

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF FLORIDA

CASE NO.: 20-cv-81205-RAR

SECURITIES AND EXCHANGE
COMMISSION,

Plaintiff,

v.

COMPLETE BUSINESS SOLUTIONS
GROUP, INC. d/b/a PAR FUNDING, et al.,

Defendants.

**DEFENDANTS' JOINT REPLY TO THE RECEIVER'S RESPONSE TO
DEFENDANTS' JOINT CROSS MOTION TO HAVE THIS COURT DIRECT THE
RECEIVER TO REHIRE SKILLED, KNOWLEDGEABLE AND EXPERIENCED CBSG
EMPLOYEES WHO KNOW THE BUSINESS AND HAVE BEEN OUT OF WORK
SINCE THE TRO AND THE RECEIVER'S APPOINTMENT**

In its response to Defendants' joint motion to rehire experienced CBSG employees, the Receiver candidly advises that he has no experience with the merchant cash advance industry, is incapable of managing or monitoring the day to day operations of CBSG, and will need guidance on countless issues, including varying state laws and regulations. (Receiver's Corrected Reply at 1-2)¹ We agree with the Receiver that the merchant cash funding business is complicated and

¹ The Receiver's initial motion to retain a professional was premised on two factual claims – an alleged \$500 million in defaulted agreements and the inability to speak with knowledgeable CBSG employees. (Receiver's Expedited Motion to Engage a Professional dated August 6, 2020 at para.'s 10-11, Dkt. No. 101) Both of those factual claims were soundly disproved in our Motion to Rehire Employees and are no longer made here. Also not challenged is the proof of the SEC's wildly inaccurate assertion to this Court on August 4, 2020 that CBSG only had \$2.5 million in accounts – when it in fact had about \$25 million. (See Defendants' Cross Motion to Hire Employees at p. 5 and Exhibit 2, August 7, 2020, Dkt. No. 106) This is the problem; both the SEC and the Receiver

requires skilled individuals with expertise in underwriting, accounting, account processing, bookkeeping, ACH processing and the particular platforms and systems that were designed for CBSG. We also agree that the Receiver should have available, individuals with expertise in the state laws and regulations governing CBSG’s business, as well as individuals who have detailed knowledge of the litigation, both advanced and defended, by CBSG. One needn’t look far for the people who possess this knowledge and expertise—they are right in front of us. Indeed, it is for this very reason that Defendants filed this cross-motion for the Receiver to rehire CBSG employees.

For example, the Receiver wishes to employ someone with insight into CBSG’s “underwriting procedures,” and whether they are “sufficient.” (*Id.* at 2) It is pretty clear that, whatever those procedures are, they have worked extremely well. Since 2012, CBSG has provided factoring agreements for businesses, and paid investors like clockwork, missing an interest payments only in April and May 2020 due to COVID-19’s dramatic effect on small businesses, while at the same time maintaining significant reserves in its bank accounts.² Since 2012, for the past eight years, the cash over cash default rate is 1.2%—an extraordinarily excellent number, perhaps the best in the industry. Since 2012 investors have generally received interest returns of 10-20%. It is absolutely fair to say that by the time a new person, much less and far worse, a whole new group of people (DSI, for example), understands that the underwriting procedures are

are acting on very inaccurate information. The Receiver needs to rehire the employees with knowledge immediately and the SEC needs to release funds for him to do so.

² CBSG missed payments after the SEC filed its *ex parte* action, froze accounts and requested a Receiver on or about July 25, 2020.

excellent—weeks or months from now—this company will be over and the harm to investors caused by the SEC’s actions in this case will be irreparable.³

We include herein a **Proposed Action Plan**. (See pages 7-8, *infra*.)

The receiver requests advice on whether the portfolio of MCA’s should be enforced under their current terms or restructured.⁴ (*Id.* at 2) But that is just what CBSG did in response to COVID-19 with their expert employees—employees who know this information now. These very employees, whom worked month after month and year after year to achieve excellent numbers in the past, just repositioned the company to successfully respond to COVID-19.⁵ The employees understand that the post-COVID-19 business environment is dramatically altered; it is they who have spent the last three months addressing the COVID-19 fallout and successfully restructured the vast majority of defaults brought on by the pandemic. Indeed, the Exchange Offer in March and April 2020 was instituted because of, driven by, and responsive to, the COVID-19 business environment. CBSG quickly grasped the dramatic and negative consequences of COVID-19 on small businesses and acted immediately by re-aligning the promissory note interest rates with

³ Not only that, paying hundreds of thousands of dollars to a new group of people to learn, from scratch, a very successful but extremely complicated business with its own relationships with the merchants, which are in contact daily, as well as investors, will accomplish nothing, is wholly unnecessary and will just dissipate assets.

⁴ Ironically, and sadly, the SEC criticized just the kind of “restructuring” considered by the Receiver and made it an element of their Complaint, having apparently not the faintest idea that it was done in response to the burgeoning COVID-19 crisis. (See SEC Complaint at para.’s 126-141, Dkt. No. 1)

⁵ The Receiver expresses concern that defendant Joseph Laforte is one of the employees Defendants seek to be rehired and even attaches his recent indictment. That is just a red herring. Defendants do not request that the Receiver hire Joseph Laforte or Lisa McElhone and made that crystal clear in our cross-motion. Nor will they have access to any of the CBSG bank accounts.

COVID-19 reality and permitting small businesses to make much smaller payments – which was successfully working until the SEC’s brazen actions in this case.

This was smart, nimble planning and it enabled CBSG to make regular investment payments – until the SEC’s ill-advised *ex parte* actions here. Returning the 70 knowledgeable, experienced professionals who know CBSG’s business, its systems, bookkeeping and accounting, will enable CBSG to pay investors and support its merchant customers and stay in business during COVID-19, unlike countless businesses which have closed nation-wide. CBSG was certainly positioned financially and making all payments to investors in June and July 2020 when the SEC stepped in – oblivious to the fact that the April 2020 Exchange Offer restructuring was done to protect investors and the ability of CBSG to continue in the face of a huge economic downturn.⁶

Next, we appreciate that the Receiver candidly advises the Court that he will need expertise on “whether the MCA’s are lawfully structured under relevant statutory and regulatory regimes,” which vary from state to state. The Receiver will also need expert advice on evaluating non-performing funding agreements to determine whether they should be passed to a collection agency, litigated, or written off. (Receiver’s Corrected Reply at 2) Well, that is just what CBSG employees have been doing successfully for eight years – with the assistance of excellent counsel. For eight years, CBSG has been making those precise calls and has, in the process, achieved a 1.2% cash over cash default rate. And, CBSG has achieved a consistent monthly collection/deposit receivable

⁶ On May 12, 2020, the Washington Post reported that despite over \$700 billion dollars being put into the US economy by Congress, over 100,000 businesses had closed. (*See* Washington Post, May 12, 2020 annexed as Exhibit A) Similarly, a detailed study by the National Academy of Sciences, dated June 23, 2020, found “massive dislocation” among small businesses just several weeks after COVID-19 onset. Across the sample of 5,800 small businesses, 43% had temporarily closed, nearly all due to COVID-19. (*See* The Impact of COVID-19 on Small Business Outcomes and Expectations, annexed hereto as Exhibit B)

rate of 5-10% as a percentage of its AR balances, with an average rate of about 7%. This means that with the current AR balance (about \$421 million), CBSG was consistently collecting through litigation, settlements and merchant payments, about \$30 million per month. These are excellent numbers which is why, month after month and year after year, the investors were paid and why CBSG was positioned, with the April 2020 restructuring, to survive the COVID-19 pandemic and its economic fallout. And why there were significant cash balances on hand for reserves.

Further, whom better for the Receiver to consult with on the questions of the current litigation around the country (involving hundreds of cases), and the various state laws and rules than the excellent lawyers who have been full-time prosecuting and defending these cases – successfully, we might add – for the last six months. Attorneys from Fox Rothschild know the applicable state law and regulation and have successfully prosecuted and defended CBSG in courts all over the country. And some new firm is supposed to come in now and learn all of these laws and the hundreds of pending cases? Maybe in six months – or even longer if the employees are not immediately brought back. The underwriters and collection staff of CBSG, in addition to Fox Rothschild, have up to date knowledge and information on the Receiver's questions about whether the portfolio of MCA's should be enforced, restructured or litigated that simply cannot be replicated without many months of work that has already been done by professionals. But if months of wholly duplicative work occurs, it will be too late. By that time, the SEC's actions will have irreparably destroyed the business – leading to a catastrophic effect on the investors they claim to be trying to protect in this action.

The Receiver raises some practical concerns at page 3 of its Reply. These can be answered in turn. First, we respectfully request that the Court direct the SEC to lift the freeze on Full Spectrum's six (6) bank accounts and three (3) ACH accounts or, at a minimum, release \$210,000

which is four weeks' pay (\$90,000 every two weeks) for the 70 employees, plus \$30,000 in payroll checks that were not deposited from prior weeks before the freeze of the accounts. (*See* Exh. 2, annexed hereto). Second, Defendants have not objected, and do not object, to the Receiver having discretion to process payroll. Third, the employees can readily restore normal operations while documents continue to be scanned. This happens all the time in businesses that have received information or regulatory requests or subpoenas. There is hardly an entity in the financial world that has not received an all-encompassing document demand from litigators or regulators and continued its business. It happens every single day. Indeed, by the time this motion is decided, the computer hard drives may have already been forensically imaged.

Fourth, the employees have expertise in this business and there is no allegation anywhere that they have done wrong. It is wise for the Receiver to rely upon them. Moreover, Mr. Cole, through his attorney, has offered to speak to and assist the Receiver. In fact, Defendants propose the following **Plan of Action**. While the Defendants do not suggest that the Receiver has concluded that "the receivership should result in a liquidation of the Receivership Entities" (Receiver's Reply at 4), time is of the essence. Unless the Receiver obtains the immediate services, expertise and assistance of these knowledgeable and experienced employees, liquidation will, without doubt, be the end result. Without CBSG professionals and support staff working hard this week to restore the business, there will be no business to restore.

If the 70 professionals and support staff continue to be denied their paychecks for the previous weeks' work, the company will not survive. The daily review of the MCA portfolio and the employee's daily contact with the merchant businesses have made this company successful. Without pay and with the prospect of liquidation, employees will begin to look elsewhere for employment, and the investors will lose their investments. By the time some new "expert"

company even begins to understand the complexities of CBSG's business, much less some of the other topics the Receiver has mentioned, weeks if not months will have passed, and there will be no company to save and no funds with which to pay investors or fund businesses.

PROPOSED ACTION PLAN

This is Where Company Financials Currently Stand due to the July 28, 2020 Freeze

Client/Merchant Deposits: Through Friday, 08/07/20, due to the freeze order, the Receiver has not processed approximately \$12 million in merchant payments. These returned deposits would have been used, along with the approximately \$22 million in CBSG bank accounts, to secure investor capital with the company. In addition to the approximately \$12 million in merchant payments, there are also about \$200,000 in recurring daily automatic ACH payments that were not collected due to the freeze on the ACH accounts.

Client/Merchant Returned Payments: The Receiver has not addressed the approximately \$231,000 in returned merchant payments, known to the company, since the Receiver took over. He may not be aware of this issue. These are daily matters that Full Spectrum Processing (FSP) employees resolve amicably each and every morning with their client merchants. The FSP employees are on a first name basis with the merchants and, every day, work out modified terms to the factoring agreements in order to assist the merchants.

The freeze on CBSG bank accounts has compounded some of CBSG's merchants' financial problems because, since July 28, 2020, there has been approximately \$225,000 in merchant business funding wires that are contractually obligated to be sent by CBSG to its merchants pursuant to current factoring agreements, and have not been paid. These payments are needed by CBSG's merchants to pay operating expenses including payments to the merchants' vendors, staff and rent in order to continue to stay in business. Given COVID-19, these businesses

are dependent on these wires to pay operational expenses to keep their business operating. Assuming the Receiver was even aware of these issues, the Freeze Order prevents him from making the needed payments and is imperiling the survival of these companies.

Investor Payments: The Receiver has missed processing payments to creditors in the amount of \$1.4 million due on August 01, 2020, with another \$494,000 due on August 10, 2020. Even if the Receiver knew to make these payments, the Freeze order prevents him from doing so.

Vendor Payments: The Receiver has not processed approximately in \$80,000 in payments due CBSG's vendors over the past 10 days. The company normally processes vendor invoices weekly on Wednesday and Friday. These payments include payments to vendors for FSP's other clients which are not part of the SEC Complaint. Again, even were the Receiver to learn about these payments due, the Freeze order prevents him from making these payments.

FSP Employee Returned Paychecks: Due to the freeze order, FSP employees who did not cash or deposit their prior weeks' paychecks are now prevented from doing so. FSP has \$30,408.42 in outstanding paychecks for employees which include their medical benefits. These paychecks were drafted from the FSP Citizens bank account, which was then frozen, and the paychecks have been returned unpaid.

FSP Employee Payroll Processing: The Receiver has not processed \$92,503.23, which is the current payroll for employees for work performed from 07/27/20 to 08/07/20. These employees should be permitted to keep their jobs. However, even if these employees are not rehired, they are entitled to be paid and each employee has paid time off (PTO) accrued. Some employees also have severance pay as part of their termination package.

Solutions to Stem the Damage and the Dissipation of Investor funds.

Company Management: The current department managers will return to work and oversee their department while, at the same time, report all decisions made to the Receiver and ensure that all transactions are related to the business. There will a hold on any salary, distributions or pay going to the owners and directors of CBSG/FSP. As noted in n. 5, neither Mr. Laforte nor Ms. McElhone will have any involvement in CBSG's business or have access to CBSG accounts.

Cash Accounts and Processing: The company will have all deposits and payments processed on a shared account, and the Receiver will have signatory authority on the account. The company will be permitted to process wires, client payments and issue checks, and the Receiver will provide approval before any transactions are carried out by FSP staff.

Data Backup: The company has additional laptops available and it can operate while the company computers are being copied. The company will agree to preserve any new information for the purpose of review by the Receiver and the Receiver can share active, live review of all data files that the employees are managing.

Merchant Communications: The employees have a direct and often a first name basis relationship with the merchant clients. Many of these clients will hesitate to work with unknown third parties who do not understand their business.

Moratorium on New Capital: CBSG has not accepted new capital since March 2020. The company will maintain its moratorium on raising any new capital or introducing new creditors to the business. To be clear this proposal is for the short term to restore and maintain current business. This proposal also serves the shared objective of protecting investors funds, protecting the company's assets, and restoring 70 employees to their jobs at a time when new jobs are scarce.

CONCLUSION

Accordingly, we have no objection to the Receiver getting advice. To the contrary, in order to answer his questions with current, accurate information and save this company, the company's employees should be immediately rehired, and the attorneys engaged and utilized. To accomplish this, we respectfully request that the Court direct the SEC to implement the Proposed Action Plan, lift the freeze on Full Spectrum's six (6) bank accounts and the three (3) ACH accounts which are set forth as Exhibit 2 in our Cross Motion. This will permit the company to rehire employees, restore its income streams and begin to pay its investors. This will fulfill the mission of doing no harm.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that, on August 9, 2020, I electronically filed the foregoing with the Clerk of the Court by using the CM/ECF system which will send a notice of electronic filing to all counsel of record.

s/Joel Hirschhorn
JOEL HIRSCHHORN

EXHIBIT A

The Washington Post

Democracy Dies in Darkness

Small business used to define America's economy. The pandemic could change that forever.

More than 100,000 small businesses have closed forever as the nation's pandemic toll escalates

By **Heather Long**

May 12, 2020 at 5:00 p.m. EDT

The coronavirus pandemic is emerging as an existential threat to the nation's small businesses — despite Congress approving a historic \$700 billion to support them — with the potential to further diminish the place of small companies in the American economy.

The White House and Congress have made saving small businesses a linchpin of the financial rescue, even passing a second stimulus for them late last month. But already, economists project that more than 100,000 small businesses have shut permanently since the pandemic escalated in March, according to a study by researchers at the University of Illinois, Harvard Business School, Harvard University and the University of Chicago. Their latest data suggests at least 2 percent of small businesses are gone, according to a survey conducted May 9 to 11.

The carnage has been even higher in the restaurant industry, where 3 percent of restaurant operators have gone out of business, according to the National Restaurant Association.

Tearful, heartfelt announcements about small-business closures are popping up on websites and Facebook pages around the country. Analysts warn this is only the beginning of the worst wave of small-business bankruptcies and closures since the Great Depression. It's simply not possible for small businesses to survive with no income coming in for weeks followed by reopening at half capacity, many owners say.

The result is likely to further shift the balance of power — and jobs — toward big businesses that have a better chance of surviving the uncertain year ahead by borrowing money or drawing on large cash reserves. Emergency actions by the Federal Reserve, backed by the Treasury, have made borrowing money almost free for large companies.

“We are going to see a level of bankruptcy activity that nobody in business has seen in their lifetime,” said James Hammond, chief executive of New Generation Research, which tracks bankruptcy trends. “This will hit everyone, but it will be harder for small businesses since they don't have a lot of spare cash.”

While 4.2 million businesses have received emergency loans from the Small Business Administration, it's a fraction of the 30 million small firms in the nation. Many small-business owners say Congress' financial rescue isn't designed well to help very small businesses, known as micro firms, that have large overhead costs such as rent.

“It wouldn't be surprising if well over 1 million of these micro firms ultimately fail,” Mark Zandi, chief economist at Moody's Analytics, wrote in a recent note to clients, referring to firms with fewer than 10 employees.

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In the 1980s and 1990s, small businesses employed over half of American workers, but that dynamic has shifted over time. By 2017, only 47 percent of private-sector employees were at small businesses, and the pandemic appears to be reducing that again.

In April, smaller firms had substantially more layoffs than larger ones, according to payroll processor ADP, an early warning sign.

Losing small businesses often creates a ripple effect in communities, especially smaller towns where little shops and restaurants remain the lifeblood of Main Street. These business owners often depend on each other, meaning as some shutter forever, it can trigger more to follow.

“This is culturally devastating for communities. Small businesses really help provide communities with a sense of identity and place,” said Patrice Frey, president of the National Main Street Center, which advocates for restoring downtown hubs. “It’s very difficult to imagine how these businesses are going to be replaced easily, especially in more rural and distressed areas.”

After decades in business, places including Ricardo’s Mexican Restaurant in Las Vegas, Biba Restaurant in Sacramento, Great Scott music venue in Boston and Tony Ciccarelli barbershop in Troy, N.Y., are closing forever. Many made their announcements just before May 1 rent was due.

Bridget McGinty is among those who made the gut-wrenching call on May 1 to close permanently.

For 19 years, McGinty and her sister ran Tastebuds, a popular Cleveland lunch spot. The business was on “life support” last month, she said, and she didn’t think they could survive the summer paying rent and making virtually no money as downtown Cleveland remains largely deserted.

“There were just too many things against us,” said McGinty, still choking up at having to say it aloud.

Congress approved more than \$700 billion in relief for small businesses, mostly in the form of Paycheck Protection Program loans and grants. The money comes from the Small Business Administration, although business owners apply for it through their local bank.

Business owners like McGinty who are closing permanently say the process was too slow and the money covers only about two months of expenses, if that, even though it’s likely to be months before restaurants, gyms and stores are full again.

Neil Bradley, chief policy officer at the U.S. Chamber of Commerce, is urging Congress to come up with a special “bridge program” to help restaurants, movie theaters, hair salons and other places that won’t be able to open at full capacity for a long time. But negotiations between Congress and the White House on the next economic relief package have stalled.

Another big complaint is that small businesses have to use three-quarters of the PPP money on payroll in order for it to become a grant that does not have to be repaid. Congress designed the PPP program that way to help save jobs, but it is causing problems when rent or other expenses represent a larger share of a company’s obligations, compared with payroll.

“What we hear over and over again is the federal stimulus isn’t really working for the restaurant industry,” said John

McGinty is an example. Her decision to close means her five employees must look for new jobs. After exhausting the \$15,000 in cash she had in the bank, she applied for a PPP loan but quickly realized it wouldn't work well for her since her overhead costs are equal, if not more, than wages for her workers. On top of rent, restaurants have the added cost of replacing all their food since most of what they had in their refrigerators in March has gone bad.

"It's going to take so long for restaurants to come out of debt or to just break even," McGinty said. She urged landlords to "just forgive the rent" for April and May. Otherwise it becomes an "unbearable burden in the future" that small-business owners will struggle to pay later this year.

The economists who have been tracking permanent small-business closures also found that 34 percent of small businesses said they are either paying reduced rent or delaying the payment, according to a poll conducted April 25 to 27. The researchers have been doing informal surveys of over 50,000 small-business owners that subscribe to the Alignable business network. Respondents come from a wide variety of industries and roughly mirror government data on small-business characteristics.

As business owners debate whether to take PPP money, some are opting to reinvent their business model instead, often by doing more online and reducing staff costs.

Dave and Stacy Dockins spent the last night in April holding hands and coming to terms with one of the hardest decisions of their marriage. The couple has run the popular Yoga Project studios in the Fort Worth area for 15 years. But on May 1, they decided to close all three of their yoga studios.

From now on, Yoga Project will be online-only — with a fraction of the former staff.

"We were afraid it would come to this. The money is just running out," said Dave Dockins, after four different banks failed to process his PPP loan applications. "It's still really raw for my wife and I. This is the hardest decision we've ever made."

They said closing was their only option because they could no longer afford the rent and other overhead costs. The PPP was a poor option for them because their instructors are usually contractors — 1099 workers — who are not eligible for the payroll money.

Another issue with the PPP loan is that it covers only eight weeks of expenses, and the money must be used as soon as the business owner starts receiving it. That's tough for restaurants and other businesses that are still closed or operating with a skeleton crew for takeout. They do not need all of their workers.

Some business owners say the money would be more helpful later in the summer when they can hopefully try to bring in more customers.

"If restaurants are only allowed to open at half capacity, that is a nail in the coffin right there," said Justin Barrett, the chef and owner of Piecemeal Pies in White River Junction, Vt. "Consecutive rounds of PPP should be considered for small businesses until there is a vaccine."

Piecemeal Pies is a small 25-seat restaurant that specializes in British meat pies and cider. Customers used to love sitting at the counter or communal table — attractions that have become liabilities in the era of social distancing. They

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created “Pie Day Friday” for customers to order takeout, but it isn’t bringing in much revenue and doesn’t require all nine of his workers.

Barrett got a PPP loan, but the money will be gone by mid-June.

Dave and Stacy Dockins say they are working “the hardest we’ve ever worked in our lives” as they broadcast Yoga Project sessions from their home and try to build up online membership.

McGinty’s Cleveland restaurant isn’t reopening, but she’s still busy: She spent the past few days donating most of her equipment and furniture to a local Catholic parish’s food pantry and community center in between calls with her landlord, bank and insurance agent.

Each one is trying to be nimble, but none is sleeping well at night.

Andrew Van Dam contributed to this report.

EXHIBIT B



The impact of COVID-19 on small business outcomes and expectations

Alexander W. Bartik^a, Marianne Bertrand^b, Zoe Cullen^c, Edward L. Glaeser^d, Michael Luca^{c,1} , and Christopher Stanton^c 

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Edited by Jose A. Scheinkman, Columbia University, New York, NY, and approved June 23, 2020 (received for review April 13, 2020)

To explore the impact of coronavirus disease 2019 (COVID-19) on small businesses, we conducted a survey of more than 5,800 small businesses between March 28 and April 4, 2020. Several themes emerged. First, mass layoffs and closures had already occurred—just a few weeks into the crisis. Second, the risk of closure was negatively associated with the expected length of the crisis. Moreover, businesses had widely varying beliefs about the likely duration of COVID-related disruptions. Third, many small businesses are financially fragile: The median business with more than \$10,000 in monthly expenses had only about 2 wk of cash on hand at the time of the survey. Fourth, the majority of businesses planned to seek funding through the Coronavirus Aid, Relief, and Economic Security (CARES) Act. However, many anticipated problems with accessing the program, such as bureaucratic hassles and difficulties establishing eligibility. Using experimental variation, we also assess take-up rates and business resilience effects for loans relative to grants-based programs.

COVID-19 | small businesses | CARES Act

In addition to its impact on public health, coronavirus disease 2019 (COVID-19) has caused a major economic shock. In this paper, we explore the impact of COVID-19 on the small business landscape in the United States, focusing on three questions. First, how did small businesses adjust to the economic disruptions resulting from COVID-19? Second, how long did businesses expect the crisis to last, and how do expectations affect their decisions? Third, how might alternative policy proposals impact business and employment resilience?

To explore, we surveyed more than 5,800 small businesses that are members of Alignable, a network of 4.6 million small businesses. The survey was conducted between March 28 and April 4, 2020. The timing of the survey allows us to understand expectations of business owners at a critical point in time when both the progression of COVID-19 and the government's response were quite uncertain.

The results suggest that the pandemic had already caused massive dislocation among small businesses just several weeks after its onset and prior to the availability of government aid through the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Across the full sample, 43% of businesses had temporarily closed, and nearly all of these closures were due to COVID-19. Respondents that had temporarily closed largely pointed to reductions in demand and employee health concerns as the reasons for closure, with disruptions in the supply chain being less of a factor. On average, the businesses reported having reduced their active employment by 39% since January. The decline was particularly sharp in the Mid-Atlantic region (which includes New York City), where 54% of firms were closed and employment was down by 47%. Impacts also varied across industries, with retail, arts and entertainment, personal services, food services, and hospitality businesses all reporting employment declines exceeding 50%; in contrast, finance, professional services, and real estate-related businesses experienced less disruption, as these industries were better able to move to remote production.

Our results also highlight the financial fragility of many businesses. The median firm with monthly expenses over \$10,000 had only enough cash on hand to last roughly 2 wk. Three-quarters of respondents only had enough cash on hand to last 2 mo or less.* Not surprisingly, firms with more cash on hand were more optimistic that they would remain open by the end of the year.

Our survey also elicited businesses' beliefs about the evolution of the crisis, allowing us to study the role of beliefs and expectations in decisions. The median business owner expected the dislocation to last well into midsummer, as 50% of respondents believed that the crisis would last at least until the middle of June. However, beliefs about the likely duration of the crisis varied widely. This raises the possibility that some firms were making mistakes in their forecasts of how long the crisis will last.†

The crisis duration plays a central role in the total potential impact. For a crisis lasting 4 mo instead of 1 mo, only 47% of businesses expected to be open in December compared to 72% under the shorter duration. There is also considerable heterogeneity in how sensitive businesses are to the crisis. In-person industries like personal services or retail reported worse prospects for riding out the pandemic than professional services or other sectors with minimal need for face-to-face contact.

Lastly, our analysis explores variants of stimulus packages that were being discussed at the time of the survey. The results show that over 70% of respondents anticipated taking advantage of aid when asked about a program that resembles the Paycheck Protection Program (PPP) that is part of the CARES Act. Moreover, they expected this funding to influence other business decisions—including layoff decisions and staying in business

Significance

Drawing on a survey of more than 5,800 small businesses, this paper provides insight into the economic impact of coronavirus 2019 (COVID-19) on small businesses. The results shed light on both the financial fragility of many small businesses, and the significant impact COVID-19 had on these businesses in the weeks after the COVID-19-related disruptions began. The results also provide evidence on businesses' expectations about the longer-term impact of COVID-19, as well as their perceptions of relief programs offered by the government.

Author contributions: A.W.B., M.B., Z.C., E.L.G., M.L., and C.S. designed research, performed research, analyzed data, and wrote the paper.

The authors declare no competing interest.

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*See refs. 1 and 2 for discussions of cash holdings of small businesses.

†See refs. 3–5 for related literature on the behavioral economics of firm decisions.

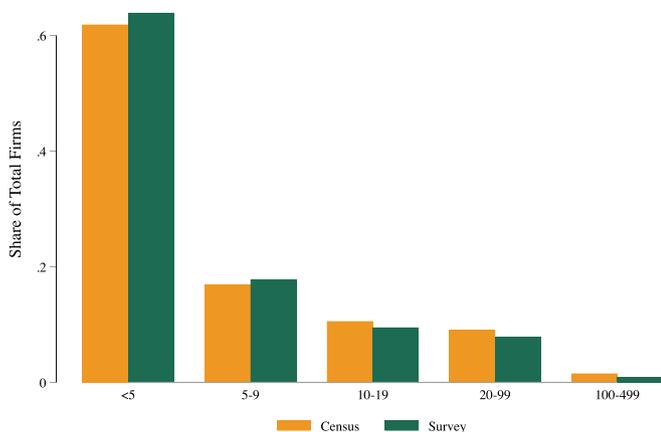


Fig. 1. Firm size in the survey and Census. This figure plots the share of firms in each employment category for the 2017 Census of US Businesses and the survey respondents. The sample size for the survey is 4,873 responses, omitting 959 responses with missing employment data.

altogether. At the same time, many businesses were reluctant to apply for funding through the CARES Act because of concerns about administrative complexity and eligibility. A large number of respondents also anticipated problems with accessing the aid, citing potential issues such as bureaucratic hassles and difficulties establishing eligibility.

Our survey was constructed to allow for a counterfactual evaluation of a straight loan policy, which is a stylized representation of traditional Small Business Administration disaster relief programs. While the more generous PPP program does improve take-up and business outcomes, traditional loans with speedy delivery and sufficient liquidity are also found to meaningfully shift business owners' expectations about survival. When compared to a straight loan without forgiveness provisions, the CARES Act had modestly greater take-up, but at much higher cost to the government. Because the majority of business owners would have taken up aid in the form of less generous loans, our results suggest that liquidity provision was paramount for these owners.

Overall, our paper contributes to our understanding of the economic impact of COVID-19 on the small business ecosystem. The fate of the 48% of American workers who work in small businesses is closely tied to the resilience of the small business ecosystem to the massive economic disruption caused by the pandemic. Our survey was conducted during a period of substantial policy uncertainty and before any federal response had been enacted. Our results provide a unique snapshot into business decisions and expectations at that time, while offering insight for policy designed to aid the recovery. Our results highlight the role the length of the crisis will play in determining its ultimate impact, which policy makers should consider as they contemplate the scale of the required interventions. We estimate that closures alone might lead to 32.7 million job losses if the crisis lasts for 4 mo and 35.1 million job losses if the crisis lasts for 6 mo. While some of these workers will surely find new jobs, these projections suggest that the scale of job dislocation could be larger than anything America has experienced since the Great Depression and larger than the impact of the 1918 influenza epidemic (6–8). Another important take-away of our work is that, during liquidity crunches with significant cash flow disruptions, the form of cash injection (e.g., grant vs. loan) may be less important than making sure that funding is rapidly available with little administrative complexity.[‡]

[‡]This echoes a growing literature that suggests that reducing, simplifying, or providing assistance in the process of signing up for programs can increase take-up. For examples, see refs. 9 and 10.

The rest of the paper proceeds as follows. *Survey Design and Details* discusses the survey design. *Firm Characteristics and Representativeness* discusses the characteristics of the firms that responded to the survey and their representativeness. In *Responses to the COVID-19 Pandemic and Lockdown*, we explore the current and expected impacts of COVID-19 on these businesses. In *Anticipated Response to CARES Act Programs*, we present results from a module of the survey that experimentally varies policy proposals, allowing us to explore responses to policies such as the recently passed CARES Act as well as alternative policies. *Industry Differences in Response to Crisis Duration* considers survival rate differences across industries, and how survival depends on the duration of the crisis. We conclude in *Conclusion*.

Survey Design and Details

Our survey was sent out in partnership with Alignable, a network-based platform focused on the small business ecosystem. Alignable enables businesses to share knowledge and interact with one another, and currently has a network of 4.6 million small businesses across North America. Much of the network growth has been organic, with little outside marketing.

Alignable also regularly sends out polls (which they call “pulse surveys”) to users. At the end of a regular pulse poll, participants who took that poll received an email inviting them to participate in a more comprehensive survey being conducted by researchers at Harvard Business School. Participants were shown a disclosure statement and consent protocol. No payments were offered; participation was completely voluntary. The survey was approved by the Harvard University Institutional Review Board.

We received 7,511 responses between March 27 and April 4; 5,843 of these can be traced back to US-based businesses, which is the relevant sample for understanding policy. While the 7,511 responses represent a small fraction (0.017%) of Alignable's total membership, they represent a much larger share of Alignable's membership that has engaged with their weekly pulse surveys on COVID-19. Alignable estimates that 50,000 to 70,000 members are taking these pulse surveys weekly, which suggests a 10 to 15% conversion rate of these more active respondents.

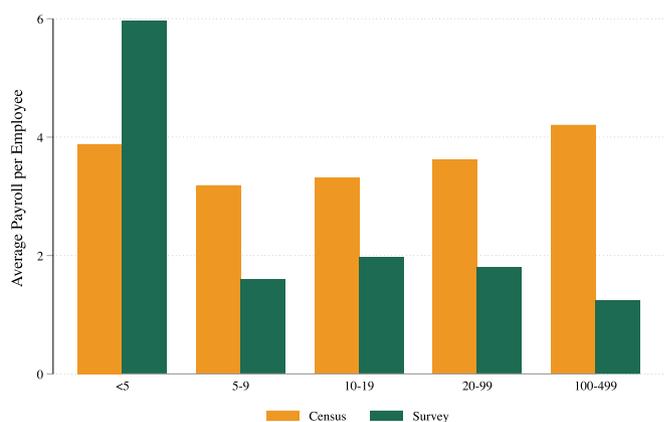


Fig. 2. Average per capita payroll (\$1,000s) in the survey and Census. This figure plots per-employee payroll in thousands of dollars by firm size for the 2017 Census of US Businesses aggregates and the survey respondents. The Census data only report annual payroll for W2 workers and the number of firms in an employment size category. To calculate payroll for the survey firms, we take the midpoint of categorical answers for monthly expenses, multiply by the fraction of expenses going toward payroll, and divide by total employees (we cannot distinguish between W2 employees and contractors).

Table 1. Summary measures across regions

	Closed at time		Expected to close by December		Weeks COVID will last		Current/January employment	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
E. North Central	0.45	0.50	0.35	0.48	14.7	10.2	0.68	0.38
E. South Central	0.41	0.49	0.36	0.48	16.3	11.5	0.57	0.49
Mid Atlantic	0.54	0.50	0.37	0.48	14.5	10.0	0.53	0.45
Mountain	0.39	0.49	0.35	0.48	16.0	11.3	0.68	0.38
New England	0.47	0.50	0.33	0.47	16.6	10.2	0.55	0.49
Pacific	0.46	0.50	0.37	0.48	15.4	10.7	0.55	0.48
South Atlantic	0.41	0.49	0.38	0.48	15.5	10.3	0.63	0.45
W. North Central	0.43	0.50	0.35	0.48	15.7	10.8	0.66	0.41
W. South Central	0.40	0.49	0.39	0.49	15.2	11.1	0.68	0.43
Total	0.45	0.50	0.37	0.48	15.4	10.6	0.61	0.45
<i>n</i>	4,976	.	4,059	.	4,162	.	4,365	.

This table reports breakdowns by regions. Totals include 12 observations with unknown region. Note that the Closed at time column includes both temporary and permanent closures. The measure Expected to close by December comes from a question asking about the likelihood of being open in December, where answers were given on a five-point scale. Closure is coded as a binary indicator for those marking “Extremely Unlikely,” “Somewhat Unlikely,” or “Somewhat Likely” to be open in December. The ratios of current employment versus January employment are weighted by January employment.

Our sample, therefore, is selected in three ways: 1) They are firms that have chosen to join Alignable, 2) they are Alignable firms that have chosen to stay actively engaged taking surveys, and 3) they are the set of firms that are active within Alignable that chose to answer our survey. Consequently, there are many reasons to be cautious when extrapolating to the entire universe of America’s small businesses. We will discuss their representativeness based on observable attributes in the next section of this report.

The survey included a total of 43 questions, with basic information about firm characteristics (including firm size and industry), questions about the current response to the COVID-19 crisis, and beliefs about the future course of the crisis. Some questions were only displayed based on skip logic, so most participants responded to fewer questions. The survey also includes an experimental module that randomized scenarios between respondents to understand how different federal policies might impact these firms’ behavior and survival as the crisis unfolds. Specifically, we experimentally varied some of the descriptions of potential policies across the sample to shed light on the potential impact of policy initiatives that, at the time, were very uncertain. We will discuss that module more thoroughly in *Anticipated*

Response to CARES Act Programs. A further experimental module included between-respondent randomization which explored decisions under different hypothetical durations of the crisis.

Firm Characteristics and Representativeness

The survey contains three baseline questions which enable us to assess the representativeness of the sample along observable dimensions: number of employees, typical expenses (as of January 31, 2020), and share of expenses that go toward payroll. We are also able to get rough information about geolocation to assess representativeness by state.

We compare our data with data on businesses from the 2017 Census of US Businesses, using the publicly available statistics published by the US Census Bureau. The underlying data are drawn from the County Business Patterns sampling frame and cover establishments with paid employees, including sole proprietorships if the owner receives a W2. The Census

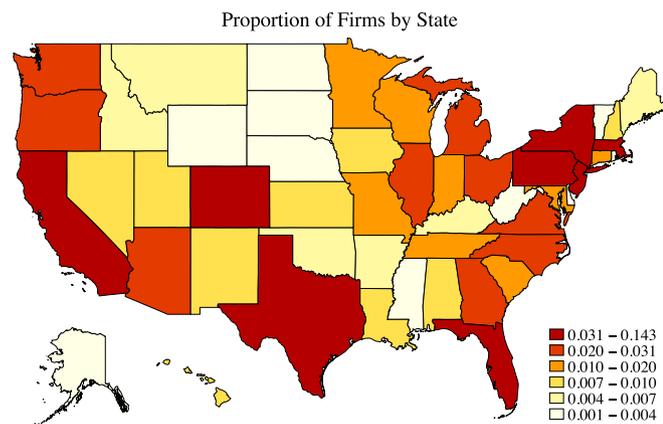
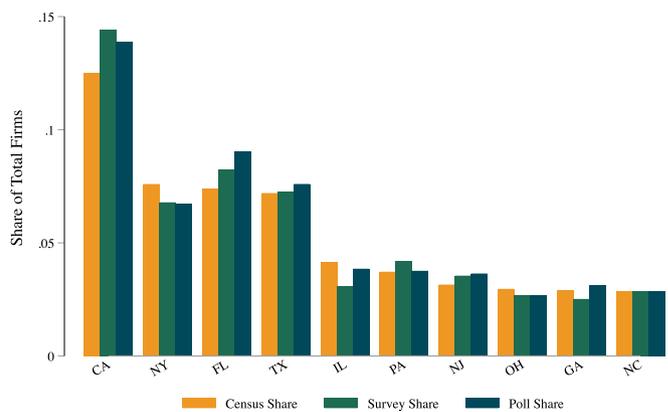


Fig. 3. Coverage by state. This figure plots shares of survey responses across different states.



Omits responses with missing location data.

Fig. 4. Firm locations in the Census, downstream survey, and upstream presurvey Alignable poll. This figure plots the share of firms in each state for the 2017 Census of US Businesses, the survey respondents, and the respondents who took the upstream Alignable poll. Users who took the survey did so after taking the Alignable poll. They were then redirected to the Harvard Business School Qualtrics web link. Note that the upstream poll did not ask questions about firm size or payroll, so prior figures cannot check compositional differences based on firm size or pay.

Table 2. Summary measures by firm size

Number of Employees	Closed at time		Expected to close by December		Weeks COVID will last		Current/January employment	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Under 5	0.46	0.50	0.36	0.48	15.8	10.9	0.66	0.49
5 to 9	0.47	0.50	0.39	0.49	14.7	10.2	0.52	0.44
10 to 19	0.41	0.49	0.42	0.49	14.7	10.1	0.55	0.47
20 to 99	0.36	0.48	0.30	0.46	14.1	9.5	0.58	0.42
100 to 499	0.26	0.44	0.22	0.42	16.2	10.8	0.72	0.44
Unknown	0.41	0.49	0.49	0.50	16.7	10.5	.	.
Total	0.45	0.50	0.37	0.48	15.4	10.6	0.61	0.45
<i>n</i>	4,976	.	4,059	.	4,162	.	4,365	.

This table reports breakdowns by firm size. There are 103 firms in this sample with unknown employment as of January. All measures are coded according to Table 1 legend.

data capture large and small businesses alike, but, for our comparisons, we will look only at businesses with fewer than 500 employees.

The Alignable network allows users to share customer leads, which could potentially skew our sample toward retail and service businesses that interact directly with consumers. Since retail businesses are particularly vulnerable to COVID-19 disruptions, our sample could overstate the aggregate dislocation created by the crisis. Naturally, industries dominated by large firms, such

as manufacturing, are underrepresented. However, as we discuss later, our data on the industry mix of responses suggest that the sample represents a wide swath of America's smaller businesses.

Fig. 1 shows the size distribution of our sample and the size distribution of businesses with fewer than 500 employees in the Economic Census. The match of employment sizes is reassuring. About 64% of the businesses in our sample have fewer than five employees, while about 60% of the firms in the Economic Census are that small. About 18% of businesses in both

Table 3. Summary measures by industry

	Closed at time		Expected to close by December		Weeks COVID will last		Current/January employment	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Raw data								
Retailers, except grocery	0.53	0.50	0.45	0.50	14.1	9.5	0.49	0.42
Arts and entertainment	0.70	0.46	0.42	0.49	17.5	11.3	0.40	0.46
Banking/finance	0.19	0.39	0.25	0.43	16.1	10.9	0.81	0.33
Construction	0.32	0.47	0.38	0.49	14.3	10.3	0.66	0.40
Health care	0.45	0.50	0.29	0.45	15.1	10.4	0.69	0.37
Other	0.39	0.49	0.35	0.48	16.6	11.2	0.70	0.41
Personal services	0.86	0.34	0.39	0.49	11.8	8.3	0.35	0.40
Professional services	0.21	0.41	0.29	0.45	15.7	10.6	0.80	0.41
Real estate	0.37	0.48	0.30	0.46	15.8	11.4	0.70	0.41
Restaurant/bar/catering	0.56	0.50	0.52	0.50	13.1	8.7	0.24	0.37
Tourism/lodging	0.61	0.49	0.45	0.50	16.2	10.0	0.30	0.35
Total	0.45	0.50	0.37	0.48	15.5	10.6	0.58	0.44
<i>n</i>	4413	.	3953	.	4000	.	3935	.
Reweight to census by size and region								
Retailers, except grocery	0.53	0.50	0.44	0.50	14.3	9.8	0.51	0.42
Arts and entertainment	0.70	0.46	0.41	0.49	17.1	11.4	0.43	0.47
Banking/finance	0.20	0.40	0.25	0.43	16.3	11.1	0.84	0.30
Construction	0.33	0.47	0.38	0.49	14.4	10.3	0.71	0.38
Health care	0.43	0.50	0.28	0.45	14.5	10.1	0.72	0.35
Other	0.39	0.49	0.34	0.47	16.4	11.2	0.74	0.38
Personal services	0.86	0.34	0.39	0.49	11.9	8.4	0.37	0.40
Professional services	0.21	0.41	0.30	0.46	15.6	10.7	0.80	0.41
Real estate	0.37	0.48	0.31	0.47	15.6	11.0	0.74	0.39
Restaurant/bar/catering	0.58	0.49	0.49	0.50	13.4	9.0	0.23	0.36
Tourism/lodging	0.60	0.49	0.43	0.50	16.1	9.9	0.31	0.35
Total	0.45	0.50	0.36	0.48	15.4	10.6	0.61	0.43
<i>n</i>	4,326	.	3,877	.	3,921	.	3,935	.

This table reports breakdowns by industry. The top section contains raw data, and the bottom section contains data reweighted to match the Census share of firms by size and region bucket. Missing industry information explains differences in observations between raw data and prior analysis. Differences in observations between raw data and reweighted data arise from firms with unknown January employment or region. All measures are coded according to Table 1 legend.

Table 4. Breakdown of issues affecting businesses

	<i>n</i> (total)	<i>n</i> (answering)	Supply chain	Employee health	Demand/orders
Raw data					
Currently open	2,759	2,196	30.2	49.8	66.2
Temporarily closed	2,116	1,774	35.5	59.7	83.4
Permanently closed	100	85	37.9	60.8	86.1
Total	4,975	4,055	34.6	56.8	78.6
Reweighted to Census by size and region					
Currently open	2,698	2,149	30.4	50.4	65.9
Temporarily closed	2,080	1,744	35.7	60.2	83.7
Permanently closed	94	80	39.2	63.6	85.8
Total	4,872	3,973	35.1	58.1	78.5

This table reports respondents' reactions to the importance of issues affecting their business, broken down by the status of the business at the time of taking the survey.

samples have between five and nine employees. The survey becomes less precisely matched to the Census among the larger employment groupings, and we believe that our survey will capture the experience of larger employers with less accuracy.

While our survey does not allow for a direct comparison of payroll expenses with Census data, we constructed a rough comparison by approximating payroll expenses for the Alignable firms from categorical questions about monthly expenses and the share of these expenses going toward payroll. The Census provides annual payroll expenses for W2 employees. To get a sense of the match, we compared our estimated monthly payroll expenses in our sample with one-twelfth of annual expenses in the US Census. To facilitate comparison, we divide by an estimate of total employment.⁵ Fig. 2 shows the size distribution of monthly estimated payroll expenses in our sample and a comparable breakdown for the Census using a per capita adjustment. The match is imperfect, especially for larger firms. The discrepancy might reflect the underrepresentation of manufacturing or professional services firms in our sample, which are among the highest paying of all two-digit North American Industry Classification System sectors in the Census data. *SI Appendix, Table S1* provides further detail on the industry match to the Census.

Fig. 3 shows the geographic scope of our sample. The Alignable sample draws particularly from California, the New York region, Florida, and Texas. The sample is sparse in America's western heartland, which matches the location distribution of smaller businesses in the Economic Census.

Fig. 4 shows the share of our sample coming from the 10 most populous states. The figure also includes the share of small businesses in the Economic Census that are within each state. For example, California has 14.4% of our Alignable survey sample, 12.5% of small businesses in the Census data, and 11.52% of total US population. Our sample does overrepresent the coasts and underrepresents Illinois. Alignable shared the geographic distribution of their weekly pulse survey takers, and the final set of columns within each grouping allows us to assess selection differences between respondents to the shorter pulse poll and our downstream survey. There are some minor sampling differences across states, but the Alignable pulse poll sample

⁵This comparison is very likely to include a different definition of "headcount" as we do not disambiguate between W2 and 1099 employment in the survey whereas the Census data only include W2 employees, who are more likely to be full-year, full-time employees. Although we cannot disambiguate part-time W2 employees who would show up in the Census versus contractors who would not, 32% of the January employment captured in the survey falls into the category. According to Current Population Survey data for 2019, about 17% of the broader labor force was part-time; recent figures on the number of contract workers suggests they made up about 12% of the labor force in 2016, but they would not have been captured in the Census (11).

and those taking our broader survey have quite good geographic coverage.

To shed further light on our sample, we conducted a follow-up phone screen of 400 businesses—a randomly selected set of 200 businesses that responded to our survey and 200 businesses from the broader active Alignable membership (i.e., that filled out their previous pulse poll), but who did not respond to our survey. During the phone screen, we asked each business whether they were still open for business. For businesses that did not answer the phone on a first attempt, we made a second attempt to call. Out of the businesses who responded to our survey, roughly 42% reported being open when we called them. Out of the businesses that are active on Alignable but did not respond to our survey, roughly 56% reported being open.

Overall, while the sample captured by the survey may be an imperfect snapshot for certain pockets of America's small businesses, it also allows for important insight into the overall small business ecosystem. The sample is large and includes firms from most major industry groups, states, and firm size categories.

Responses to the COVID-19 Pandemic and Lockdown

We now turn to our main results, which we group into three categories. First, we describe the impact of COVID-19 on business operations and employment toward the beginning of the crisis. Second, we report our results on the financial fragility of those businesses, as captured by their cash on hand and ongoing expenses. Third, we turn to their expectations about the

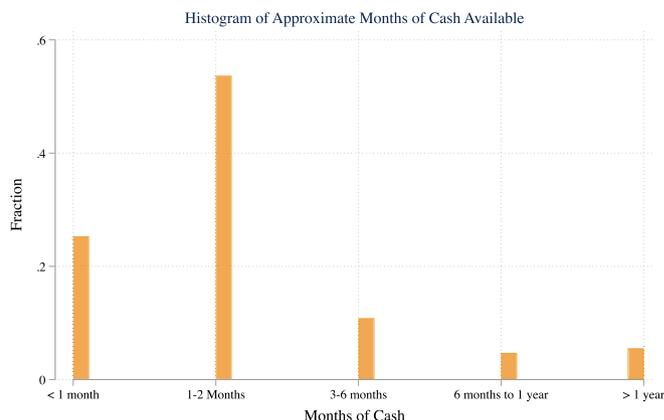


Fig. 5. Months of cash. This figure plots firms' months of cash available as a multiple of January 2020 expenses. We compute this measure by taking the midpoint of categorical responses for the amount of cash on hand and dividing by the midpoint of the categorical response for typical monthly expenses prior to the crisis. The sample size is 4,176.

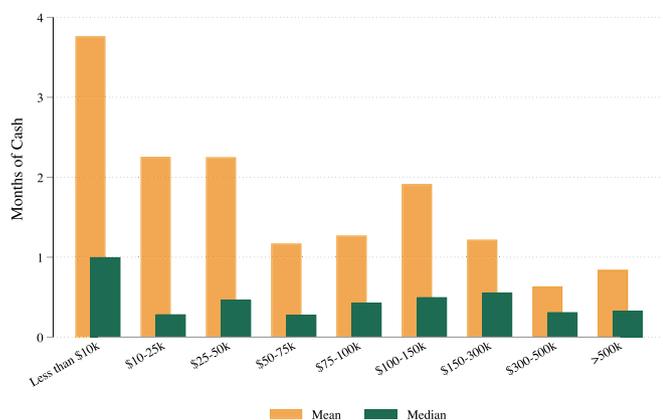


Fig. 6. Mean and median months of cash split by monthly expenses (\$1,000s). This figure plots means and medians of the months of cash available measure across the distribution of typical monthly expenses.

duration of the crisis and their own economic survival, as measured at a particularly sensitive point for understanding the impact of future policies.

Temporary Closings and Employment. The initial survey question asked owners, “is this business currently operational?” We allowed owners to respond that the business was operational, temporarily closed, or permanently closed. We also allowed them to report whether the business was closed because of COVID-19 or another reason.[¶]

Across the sample, 41.3% of businesses reported that they were temporarily closed because of COVID-19. A far smaller number—1.8%—reported that they were permanently closed because of the pandemic. By contrast, only 1.3% reported that they were temporarily closed for other reasons; 55.5% reported that they were still operational.

We also asked the business owners to fill in a matrix that contained the number of full-time and part-time employees that were employed by the firm “now,” as of the survey date, and on January 31, 2020. Over the entire sample, the number of full-time employees had fallen by 32% between January 31 and late March 2020. The number of part-time employees was 57% lower than at the end of January. Overall employment declined significantly, totaling a 39% reduction from January headcount. These results include businesses that had temporarily closed. If we look only at businesses that were still operating, we find that the number of total full-time employees had fallen by 17.3%. The number of part-time employees declined by 34%. These estimates can also be compared to other emerging data points. The Atlanta Fed conducted a similar survey (14), drawn from Dun & Bradstreet listings, and found smaller employment effects (roughly 10% decrease in employment). Whereas their survey includes larger firms as well, our focus is on smaller businesses. Further, their survey undersamples newer firms, which may have larger employment changes. We can also compare our results to publicly released aggregated payroll data from Automatic Data Processing, Inc. (ADP), a provider of human resources management software (which may have different issues of representativeness). In those data, paid employment at firms with less than 500 employees declined by about 18% between January

[¶]We did not attempt to assess the quality of firm management, as in ref. 12. We hope that future surveys will test when quality of management helps protect firms against closure during this crisis. This crisis also presents an opportunity for understanding managerial decision-making under stress, as discussed by ref. 13.

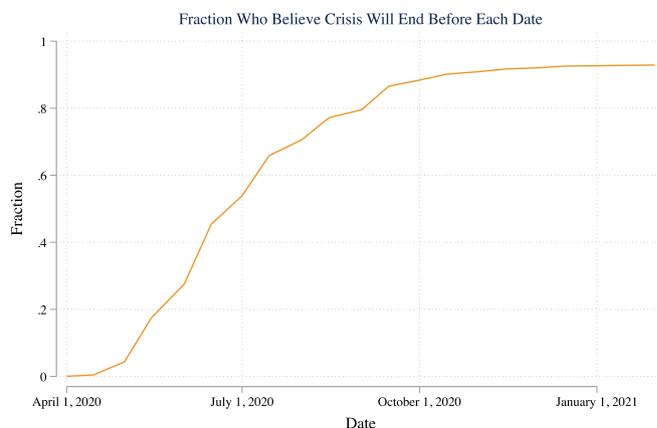


Fig. 7. Cumulative distribution function of expected COVID end date. This figure plots the distribution function across respondents for the expected end date of COVID-related disruptions. The y axis represents the share of respondents who believe that COVID disruptions will end on or before the date given on the x axis.

and April.[¶] These data, however, treat anyone receiving pay in April as employed even if they were laid off during or before the interval. Looking at higher-frequency data on paychecks in the ADP microdata, concurrent but independent work by Cajner et al. (15) finds that employment declined, on average, 27% for firms with less than 500 employees and about 28% for firms with less than 50 employees between mid-February and mid-April.^{**} These numbers are somewhat smaller than the 39% decline in employment for small businesses that we find but higher than the estimates of the Atlanta Fed survey.

We then expand to look at geographic variation of the effects. Table 1 shows our results across the 11 Census divisions and displays the share of businesses that had temporarily closed because of COVID-19 and the reduction in total employment between January 31 and the survey date. The results are not meaningfully different if we separate out full-time or part-time employees. While there is regional heterogeneity, the disruptions are severe almost everywhere.

The Mid-Atlantic division had the sharpest decreases in employment and the largest share of firms that had temporarily suspended operations. Fifty-four percent of firms in that region were closed in late March/early April, and employment had fallen by an average of 47%. The Mountain region was the least affected, but, even there, 39% of firms had temporarily closed, and employment had declined by 32%.

Tables 2 and 3 display the same breakdown by firm size and industry. Smaller firms with fewer than 20 employees in January were more likely to be closed. Firms with between 66 and 19

[¶]Data were accessed from <https://adpemploymentreport.com/2020/April/SBR/SBR-April-2020.aspx> on May 21, 2020. We aggregate the estimates across firm size bins to estimate job losses for firms with 1 to 499 employees using firm weights. The corresponding estimates using employment weights are also 18%. The weights come from the Bureau of Labor Statistics’ Business Employment Dynamics figures of the distribution of private sector employment (table F) and firm size (table G) for the first-quarter of 2019 (not seasonally adjusted). Data were accessed from <https://www.bls.gov/bdm/bdmfirmsize.htm> on May 22, 2020.

^{**}These figures were computed using the estimates in figure 10 from the May 6, 2020 version of ref. 15. We aggregate the estimates across firm size bins to estimate job losses using firm weights. The corresponding estimates using employment weights are 23% job losses for firms with 1 to 499 employees and 27% job losses for firms with 1 to 49 employees. The weights come from the Bureau of Labor Statistics’ Business Employment Dynamics figures of the distribution of private sector employment (table F) and firm size (table G) for the first quarter of 2019 (not seasonally adjusted). Data were accessed from <https://www.bls.gov/bdm/bdmfirmsize.htm> on May 22, 2020.

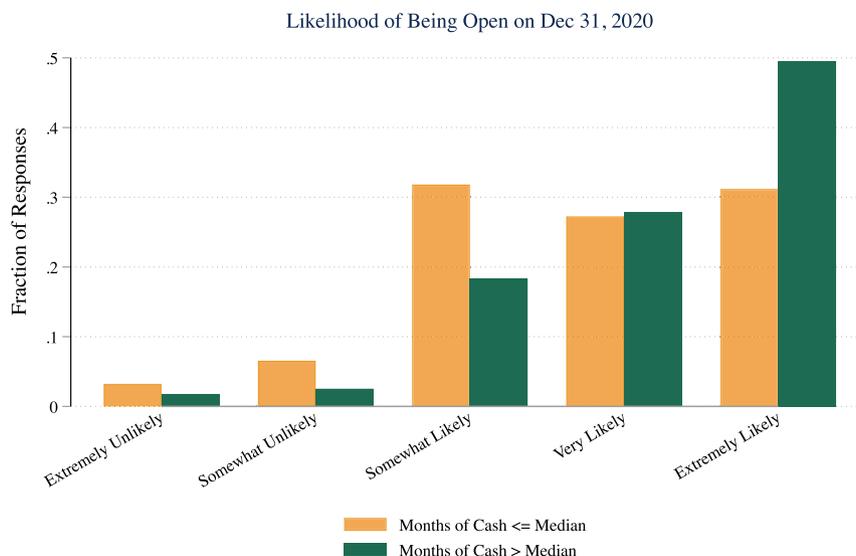


Fig. 8. Likelihood of remaining open or reopening by December. This figure displays the frequency of answers to a question about the likelihood of being open in December 2020. Responses are plotted based on whether the firm has more than the median number of months of cash on hand given their pre-COVID expenses.

employees in January had the largest employment reductions. Across industries, in-person retail and service businesses had declined precipitously. Although hard hit, the impact was not as extreme for professional services firms—banking and finance, real estate, or construction. Table 3 also allows a comparison of how our results might change if we reweight to the region and firm size cells in the Census data and then cut by industry (a dimension that is not targeted in the reweighting). The results change little across industries in the reweighted data compared to the raw data.

Table 4 shows the problems that firms reported facing, split by their operational status at the time of the survey. We asked owners to rate, on a 1 to 100 scale, the problems they were experiencing with employee illness, supply chains, and customer demand. The scale had numerical values and also a text label that went from “Not a concern” at one end to “Extremely disruptive” at the other end. We differentiate between firms that are open, temporarily closed, and permanently closed, and we show the share of firms in each category that indicate significant difficulties in each of these areas.

On average, firms rated the disruptions resulting from supply chain challenges to be 35 on the 100-point scale (which is in the “slightly disruptive” part of the scale). Concerns about employee health were more prominent, with firms rating it as 57 out of 100 (which maps to “somewhat disruptive”). Reductions in demand were even more disruptive, with firms rating the importance of this to be 79 out of 100 (extremely disruptive). While closed firms noted worse disruptions due to demand, the basic ranking of the different disruptions was consistent across different types of firms. These findings suggest, thus far, that supply chain problems have been less pronounced, relative to disruptions resulting from demand shocks and concerns about employee health.

Altogether, these results suggest that a vast number of enterprises had temporarily shut down and laid off workers over the first several weeks of the crisis. The impact on business disruptions in the coming months will depend both on the length of the crisis and on the financial fragility of firms. The central role of the demand shock highlights the challenges in adjusting to the financial shock caused by COVID-19–related disruptions. We now directly explore financial fragility, and the extent to which firms’ resources might allow them to weather the crisis.

Financial Fragility. To measure financial fragility, we asked the respondents “roughly how much cash (e.g. in savings, checking) do you have access to without seeking further loans or money from family or friends to pay for your business?” We then divided this amount by their January 31 monthly expenses to understand how long they could maintain operations without seeking extra credit or outside assistance.^{††}

Fig. 5 shows a histogram of cash available as a multiple of January 31, 2020 monthly expenses. Approximately one-fourth of firms had cash on hand totaling less than 1 mo of expenses. About one-half of firms had enough cash on hand to cover between 1 mo and 2 mo of expenses.

Fig. 6 sorts firms by January 31, 2020 monthly expenses and then tabulates the mean and median cash on hand relative to pre-crisis expenses. The median firm with under \$10,000 in monthly expenses had 1 mo of cash on hand. For all firms with greater than \$10,000 in monthly expenses, the median firm typically had less than 15 d of cash on hand, based on their precrisis expense levels. These firms did not have cash on hand to meet their regular expenses.

These limited levels of cash on hand help to shed light on why layoffs and shutdowns were so prevalent. Absent these actions, it is hard to understand how these firms could have met payroll.

Predicting the Path of the Crisis. Finally, we ask the firms to predict how long the COVID-19 crisis will last and whether they believe they will be open again at the end of 2020. To predict the end of the crisis, we asked the survey respondents “the most likely date” when the crisis would be over. We also asked them their confidence about this belief on a 1 to 10 scale.

Fig. 7 shows the distribution of expected end dates. The figure shows that roughly 20% of respondents believed that the crisis would be over by the end of May. Thirty percent of respondents believed that the crisis would end between the end of May and the start of July. Just over one half of the firms answered that they thought that the crisis would still be going at the start of July.

^{††}We did not collect information about access to lines of credit or outside borrowing, but, given the severity of the contraction in demand, those credit facilities may be unlikely to remain accessible without a government guarantee.

However, the firms were not particularly confident about their answers. Fifty percent of respondents reported their confidence level as 5 or less on the 1 to 10 scale. Sixteen percent gave their confidence a 2 or less. Their uncertainty highlights the broader uncertainty that was present throughout the world at the time.

Fig. 8 shows the histogram of responses about whether firms will be open on December 31, 2020. Overall, more than 90% thought it is at least somewhat likely that they would be open. More than 63% reported that it is very or extremely likely that they would be open—which we later use as a measure of the probability of being open. A growing literature has found entrepreneurs to be overoptimistic about their prospects (see, for example, ref. 13). This suggests that true survival rates may be even lower than predicted by businesses.

The firms with more cash on hand were more confident about their future, as evidenced by the split based on whether the firm had more or less cash on hand (relative to usual monthly expenses) than the median in our sample. Fifty percent of those firms with more than the median cash on hand thought it was extremely likely that they would be open at the end of the year. Thirty-one percent of firms with less cash on hand, relative to the median, thought that they would be open at the end of the year. One interpretation of these findings is that liquidity generated confidence in the ability to survive this crisis. Among firms with at least 20 employees, 71% expressed that they were either very likely or extremely likely to survive, which may indicate greater access to outside resources despite having a higher expense base.

Fig. 9 shows that the share of firms that think that they are “very likely” or “extremely likely” to be open varies based on their belief about the duration of the crisis. The firms that thought that the crisis will be short also believed that they are more likely to survive. Those who believed in a longer crisis were more pessimistic.

Anticipated Responses to CARES Act Programs

In this section, we discuss the survey’s questions about take-up of the CARES Act PPP loans and their expected impact on employment. One important aspect of the CARES program is that “loans will be fully forgiven when used for payroll costs, interest on mortgages, rent, and utilities,” as long as 75% of the forgiven amount is spent on payroll and the employer either maintains or quickly rehires workers and maintains salary

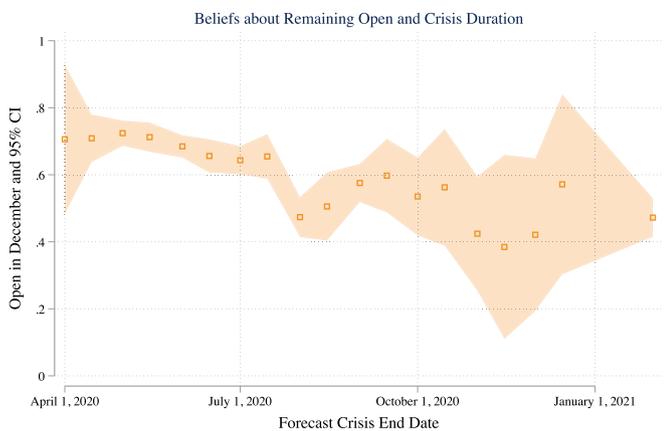


Fig. 9. Likelihood of remaining open or reopening by December 2020 as a function of beliefs about COVID end date. This figure plots the likelihood of being open in December, 2020 as a function of respondents’ expected COVID end date. Averages are plotted, and the shaded region is the CI. The opening likelihood is computed as the share of respondents who answered “Extremely likely” or “Very likely.”

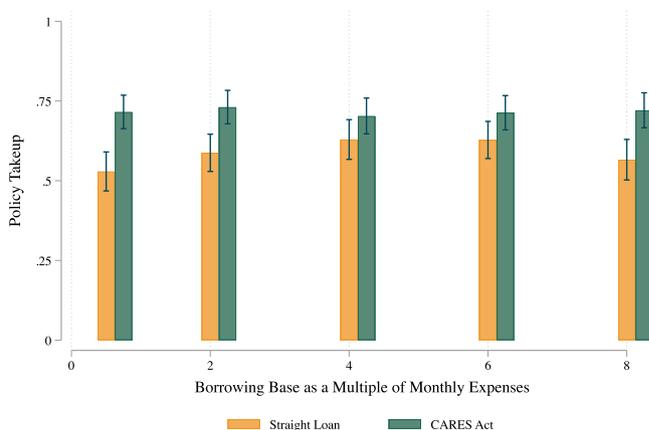


Fig. 10. Differences in policy take-up across loans versus CARES Act PPP split by hypothetical limits on borrowing amount. This figure displays policy take-up rates for loans versus the stylized PPP policy using a between-subjects design. The borrowing base was also randomized between subjects as a multiple of typical monthly expenses prior to the crisis. The text displayed for the PPP program was, “Imagine a policy where the government allows you to borrow up to [borrowing base] times your typical monthly expenses without posting any collateral. You could use this money to cover any of your business expenses. The loan will be forgiven by the amount spent on payroll, lease, rent, mortgage, and utility payments in the 8 weeks after origination (you can consider this amount to be a grant). The remainder of the loan (that is not spent on these items) will have deferred payments for 1 year. After that, the loan would have an annual interest rate of 4% (deferred for 1 year) and you would have up to 10 years to repay the loan. For example, if you borrow \$50,000 and you have no qualifying expenses to offset the loan, the required monthly payment starting 1 year from today would be \$506 per month for 10 years. If you borrow \$50,000 and spend \$40,000 to pay your employees during the first 8 weeks, you will have 10 years to pay the remaining \$10,000 with monthly payments of \$102.” Subjects in the loan condition saw the text, “Imagine the government offers a loan allowing you to borrow up to [borrowing base] times your typical monthly expenses without posting any collateral. You could use this money to cover any of your business expenses. The loan would have an annual interest rate equivalent of 4% and principal and interest payments would be deferred for 1 year. You would have up to 10 years to repay the loan. For example, if you borrow \$50,000, the required monthly payment starting 1 year from today would be \$506 per month for 10 years.” Pooled means for the loan and CARES Act responses are 0.59 and 0.72, respectively. The sample size is 2,610, and the pooled t-statistic on the difference between policies is 6.97.

levels (<https://home.treasury.gov/system/files/136/PPP%20-%20Overview.pdf>). Consequently, a significant portion of the “loans” can be seen as a grant rather than traditional debt.

The high level of loan forgiveness means that this represents a large potential transfer to small businesses. We assess the importance of the grant component of the CARES loans relative to a pure (and far less expensive) loan program. One-third of the survey respondents were randomly asked about their interest in a CARES-like program, which was describe as a loan program which “will be forgiven by the amount spent on payroll, lease, rent, mortgage, and utility payments in the 8 weeks after origination.” One-third of the respondents were randomly asked about their interest in a loan program that was otherwise identical, but without prompting any possibility of forgiveness.^{††} As part of the display, the amount of liquidity was varied, with the caveat to respondents that these policies may not be the actual policies currently available to them. This was designed to measure

^{††}Because there was significant policy uncertainty at the time of the survey, one-third of respondents were also asked about a potential policy that focused on aid that could only be used for payroll. This policy became less relevant after the details of the CARES Act emerged.

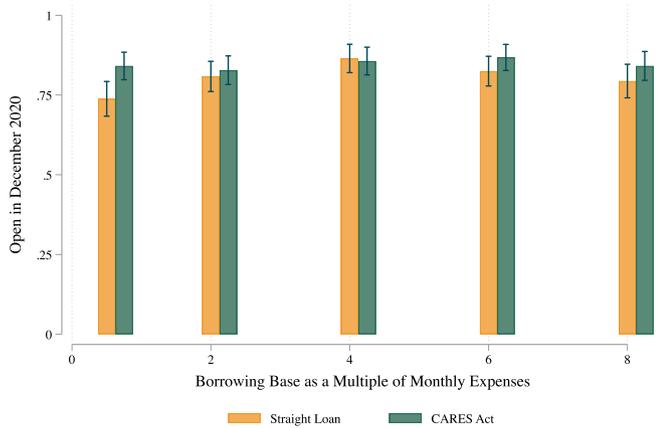


Fig. 11. Differences in policy effects on the propensity to remain open in December of 2020, split by hypothetical limits on borrowing amount. This figure plots differences in the propensity to remain open under different policies. The measure is computed using a follow-up question after policy information displayed, using the fraction that chose “Very likely” or “Extremely likely” to be open in December of 2020. See Fig. 10 legend for additional detail about the policy display. Pooled means for the loan and CARES Act are 0.805 and 0.848, respectively. The sample size is 2,550, and the pooled t-statistic on the difference between policies is 2.76.

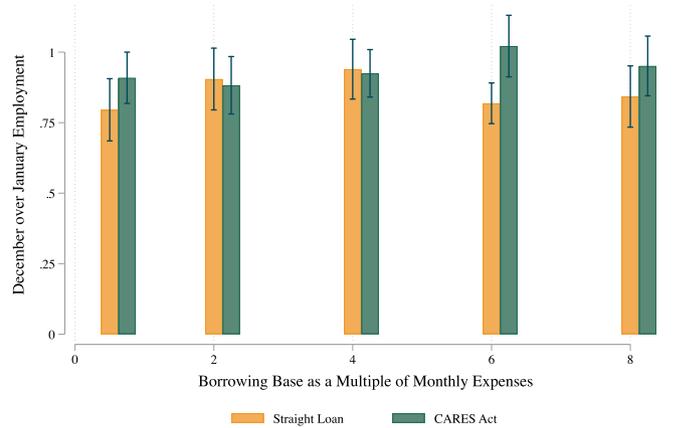


Fig. 12. Differences in policy effects on relative employment between December and January. This figure plots differences in the ratio of relative employment between December 2020 and January 2020 under different policies. The December 2020 employment measure is computed using a follow-up question after policy information displayed. See Fig. 10 legend for additional detail about the policy display. Pooled means for the loan and CARES act responses are 0.86 and 0.94, respectively. The sample size is 2,341, and the pooled t-statistic on the difference between policies is 2.42.

how program generosity affects take-up and perceived business resilience.^{§§}

Fig. 10 shows the expected take-up of the two programs (the exact details of the question wording is contained in the figure legend). Seventy-two percent of respondents who were told about the loans with forgiveness said that they would like to take them up. Fifty-nine percent of respondents were interested in taking up the loan program without forgiveness. While there was substantial interest in a pure-loan program, there was significantly more interest in the loan program with forgiveness.

A primary reason to forgive loans is that such a subsidy might do more to maintain employment and keep businesses open in the long term.^{¶¶} We therefore reasked businesses to project their likelihood of being open and their expectations about employment after we told them about the loan programs. Figs. 11 and 12 show the expected probability of being open and the expected employment (relative to January 2020 employment) for the two groups of respondents.

Before they were told about the policies, both groups had experienced similar employment declines since January, and both groups expected their employment in December 2020 to be about 40% less relative to January 2020 (that is, assignment was balanced). After the respondents were told about the CARES-like loans, they projected their employment would decline by only 6% by December 2020. The respondents who were told about loans without forgiveness predicted their employment levels would fall by 14%. (Because we randomize the policy and the generosity, this analysis is equally weighted across firms.) We are unable to distinguish precisely whether it is the conditional

nature of the PPP program or the more favorable credit terms that drive these differences.

When asked about their expectation of remaining in business in December 2020, businesses responded similarly. Before being told about the loans, the businesses thought that they had a 62 to 63% chance of being open in December 2020. The probability rose to 81% among those who were told about the standard loans. The projected chance of survival increased to 85% for the businesses who were informed about the PPP loans that came with forgiveness. Again, the flow of credit seems important, but forgiveness did have a statistically significant impact on the expectation of staying in business.

Why would businesses not take the aid that comes with such generous forgiveness terms? Fig. 13 asks the 28% of firms that said that they would not take a CARES-like loan why they would turn down such a generous offer. The most common response, given by 35% of refusers, was that they did not need the cash, which suggests that one-tenth of our sample truly feels confident with their financial security.^{***}

A significant number of those who said that they wouldn't take the CARES assistance cited other concerns. Thirty percent of these respondents said that they didn't think that they would qualify. Nearly 20% said that they didn't trust the government to forgive the debt. Over one-tenth thought that it would be too much of a hassle. These results suggest that clarity about the program and a streamlined process are important policy considerations to ensure a high take-up rate.

We also randomly informed survey recipients about the changes in unemployment insurance under the CARES act. We found that informing employers about the increased generosity of unemployment insurance was associated with lower employment projection in December 2020, among those businesses that were told about the CARES-like loans. Information about unemployment insurance had no impact on the expected probability of remaining open. More work is needed to understand how interactions between programs may influence economic outcomes.

^{§§}A few program features differed between what was displayed to respondents and the actual program. The most relevant is that the interest rate displayed was 4%, which was higher than the interest rate under the program for the nonforgiven portions of the PPP loans. This reflected the maximum interest rate in the legislative text of the CARES Act. The actual implemented interest rates ended up below this maximum.

^{¶¶}An exact welfare analysis is beyond the scope of this paper. Hamilton (16) suggests that the median person in self-employment might be realizing nonpecuniary benefits because earnings differences may not justify the risk of running a business, but those who persist in self-employment over the long run likely have a comparative advantage in running their own business relative to their other options (17).

^{***}Those who report their intention not to take up the program due to having sufficient cash have a median of 3.5 mo of cash on hand. Those who express other reasons for lack of take-up have a median of 1 mo of cash.

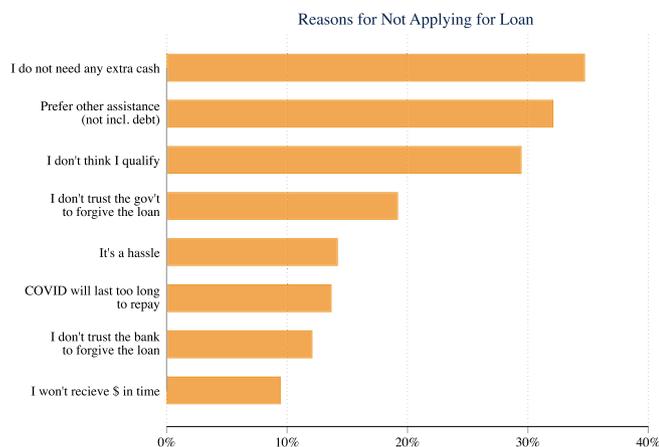


Fig. 13. Reasons for not using the resources in the CARES Act. This figure contains the frequency of responses for reasons that respondents would not take up aid under the CARES Act policy condition; 383 respondents indicated they would not use the policy, and 382 answered this question. Respondents could select more than one option, so percentages need not sum to 100. Fifty percent of respondents selected an additional reason not displayed or filled in the free text entry for other.

Industry Differences in Response to Crisis Duration

COVID-19 disruptions do not affect all businesses equally. Some are deemed essential and remained open, while others were required to close. Some businesses could shift employees to remote work, while others were ill equipped for the transition. In this section, we explore the cross-industry variation in its effects.

Our results suggest that disparities will be larger if the pandemic ends up lasting for several months. Specifically, we asked businesses the following: “We want to understand how the duration of the COVID-19 disruptions might change your answers. Suppose that most COVID-19 disruptions continue for X months, what is the likelihood of your business remaining operational by Dec. 31, 2020? Please provide your best guess.” We randomize the duration (X) to be 1 mo, 4 mo, or 6 mo, and offer respondents a five-point scale ranging from extremely unlikely to extremely likely. As before, we transform this answer into a binary outcome of likely or unlikely to remain open for ease of exposition.

Table 5 displays the responses to this question by industry. When firms are told to expect a 1-mo crisis, the expectation of remaining open by the end of the 2020 hovers above 68% across all industries, with the exception of arts and entertainment, personal services, and tourism and lodging. In those industries, the expectation of remaining open drops to 66%, 57%, and 63%, respectively. When firms are told to expect a 6-mo crisis, the average expectation of remaining open falls to 39%, and there is significant heterogeneity between sectors. The expected survival probability for firms in Arts and Entertainment drops precipitously to 45% under a 4-mo crisis, and 35% if the crisis lasts 6 mo. The expected probability of being open for Personal Services firms falls to 19% if the crisis lasts 6 mo.

The restaurant industry also seems particularly vulnerable to a long crisis. Restaurateurs believed that they had a 74% chance of survival if the crisis lasts 1 mo, but if the crisis lasts 4 mo, they gave themselves a 29% chance of survival. Under a 6-mo crisis, they expected to survive with only a 19% probability. Likewise, the chance of survival for firms in tourism and lodging drops to 25% by the 6-mo mark. Meanwhile, banking and finance, real estate, and professional services reported they will be able to weather extended disruptions far better than these more exposed sectors.

In Table 6, using the results in Table 5 around closure probabilities as a function of crisis duration, we examine how employ-

ment separations might evolve due to firm closure. Building on our estimates of the impact of crisis duration on job loss, Table 6 estimates the impact of COVID-19 on aggregate job loss from small business closures and how businesses expected this to vary with crisis duration. Specifically, we begin with the number of workers who are projected to lose their jobs from small firm closures. We then multiply the initial employment level (based on the 2017 Economic Census), at the employment size level, by the survey-based estimate of the share of firms that will be closed in December depending on the length of the crisis. The first row shows that there were 5.9 million workers in firms with fewer than five employees in 2017. In our survey, 43% of those smaller firms expected to be closed in December even if the crisis lasted for only 1 mo. Next, we multiplied 0.43 times 5.9 million workers to project 1.6 million separations due to firm closings (in the absence of additional aid beyond what was expected at the time of the survey). These smaller firms are extremely fragile, but, since they represent a relatively small share of employment, their closures add only modestly to overall job losses. Firms with over 50 employees are more optimistic about their survival, even if the crisis lasts for several months. Yet, even among these firms, 54% expected to be closed in December if the crisis lasts at least 4 mo. Those closures would create 14.6 million separations. This figure may be an overestimate, because this firm size category is large, and the closure rates may be lower for larger firms.

Taken altogether, the closures are projected to create 32.7 million job losses if the crisis lasts for 4 mo and 35.1 million job losses if the crisis lasts for 6 mo. Moreover, these job losses look only at business closures and do not account for the reduction in the number of workers by firms that remain open or job losses among workers who are employed by larger firms.

Table 5. Reported likelihood of remaining open by industry and hypothetical crisis duration

Industry	n	1 mo	4 mo	6 mo
Raw data				
Retailers, except grocery	490	0.68	0.35	0.34
Arts and entertainment	281	0.66	0.45	0.35
Banking/finance	148	0.78	0.61	0.60
Construction	383	0.72	0.43	0.45
Health care	395	0.78	0.47	0.35
Other	1,384	0.76	0.48	0.38
Personal services	168	0.57	0.40	0.19
Professional services	201	0.79	0.64	0.55
Real estate	93	0.74	0.57	0.58
Restaurant/bar/catering	163	0.74	0.29	0.19
Tourism/lodging	145	0.63	0.50	0.25
Total	3,851	0.72	0.47	0.39
Reweight to Census by size and region				
Retailers, except grocery	485	0.69	0.35	0.34
Arts and entertainment	271	0.66	0.45	0.36
Banking/finance	144	0.78	0.64	0.62
Construction	372	0.72	0.42	0.46
Health care	386	0.77	0.47	0.37
Other	1,361	0.76	0.48	0.39
Personal services	167	0.56	0.37	0.19
Professional services	197	0.79	0.62	0.56
Real estate	93	0.72	0.55	0.59
Restaurant/bar/catering	160	0.75	0.35	0.19
Tourism/lodging	143	0.65	0.52	0.23
Total	3,779	0.71	0.47	0.39

This table reports results of expectations about remaining open in December under different hypothetical durations of the COVID crisis. This question was asked at the end of the survey, after policy questions were conducted. The randomization is between subjects.

Table 6. Extensive margin separations arising from firm closures over different hypothetical crisis durations (all numbers in millions)

January employees	2017 Census		End-of-2020 separations if crisis lasts		
	Firms	Employees	1 mo	4 mo	6 mo
Under 5	3.7	5.9	1.6	3.1	3.6
6 to 24	1.8	18.1	4.8	10.5	12.1
25 to 49	0.3	9.5	1.6	4.4	6.9
50+	0.3	26.8	5.8	14.6	12.5
Total	6.1	60.4	13.7	32.7	35.1

This table reports results of end-of-2020 employment separations based on extensive margin business closures using the between-subjects survey design that asked about the ability to remain open under different crisis durations in Table 5. We take the fraction of businesses closing by December 2020 as the complement of the numbers in Table 5 and then multiply by the number of 2017 employees (in millions) from the Census, yielding the implied level of employment separations in each cell.

These results suggest that the damage to our economy and its network of small businesses will be far larger if the crisis lasts for many months. This suggests large potential economic benefits for policies that can safely lead to reopening the economy quickly.

Conclusion

Small businesses employ almost 50% of American workers. Yet, our results underscore the financial fragility of many small businesses, and how deeply affected they are by the current crisis. In our sample, which is skewed toward the retail sector, we found that 43% of businesses were temporarily closed and that employment had fallen by 40%. This represents a shock to America’s small firms that has little parallel since the Great Depression of the 1930s. Our results suggest that many of these firms had little cash on hand toward the beginning of the pandemic, which means that they will either have to dramatically cut expenses, take on additional debt, or declare bankruptcy. This highlights the ways in which the immediacy of new funding might impact medium term outcomes.

Small businesses’ responses to our survey suggest that many are likely to fail absent financial assistance. As of the last week of March 2020, 38% of businesses viewed it as unlikely or only somewhat likely that they would be open as of the end of 2020. While optimism increased when they were informed about the CARES loan program, it is unclear whether the CARES act will enable most of America’s small businesses to survive—or whether beliefs about its impact are overly optimistic.

The results also highlight the importance of well-designed and sustained economic and public health policy measures. Three policy-relevant results of our survey stand out. First, more than

13% of respondents say that they do not expect to take out CARES Act PPP loans because of the application hassle, distrust that the federal government will forgive the loans, or worry about complicated eligibility rules. Therefore, streamlining the application process and clarifying the eligibility criterion and loan forgiveness rules might increase the take-up rate for loans. Second, firms in particularly exposed industries—such as restaurants, tourism, and personal services—project that they will find it extremely difficult to stay in business if the crisis lasts for longer than 4 mo. These findings suggest large economic benefits from any policies that can safely shorten the economic shutdown (e.g., through stronger short-term containment policies). Third, if we extrapolate the 72% of businesses who indicate they would take up the CARES PPP loans to all US small businesses, the total volume of loans would be approximately \$410 billion. (This assumes that all businesses take out the maximum loan size [2.5 mo of expenses].) When we allow for different take-up rates by employer size and multiply by the 2017 Census payroll amounts in each firm size category, we estimate total loan demand of \$436 billion, in excess of the \$349 billion allocated in the first tranche of the CARES act.^{†††} Total demand for such aid may ultimately be even higher under an extended crisis.

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^{†††}Monthly payroll in the 2017 Census data for businesses under 500 employees totaled 226 billion dollars. Our estimates do not account for increases in total payroll in this sector since 2017. Our estimates also do not account for the fact that the PPP guidelines allowed some firms with more than 500 employees to access aid.

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