work together to solve it.			
CSBDF Borrower (n = 68)	52.9%	17.6%	29.4%
CSBDF Grantee (n = 385)	45.5%	21.0%	33.5%
Received Both (n = 18)	50.0%	5.6%	44.4%
My community supports entrepreneurs like me.			
CSBDF Borrower (n = 71)	63.4%	11.3%	25.4%
CSBDF Grantee (n = 392)	55.9%	15.8%	28.3%
Received Both (n = 17)	64.7%	5.9%	29.4%
My neighborhood's small business owners help each other.			
CSBDF Borrower (n = 69)	58.8%	18.8%	23.2%
CSBDF Grantee (n = 381)	48.0%	20.5%	31.5%
Received Both (n = 17)	52.9%	17.6%	29.4%

*Note: Statistically significant at ***p < 0.01, **p < 0.05, or *p < 0.10.*[55]

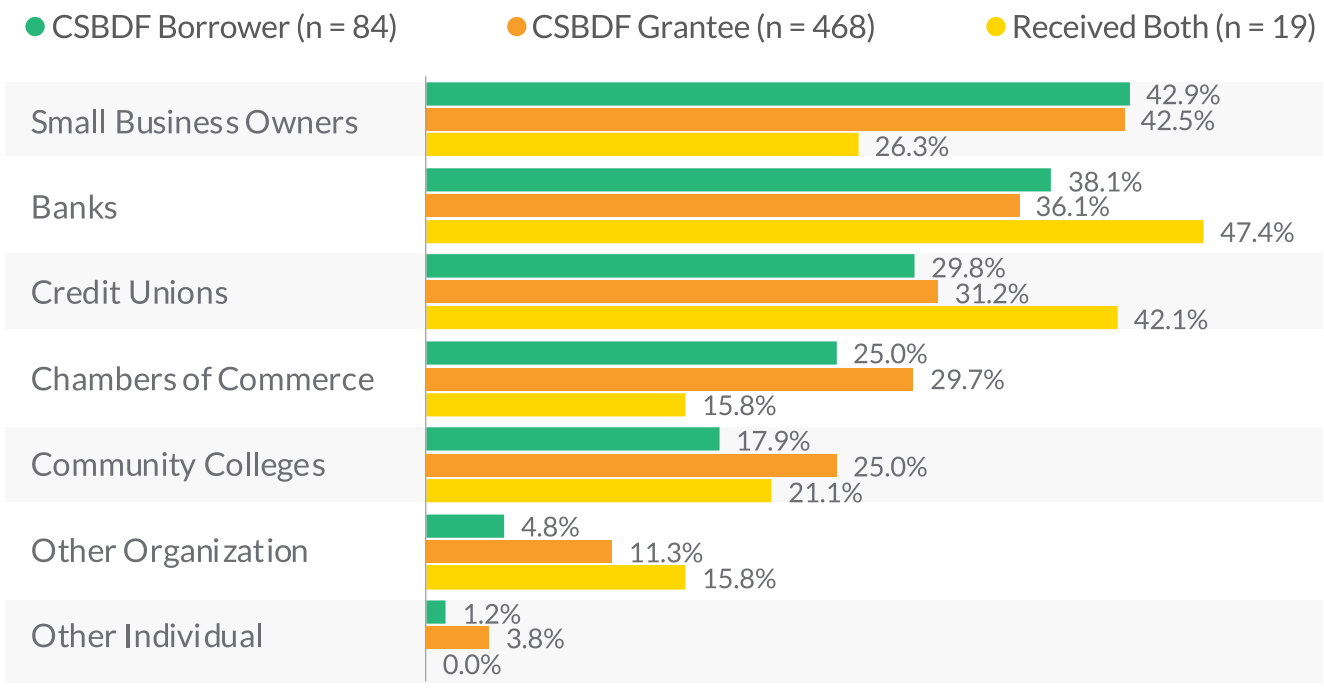
[54] When viewing social capital through an equity lens, it must be acknowledged that terms like "community" can vary by race, ethnicity, and class (S. S. Smith, 2000). While our survey controls for this in that we utilize statements reflecting both bridging and bonding capital constructs, our operationalization of these categories is too simplistic to capture the full nuance of this issue.

[55] Based on ANOVA analysis derived from recoding level of agreement (strongly disagree = 1, disagree = 2, undecided = 3, agree = 4, strongly agree = 5) and comparing mean score differences across intervention types.

OUTCOME: CULTIVATES TRUST IN ORGANIZATIONS & INDIVIDUALS

Research has long established that trust plays a critical role in lowering the types of transaction costs which often impede economic growth. During the pandemic, this was reflected in how small business businesses were better able to access aid when embedded in communities with higher levels of institutional trust (Maksimovic et al., 2022). **Figure 8** shows the percentage of respondents indicating they would trust the listed organization, individual, or group to provide them with correct information about small business matters. While there are differences here across intervention type, they are relatively small compared to the social capital sentiment scores discussed above.

FIGURE 8: PERCENT RESPONDENTS WHO WOULD TRUST THE LISTED ENTITY/INDIVIDUAL ON BUSINESS MATTERS



OUTCOME: IMPROVED BUSINESS SENTIMENT

Respondents were asked questions to measure their business sentiment. Firm sentiment is often used as a subjective thermometer to determine on-the-ground economic conditions. **Table 12** shows borrowers were more likely to have a positive overall business sentiment outlook than those who received grants.[56] As we might expect, those who received loans (55.1%) were more likely to report an ability to get financing when needed compared to those who received grants (32.6%). Conversely, grant recipients (24.3%) were more likely to report concerns about future COVID-19 surges compared to loan recipients (15.0%). Interestingly, despite the tight labor market about half of grantees (50.4%) and borrowers (51.5%) said they could find qualified employees for open job positions.

TABLE 12: OPERATING BUSINESS CONDITIONS SENTIMENT

Respondent Category	Agree	Disagree	Undecided
We can get business financing when needed.* **			
CSBDF Borrower (n =69)	55.1%	23.2%	21.7%
CSBDF Grantee (n = 389)	32.6%	37.9%	29.5%
Received Both (n = 16)	50.0%	25.0%	25.0%
We have no concerns about another COVID-19 surge. **			
CSBDF Borrower (n = 70)	24.3%	51.4%	24.3%
CSBDF Grantee (n = 398)	15.0%	71.2%	13.8%
Received Both (n = 15)	26.7%	60.0%	13.3%
We are able to recruit and retain qualified employees.			
CSBDF Borrower (n = 68)	51.5%	26.5%	22.1%
CSBDF Grantee (n = 370)	50.4%	33.2%	16.4%
Received Both (n = 16)	68.8%	25.0%	6.3%
We anticipate increasing demand for our services.			
CSBDF Borrower (n = 70)	62.9%	5.7%	31.4%
CSBDF Grantee (n = 397)	67.1%	7.0%	25.9%
Received Both (n = 14)	71.4%	0.0%	28.6%
We have no issues finding or sourcing business supplies.			
CSBDF Borrower (n = 68)	44.1%	36.8%	19.1%
CSBDF Grantee (n = 390)	46.0%	39.4%	14.6%
Received Both (n = 15)	40.0%	46.7%	13.3%

[57] Based on ANOVA analysis derived from recoding level of agreement (strongly disagree = 1, disagree = 2, undecided = 3, agree = 4, strongly agree = 5) and comparing mean score differences across intervention types.

OUTCOME: FOSTERS NEED FOR FUTURE FINANCING

To capture the firm's forward-looking business outlook, respondents were asked about their capital needs over the next 12 months. Entrepreneurs seeking to grow usually require capital infusions, and they are unlikely to seek debt financing if they have a negative outlook about their own business or the economy more broadly (Lechner & Pervaiz, 2018)(Lechner & Pervaiz, 2018). **Table 13** demonstrates those who received grant aid (77.2%) were more likely to say they would need a loan in the next 12 months than those who received a loan (65.3%). One of the largest factors for a response indicating a need for financing is the primary owner's race. For example, as shown by **Table 14**, Black-owned firms indicated a higher anticipated need for financing (87.8%) versus White-owned firms (51.5%).

TABLE 13: ANTICIPATED NEED FOR CAPITAL IN NEXT 12 MONTHS (N = 359)[58]

Respondent Category	Count	Will Need Financing	No Anticipated Needs
CSBDF Borrower	49	65.3%	34.7%
CSBDF Grantee	298	77.2%	22.8%
Received Both	12	75.0%	25.0%
Total	359	75.5%	24.5%

TABLE 14: ANTICIPATED NEED FOR CAPITAL BY RACE OF OWNER (N = 358)

Primary Owner Race	Count	Will Need Financing	No Anticipated Needs
American Indian	3	33.3%	66.7%
Asian	12	66.7%	33.3%
Black	229	87.8%	12.2%
Other	7	100.0%	0.0%
White	99	51.5%	48.5%
Decline to State	8	37.5%	62.5%
Total	358	75.7%	24.3%

[58] This question was only displayed to respondents who indicated their business was open *and* operating at the time of survey.

Importantly, a limitation of our research is that we have insufficient data to know *why* certain firm owners have no interest in credit. During the pandemic, levels of debt aversion increased across many types of entrepreneurs, a pattern that frequently emerges during periods of economic uncertainty (Paaso et al., 2021). Even outside of the context of a disaster, some business owners prefer to avoid loan repayment obligations due to low levels of trust in financial institutions (Nguyen et al., 2021). In other cases, an entrepreneur simply does not wish to expand for lifestyle and/or family reasons (Walker & Brown, 2004; Wu et al., 2007). Finally, sometimes an owner may seek business capital to temporarily relieve financial distress through short-term cash infusions. This later type of motivation may result in a positive (firm stability) or negative (firm failure) outcome, depending on the business management knowledge of the owner(s) and financing terms (Charron-Chénier & Seamster, 2021).[59]

We also asked respondents how they would use future loan proceeds, if approved. Based on anticipated funds use, the data could indicate many small business owners are still facing short-term challenges. As shown by **Table 15**, most respondents would use financing for working capital (39.1%) or for cashflow needs (20.3%). Both items represent expenses that could be considered more immediate or pressing in nature. The third most frequently selected use of funds category was purchasing machinery and equipment (12.9%). This is in theory a medium or long-term expense, but it was not selected by a large proportion of respondents. Differences between loan and grant recipients on use of funds from future financing are mostly immaterial, with one exception. A larger percentage of grant aid recipients (40.0%) would use financing proceeds for working capital vs those who received loans (31.3%).

TABLE 15: PRIMARY USE OF LOAN PROCEEDS, IF APPROVED[60]

Primary Use of Funds	CSBDF Borrower (n = 32)	CSBDF Grantee (n = 230)	Received Both (n = 9)	Total (n = 271)
Working Capital	31.3%	40.0%	44.4%	39.1%
Cashflow Needs	25.0%	20.0%	11.1%	20.3%
Machinery & Equipment	9.4%	13.9%	0.0%	12.9%
Inventory & Supplies	9.4%	8.3%	11.1%	8.5%
Other Use of Funds	3.1%	8.3%	0.0%	7.4%
Real Estate Purchases	3.1%	4.3%	11.1%	4.4%
Leasehold Improvements	3.1%	2.6%	11.1%	3.0%
Business Acquisition	6.3%	1.3%	11.1%	2.2%
Refinance Business Debt	9.4%	1.3%	0.0%	2.2%

[60] This question was only displayed to respondents (1) with open *and* operating firms at the time of survey who (2) indicated a likely need for financing in the next 12 months.

CONCLUSIONS

While the worst parts of the pandemic are subsiding, its adverse impacts continue to reverberate across North Carolina's entrepreneurial community. The path to full recovery in the wake of COVID-19 is long, and we find preliminary support for continued use of **both** grant and loan interventions to redress inequities and build resiliency. Our findings offer a counterpoint to the idea that pandemic policy responses were sufficient, and no additional action is required (Harasztosi et al., 2022; IMF Fiscal Affairs Department, 2021).

Table 16 below summarizes our findings and suggests which intervention is most correlated with a greater improvement in the indicated metric.[61], [62] Categorizing whether a loan or grant is the favored intervention type is based on (1) our assessment of descriptive differences between the two interventions, (2) whether any differences are statistically significant, (3) the extent to which any significant differences remain after our findings and any existing scholarly literature (Oliver et al., 2005).

We include a **low**, **medium**, or **high** certainty ratings for each metric, indicating our level of confidence that repeated studies would favor the indicated intervention. For example, the data suggest borrowers have higher employment levels than grantees. But since we cannot control for numerous endogenous variables which might influence employment counts, there is a **low** level of certainty in that finding. This assessment process is, almost by necessity, a qualitative judgement with an inherent level of subjectivity. At present there is simply insufficient data to conduct any sort of rigorous and systematic grading of intervention types.

TABLE 16: DIFFERENCES IN SHORT-TERM OUTPUTS & OUTCOMES BY INTERVENTION

Outputs and Outcomes	Favored Intervention		Certainty Level
	Loan	Grant	
Supports Existing Employment Position(s)	✓		Low
Improves Firm's Financial Stability		✓	Medium
Creates Higher Levels of Social Capital	No Difference		Medium
Cultivates Trust in Organizations & Individuals	No Difference		Low
Improved Business Sentiment	✓		Low
Fosters Need for Future Financing		✓	High

Our findings must be considered in the light that few areas of development policy are supported by quality evidence and high levels of certainty (Berger et al., 2021; Grayson & Gomersall, 2003). Loans, for example, are the lifeblood of the community development sector—but as one systematic review of small and medium-sized enterprise (SME) financing initiatives noted, "it remains unclear to what extent SME financing contributes to economic development and poverty reduction" (Kersten et al., 2017, p.330). While the evidence for small business lending as a development strategy is limited, what does exist is positive enough to support continued work in this area (McCall & Hoyman, 2021). In a similar fashion, we argue that there is a continued need to support grant aid, emergency loans, and combined grant aid/loan interventions.

doi: 10.46712/Extraordinary.Times

RECOMMENDATIONS

1. Small business recovery efforts must work to promote equitable access to aid in a more strategic and intentional manner.

Our data add to existing scholarship highlighting how socioeconomic disparities can accrue at different rates across historically marginalized communities (Wilson et al., 2020). The findings are reflective of a growing body of research demonstrating the strongest correlates with adverse pandemic impacts are a firm owner's race, ethnicity, and/or income level (Karpman et al., 2020). The bulk of the data showed markedly negative impacts from the pandemic across *all* owners who are BIPOC. Concurrently, there are cases where adverse outcomes disproportionately accrued to Black-owned firms, even after controlling for revenues and firm age. As an illustrative example, in our sample Black-owned firms were the racial demographic that was *least* likely to indicate pre-pandemic approval for financing. However, Black entrepreneurs were concurrently the *most* likely to indicate a financing need in the next 12 months.

As our analysis suggests, financing plays a key role in supporting employment and the data offer preliminary support for strategies that strategically target relief to Black- owned firms. Such initiatives would be equitable while also creating a notable economic impact across North Carolina. In making this recommendation, we must again note there is no question the pandemic exacerbated small business disparities for every type of marginalized constituency. But the data suggest that the level of inequity has been particularly notable for Black-owned firms who need additional help because they face the largest barriers to full recovery (Bloom et al., 2021; Lahr et al., 2022; Misera, 2020).

The negative socioeconomic impacts observed in our data reflect enduring racial disparities that have long been a staple of entrepreneurial life in Black communities (Asante-Muhammad et al., 2021). Black-owned firms have always faced significant credit access barriers (Chernenko & Scharfstein, 2022; Federal Reserve Bank System, 2022) which have persisted for longer and are more severe compared to capital access across other racial minorities (Bates, 1989; R. W. Fairlie & Robb, 2008a). As a result, on a proportional basis there are fewer Black-owned firms, and existing Black firms are smaller than they should be after controlling for factors unrelated to race (Tareque et al., 2021). The issue is compounded by a growing wealth gap between Black households and White households that makes it harder to start and sustain any type of small business venture. Though the wealth gap has been on the rise for decades (Bradford, 2003), the trend was accelerated by the pandemic (Singh, 2020).

Being more strategic and targeted with aid means ensuring programs are designed to close socioeconomic gaps in high need populations. We are cognizant that this might be difficult to do within the context of a disaster, and it may seem at odds to argue for aid accessibility concurrently with our subsequent recommendation to emphasize the speed of aid distribution. However, such strategic adjustments for equity purposes need not materially slow down the process or make it more complicated. Consider the hypothetical example of a disaster loan program with two funding rounds in an area where 20% of small businesses are owned by BIPOC individuals. In this hypothetical, after the first funding round 10% of funds were deployed to BIPOC-owned firms. We would recommend the second round proactively set aside funds to ensure at least 20% of total funds flow to BIPOC-owned firms.[63]

[63] This type of adaptive design can also be time based – for example, "holding" funds for targeted populations for a period of days before allowing applications from a broader constituency.

2. Current and future assistance programs must be designed in a manner that emphasizes both speed and application flexibility.

Because the pandemic's effects escalated so quickly, aid programs were administered with a dizzying and constantly shifting array of requirements and restrictions. In many ways it seems that the requirements to receive assistance reflected the current level of economic urgency. When the economy was in freefall, policymakers and funders concentrated on quick aid distribution. But as public health concerns began to wane, new programs seemed to add restrictions and require more complex application processes (H. Hahn et al., 2021).

Our analysis suggests more restrictive aid processes simply make it harder to help those who need it most. In future initiatives, whether related to COVID-19 or other disasters, funding organizations should err on the side of flexibility when providing small business relief. As noted in recommendation #1 above, there are ways to do this while also keeping equity concerns in mind. During the pandemic, the main counterpoint to prioritizing speed and minimizing applicant burdens was concerns over fraud. Fraud, waste, and abuse certainly occurred—but there is insufficient evidence to suggest that the cost of such abuse was so high additional restrictions should be used in future disaster aid relief. For the most part, *relative* levels of waste in COVID-19 aid programs were low and generally related to the fact that initiatives with unprecedented scope were launched in short time frames (Office of Inspector General, 2022).[64] Attempting to prevent abuse by raising application barriers and creating restrictions has its own cost via creating additional inequities around aid access (Bailey & Sokolowski, 2022; Howell et al., 2021).

[64] While outside the scope of our analyses, we did not identify any cases of fraud, waste, or abuse across the loan and grant awards in our sample. In the process of cleaning the data we did identify 6 cases (1% of the sample) where demographic information was inconsistent. For example, a business was categorized as BIPOC-owned with 1 white owner. In every case these inaccuracies appeared to be clerical errors, and all of them have been corrected in CSBDF's data systems and the publicized dataset.

3. Financial institutions and philanthropic foundations should fund trials of both grant only and combined grant/loan interventions.

Though our data are promising, information on grant and loan interventions conducted during the pandemic is limited. We particularly recommend funding trials which combine small grants with larger loans, a model of intervention has shown promise when tested at a very small scale (B. Johnson & Ward, 2016; McCall, 2021). This might include something like providing a grant equal to 10% of a loan's approved amount, which could be provided as cash aid or used as financing equity.

In arguing for the need to conduct additional research, we again call on the CDFI industry and its funders to take an incremental approach towards evidence-based policy. For example, we do not believe it necessary that future studies only be funded if they use "gold standard" methodologies like randomized controlled trials (RCTs) or attempt to analyze natural experiments. RCTs may not be desirable in this case, as randomly assigning firms for assistance amidst an active disaster (or recovery from one) poses an ethical quandary. More practically, RCTs and quasi-experimental designs also require a high level of resources and organizational capacity, neither of which are plentiful in most CDFIs (Freedman, 2015; Galster et al., 2004; J. Hahn et al., 2001; Harger et al., 2019; Lemieux & Milligan, 2008).

4. Public sector partnerships with community organizations were highly effective, and they should be expanded/strengthened.

The severity of the pandemic as a public health and economic crisis launched countless partnerships between public entities and local community organizations. These collaborations were forged by necessity and bolstered by widespread successes (Williams, Brown-Graham, et al., 2021). During the worst of the pandemic, research noted how effective collaborations drew from stocks of organizational social capital in ways that increased the adaptive and programmatic capacity of partnering entities (Williams, McCall, et al., 2021).

But while COVID-19 normalized widespread leverage of nonprofit development entities, such organizations have long been the bedrock of community stability and resiliency. CDFIs, CDCs, and similar types of organizations are vital partners in part because they have a unique ability to address gaps in a locale's unmet economic needs (Dorius, 2011; Mosley, 2019; Rubin, 2008; R. Shaffer et al., 2006). Because these types of community organizations know local needs best, they can quickly adapt to changing circumstances and enhance strategic targeting of aid efforts (Simon, 2001).

Meaningful partnerships can be difficult to maintain – they require a great deal of proactive management and relationship building at the organizational and individual level. But if not utilized, the strong ties formed by the pandemic across the public and non-profit sector will fray with time (Ozanne & Ozanne, 2021). Governments and community organization funders must keep forward momentum in this area by bolstering existing partnerships and identifying new opportunities to forge collaborations. Building on these proven strategies for success will enable a more holistic and evidence-based response for both current recovery efforts as well as future crises.

REFERENCES

Acs, Z. (Ed.). (1999b). *Are Small Firms Important? Their Role and Impact*. Springer Science & Business Media. http://dx.doi.org/10.1007/978-1-4615-5173-7

Agnitsch, K., Flora, J., & Ryan, V. (2006). Bonding and Bridging Social Capital: The Interactive Effects on Community Action. *Community Development*, *37*(1), 36–51. https://doi.org/10.1080/15575330609490153

Albers, C. J., Kiers, H. A. L., & van Ravenzwaaij, D. (2018). Credible Confidence: A Pragmatic View on the Frequentist vs Bayesian Debate. *Collabra: Psychology*, *4*(1), 31. https://doi.org/10.1525/collabra.149

Appleyard, L. (2011). Community Development Finance Institutions (CDFIs): Geographies of financial inclusion in the US and UK. *Geoforum*, *42*(2), 250–258. https://doi.org/10.1016/j.geoforum.2010.09.004

Aquilina, M., Klump, R., & Pietrobelli, C. (2006). Factor Substitution, Average Firm Size and Economic Growth. *Small Business Economics*, *26*(3), 203–214. https://doi.org/10.1007/s11187-005-4715-4

Asante-Muhammad, D., Buell, J., Graves-Manns, T., Lester, W., & Wallace, N. (2021). *Addressing the Needs of Black-Owned Businesses and Entrepreneurs*. National Community Reinvestment Coalition and ResilNC. https://www.resilnc.org/2021-report

Atkins, R., Cook, L., & Seamans, R. (2022). Discrimination in lending? Evidence from the Paycheck Protection Program. *Small Business Economics*, *58*(2), 843–865. https://doi.org/10.1007/s11187-021-00533-1

Audretsch, D. B. (2003). Standing on the Shoulders of Midgets: The U.S. Small Business Innovation Research Program (SBIR). *Small Business Economics*, *20*(2), 129–135. https://doi.org/10.1023/A:1022259931084

Autor, D., Cho, D., Crane, L. D., Goldar, M., Lutz, B., Montes, J., Peterman, W. B., Ratner, D., Villar, D., & Yildirmaz, A. (2022). An evaluation of the Paycheck Protection Program using administrative payroll microdata. *Journal of Public Economics*, *211*, 104664. https://doi.org/10.1016/j.jpubeco.2022.104664

Bagnoli, L., & Megali, C. (2011). Measuring Performance in Social Enterprises. *Nonprofit and Voluntary Sector Quarterly*, *40*(1), 149–165. https://doi.org/10.1177/0899764009351111

Bailey, C., & Sokolowski, M. (2022). Lender financial reporting incentives and loan prioritization during the Paycheck Protection Program. *Managerial Finance*, *ahead-of- print* (ahead-of-print). https://doi.org/10.1108/MF-11-2021-0530

Bartholomew, S., & Smith, A. D. (2006). Improving Survey Response Rates from Chief Executive Officers in Small Firms: The Importance of Social Networks. *Entrepreneurship Theory and Practice*, *30*(1), 83–96. https://doi.org/10.1111/j.1540- 6520.2006.00111.x

Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, *61*(8), 1139–1160. https://doi.org/10.1177/0018726708094863

Bates, T. (1989). The changing nature of minority business: A comparative analysis of asian, nonminority, and black-owned businesses. *The Review of Black Political Economy*, *18*(2), 25–42. https://doi.org/10.1007/BF02895231

Bates, T., & Robb, A. (2016). Impacts of Owner Race and Geographic Context on Access to Small-Business Financing. *Economic Development Quarterly*, *30*(2), 159–170. https://doi.org/10.1177/0891242415620484

Becker, H. A., & Vanclay, F. (2003a). *The international handbook of social impact assessment: Conceptual and methodological advances* (Repr.). Edward Elgar Publishing. https://doi.org/10.4337/9781843768616

Berger, L., Berger, N., Bosetti, V., Gilboa, I., Hansen, L. P., Jarvis, C., Marinacci, M., & Smith, R. D. (2021). Rational policymaking during a pandemic. *Proceedings of the National Academy of Sciences*, *118*(4), e2012704118. https://doi.org/10.1073/pnas.2012704118

Berner, M., Brown-Graham, A., McCall, J., Morgan, J., Mulligen, T., Floyd, N., Hatton, C., & Mahood, A. (2019, April). *Building Bonds and Bridges (and Leveraging Links): A Place- Based Mobility Strategy Based on Social Capital Creation*. Biannual Federal Reserve Community Development Research Conference, Washington, DC. https://doi.org/10.46712/building-bridges-bonds

Bird, S., & Sapp, S. (2004). Understanding the Gender Gap in Small Business Success: Urban and Rural Comparisons. *Gender & Society*, *18*(1), 5–28. https://doi.org/10.1177/0891243203259129

Bjørnskov, C. (2012b). How Does Social Trust Affect Economic Growth? *Southern Economic Journal*, *78*(4), 1346–1368. https://doi.org/10.4284/0038-4038-78.4.1346

Blanchflower, D. G., Levine, P. B., & Zimmerman, D. J. (2003b). Discrimination in the Small- Business Credit Market. *Review of Economics and Statistics*, *85*(4), 930–943. https://doi.org/10.1162/003465303772815835

Bloom, N., Fletcher, R. S., & Yeh, E. (2021). *The Impact of COVID-19 on US Firms* (Working Paper No. 28314; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w28314

Boldon, N., Maury, R., Armstrong, N., & Van Slyke, R. (2016). The State of Veteran Entrepreneurship Research: What We Know and Next Steps (pp. 1–19). *Institute for Veterans & Military Families.* https://ivmf.syracuse.edu/article/the-state-of-veteran- entrepreneurship-research-what-we-know-and-next-steps/

Bopp, C., Harmon, E., & Voida, A. (2017). Disempowered by Data: Nonprofits, Social Enterprises, and the Consequences of Data-Driven Work. *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, 3608–3619. https://doi.org/10.1145/3025453.3025694

Bradford, W. D. (2003). The Wealth Dynamics of Entrepreneurship for Black and White Families in the U.S. *Review of Income and Wealth*, *49*(1), 89–116. https://doi.org/10.1111/1475-4991.00076

Brash, R. (2008). *Public Sector Duplication of Small Business Administration Loan and Investment Programs: An Analysis of Overlap Between Federal, State, and Local Programs Providing Assistance to Small Businesses* (pp. 1–52). Metropolitan Housing and Communities Policy Center, The Urban Institute. https://www.urban.org/sites/default/files/publication/31416/411600-Public-Sector-Duplication-of-Small-Business-Administration-Loan-and-Investment-Programs.

Brown, D. J., & Earle, J. S. (2012). *Do SBA loans create jobs? Estimates from universal panel data and longitudinal matching methods* (CES 12-27). Center for Economic Studies, US Census Bureau. https://doi.org/10.2139/ssrn.2205174

Brown, J. D., & Earle, J. S. (2017). Finance and Growth at the Firm Level: Evidence from SBA Loans. *The Journal of Finance*, *72*(3), 1039–1080. https://doi.org/10.1111/jofi.12492

Burton, D., Confield, E., Gasner, M. R., & Weisfuse, I. (2011). A qualitative study of pandemic influenza preparedness among small and medium-sized businesses in New York City. *Journal of Business Continuity & Emergency Planning*, *5*(3), 267–279. https://pubmed.ncbi.nlm.nih.gov/22308579/

Cabrera, N. L., & Holliday, M. R. (2017). Racial Politics and Racial Self-Identification: A Case Study of Arizona, 2010-2011. *Hispanic Journal of Behavioral Sciences*, *39*(2), 131–149. https://doi.org/10.1177/0739986317700417

Calem, P., & Freedman, A. (2020). *Neighborhood Demographics and the Allocation of Paycheck Protection Program Funds* (No. 3776794). https://doi.org/10.2139/ssrn.3776794

Callois, J.-M., & Aubert, F. (2007). Towards Indicators of Social Capital for Regional Development Issues: The Case of French Rural Areas. *Regional Studies*, *41*(6), 809–821. https://doi.org/10.1080/00343400601142720

Carolina Small Business Development Fund. (2022). Employment Impact Data: Methodology and Definitions. https://www.carolinasmallbusiness.org/post/employment-impact

Casey, T., & Christ, K. (2005b). Social Capital and Economic Performance in the American States. *Social Science Quarterly*, *86*(4), 826–845. https://doi.org/10.1111/j.0038- 4941.2005.00358.x

Chang, S. E., Brown, C., Handmer, J., Helgeson, J., Kajitani, Y., Keating, A., Noy, I., Watson, M., Derakhshan, S., Kim, J., & Roa-Henriquez, A. (2022). Business recovery from disasters: Lessons from natural hazards and the COVID-19 pandemic. *International Journal of Disaster Risk Reduction*, *80*, 103191. https://doi.org/10.1016/j.ijdrr.2022.103191

Charron-Chénier, R. (2020). Predatory Inclusion in Consumer Credit: Explaining Black and White Disparities in Payday Loan Use. *Sociological Forum*, *35*(2), 370–392. https://doi.org/10.1111/socf.12586

Charron-Chénier, R., & Seamster, L. (2021). Racialized Debts: Racial Exclusion From Credit Tools and Information Networks. *Critical Sociology*, *47*(6), 977–992. https://doi.org/10.1177/0896920519894635

Chen, B., Hanson, S., & Stein, J. (2017). *The Decline of Big-Bank Lending to Small Business: Dynamic Impacts on Local Credit and Labor Markets* (No. w23843). National Bureau of Economic Research. https://doi.org/10.3386/w23843

Chernenko, S., & Scharfstein, D. S. (2022). Racial Disparities in the Paycheck Protection Program (Working Paper No. 29748). *National Bureau of Economic Research*. https://doi.org/10.3386/w29748

Community Capital Fund. (2021, July 6). OPKS Small Business Economic Recovery Program. *Overland Park CDBG Small Business Economic Recovery Program*. https://www.ccfkansascity.org/opks

Community Development Financial Institutions Fund. (2022). List of Certified Community Development Financial Institutions (CDFIs) [Data set]. *US Department of the Treasury*. https://www.cdfifund.gov/programs-training/certification/cdfi

Corcoran, E., Misera, L., & Wiersch, A. M. (2021). *Small Business Credit Survey: Report on Nonemployer Firms*. Federal Reserve System. https://www.fedsmallbusiness.org/survey/2021/report-on-nonemployer-firms

Corduneanu-Huci, C., Dorsch, M. T., & Maarek, P. (2020). The politics of experimentation: Political competition and randomized controlled trials. *Journal of Comparative Economics*. https://doi.org/10.1016/j.jce.2020.09.002

Craig, B., Jackson III, W., & Thomson, J. (2004). *Are SBA Loan Guarantees Desirable?* (Economic Commentary). Federal Reserve Bank of Cleveland. https://www.clevelandfed.org/newsroom-and-events/publications/economic- commentary/economic-commentary-archives/2004-economic-commentaries/ec- 20040915-are-sba-loan-guarantees-desirable

Craig, B., Jackson, W., & Thomson, J. (2007a). Small Firm Finance, Credit Rationing, and the Impact of SBA-Guaranteed Lending on Local Economic Growth. *Journal of Small Business Management*, *45*(1), 116–132. https://doi.org/10.1111/j.1540- 627X.2007.00202.x

Craig, B., Jackson, W., & Thomson, J. (2007b). Small Firm Credit Market Discrimination, Small Business Administration Guaranteed Lending, and Local Market Economic Performance. *The ANNALS of the American Academy of Political and Social Science*, *613*(1), 73–94. https://doi.org/10.1177/0002716207303579

Craig, B., Jackson, W., & Thomson, J. (2008). Credit market failure intervention: Do government sponsored small business credit programs enrich poorer areas? *Small Business Economics*, *30*(4), 345–360. https://doi.org/10.1007/s11187-007-9050-5

Davis, L. E., & Engel, R. J. (2011). *Measuring Race and Ethnicity*. Springer New York. https://doi.org/10.1007/978-1-4419-6697-1

Davis, S., Haltiwanger, J., & Schuh, S. (1996). Small business and job creation: Dissecting the myth and reassessing the facts. *Small Business Economics*, *8*(4), 297–315. https://doi.org/10.1007/BF00393278

Decker, R., Haltiwanger, J., Jarmin, R., & Miranda, J. (2014). The Role of Entrepreneurship in US Job Creation and Economic Dynamism. *Journal of Economic Perspectives*, *28*(3), 3–24. https://doi.org/10.1257/jep.28.3.3

DeYoung, R., Glennon, D., & Nigro, P. (2008). Borrower–lender distance, credit scoring, and loan performance: Evidence from informational-opaque small business borrowers. *Journal of Financial Intermediation*, *17*(1), 113–143. https://doi.org/10.1016/j.jfi.2007.07.002

Dietch, E. A., & Corey, C. M. (2011). Predicting long-term business recovery four years after Hurricane Katrina. *Management Research Review*, *34*(3), 311–324. https://doi.org/10.1108/01409171111116321

Domingue, S. J., & Emrich, C. T. (2019). Social Vulnerability and Procedural Equity: Exploring the Distribution of Disaster Aid Across Counties in the United States. *The American Review of Public Administration*, *49*(8), 897–913. https://doi.org/10.1177/0275074019856122

Dorius, N. (2011). Measuring Community Development Outcomes: In Search of an Analytical Framework. *Economic Development Quarterly*, *25*(3), 267–276. https://doi.org/10.1177/0891242411409207

Duarte, F. D., Gama, A. P. M., & Gulamhussen, M. A. (2018). Defaults in bank loans to SMEs during the financial crisis. *Small Business Economics*, *51*(3), 591–608. https://doi.org/10.1007/s11187-017-9944-9

Dunn, A., Hood, K., & Driessen, A. (2020a). Measuring the Effects of the COVID-19 Pandemic on Consumer Spending Using Card Transaction Data. *US Bureau of Economic Analysis*. https://doi.org/10.13140/RG.2.2.20007.29600

Eagle, N., Macy, M., & Claxton, R. (2010b). Network Diversity and Economic Development. *Science*, *328*(5981), 1029–1031. https://doi.org/10.1126/science.1186605

Eggleston, M. (2021). Fed's PPP Liquidity Facility Providers CDFIs Balance Sheet Relief. *Federal Reserve Bank of St. Louis Bridges*, *1*. https://www.stlouisfed.org/publications/bridges/volume-1-2021/fed-ppplf-cdfi-balance- sheet-relief

Erel, I., & Liebersohn, J. (2020). Does FinTech Substitute for Banks? Evidence from the Paycheck Protection Program (Working Paper No. 27659). *National Bureau of Economic Research*. https://doi.org/10.3386/w27659

Fairlie, R. (2020). The impact of COVID-19 on small business owners: Evidence from the first three months after widespread social-distancing restrictions. *Journal of Economics & Management Strategy*, *29*(4), 727–740. https://doi.org/10.1111/jems.12400

Fairlie, R., & Fossen, F. (2022a). The 2021 Paycheck Protection Program Reboot: Loan Disbursement to Employer and Nonemployer Businesses in Minority Communities (Working Paper No. 29732). *National Bureau of Economic Research*. https://doi.org/10.3386/w29732

Fairlie, R., & Fossen, F. M. (2022b). Did the Paycheck Protection Program and Economic Injury Disaster Loan Program get disbursed to minority communities in the early stages of COVID-19? *Small Business Economics*, *58*(2), 829–842. https://doi.org/10.1007/s11187- 021-00501-9

Fairlie, R. W., & Robb, A. M. (2008b). *Race and Entrepreneurial Success: Black-, Asian-, and White-Owned Businesses in the United States*. The MIT Press. https://doi.org/10.7551/mitpress/7961.001.0001

Farrell, D., & Wheat, C. (2016). *Cash is King: Flows, Balances, and Buffer Days: Evidence from 600,000 Small Businesses* (p. 44). JPMorgan Chase Institute. https://ssrn.com/abstract=2966127

Federal Reserve Bank System. (2022). 2022 Report on Firms Owned by People of Color [Small Business Credit Survey (SBCS)]. *Federal Reserve Bank System*. https://doi.org/10.55350/sbcs-20220629

Franke, T. M., Ho, T., & Christie, C. A. (2012). The Chi-Square Test: Often Used and More Often Misinterpreted. *American Journal of Evaluation*, *33*(3), 448–458. https://doi.org/10.1177/1098214011426594

Frechtling, J. A. (2007). Logic Modeling Methods in Program Evaluation. *John Wiley & Sons*.

Freedman, M. (2015). Place-based programs and the geographic dispersion of employment. *Regional Science and Urban Economics*, *53*, 1–19. https://doi.org/10.1016/j.regsciurbeco.2015.04.002

Freeland, R. E., & Keister, L. A. (2016). How Does Race and Ethnicity Affect Persistence in Immature Ventures? *Journal of Small Business Management*, *54*(1), 210–228. https://doi.org/10.1111/jsbm.12138

Gabe, T. M. (2017). Small Businesses and the Growth of Good US Jobs. *The Pursuit of Economic Development: Growing Good Jobs in US Cities and States, 119–142. Springer International Publishing*. https://doi.org/10.1007/978-3-319-52476-4

Galope, R. V. (2014). What Types of Start-ups Receive Funding from the Small Business Innovation Research (SBIR) Program?: Evidence from the Kauffman Firm Survey. *Journal of Technology Management & Innovation*, *9*(2), 17–28. https://doi.org/10.4067/S0718-27242014000200002

Galster, G., Temkin, K., Walker, C., & Sawyer, N. (2004). Measuring the Impacts of Community Development Initiatives: A New Application of the Adjusted Interrupted Time-Series Method. *Evaluation Review*, *28*(6), 502–538. https://doi.org/10.1177/0193841X04267090

Geer, J. G. (1988). What do open-ended questions measure? *Public Opinion Quarterly*, *52*(3), 365–367. https://doi.org/10.1086/269113

Gertler, P. J., Martinez, S., Premand, P., Rawlings, L. B., & Vermeersch, C. M. J. (2016). Impact Evaluation in Practice (2nd Edition). *World Bank Publications.*

Gonzalez, D., Karpman, M., Kenney, G., & Zuckerman, S. (2020). *Hispanic Adults in Families with Non-citizens Disproportionately Feel the Economic Fallout From COVID-19* (pp. 1–10). Urban Institute. https://www.urban.org/research/publication/hispanic-adults- families-noncitizens-disproportionately-feel-economic-fallout-covid-19

Gorard, S. (2014). The widespread abuse of statistics by researchers: What is the problem and what is the ethical way forward? *The British Pyschological Society*, *38*(1), 3–10.

Granja, J., Makridis, C., Yannelis, C., & Zwick, E. (2020). Did the Paycheck Protection Program Hit the Target? (SSRN Scholarly Paper No. 3592172). https://doi.org/10.3386/w27095

Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*, *78*(6), 1360–1380. https://doi.org/10.1086/225469

Grayson, L., & Gomersall, A. (2003). A Difficult Business: Finding the Evidence for Social Science Reviews (Working Paper No. 19). *Economic and Social Research Council Center for Evidence-Based Policy and Practice, 1-21.* https://www.researchgate.net/publication/260386917_A_Difficult_Business_Finding_the_Evidence_for_Social_Science_Reviews

Guiso, L., Sapienza, P., & Zingales, L. (2004). The Role of Social Capital in Financial Development. *The American Economic Review*, *94*(3), 526–556. JSTOR. https://doi.org/10.1257/0002828041464498

Hahn, H., Hill, I., Courtot, B., & Burroughs, E. (2021). How Might State Responses to the Pandemic Affect the Safety Net? (pp. 1–47). Washington, DC. https://www.urban.org/research/publication/how-might-state-responses-pandemic-affect- safety-net

Hahn, J., Todd, P., & Van der Klaauw, W. (2001). Identification and Estimation of Treatment Effects with a Regression-Discontinuity Design. *Econometrica*, *69*(1), 201–209.

Harasztosi, P., Maurin, L., Pál, R., Revoltella, D., & van der Wielen, W. (2022). Firm-level policy support during the crisis: So far, so good? *International Economics*, *171*, 30–48. https://doi.org/10.1016/j.inteco.2022.04.003

Harger, K. R., Ross, A., & Stephens, H. M. (2019). What matters the most for economic development? Evidence from the Community Development Financial Institutions Fund. *Papers in Regional Science*, *98*(2), Article 2. https://doi.org/10.1111/pirs.12396

Haynes, G. W., Danes, S. M., Schrank, H. L., & Lee, Y. (2019). Survival and success of family- owned small businesses after hurricane Katrina: Impact of disaster assistance and adaptive capacity. *Journal of Contingencies and Crisis Management*, *27*(2), 130–144. https://doi.org/10.1111/1468-5973.12245

Held, L., & Ott, M. (2018). On p-Values and Bayes Factors. *Annual Review of Statistics and Its Application*, *5*(1), 393–419. https://doi.org/10.1146/annurev-statistics-031017-100307

Henderson, L., Herring, C., Horton, H. D., & Thomas, M. (2015). Credit Where Credit is Due?: Race, Gender, and Discrimination in the Credit Scores of Business Startups. *The Review of Black Political Economy*, *42*(4), 459–479. https://doi.org/10.1007/s12114-015-9215-4

Hensel, P. G. (2021). Reproducibility and replicability crisis: How management compares to psychology and economics – A systematic review of literature. *European Management Journal*, *39*(5), 577–594. https://doi.org/10.1016/j.emj.2021.01.002

Higgins, M. J., Lacombe, D. J., Stenard, B. S., & Young, A. T. (2020). Evaluating the effects of Small Business Administration lending on growth. *Small Business Economics*. https://doi.org/10.1007/s11187-019-00291-1

Hiramatsu, T., & Marshall, M. (2018). The Long-Term Impact of Disaster Loans: The Case of Small Businesses after Hurricane Katrina. *Sustainability*, *10*(7), 2364. https://doi.org/10.3390/su10072364

Howell, S. T., Kuchler, T., Snitkof, D., Stroebel, J., & Wong, J. (2021). Automation and Racial Disparities in Small Business Lending: Evidence from the Paycheck Protection Program (Working Paper Series No. 29364). *National Bureau of Economic Research.* https://doi.org/10.3386/w29364

Hoyman, M., McCall, J., Paarlberg, L., & Brennan, J. (2016). Considering the role of social capital for economic development outcomes in US counties. *Economic Development Quarterly*, *30*(4), 342–357. https://doi.org/10.1177/0891242416659135

Hubbard, R. (2011). The widespread misinterpretation of p-values as error probabilities. *Journal of Applied Statistics*, *38*(11), 2617–2626. https://doi.org/10.1080/02664763.2011.567245

Fiscal Affairs. (2021). Country Fiscal Measures in Response to the COVID-19 Pandemic. *International Monetary Fund*, *1-22*. https://www.imf.org/en/Topics/imf-and- covid19/ Fiscal-Policies-Database-in-Response-to-COVID-19

Immergluck, D. (2008). Research Design Issues for Measuring CDFI Performance and Impact. In D. Fabiani & T. F. Buss (Eds.), *Reengineering Community Development for the 21st Century* (pp. 76–94). Routledge. https://doi.org/10.4324/9781315701240

Industrial Economics. (2018). Evaluating Technical Assistance and Economic Opportunity Outcomes of the Community Advantage Pilot Program. *US Small Business Administration Office of Performance Management and Office of Capital Access*, 1-82. https://www.sba.gov/sites/default/files/aboutsbaarticle/Community_Advantage_Final_ Evaluation_Report_-_June_21_2018.pdf

Jackson, A. (2001). An evaluation of evaluation: Problems with performance measurement in small business loan and grant schemes. *Progress in Planning*, *55*(1), 1–64. https://doi.org/10.1016/S0305-9006(00)00019-2

Jenkins, A. S., Wiklund, J., & Brundin, E. (2014). Individual responses to firm failure: Appraisals, grief, and the influence of prior failure experience. *Journal of Business Venturing*, *29*(1), 17–33. https://doi.org/10.1016/j.jbusvent.2012.10.006

Johnson, B., & Ward, C. (2016, June 10). Bioscience as a Foundation for Transforming St. Louis [Federal Reserve Bank of St. Louis]. *Bridges*. https://www.stlouisfed.org/publica tions/bridges/spring-2016/bioscience-as-a-foundation- for-transforming-st-louis

Johnson, V. E. (2019). Evidence From Marginally Significant t Statistics. *The American Statistician*, *73*(sup1), 129–134. https://doi.org/10.1080/00031305.2018.1518788

Josephson, A., & Marshall, M. (2014). The Effectiveness of Post-Katrina Disaster Aid: The Influence of SBA Loans on Small Businesses in Mississippi. *10th Annual Conference of the International Institute for Infrastructure Renewal and Reconstruction*, 141–145. https://doi.org/10.5703/1288284315354

Josephson, A., & Marshall, M. I. (2016). The Demand for Post-Katrina Disaster Aid: SBA Disaster Loans and Small Businesses in Mississippi. *Journal of Contingencies and Crisis Management*, *24*(4), 264–274. https://doi.org/10.1111/1468-5973.12122

Kapinos, P. (2021). Did the Paycheck Protection Program have negative side effects on small- business activity? *Economics Letters*, *208*, 110045. https://doi.org/10.1016/j.econlet.2021.110045

Kaplowitz, M. D., Hadlock, T. D., & Levine, R. (2004). A Comparison of Web and Mail Survey Response Rates. *Public Opinion Quarterly*, *68*(1), 94–101. https://doi.org/10.1093/poq/nfh006

Karpman, M., Zuckerman, S., & Kenney, G. (2020). Uneven Recovery Leaves Many Hispanic, Black, and Low-Income Adults Struggling. *Urban Institute*. https://www.urban.org/research/publication/uneven-recovery-leaves-many-hispanic- black-and-low-income-adults-struggling

Kersten, R., Harms, J., Liket, K., & Maas, K. (2017). Small Firms, large Impact? A systematic review of the SME Finance Literature. *World Development*, *97*, 330–348. https://doi.org/10.1016/j.worlddev.2017.04.012

Kilkenny, M., Nalbarte, L., & Besser, T. (1999). Reciprocated community support and small town—Small business success. *Entrepreneurship & Regional Development*, *11*(3), 231–246. https://doi.org/10.1080/089856299283182

Kim, O. S., Parker, J. A., & Schoar, A. (2020). Revenue Collapses and the Consumption of Small Business Owners in the Early Stages of the COVID-19 Pandemic (Working Paper No. 28151). *National Bureau of Economic Research*. https://doi.org/10.3386/w28151

Kirchhoff, B. A., Linton, J. D., & Walsh, S. T. (2013). Neo-Marshellian Equilibrium versus Schumpeterian Creative Destruction: Its Impact on Business Research and Economic Policy. *Journal of Small Business Management*, *51*(2), 159–166. https://doi.org/10.1111/jsbm.12018

Klein, V. B., & Todesco, J. L. (2021). COVID-19 crisis and SMEs responses: The role of digital transformation. *Knowledge and Process Management*, *28*(2), 117–133. https://doi.org/10.1002/kpm.1660

Knudsen, B., Florida, R., & Stolarick, K. (2000). *Bridging and bonding: A multidimensional approach to regional social capital*. Martin Prosperity Institute.

Kolker, A. (2020). Unauthorized Immigrants' Eligibility for COVID-19 Relief Benefits: In Brief (No. R46339). Congressional Research Service. https://crsreports.congress.gov/product/details?prodcode=R46339

Lechner, C., & Pervaiz, A. (2018). Entrepreneurial Strategy: A Contingency Review and Outlook for Future Research. In R. Blackburn, D. De Clercq, & J. Heinonen, *Handbook of Small Business and Entrepreneurship* (pp. 145–163). SAGE Publications. https://doi.org/10.4135/9781473984080.n9

Leigh, N. G., & Blakely, E. J. (2016). *Planning Local Economic Development: Theory and Practice* (6th edition). SAGE Publications, Inc.

Lemieux, T., & Milligan, K. (2008). Incentive effects of social assistance: A regression discontinuity approach. *Journal of Econometrics*, *142*(2), 807–828. https://doi.org/10.1016/j.jeconom.2007.05.014

Li, M. (2021). Did the small business administration's COVID-19 assistance go to the hard hit firms and bring the desired relief? *Journal of Economics and Business*, *115*, 105969. https://doi.org/10.1016/j.jeconbus.2020.105969

Macke, J., & Dilly, E. (2010). Social Capital Dimensions in Collaborative Networks: The Role Of Linking Social Capital. *International Journal of Social Inquiry*, *3*(2), 121–136.

Maggio, M. D., Ratnadiwakara, D., & Carmichael, D. (2022). *Invisible Primes: Fintech Lending with Alternative Data* (No. w29840; p. w29840). National Bureau of Economic Research. https://doi.org/10.3386/w29840

Maksimovic, V., Xue, J., & Yang, L. (2022). *Seizing Opportunities: Small Businesses, Social Capital, and Banks* (SSRN Scholarly Paper No. 4078042). https://doi.org/10.2139/ssrn.4078042

Malizia, E. E., & Feser, E. J. (1999). *Understanding Local Economic Development*. Center for Urban Policy Research.

McCall, J. (2020). *Programa Empresarial Latino: Process Evaluation of Lending Outcomes* (Sponsored Programs Impact Assessment) [Evaluation Report]. Carolina Small Business Development Fund. https://www.carolinasmallbusiness.org/post/latino-program

McCall, J. (2021). *Piedmont Community College: Partnering to Help Small Businesses* [Policy Brief & Report]. Carolina Small Business Development Fund. https://doi.org/10.46712/pcc.case.studyMcCall, J., & Hoyman, M. (2021). Community Development Financial Institution (CDFI) Program Evaluation: A Luxury but not a Necessity? *Community Development*, 1–31. https://doi.org/10.1080/15575330.2021.1976807

McCall, J., & Williams, T. (2020). *Social Capital in the Era of Social Distancing: Community Development Responses to COVID-19* [Policy Brief]. Carolina Small Business Development Fund. https://doi.org/10.46712/covid19.social.capital

McDonald, T. M., Florax, R., Marshal, M. I., McDonald, T. M., Florax, R., & Marshal, M. I. (2014). *Informal and Formal Financial Resources and Small Business Resilience to Disasters*. https://doi.org/10.22004/AG.ECON.170332

McShane, B. B., & Gal, D. (2017). Statistical Significance and the Dichotomization of Evidence. *Journal of the American Statistical Association*, *112*(519), 885–895. https://doi.org/10.1080/01621459.2017.1289846

Meurer, M. M., Waldkirch, M., Schou, P. K., Bucher, E. L., & Burmeister-Lamp, K. (2022). Digital affordances: How entrepreneurs access support in online communities during the COVID-19 pandemic. *Small Business Economics*, *58*(2), 637–663. https://doi.org/10.1007/s11187-021-00540-2

Meyer, B. H., & Schweitzer, M. E. (2022). Access to Credit for Minority-owned Businesses. *Economic Commentary*, *2022–04*. https://doi.org/10.26509/frbc-ec-202204

Mijid, N., & Bernasek, A. (2013). Decomposing Racial and Ethnic Differences in Small Business Lending: Evidence of Discrimination. *Review of Social Economy*, *71*(4), 443–473. https://doi.org/10.1080/00346764.2012.761751

Kolker, A. (2020). *Unauthorized Immigrants' Eligibility for COVID-19 Relief Benefits: In Brief* (No. R46339). Congressional Research Service. https://crsreports.congress.gov/product/details?prodcode=R46339

Lahr, D., Adams, A., Edges, A., & Bletz, J. (2022). Where Do We Go From Here? The Survival and Recovery of Black-Owned Businesses Post-COVID-19. *Humanity & Society*, *46*(3), 460–477. https://doi.org/10.1177/01605976211049243

Lanahan, L., Joshi, A. M., & Johnson, E. (2021). Do public R&D subsidies produce jobs? Evidence from the SBIR/STTR program. *Research Policy*, *50*(7), 104286. https://doi.org/10.1016/j.respol.2021.104286

Lans, T., Blok, V., & Gulikers, J. (2015). Show me your network and I'll tell you who you are: Social competence and social capital of early-stage entrepreneurs. *Entrepreneurship & Regional Development*, *27*(7–8), 458–473. https://doi.org/10.1080/08985626.2015.1070537

Millar, M., & Dillman, D. A. (2012). Encouraging Survey Response via Smartphones. *Survey Practice*, *5*(3), 3095. https://doi.org/10.29115/SP-2012-0018

Miller, A. L., & Lambert, A. D. (2014). Open-Ended Survey Questions: Item Nonresponse Nightmare or Qualitative Data Dream? *Survey Practice*, *7*(5), 2859. https://doi.org/10.29115/SP-2014-0024

Miller, N., Besser, T., & Malshe, A. (2007). Strategic Networking among Small Businesses in Small US Communities. *International Small Business Journal*, *25*(6), 631–665. https://doi.org/10.1177/0266242607082525

Misera, L. (2020). *An Uphill Battle: COVID-19's Outsized Toll on Minority-Owned Firms* (pp. 1–7). Federal Reserve Bank of Cleveland. https://doi.org/10.26509/frbc-cd-20201008

Molina-Morales, F. X., & Martínez-Fernández, M. T. (2010). Social Networks: Effects of Social Capital on Firm Innovation. *Journal of Small Business Management*, *48*(2), 258–279. https://doi.org/10.1111/j.1540-627X.2010.00294.x

Mosley, J. (2019). Community Development Financial Institutions: Invaluable Capital Partners in Low-income Rural Areas. *State and Local Government Review*, *51*(4), Article 4. https://doi.org/10.1177/0160323X20928401

NC Rapid Recovery. (2022). *NC COVID-19 Rapid Recovery Update: Loans Approved*. Golden LEAF and the NC Rural Center. https://ncrapidrecovery.org/news-updates/

Neumark, D., Zhang, J., & Wall, B. (2006). Where the Jobs Are: Business Dynamics and Employment Growth. *Academy of Management Perspectives*, *20*(4), 79–94. JSTOR. https://doi.org/10.5465/amp.2006.23270308

Newberger, R., & Toussaint- Comeau, M. (2014). *An Analysis of SBA Loans in Lower-income and Black Neighborhoods in Detroit and Michigan* (ProfitWise News and Views, pp. 2– 26). Federal Reserve Bank of Chicago. https://www.chicagofed.org/publications/profitwise-news-and-views/2014/pnv- spring2014

Nguyen, H. T., Nguyen, H. M., Troege, M., & Nguyen, A. T. H. (2021). Debt aversion, education, and credit self-rationing in SMEs. *Small Business Economics*, *57*(3), 1125– 1143. https://doi.org/10.1007/s11187-020-00329-9

Nicholson-Crotty, S., & Meier, K. J. (2002). Size doesn't matter: In defense of single-state studies. *State Politics & Policy Quarterly*, *2*(4), 411–422. https://doi.org/10.1177/153244000200200405

Nurse, S. (2022). Why "Race Neutral" Policy Fails Black Small Business Owners: Lessons Learned From the Paycheck Protection Program and Mapping an Equitable Path Forward. In J. Rolle & M. Crump (Eds.), *Sustainability and the Future of Work and Entrepreneurship for the Underserved* (pp. 111–130). IGI Global. https://doi.org/10.4018/978-1-6684-4322-4.ch006

Office of Inspector General. (2022). *SBA's Handling of Potentially Fradulent Paycheck Protection program Loans* (Report Number 22-13; pp. 1–17). US Small Business Administration. https://www.sba.gov/document/report-22-13-sbas-handling-potentially-fraudulent-paycheck-protection-program-loans

Oliver, S., Harden, A., Rees, R., Shepherd, J., Brunton, G., Garcia, J., & Oakley, A. (2005). An Emerging Framework for Including Different Types of Evidence in Systematic Reviews for Public Policy. *Evaluation*, *11*(4), 428–446. https://doi.org/10.1177/1356389005059383

Ozanne, L. K., & Ozanne, J. L. (2021). Disaster Recovery: How Ad Hoc Marketing Systems Build and Mobilize Social Capital for Service Delivery. *Journal of Public Policy & Marketing*, *40*(3), 372–388. https://doi.org/10.1177/07439156211000355

Paaso, M., Pursiainen, V., & Torstila, S. (2021). *Entrepreneur Debt Aversion and Financing Decisions: Evidence from COVID-19 Support Programs* (SSRN Scholarly Paper No. 3615299). https://doi.org/10.2139/ssrn.3615299

Palladino, L. (2020). The Impacts of Fintech on Small Business Borrowing. *SSRN Electronic Journal*, *33*(6), 639–661. https://doi.org/10.1080/08276331.2020.1796110

Park, K. A., & Quercia, R. G. (2020). Who Lends Beyond the Red Line? The Community Reinvestment Act and the Legacy of Redlining. *Housing Policy Debate*, *30*(1), 4–26. https://doi.org/10.1080/10511482.2019.1665839

Patraporn, R. V. (2015). Complex transactions: Community development financial institutions lending to ethnic entrepreneurs in Los Angeles. *Community Development*, *46*(5), 479–498. https://doi.org/10.1080/15575330.2015.1079541

Pech, C., Ong, P., Gonzalez, S., Pech, C., Hernandez, K., & Dominguez-Villegas, R. (2020). *Disparities in the Distribution of Paycheck Protection Program Funds Between Majority- White Neighborhoods and Neighborhoods of Color in California* (pp. 4–18). UCLA Latino Policy & Politics Institute. https://latino.ucla.edu/research/disparities-ppp- neighborhoods-california/

Pituch, K. A., & Stevens, J. P. (2015). *Applied Multivariate Statistics for the Social Sciences* (0 ed.). Routledge. https://doi.org/10.4324/9781315814919

Plehn-Dujowich, J. (2010). A theory of serial entrepreneurship. *Small Business Economics*, *35*(4), 377–398. https://doi.org/10.1007/s11187-008-9171-5

Porter, S., & Whitcomb, M. (2003). The Impact of Contact Type on Web Survey Response Rates. *Public Opinion Quarterly*, *67*, 579–588. https://doi.org/10.1086/378964

Portuguez Castro, M., & Gómez Zermeño, M. G. (2020). Being an entrepreneur post-COVID-19 – resilience in times of crisis: A systematic literature review. *Journal of Entrepreneurship in Emerging Economies*, *13*(4), 721–746. https://doi.org/10.1108/JEEE-07-2020-0246

Pritschet, L., Powell, D., & Horne, Z. (2016). Marginally significant effects as evidence for hypotheses: Changing attitudes over four decades. *Psychological Science*, *27*(7), 1036– 1042. https://doi.org/10.1177/0956797616645672

Privett, N., & Erhun, F. (2011). Efficient Funding: Auditing in the Nonprofit Sector. *Manufacturing & Service Operations Management*, *13*(4), 471–488. https://doi.org/10.1287/msom.1110.0345

Pugsley, B. W., & Hurst, E. (2011). *What Do Small Businesses Do?* (Papers on Economic Activity). Brookings Institution. https://doi.org/10.1353/eca.2011.0017

Putnam, R. D. (2001). *Bowling Alone: The Collapse and Revival of American Community* (1st ed.). Touchstone Books by Simon & Schuster.

Putnam, R. D., & Campbell, D. E. (2012). *American Grace: How Religion Divides and Unites Us*. Simon & Schuster.

Putnam, R. D., Leonardi, R., & Nanetti, R. (1994). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press. https://doi.org/10.2307/j.ctt7s8r7

Quercia, R. G., & Riley, S. (2017). Bridging the Gap to Scalable Community Reinvestment Lending Programs. *Cityscape*, *19*(2), 109–128.

Rebmann, T., Wang, J., Swick, Z., Reddick, D., & Minden-Birkenmaier, C. (2013). Health care versus non-health care businesses' experiences during the 2009 H1N1 pandemic: Financial impact, vaccination policies, and control measures implemented. *American Journal of Infection Control*, *41*(6), e49–e54. https://doi.org/10.1016/j.ajic.2012.09.012

Reese, L. A., & Ye, M. (2011). Policy Versus Place Luck: Achieving Local Economic Prosperity. *Economic Development Quarterly*, *25*(3), 221–236. https://doi.org/10.1177/0891242411408292

Reosti, J. (2022, May 2). SBA hasn't given up on direct lending. *American Banker*. https://www.americanbanker.com/creditunions/news/sba-hasnt-given-up-on-direct- lending

Rich, C. G. (2009). Decline to State: Diversity Talk and the American Law Student. *Southern California Review of Law and Social Justice*, *18*, 539.

Ring, J. K., Peredo, A. M., & Chrisman, J. J. (2010). Business Networks and Economic Development in Rural Communities in the United States. *Entrepreneurship Theory and Practice*, *34*(1), 171–195. https://doi.org/10.1111/j.1540-6520.2009.00307.x

Rossi, P. H., Lipsey, M. W., & Henry, G. T. (2019). *Evaluation: A Systematic Approach* (8th ed.). Sage Publications.

Rubin, J. (2008). Adaptation or Extinction? Community Development Loan Funds at a Crossroads. *Journal of Urban Affairs*, *30*(2), 191–220. https://doi.org/10.1111/j.1467- 9906.2008.00387.x

Runyan, R. C. (2006a). Small Business in the Face of Crisis: Identifying Barriers to Recovery from a Natural Disaster. *Journal of Contingencies and Crisis Management*, *14*(1), 12–26. https://doi.org/10.1111/j.1468-5973.2006.00477.x

Runyan, R. C. (2006b). Small Business in the Face of Crisis: Identifying Barriers to Recovery from a Natural Disaster1. *Journal of Contingencies and Crisis Management*, *14*(1), 12–26. https://doi.org/10.1111/j.1468-5973.2006.00477.x

Sabasteanski, N., Brooks, J., & Chandler, T. (2021). Saving lives and livelihoods: The Paycheck Protection Program and its efficacy. *EconomiA*, *22*(3), 278–290. https://doi.org/10.1016/j.econ.2021.11.004

Salway, M. (2020). *Demystifying Social Finance and Social Investment* (P. Palmer, P. Grant, & J. Clifford, Eds.). Routledge. https://doi.org/10.4324/9781315576510

Schrank, H. L., Marshall, M. I., Hall-Phillips, A., Wiatt, R. F., & Jones, N. E. (2013). Small-business demise and recovery after Katrina: Rate of survival and demise. *Natural Hazards*, *65*(3), 2353–2374. https://doi.org/10.1007/s11069-012-0480-2

Schumpeter, J. A. (2008). *Capitalism, Socialism, and Democracy* (3rd ed.). Harper Perennial Modern Classics.

Seidman, K. F. (2005). *Economic Development Finance*. SAGE. https://doi.org/10.4135/9781452204550

Shaffer, R., Deller, S., & Marcouiller, D. (2006). Rethinking Community Economic Development. *Economic Development Quarterly*, *20*(1), 59–74. https://doi.org/10.1177/0891242405283106

Shaffer, S. (2006). Establishment Size and Local Employment Growth. *Small Business Economics*, *26*(5), 439–454. https://doi.org/10.1007/s11187-005-5598-0

Sharpe, D. (2019). Chi-Square Test is Statistically Significant: Now What? *Practical Assessment, Research, and Evaluation*, *20*(1). https://doi.org/10.7275/tbfa-x148

Simon, W. (2001). *The Community Economic Development Movement: Law, Business, and the New Social Policy*. Duke University Press.

Singh, R. (2020). The Need for Increasing Black Entrepreneurship as a Result of the COVID-19 Pandemic. *International Journal of Entrepreneurship and Economic Issues*, *4*(1), Article1. https://doi.org/10.32674/ijeei.v4i1.30

Small Business Administration. (2021, May 31). *COVID-19 Paycheck Protection Program Forgivable Loan 1st Draw and 2nd Draw Structure and Terms*. About the Paycheck Protection Program (PPP). https://www.sba.gov/funding-programs/loans/covid-19-relief- options/paycheck-protection-program

Small Business Administration. (2022, January 1). *COVID-19 EIDL Loan Structure and Terms*. About the COVID-19 Economic Injury Disaster Loan (EIDL) Program. https://www.sba.gov/funding-programs/loans/covid-19-relief-options/covid-19-economic-injury-disaster-loan/about-covid-19-eidl

Smith, G., Zielenbach, S., Newon, J., & Duda, S. (2009). *Collaborators or Competitors? Exploring the Relationships between Community Development Financial Institutions and Conventional Lenders in Small Business Finance* (Working Paper No. 2009–02; pp. 1– 27). Federal Reserve Bank of San Francisco. https://www.frbsf.org/community-development/files/wp2009-02.pdf

Smith, S. S. (2000). Mobilizing Social Resources: Race, Ethnic, and Gender Differences in Social Capital and Persisting Wage Inequalities. *The Sociological Quarterly*, *41*(4), 509–537. https://doi.org/10.1111/j.1533-8525.2000.tb00071.x

Stern, M. J., Bilgen, I., & Dillman, D. A. (2014). The State of Survey Methodology: Challenges, Dilemmas, and New Frontiers in the Era of the Tailored Design. *Field Methods*, *26*(3), 284–301. https://doi.org/10.1177/1525822X13519561

Storey, D., Saridakis, G., Sen-Gupta, S., Edwards, P., & Blackburn, R. (2010). Linking HR formality with employee job quality: The role of firm and workplace size. *Human Resource Management*, *49*(2), 305–329. https://doi.org/10.1002/hrm.20347

Strickland, M., & Burr, S. (1995). The Importance of Local, State, and Federal Programs for Women Entrepreneurs. *Economic Development Quarterly*, *9*(1), 87–90. https://doi.org/10.1177/089124249500900109

Su, J., Shao, P., & Fang, J. (2008). Effect of Incentives on Web-Based Surveys. *Tsinghua Science & Technology*, *13*(3), 344–347. https://doi.org/10.1016/S1007-0214(08)70055-5

Tareque, I., Orozco, M., Oyer, P., & Porras, J. (2021). *U.S. Black-Owned Businesses: Pre- pandemic Trends & Challenges* (pp. 1–10) [Research Brief]. Center for Entrepreneurial Studies, Stanford Graduate School of Business. https://www.gsb.stanford.edu/faculty-research/publications/us-black-owned-businesses-pre-pandemic-trends-challenges

Tierney, K. J., & Dahlhamer, J. M. (1997). Business Disruption, Preparedness And Recovery: Lessons From The Northridge Earthquake. *University of Delware Disaster Research Center*. https://udspace.udel.edu/handle/19716/657

Tonidandel, S., & LeBreton, J. (2011). Relative Importance Analysis: A Useful Supplement to Regression Analysis. *Journal of Business and Psychology*, *26*, 1–9. https://doi.org/10.1007/s10869-010-9204-3

Ueda, K., Zhao, X., & Zhang, Y. (2022). Fintech Firms' Competition Strategies: Evidence from the Unsecured Personal Loan Market. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4106569

Vanclay, F. (2003). International Principles For Social Impact Assessment. *Impact Assessment and Project Appraisal*, *21*(1), 5–12. https://doi.org/10.3152/147154603781766491

Walker, E., & Brown, A. (2004). What Success Factors are Important to Small Business Owners? *International Small Business Journal*, *22*(6), 577–594. https://doi.org/10.1177/0266242604047411

Wallace, N., Lester, W., & Graves-Manns, T. (2020). *Don't Knock the Hustle: Plotting to Scale NC's Black Businesses Post-COVID*. ResilNC. https://www.resilnc.org/report

Wallsten, S. J. (2000). The Effects of Government-Industry R&D Programs on Private R&D: The Case of the Small Business Innovation Research Program. *The RAND Journal of Economics*, *31*(1), 82–100. https://doi.org/10.2307/2601030

Watson, M. (2021). The Role of SBA Loans in Small Business Survival after Disaster Events. *Journal of Planning Education and Research*, 0739456X2110282. https://doi.org/10.1177/0739456X211028291

Weiss, C. H. (1997). How Can Theory-Based Evaluation Make Greater Headway? *Evaluation Review*, *21*(4), 501–524. https://doi.org/10.1177/0193841X9702100405

Weller, C. E. (2009). Credit Access, the Costs of Credit and Credit Market Discrimination. *The Review of Black Political Economy*, *36*(1), 7–28. https://doi.org/10.1007/s12114-009- 9034-6

Westlund, H., & Bolton, R. (2003). Local Social Capital and Entrepreneurship. *Small Business Economics*, *21*(2), 77–113. https://doi.org/10.1023/A:1025024009072

Wiklund, J., Patzelt, H., & Shepherd, D. A. (2009). Building an integrative model of small business growth. *Small Business Economics*, *32*(4), 351–374. https://doi.org/10.1007/s11187-007-9084-8

Williams, T., Brown-Graham, A., McCall, J., & Berner, M. (2021). *Community Development Organizations Capacity to Respond to COVID-19: A Theoretical Approach to the Strategic Use of Social Capital* (NcIMPACT Initiative Research Bulletin No. 2021/01 UNC School of Government. https://www.sog.unc.edu/publications/bulletins/community- development-organizations%E2%80%99-capacity-respond-covid-19-theoretical-approach-strategic-use

Williams, T., McCall, J., Berner, M., & Brown-Graham, A. (2021). Beyond Bridging and Bonding: The Role of Social Capital in Organizations. *Community Development Journal*, *bsab025*, 1–23. https://doi.org/10.1093/cdj/bsab025

Wilson, D. B., Solomon, T. A., & McLane-Davison, D. (2020). Ethics and Racial Equity in Social Welfare Policy: Social Work's Response to the COVID-19 Pandemic. *Social Work in Public Health*, *35*(7), 617–632. https://doi.org/10.1080/19371918.2020.1808145

Wu, Z., Chua, J. H., & Chrisman, J. J. (2007). Effects of family ownership and management on small business equity financing. *Journal of Business Venturing*, *22*(6), 875–895. https://doi.org/10.1016/j.jbusvent.2006.07.002

Ziliak, S. T., & McCloskey, D. N. (2008). *The Cult of Statistical Significance: How the Standard Error Costs Us Jobs, Justice, and Lives*. University of Michigan Press. https://doi.org/10.3998/mpub.18

APPENDIX I. SUPPLEMENTARY DATA

ADDITIONAL TABLES

Table A1. Financing Declines Before the Pandemic Ranked Pairwise Tests (n = 97)

Group 1	Group 2	Average Difference	P-Value	Effect Size Cohen's f	Sample	
					1	2
Black	White	-0.372	0.001***	-0.861	59	29
White	Asian	0.181	0.882	0.643	29	4
Asian	Black	0.191	0.870	0.387	4	59

Table A2. Level of FTE Employment at Time of Survey Ranked Pairwise Tests (n = 494)

Group 1	Group 2	Average Difference	P-Value	Effect Size Cohen's f	Sample	
					1	2
Grantee	Borrower	-2.61	0.001***	-0.58	419	75
Borrower	Received Both	-3.01	0.213	-0.48	75	18
Received Both	Grantee	-0.41	0.900	0.10	18	419

PREDICTORS OF EMPLOYMENT VARIATION REGRESSION MODEL

The FTE jobs model is an ordinary least squares (OLS) regression and, as such, makes numerous assumptions about how the data approximates a normal distribution. The model incorporates unedited survey data with two exceptions, both of which represent standard practice to improve model fit (Pituch & Stevens, 2015):

1. **Imputations:** To minimize excessive imputations, the model only includes fully complete surveys (n = 487). However, because of cases where control variables from external data sources had missing values, 3% of rows were imputed. Missing data were replaced with imputed means or medians (in cases of severe outliers) for each variable.

2. **Transformations:** Numerical variables with data that violated regression assumptions about normal distribution have been transformed be taking logged values and are flagged as such with "log(x)." In cases where the variable had non-missing "0" values, data were transformed using log plus one as indicated by "log(x) + 1."

Table A3. Predictors of Variation in Respondent's Current Employment Level (n=487)

R^2	Adjusted R^2	Standard Error	Coefficient of Variation	P-Value
0.399	0.380	13.804	2.447	0.000

Independent Variables	Relative Weights			Unstandardized			Standardized			p
	Lower	95% CI	Upper	Lower	95% CI	Upper	Lower	95% CI	Upper	
Social Capital Score log(*x*) + 1	0.2%	0.4%	1.9%	-0.497	-0.116	0.224	-0.115	-0.027	0.055	0.267
# Trust Sources log(*x*) + 1	0.1%	0.6%	4.6%	-0.186	-0.028	0.079	-0.105	-0.017	0.049	0.571
Mean Operating Conditions Score	0.1%	0.1%	1.4%	-0.040	-0.010	0.034	-0.084	-0.022	0.075	0.840
Respondent Firm's Gross Revenues***	60.8%	74.4%	80.0%	0.068	0.099	0.141	0.312	0.423	0.581	0.000
Cash on Hand For Business Bills	0.1%	0.4%	1.9%	-0.034	0.002	0.020	-0.104	0.005	0.059	0.740
Will Apply for a Loan in Next 12 Months?										
Yes, Plan to Apply	0.3%	1.6%	5.5%	-0.018	0.037	0.162	-0.021	0.042	0.186	0.139
No, Don't Plan to Apply*				-0.027	0.028	0.119	-0.038	0.041	0.172	0.059
Don't Know (Baseline)										
Approved for Loan Before January 2020?										
Approved for Financing**	1.7%	4.8%	10.9%	0.012	0.091	0.153	0.013	0.093	0.159	0.017
Denied for Financing				-0.105	0.016	0.116	-0.072	0.011	0.084	0.961
Control Variables										
Type of COVID-19 Aid Received										
CSBDF Borrower*	1.4%	5.3%	11.9%	-0.014	0.065	0.279	-0.014	0.068	0.289	0.077
CSBDF Grantee				-0.080	-0.024	0.164	-0.092	-0.028	0.196	0.171
Received Both (Baseline)										
# Aid Programs Applied For	1.2%	3.7%	7.1%	0.000	0.021	0.035	0.000	0.070	0.121	0.506
# Aid Programs Approved For	2.4%	6.5%	10.8%	0.013	0.032	0.047	0.041	0.094	0.146	0.274
Age of Firm (Months) log(*x*) + 1	0.6%	2.2%	4.7%	-0.068	0.057	0.117	-0.058	0.049	0.097	0.648
Business Location in Rural County	0.1%	0.1%	3.4%	-0.108	0.030	0.111	-0.107	0.028	0.105	0.795

*Statistically significant at ***p < 0.01, **p < 0.05, or *p < 0.10*

APPENDIX II. SURVEY QUESTIONS

DISTRIBUTION AND QUESTION FORMAT

The survey instrument was disseminated through Qualtrics, and online survey platform. Respondent firms were shown one question per page, and if a question was required it had to be responded to before proceeding. Back buttons were available so that respondents could change previous answers at any time. Qualtrics saves answers to the user's browser cache, which enables respondents to close a survey window and return to where they stopped when subsequently accessing the survey link.

ANONYMIZED PUBLICATION OF DATA

As part of CSBDF's commitment to transparent and accountable research, anonymized data for all research reports is published via the organization's Harvard Dataverse. We publish the data for two reasons. First, we strongly believe that community economic development data should be publicly available so that the results can be replicated and verified by anyone. Second, our work in this area seeks to broaden the scope of knowledge about how to best assist small businesses, and we thus invite other researchers to use the data to achieve that goal.

To ensure confidentiality, the published dataset was anonymized by adding noise flags to any value that could potentially unmask a respondent via triangulation.[65] This means a small random number was added or subtracted to the data to intentionally obfuscate the original value. As a result of these changes, the published data are materially similar to recorded values, but sufficiently different from the "real" values to protect confidentiality. Noise flags were applied to each respondent's firm start date, all job and employment hour counts, award date(s), and amount of award(s). A Pearson's correlation test between the original data and the deidentified values shows coefficients ranging from 0.970 to 0.981.[66]

There are some values which cannot be published because there is no way to protect respondent confidentiality through noise flags or other suppression techniques. The following datapoints were collected as part of our analysis but not published: respondent IP address, respondent longitude and latitude, respondent name, firm name, and name of grant/ and or loan program(s) awarded. Additionally, any open text entered has been omitted.

ABOUT THE SURVEY QUESTIONS LIST

The list of survey questions is below. Depending on firm characteristics and how questions were answered, certain parts of the survey not shown due to **Display Logic:** or were bypassed using **➔Skip Logic**. Additionally, some questions had **✓Validation Checks** which required entered values to be within certain ranges. To prevent bias that might occur from showing all respondents answer choices in the same order, where possible questions used **⌘Randomization**. The survey instrument was personalized and displayed information to each respondent. The questions below indicate when this occurred with brackets. For example, [Business Name] means the respondent's firm name was displayed to them.

[65] Data triangulation means attempting to unmask a respondent by combining an array of values from multiple datasets. For example, award amounts have a noise flag applied so that a record cannot be linked to information that might be obtained via public records requests.

[66] A value of 1.00 would indicate two data series are perfectly correlated and move together in a lockstep positive (+1.00) or inverse (-1.00) manner.

SECTION 1. SURVEY INTRODUCTION AND INCENTIVE EMAIL

Q1.1: Introduction Statement

Why am I being contacted?
Carolina Small Business Development Fund (CSBDF) provided [Business Name] with [Amount] in pandemic aid from the [CSBDF Grant or Loan Program] Program(s). We're conducting research to learn more about how you and other entrepreneurs utilized financial assistance throughout the COVID-19 emergency.

How will my answers be used?
Your responses will help us assess the needs of entrepreneurs and explore how disaster response programs can be improved in the future. Any information you choose to provide is confidential. We hope you will choose to provide us feedback, but your participation in the survey is strictly voluntary. No information you provide will be used or considered in current or future financial assistance programs offered by CSBDF.

Why are you doing this survey?
CSBDF is committed to strengthening North Carolina's small business ecosystems through evidence-based research and policy recommendations. This project is being managed by CSBDF's independent research staff in conjunction with our partners at ResilNC, a nonprofit collaborative that supports North Carolina's Black business ecosystem through data driven insights, policy investment recommendations, and thoughtful convenings.

Q1.2 – Confirm Email

The below email address will receive the $10 gift card for completing this survey. If you'd like to send it somewhere else, please enter a new email below.

OPEN ENDED TEXT BOX

SECTION 2. USE OF ASSISTANCE FUNDS

Q2.1 – Use of Financial Assistance

⌘ **Randomization: Answer choice order was randomized.**

How were the proceeds from [Business Name]'s [Grant or Loan Program Name 1] for [Amount 1] utilized? Check all that apply.

- ☐ Business Acquisition
- ☐ Cashflow Needs
- ☐ Machinery and Equipment
- ☐ Leasehold Improvements
- ☐ Refinanced Business Debt
- ☐ Inventory and Supplies
- ☐ Working Capital
- ☐ Real Estate Purchases
- ☐ Other (Please Describe):
- ☐ Funds Have Not Been Utilized Yet [Exclusive Answer Choice]

Q2.2 – Allocation of Funds

⚐ **Display Logic: Not shown if Funds have Not Been Utilized Yet was selected in *or* only one use of funds was selected in Q2.1.**

✓**Validation Check: The sum of all entered values must be 100.**

What percentage of the [Amount 1] [Grant or Loan Program Name 1] proceeds went to pay for the below business expenses?

Business Acquisition	XX%
Cashflow Needs	XX%
Machinery and Equipment	XX%
Leasehold Improvements	XX%
Refinanced Business Debt	XX%
Inventory and Supplies	XX%
Working Capital	XX%
Real Estate Purchases	XX%
Other (Please Describe):	XX%
Total:	100%

Q2.3 – Use of Financial Assistance

⚐ **Display Logic: Not shown if the respondent did not receive assistance from a second CSBDF grant or loan program.**

⌘ **Randomization: Answer choice order was randomized.**

How were the proceeds from [Business Name]'s [Grant or Loan Program Name 2] for [Amount 2] utilized? Check all that apply.

- ☐ Business Acquisition
- ☐ Cashflow Needs
- ☐ Machinery and Equipment
- ☐ Leasehold Improvements
- ☐ Refinanced Business Debt
- ☐ Inventory and Supplies
- ☐ Working Capital
- ☐ Real Estate Purchases
- ☐ Other (Please Describe):
- ☐ Fund Have Not Been Utilized Yet [Exclusive]

Q2.4 – Allocation of Funds

⚐ Display Logic: Not shown if the respondent did not receive assistance from a second CSBDF grant or loan program.

⚐ Display Logic: Not shown if Funds have Not Been Utilized Yet was selected in *or* only one use of funds was selected in Q2.3.

✓Validation Check: The sum of all entered values must be 100.

What percentage of the [Amount 2] [Grant or Loan Program Name 2] proceeds went to pay for the below business expenses?

Business Acquisition	XX%
Cashflow Needs	XX%
Machinery and Equipment	XX%
Leasehold Improvements	XX%
Refinanced Business Debt	XX%
Inventory and Supplies	XX%
Working Capital	XX%
Real Estate Purchases	XX%
Other (Please Describe):	XX%
Total:	100%

Q2.5 – Use of Financial Assistance

⚐ Display Logic: Not shown if the respondent did not receive assistance from a third CSBDF grant or loan program.

⌘ Randomization: Answer choice order was randomized.

How were the proceeds from [Business Name]'s [Grant or Loan Program Name 3] for [Amount 3] utilized? Check all that apply.

☐ Business Acquisition
☐ Cashflow Needs
☐ Machinery and Equipment
☐ Leasehold Improvements
☐ Refinanced Business Debt
☐ Inventory and Supplies
☐ Working Capital
☐ Real Estate Purchases
☐ Other (Please Describe):
☐ Fund Have Not Been Utilized Yet [Exclusive]

Q2.6 – Allocation of Funds

⚐ Display Logic: Not shown if the respondent did not receive assistance from a third CSBDF grant or loan program.

⚐ Display Logic: Not shown if Funds have Not Been Utilized Yet was selected in *or* only one use of funds was selected in Q2.5.

✓Validation Check: The sum of all entered values must be 100.

What percentage of the [Amount 3] [Grant or Loan Program Name 3] proceeds went to pay for the below business expenses?

Business Acquisition	XX%
Cashflow Needs	XX%
Machinery and Equipment	XX%
Leasehold Improvements	XX%
Refinanced Business Debt	XX%
Inventory and Supplies	XX%
Working Capital	XX%
Real Estate Purchases	XX%
Other (Please Describe):	XX%
Total:	100%

SECTION 3: APPLICATIONS AND APPROVALS FOR OTHER COVID AID

Q3.1 – Applications for Other COVID-19 Aid

Excluding the [Total Amount][67] assistance you received from CSBDF, did [Business Name] apply for *other* COVID-19 assistance listed below? Check all that apply.

Federal Assistance Programs
☐ Paycheck Protection Program
☐ Economic Injury Disaster Loan
☐ Restaurant Revitalization Grant

State Assistance Programs
☐ Rapid Recovery Loan
☐ Job Retention Grant
☐ Business Recovery Grant
☐ Mortgage, Utility, and Rate Relief Program

Other Assistance Programs
☐ Local Government COVID-19 Relief Loan Program
☐ Local Government COVID-19 Grant
☐ Any other (Please Describe):

No Other Assistance Applied For
☐ Didn't Apply for Aid [Exclusive]

Q3.2 Results of COVID-19 Applications

⚐ Display Logic: Not shown if answer to Q3.1 is We Didn't Apply for Any Other Pandemic Aid.

⌘ Randomization: Answer choice category group was randomized.

For which of the below assistance programs was [Business Name] approved? Check all that apply. If you applied for the same program more than once (for example, the Paycheck Protection Program) only check the box if you were approved for the *most recent* application.

Federal Assistance Programs
☐ Paycheck Protection Program
☐ Economic Injury Disaster Loan
☐ Restaurant Revitalization Grant

State Assistance Programs
☐ Rapid Recovery Loan
☐ Job Retention Grant
☐ Business Recovery Grant
☐ Mortgage, Utility, and Rate Relief Program

Other Assistance Programs
☐ Local Government COVID-19 Relief Loan Program
☐ Local Government COVID-19 Grant
☐ Any other (Please Describe):

No Other Assistance Applied For
☐ We Didn't Apply for Any Other Pandemic Aid
[Exclusive Answer Choice]

Q3.3 – Other COVID-19 Assistance

Display Logic: Not shown if answer to Q3.1 is We Didn't Apply for Any Other Pandemic Aid.

[Business Name] received [Total Amount] in total assistance from CSBDF. *Had you been approved for any other COVID-19 assistance at the time you received aid from CSBDF?* If you had been approved for a loan or grant but funds had not been dispersed on the date you requested assistance from CSBDF, select yes.

○ Yes
○ No
○ Don't Remember

Q3.4 – Previous Financing Applications

Before February 2020, had [Business Name] applied for small business financing of any type?

○ Yes
○ No
○ Don't Remember

Q3.5 – Outcome of Financing Applications

Display Logic: Not shown if the answer to Q3.4 is No or Don't Know.

What was the result of [Business Name]'s most recent application for small business financing?

○ Yes
○ No
○ Don't Remember

SECTION 4. CURRENT EMPLOYMENT LEVELS

Q4.1 – Existing Employment Positions

✓**Validation Check: Entered values for each category must range between 0 and 100.**

How many individuals are employed at [Business Name] as of [Current Date]? Enter "0" if a field does not apply because you do not have any employees in the listed category. An employed individual means:

- All individuals receiving payroll compensation from the business.
- The owner(s) of the firm, if they receive any compensation from the operation of the business or plan to in the next 2 years.
- Do not count any contract positions.

Individuals(s) employed full-time (35+ hours/week):	XX Employees
Individuals(s) employed part-time (1-34 hours/week):	XX Employees
Individual(s) employed seasonally (1-11 months/year):	XX Employees

Q4.2 – No Currently Employed Individuals

⚐ **Display Logic: Not shown unless 0 values entered for full-time, part-time, and seasonal employees in Q4.1.**

➔ **Skip Logic: If yes is selected, all other questions in section 4 are skipped.**

You have indicated [Business Name] has 0 current employees of any type. Does this mean the business has closed?

Note: If you selected 0 employees because the only individual(s) performing compensable duties are the owner(s), enter the number of owners instead. Owners who work on the business are considered employees if they are currently compensated in any form ***or*** *plan to draw compensation in any form in the future.*

○ Yes
○ No

Q4.3 – Full-Time Employee Hours

⚐ Display Logic: Not shown unless the value for full-time employees in Q4.1 is greater than or equal to 1.

✓Validation Check: Entered value must range between 35 and 80.

How many hours do each of [Business Name]'s [Number of Full-Time Employees from Q4.1] permanent full-time employee(s) work on average each week?

Q4.4 - Part-Time Employee Hours

⚐ Display Logic: Not shown unless the value for part-time employees in Q4.1 is greater than or equal to 1.

✓Validation Check: Entered value must range between 1 and 34.

How many hours do each of [Business Name]'s [Number of Part-Time Employees from Q4.1] permanent part-time employee(s) work on average each week?

Q4.5 – Seasonal Employee Time Period

⚐ Display Logic: Not shown unless the value for employees working 1 to 11 moths per year in Q4.1 greater than or equal to 1.

✓Validation Check: Entered value must range between 1 and 11.

How many months of the year do [Business Name]'s [Number of Seasonal Employees from Q4.1] temporary employee(s) work on average?

Q4.6 – Seasonal Employee Hours

⚐ Display Logic: Not shown unless the value for employees working 1 to 11 moths per year in Q4.1 greater than or equal to 1.

✓Validation Check: Entered value must range between 1 and 80.

How many hours do each of [Business Name]'s [Number of Seasonal Employees from Q4.1] work per week on average during the [Months Value from Q4.5] month seasonal employment period?

SECTION 5 – ALL OTHER QUESTIONS

Q5.1 – Most Recently Filed Tax Period

☆ **Note: Choices were presented as a dropdown box to respondents.**

What is [Business Name]'s most recently completed federal tax return year?

- ○ 2018
- ○ 2019
- ○ 2020
- ○ 2021

Q5.2 – Gross Annual Revenues in Most Recently Filed Tax Period

What range best represents [Business Name]'s *gross annual revenues* as indicated on its [Tax Year Entered in Q5.1] federal tax returns?

- ○ $0
- ○ $1 to $50,000
- ○ $50,001 to $100,000
- ○ $100,001 to $250,000
- ○ $250,001 to $500,000
- ○ $500,000 or more

Q5.3 – 2019 Gross Annual Revenues

⚐ **Display Logic: Not shown unless the respondent firm's start date was 2019 or earlier.**

What were [Business Name]'s *gross annual revenues* as indicated on its 2019 federal tax returns?

- ○ $0
- ○ $1 to $50,000
- ○ $50,001 to $100,000
- ○ $100,001 to $250,000
- ○ $250,001 to $500,000
- ○ $500,000 or more

[67] Total amount is the dollar value sum of all aid received from CSBDF.

Q5.4 – Business Operating Conditions

Display Logic: Not shown if answer to Q4.2 is Yes and firm is not operating.

Please indicate your level of agreement with the statements below about [Business Name]'s business operations as of [Current Date].

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Not Applicable
We are able to recruit and retain qualified employees.	o	o	o	o	o	o
We can get business financing when needed.	o	o	o	o	o	o
We have no issues in finding business supplies.	o	o	o	o	o	o
We have no concerns about another COVID-19 surge.	o	o	o	o	o	o
We anticipate increasing demand for our services.	o	o	o	o	o	o
We are able to recruit and retain qualified employees.	o	o	o	o	o	o
We can get business financing when needed.	o	o	o	o	o	o

Q5.5 – Cash for Operating Expenses

Display Logic: Not shown if answer to Q4.2 is Yes and firm is not operating.

How long could [Business Name] pay for its expenses using cash on hand if it had no revenue generating activities?

- ○ Less than 30 Days
- ○ 30 to 60 Days
- ○ 60 to 90 Days
- ○ More than 90 Days

Q5.6 – Projected Capital Needs

Display Logic: Not shown if answer to Q4.2 is Yes and firm is not operating.

Thinking about [Business Name]'s business needs over the *next 12 months*, do you anticipate needing financing or investment from external sources? This includes any anticipated needs for equity investment, business credit cards, lines of credit, and/or term loans.

- ○ Yes
- ○ No
- ○ Don't Remember

Q5.7 – Anticipated Uses of Capital/Investment

⚐ **Display Logic: Not shown if answer to Q4.2 is Yes and firm is not operating.**

⚐ **Display Logic: Not shown if answer to Q5.6 is No or Don't Know.**

⌘ **Randomization: Answer choice order was randomized.**

What was *the primary reason* for [Business Name]'s expected credit/investment needs over the next 12 months?

- ☐ Business Acquisition
- ☐ Cashflow Needs
- ☐ Machinery and Equipment
- ☐ Leasehold Improvements
- ☐ Refinanced Business Debt
- ☐ Inventory and Supplies
- ☐ Working Capital
- ☐ Real Estate Purchases
- ☐ Other (Please Describe):

Q5.8 – Sources of Business Information

⌘ **Randomization: Answer choice order was randomized.**

Thinking about the below organizations in your community, would you consider any of them as trustworthy and likely to provide you with the right information on business management and/or financing? Select all that apply.

- ☐ Business Institutions
- ☐ Community Credit Unions
- ☐ Community College Programs
- ☐ Other Small Business Owners
- ☐ Chambers of Commerce
- ☐ Other Organization (Please Describe):
- ☐ Other Individual (Please Describe):
- ☐ Real Estate Purchases
- ☐ I don't consider any of these trustworthy or likely to provide correct information. [Exclusive]

Q5.9 – Views on Your Community

⌘ **Randomization: Statement order was randomized.**

Please indicate your level of agreement with the following statements.

Statements	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Not Applicable
The local community supports entrepreneurs like me.	o	o	o	o	o	o
If my business runs into trouble, I know where to go for help.	o	o	o	o	o	o
My neighborhood's small business owners help each other.	o	o	o	o	o	o
Most people in my community can be trusted.	o	o	o	o	o	o
If my community has a problem, we work together to solve it.	o	o	o	o	o	o

End of Survey Message

☆ **Note:** Responses were marked completed when respondents saw this message.

Your response has been recorded. Thank you for helping us better serve North Carolina's entrepreneurial community.

You will receive an email from our vendor with a link to your survey reward. Remember to check your spam folder if you don't see it. If you haven't received an email within 24 hours, please contact TangoCards.

Scan to access full report.

Carolina Small Business DEVELOPMENT FUND

RESILNC