# EVALUATION OF MICROLOAN PROGRAM OUTCOMES

## Final Report

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Prepared for:
U.S. Small Business Administration
409 3rd Street SW
Washington, DC 20416

Optimal Solutions Group, LLC

Prepared by:
Optimal Solutions Group, LLC
5825 University Research Court, Suite 1100
College Park, MD 20740

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## The Optimal team:

- Oswaldo Urdapilleta
- Mark Turner
- Andrey Vinokurov
- Daniel Gluck

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The statements, findings, and conclusions found in this study are those of the contractor and do not necessarily reflect the views of the Office of Program Performance, Analysis, and Evaluation, the U.S. Small Business Administration, or the United States Government.

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## Glossary

| | |
|---|---|
| Burden | The impact on the public when asking for information in a data collection for compliance with the Paperwork Reduction Act of 1980. |
| Loan Closing | The final stage of the loan process, when paperwork is signed, and the loan is dispersed. |
| Loan Initiation | The date the loan becomes effective. |
| Intermediary Lender | SBA-approved lenders make all credit decisions and set all terms for microloans. |
| Microborrower | Businesses that receive a microloan from SBA-approved intermediary lenders. |
| Microloan | Financing backed by the SBA providing loans of up to $50,000 to small businesses. |
| Nonresponse Bias | The effect on the data collection by participants not completing the data collection, potentially skewing results due to the makeup of the group. |
| Sample | The microborrowers selected for the evaluation. |
| Stratification | The arrangement of microborrowers into different groups. |

## Acronyms

| | |
|---|---|
| ARRA | The American Recovery and Reinvestment Act |
| COVID-19 | Coronavirus Disease 2019 |
| CY | Calendar year |
| FY | Fiscal year |
| OMB | Office of Management and Budget |
| SBA | U.S. Small Business Administration |
| SBDC | Small Business Development Center |
| TA | Technical Assistance |
| VBOC | Veterans Business Outreach Center |
| WBC | Women's Business Center |

# Executive Summary

The purpose of the Small Business Administration (SBA) microloan program[1] is to assist women, low income, veteran, and minority entrepreneurs, and other small businesses in need of small amounts of financial assistance. The SBA provides funding to intermediary lenders that make and service microloans to eligible small businesses and provides marketing, management, and technical assistance (TA) to its microborrowers and potential microborrowers. A microloan is a short-term (6 years or less), fixed interest rate loan of no more than $50,000 made by an intermediary lender to an eligible small business. Most of the microloans are under $20,000. In fiscal year (FY) 2019, there were 144 active SBA-approved intermediary lenders serving 49 states, the District of Columbia, and Puerto Rico, and these intermediary lenders were directly or via third parties providing TA and training to over 22,000 microloan borrowers. By offering financing and support to these businesses, the microloan program aims to support job creation and retention for small businesses that would have difficulty securing funding from conventional channels.

The objective of the evaluation of the SBA microloan program is to examine the relationship of the microloan program activities of lending and TA to program outcomes of business revenue, job creation, and business survival. The evaluation also describes the population of microborrowers, their businesses and experiences with the microloan program from loan initiation (after 2008) to 2019 and during the COVID-19 pandemic (2019-2020), as well as the characteristics of intermediary lenders, and the training and TA provided to microborrowers. The SBA microloan program data, and a survey and interviews with microborrowers and intermediary lenders are the main data inputs to answer the evaluation research questions.

Optimal gathered data from 51.43 percent of the intermediary lenders and 12.97 percent of the microborrowers. Response rates exclude cases with bounced emails and wrong telephone numbers. These cases may represent closed firms and organizations. The response rate for microborrowers exceeded the target (10.00 percent). Nonresponse analysis of microborrowers revealed that respondents who completed surveys had minor differences from the targeted sample with respect to the stratification variables.

Below is a list of the key findings to each of the four research questions. It should be noted that this is not an impact evaluation. Optimal did not assess a causal relationship between microloans or training and business outcomes. In some instances, positive relationships could be due to selection bias. For example, businesses that are still operating are more likely to respond to the survey and respond that they had higher revenue and more employees than business that have closed their doors.

*Research Question 1: What are the job creation/retention, revenue growth, and business tenure outcomes of microloan program borrowers?*

- Revenue and the number of employees increased from loan initiation to calendar year (CY) 2019; and
- Microborrowers experienced a decrease in the number of employees (0.50, or one-half, of an employee) during the COVID-19 crisis.

[1] Authorized in 1991 by Public Law 102-140 and most recently expanded by the American Recovery and Reinvestment Act (ARRA) of 2009.

*Research Question 2: How do job creation/retention, revenue growth, and business tenure outcomes vary by business characteristic?*

- Startups, sole proprietorship, and minority-owned businesses had lower revenue, fewer employees, and more business closures than other types of microborrowers.
- Borrowers with higher microloan amounts had greater revenue than firms with lower microloan amounts.
- Microborrowers with additional outside financing had better business outcomes than microborrowers without outside financing.

*Research Question 3: What types, proficiency level, frequency, duration, and delivery modes of technical assistance are being provided to microloan program borrowers?*

- Almost all intermediaries reported offering training and technical assistance (TA);
- Half of microborrowers reported receiving training or TA; and
- Microborrowers participated in training or received TA on average once during the lifetime of the loan or once per quarter, and assistance was often delivered as a one-on-one training.

*Research Question 4: How does the type, proficiency level, frequency, duration, and delivery mode of technical assistance relate to microloan borrower job creation, revenue growth, and business tenure outcomes?*

- Most borrowers reported that the microloan program helped with business outcomes, particularly annual revenue; and
- There was a positive relationship between a microborrower's revenue, employment and business survival, and participation in training and TA.

Interviews and open-ended survey questions with intermediaries and microborrowers provided some context for program recommendations, particularly around training and TA. Both parties would like to see TA and training more broadly available and an increase in outreach to microborrowers to participate.

There are two suggestions for future evaluations: increase the robustness of findings and test causal relationships. One is to anticipate and mitigate low survey response rates. The study outlined some mitigation strategies that might be useful for the SBA in the future in increasing survey response rates. Another suggestion is to gain access to Census restricted data for business outcomes. This will allow for a rigorous evaluation design (causal relationship) to examine the effect of the program on business growth and survival.

# Introduction

Congress authorized the SBA's microloan program in 1991 (Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act of 1992, P.L. 102-140, 105 Stat. 804) as a five-year demonstration program to address the perceived disadvantages faced by very small businesses in gaining access to capital. The microloan program became operational in 1992, and it was made permanent, subject to reauthorization, in 1997 (the Small Business Reauthorization Act of 1997, P.L. 105-135, 111 Stat. 2592).[2] The American Recovery and Reinvestment Act (ARRA) of 2009 expanded the SBA's microloan program and designated an additional $50 million for loans and $24 million for technical assistance (TA). In recent years, the microloan program has grown—from about 3,900 small business loans (microloan program borrowers or microborrowers) totaling approximately $55.8 million in 2014 to over 5,500 microloans totaling $81.5 million in fiscal year (FY) 2019.

The purpose of the microloan program is to assist women, low income, veteran, and minority entrepreneurs, and other small businesses in need of small amounts of financial assistance. The microloan program seeks to integrate micro-level financing with training and TA for startup, newly established, existing, and growing small businesses. Although the microloan program is open to all small businesses, it targets new and early-stage businesses in underserved markets, including borrowers with little to no credit history, low-income borrowers, and women and minority entrepreneurs in both rural and urban areas, who generally do not qualify for conventional loans or other, larger SBA guaranteed loans.[3]

Under the microloan program, the SBA makes direct loans to intermediary lenders that, in turn, use the proceeds to make microloans and provide training and TA to eligible microborrowers in their SBA-approved geographic service areas. A microloan is a short-term (6 years or less), fixed interest rate loan of not more than $50,000 made by an intermediary lender to an eligible small business. Most of the microloans are under $20,000. A borrower applying for a microloan of more than $20,000 must have good prospects for success and meet a no credit elsewhere test to determine if the microloan applicant can obtain some or all the requested microloan funds at comparable interest rates and terms from private sector lenders using nonfederal dollars. Borrowers may use microloans for the purchase of furniture, fixtures, supplies, materials, equipment, and/or for working capital. Microloans cannot be made to refinance existing debt (with some exceptions) [4] or acquire land or property and must be repaid within 6 years. The borrower and intermediary negotiate interest rates (within statutory limits), and they typically range from six to nine percent. [5]

The SBA provides funding to intermediary lenders that make and service microloans to eligible small businesses and provide marketing, management, and TA assistance to its microborrowers and potential microborrowers.[6] In general, intermediary lenders will lend to businesses that fall short of a

[2] Dilger, R.J. (2019). *SBA Assistance to Small Business Startups: Client Experiences and Program Impact*. Congressional Research Service Report, R43083.
[3] Dilger, R.J. (2020). Congressional Research Service Report. *Small Business Administration Microloan Program*. Congressional Research Service Report, R41057.
[4] Existing debt can be refinanced if it improves the cash flow of the borrower.
[5] Dilger, R.J. (2020). *Small Business Administration Microloan Program*. Congressional Research Service Report, R41057.
[6] U.S. Small Business Administration, Office of Economic Opportunity. (2018). *Microloan Program Standard Operating Procedures (SOP) 52 00 B.* https://www.sba.gov/sites/default/files/2018-05/Microloan%20SOP%2052%2000%20B.pdf.

traditional bank's underwriting criteria (e.g., startups, businesses with limited experience, credit or financial records, or business owners who have limited or below average credit).

The SBA is authorized to provide grants to intermediaries for the purpose of providing intensive TA in marketing, management, business counseling, and training to small businesses that are borrowers or prospective borrowers. Intermediary lenders must use their TA grant funds to deliver ongoing training and counseling to their microborrowers, and the TA is free of charge and throughout the life of each microloan. The training and TA are important microloan program elements that provide the opportunity for intermediaries to assist microborrowers in increasing the likelihood of full repayment of the loan and augmenting their business survival, growth, and success. Counseling may include giving advice, guidance, or instruction specifically tailored to an individual or a group of individuals associated with a single business. TA services, and their method of delivery, are not universal. Information delivery media may vary and expand beyond person-to-person communication to include teleconferencing, electronic media, printed materials, videos, or any delivery mechanism provided it is effective in assisting clients to reach their training goals. The SBA allows each intermediary lender to determine the best approach for assisting its clients. Intermediary lenders are also expected to develop partnerships with other SBA-funded TA providers, such as Women's Business Centers (WBCs), Veterans Business Outreach Centers (VBOCs), Small Business Development Centers (SBDCs), SCORE Chapters, and Program for Investment in Micro-Entrepreneurs recipients to assist with TA.[7]

By offering financing and support to these small businesses, the microloan program aims to support job creation and retention for small businesses that would have difficulty securing funding from conventional channels. In FY 2019, there were 144 active SBA-approved intermediary lenders serving 49 states, the District of Columbia, and Puerto Rico that directly or via third parties provided TA and training to over 22,000 microborrowers.[8-9]

# Description of the Evaluation

## Evaluation Objectives

The objective of this evaluation is to examine the relationship of the microloan program activities of lending and technical assistance to program outcomes of business revenue, job creation, and business survival. The evaluation also describes the population of microborrowers, their businesses and experiences with the program, as well as the characteristics of intermediary lenders, and the training and TA provided to microborrowers.

The evaluation addresses the following four research questions:

1. What are the job creation/retention, revenue growth, and business tenure outcomes of microloan program borrowers?
2. How do job creation/retention, revenue growth, and business tenure outcomes vary by business characteristic (such as business type, industry, geographic region, and underrepresented population)?

[7] U.S. Small Business Administration, Office of Economic Opportunity. (2018). *Microloan Program Standard Operating Procedures (SOP) 52 00 B.* https://www.sba.gov/sites/default/files/2018-05/Microloan%20SOP%2052%2000%20B.pdf.
[8] U.S. Government Accountability Office. (2019). *SBA Microloan Program: Opportunities Exist to Strengthen Program Performance Measurement, Collaboration, and Reporting*, *GAO-20-49*. https://www.gao.gov/products/gao-20-49.
[9] Dilger, R.J. (2020). *Small Business Administration Microloan Program*. Congressional Research Service Report, R41057.

3. What types, proficiency level, frequency, duration, and delivery modes of technical assistance are being provided to microloan program borrowers?
4. How does the type, proficiency level, frequency, duration, and delivery mode of technical assistance relate to microloan borrower job creation, revenue growth, and business tenure outcomes?

## Evaluation Methodology

The microloan program logic model guided the evaluation design and outlined the program's theory of change, depicting how the program's assumptions, resources, strategies, activities, and contextual factors are expected to lead to the desired outcomes. A revised logic model based on the findings from this evaluation is available in Appendix A.

The evaluation focused on microborrowers who received microloans from FY 2010 through FY 2019. The evaluation methodology involves a pre-post program assessment of business performance outcomes for a microborrower's business, including the number of employees, revenue, and existing business survival. The study examined the change in business performance and tenure from the baseline, preprogram participation period (i.e., the loan initiation calendar year) to two follow-up calendar years (CY) 2019 and 2020 (used for reference in the borrower survey). The study uses the timeframe from the loan initiation to CY 2019 to determine the business growth of microloan borrowers' businesses before the coronavirus disease 2019 (COVID-19) pandemic. The study also includes an assessment of program outcome changes from CY 2019 to CY 2020 to gauge the effect of the COVID-19 economic crisis on business performance and survival.

To address the research questions, we used the following analytical methods:

- Descriptive analyses of characteristics of microloan borrowers, their businesses, intermediary lenders, and their experiences with the program.
- Univariate analyses comparing microloan borrowers' business growth outcomes from the loan initiation CY year to CY 2019 and from CY 2019 to CY 2020.
- Multivariate analyses to identify key drivers of business growth outcomes including business and owner characteristics, region, urbanicity, and dimensions of training and TA received by microborrowers.

This study does not measure causality of the microloan program and/or the training and TA on business outcomes. All findings are relationships/correlations between the business or microloan program characteristics and their business growth outcomes. There is no implied direction of the relationship or any inferences to causation. The limitations of the study are further described below.

## Data Collection

The study relied on the SBA's administrative data and primary data collection including web-based surveys and semi-structured interviews administered to microborrowers and intermediary lenders. Detailed descriptions of the survey instruments and data collection procedures are discussed in Appendices B and C.

The study conducted data collection as soon as OMB approval was granted, from April 29, 2021, to August 29, 2021. The sample released for the data collection had 8,200 microborrowers, including

6,330 microborrowers with emails. Optimal conducted data collection with microborrowers with available emails and 179 intermediary lenders. Optimal collected completed survey data with 90 intermediary lenders and 697 borrowers and conducted interviews with nine intermediaries and nine borrowers.[10] The survey response rates were 51.43 percent among intermediaries and 12.97 percent among borrowers (Appendix C). Response rates exclude cases with bounced emails and wrong telephone numbers. These cases may represent closed firms and organizations.

The response rates for the SBA customers above are common in SBA studies. The small business population is difficult to reach (particularly out-of-business or non-employer businesses), and, in this study, the focus was on a population of very small business owners that participated in the program during the past 10 years.

Microborrowers and intermediary lenders received multiple email invitations to the Web survey. In addition, every nonresponding microborrower received at least four reminder telephone calls, using the Twilio automated calling platform. These calls included information on how to access the survey and who to contact with any questions about the study. Respondents with partially completed surveys received at least one more targeted, individual telephone call. When Optimal connected with these individuals over telephone calls, we confirmed email addresses, re-sent individual survey links to those borrowers, and answered their questions about the study.

For intermediary lenders, there were multiple follow-up email reminders. Optimal sent email reminders to all available email contacts for nonresponding intermediaries. There was an emphasis on finding alternate contacts at the intermediary firm when a target contact was unresponsive to emails or telephone calls.[11] Each intermediary organization also received at least one personal telephone call, and Optimal made additional calls to those who opened but did not complete the survey.

### Additional Survey Outreach

In response to a low response rate in the initial data collection wave, Optimal implemented several mitigation efforts that were successful in attaining the response rate for microborrowers and a higher than initially observed response rate for intermediary lenders:

- There were multiple follow-up email reminders. Optimal sent emails at various times of the day and at different days of the week, spread out over a multiple week period, and at different frequencies per week.
- Email reminders for microborrowers had different appeals, including helping other small businesses, receiving better service for their future loans, and improvements to the program.
- Borrowers were also offered Web surveys in Spanish language.
- Optimal used an additional survey invitation method, Constant Contact, to further highlight the legitimacy of the study and minimize bounced emails.

[10] During the data collection, Optimal conducted seven interviews in each group. There were two additional interviews for each group during the pretest of the instruments.

[11] In some instances, an intermediary lender staff had been incorrectly assigned to answer the survey and did not have knowledge of the program, and most of the time, they redirected email invitations to other staff in their organization.

- We conducted personal reminder telephone calls with intermediary lenders with partially completed surveys.
- The SBA assisted in sending email reminders to borrowers and intermediary lenders.

To minimize undue burden, Optimal included opt-out links in all emails sent and maintained records to ensure it did not contact those who did not want to be contacted. Survey emails were also bundled with invitations to complete qualitative telephone-based interviews to maximize the potential for each email to end up with a successful completion of the survey, interview, or both.

### Nonresponse Bias Analysis

Because of the low response rate, Optimal conducted a nonresponse bias analysis to any statistical differences in the characteristics of the survey respondents to the sample. The nonresponse analysis showed that the microborrowers with the completed surveys had minor differences to the sample with respect to the stratification variables of region, urban/rural, and underrepresented owner (Appendix C). Optimal developed three nonresponse-adjusted weights for the for the revenue items, employment items, and all other survey items. These sets of weights better adjusted the results based on differential item nonresponse to the business performance outcome questions. All the results below use the weighted data.

## Study Limitations

Evaluation results should be interpreted with caution due to the following methodological limitations.

The COVID-19 pandemic hindered the study's data collection since borrowers may have temporarily or permanently closed their businesses and thus were very hard to reach and engage in responding to the survey.[12] The response rate for intermediary lenders was also below the target. One of the limitations in attaining a higher response rate was the lack of emails for microborrowers in the SBA's administrative data. The SBA contacted intermediary lenders to obtain emails for all sampled 8,200 borrowers. Emails provided by intermediaries were available for 74.41 percent (6,106 of 8,200) of the sample. Optimal tried the Dun & Bradstreet database and web lookups in an attempt to obtain contact information from businesses without emails. However, these efforts did not improve the availability of contact information.

Low response rates to the microborrower survey may bias the results, particularly for the changes in outcomes over time. Although Optimal developed the analytical weights to adjust for the nonresponse, some biases may remain due to unmeasured influences of the low response rate. For instance, borrowers dissatisfied with the program might have had no incentive to respond to the survey. Whereas active business could have been more likely to respond the survey and have positive outcomes.

Another limitation is the self-reported nature of the business outcomes (the amount of revenue, number of employees, and business closures). There is no external validation of answers. The evaluation explored secondary data sources for the business outcomes data but had no success in locating and matching the borrowers' businesses (Appendix C).

[12] It is also possible that these businesses were exposed to survey overload since numerous research organizations were collecting data about pandemic experiences of these small businesses at the same time, as noted during our exchanges with some microborrowers.

The study presents the relationships between the microloan program and business outcomes. The lack of a quasi-experimental research design precludes establishing a causal link between microborrowers' loan (or TA and training received) and the business outcomes. The evaluation collected pre- and post-program data for the business performance. However, the study did not have a comparison group of businesses that are similar to the microloan borrowers that did not participate in the program. Without a comparison group, the evaluation cannot assess if the increase in business growth or the effect of training, controlling for other factors, can be attributed to the microloan program. For example, firms that survive after the few years following formation tend to grow. Also, larger microborrowers may need larger microloan amounts and their revenue growth might be larger than among smaller firms due to factors other than a consequence of larger loan amounts. Thus, without a comparison group, the business growth cannot be attributable to the microloan program.

## Study Results

In the following pages, we provide responses to each of the four research questions. Detailed results are shown in Appendices D and E.

### Research Question 1: What are the job creation/retention, revenue growth, and business tenure outcomes of microloan program borrowers?

| **Overview of Findings –– Research Question 1** |
| --- |
| • Microborrowers had significant business growth from loan initiation CY to CY 2019.<br>• During the COVID-19 pandemic, microborrowers had a significant decrease in the number of employees in 2020, although no significant change in annual revenue. |

We first tested if there is a statistically significant difference of business outcomes (revenue and employment) among program participants from the baseline (i.e., the loan initiation year) to the follow-up CY 2019. On average, this time period for measuring business outcomes changes is about three and a half years. The results showed statistically significant increases in average business revenue and the number of employees from the loan initiation year to CY 2019 (Exhibit 1). A potential issue with these results is selection bias, where firms that had weaker growth and closed their business might have been less likely to respond to the survey or report their outcomes.

**Exhibit 1.** Revenue and employment by time period, based on the borrower survey

| | Borrowers with loan initiation year between 2009 and 2018 | |
|---|---|---|
| | **Loan initiation year** | **CY 2019** |
| **Revenue (p<.001)** | | |
| Mean | $253,785 | $532,605 (p<.001) |
| Median | $75,835 | $173,498 |
| Respondents with missing revenue data | 10.61 percent | 10.61 percent |
| **Number of employees (p<.001)** | | |
| Mean | 4.23 | 6.18 (p<.001) |
| Median | 2 | 3 |
| Distribution: | | |
| 0 (non-employee firms) | 19.27 percent | 19.01 percent |
| 1-2 | 28.89 percent | 24.28 percent |
| 3-4 | 20.94 percent | 16.93 percent |
| 5-6 | 11.91 percent | 8.84 percent |
| 7+ | 14.13 percent | 26.08 percent |
| Respondents with missing employee data | 4.86 percent | 4.86 percent |

NOTES: Based on the borrower weighted survey data. Revenue was adjusted for inflation using Price Deflators for Gross Domestic Product (in 2020 dollars). ** p<.01; *** p<.001, comparing two time periods. Also see Appendix D, Exhibit 1.

Exhibit 2 shows changes from CY 2019 to CY 2020 during the COVID-19 period. Microborrowers reported a relatively small but statistically significant decrease in the number of employees (0.50 of an employee). There was no significant decrease in the revenue.

These results in Exhibit 2 are somewhat different from other surveys of small businesses during the pandemic. There are numerous reports of substantial revenue and employment losses among small businesses, especially during the beginning of 2020.[13] One potential source for this discrepancy in evidence is that this study did not separate business revenue from the COVID-19 assistance loans, which microborrowers may have incorporated in their self-reported annual revenue responses.

[13] The Effects of the COVID-19 Pandemic on Small Businesses (sba.gov), Revenue Collapses and the Consumption of Small Business Owners in the Early Stages of the COVID-19 Pandemic (nber.org), Kenan Insights Fact Sheet: The COVID-19 Pandemic and Small Business Employment.pdf (unc.edu)

**Exhibit 2.** Revenue and employment by time period, based on the borrower survey

| | Borrowers with the loan initiation year between CY 2009 and CY 2019 | |
|---|---|---|
| | **CY 2019** | **CY 2020** |
| **Revenue** | | |
| Mean | $486,967 | $455,959 |
| Median | $148,205 | $115,000 |
| Respondents with missing revenue data | 9.69 percent | 9.69 percent |
| **Number of employees(p<.01)** | | |
| Mean | 5.81 | 5.26 |
| Median | 3 | 2 |
| 0 | 19.81 percent | 24.07 percent |
| 1-2 | 26.16 percent | 26.40 percent |
| 3-4 | 16.38 percent | 12.60 percent |
| 5-6 | 8.40 percent | 10.04 percent |
| 7+ | 24.81 percent | 22.45 percent |
| Respondents with missing employee data | 4.44 percent | 4.44 percent |

NOTES: Based on the borrower weighted survey data. Revenue was adjusted for inflation using Price Deflators for Gross Domestic Product (in 2020 dollars). ** p<.01; *** p<.001, comparing two time periods. Also see Appendix D, Exhibit 1.

The results also revealed that about 8.49 percent of borrowers reported that their business has been permanently closed as of summer 2021, and less than 2 percent (1.70 percent) reported that the business closure was due to the pandemic (Exhibit 3). These results are lower than small business closure rates reported elsewhere.[14] The sampling differences might partially account for the difference in business closure rates. It's possible that borrowers who temporarily or permanently closed their businesses had no incentive to respond to the survey and thus are underrepresented in the current sample.

**Exhibit 3.** Businesses sold or permanently closed, based on the borrower survey

| | **n** | **Percent** |
|---|---|---|
| In business | 632 | 89.95 |
| Sold or permanently closed | 56 | 8.49 |
| Respondents with missing data | 9 | 1.56 |
| **When business was sold or permanently closed** | | |
| Before the COVID-19 pandemic | 40 | 6.79 |
| Due to the COVID-19 pandemic | 16 | 1.70 |
| **Total number of respondents** | **697** | |

NOTE: Based on the borrower weighted survey data.

[14] Business Exit During the COVID-19 Pandemic: Non-Traditional Measures in Historical Context (federalreserve.gov)

## Research Question 2: How do job creation/retention, revenue growth, and business tenure outcomes vary by business characteristic?

| Overview of Findings — Research Question 2 |
| --- |
| • Microloan borrowers are a unique population of very small businesses, mostly in trade or service industries, with disadvantaged business certificates or designations, and located in metropolitan areas.<br>• Most borrowers had no access to financing sources other than the microloan program.<br>• Startups, sole proprietorships, and minority-owned firms had significantly lower business growth and odds of business survival than other types of firms. |

### Characteristics of Microloan Borrower Businesses

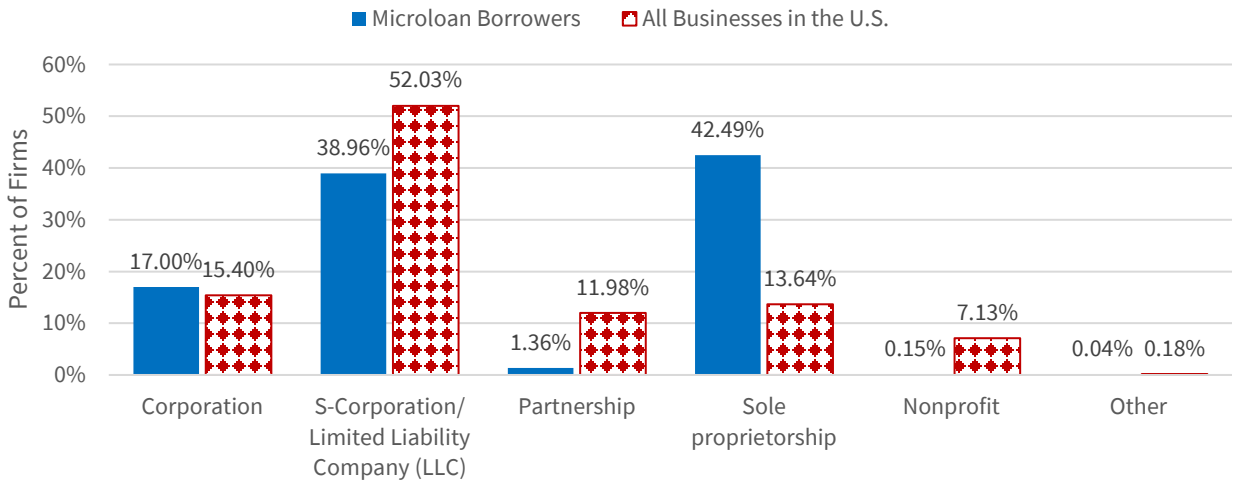
Based on the SBA's administrative data, microloan borrowers are a unique population of small businesses. Microborrowers are very small in terms of revenue and number of employees, have short business tenure, and many are startups, sole proprietorships, in trade or service industries, with disadvantaged business certificates or designations, and located in metropolitan areas.

Microloan businesses were:

- largely located (87.84 percent) in metropolitan areas, and only close to 2 percent were located in rural areas[15] (Appendix D, Exhibit 7);
- in general, small in terms of their revenue and the number of employees (Exhibit 1 above);
- startups at the loan initiation year -- almost half (45.13 percent; Appendix D, Exhibit 4);
- on average, active for 4.6 years, as of the loan closure date (Appendix D, Exhibit 3);
- certified or had specific business designations such as, small business (62.57 percent), minority-owned (33.92 percent), women-owned (43.31 percent), or others (Appendix D, Exhibit 5); and
- based on the SBA data, sole proprietorships (42.49 percent) or LLCs (38.96 percent) (Exhibit 4).

[15] Rural-Urban Continuum Code: Non-metro counties with less than 2,500 urban population.

**Exhibit 4.** Business legal structure of the SBA microloan borrowers and the U.S. population of all firms




NOTES: Based on the SBA data for the microloan universe as of FY 2020. Census 2018 County Business Patterns includes all U.S. businesses with paid employees (counts do not sum up to total).

These results for the business characteristics differ from the overall U.S. population of businesses of all sizes.[16] Microloan firms tend to be smaller in terms of average annual revenue ($486,967 vs. $6,711,742) and average number of employees (5.81 vs 22.4),[17] particularly having at least 20 employees (4.55% vs 10.95%)[18] (Appendix D, Tables 4b and 4c). Microloan firms also have a higher proportion of being sole proprietorships, a lower proportion of LLCs and partnerships (Exhibit 4 above), and a lower proportion of firms over 15 years of age (10.10% vs. 31.40%, Appendix D, Table 4a)[19].

Microborrowers, on average, are not businesses with characteristics (older, urban location, corporation, in high-growth industries) associated to high potential for growth). In terms of business industry, the largest proportions of microloan firms were in economic sectors of retail trade (22.14 percent), other services (repair, beauty salons, barber shops, pet care, etc.) (12.56 percent), accommodation and food services (12.39 percent), transportation and warehousing (8.21 percent), and professional, scientific, and technical services (7.85 percent). Exhibit 5 includes similar statistics for reference to the population of businesses in the United States. Compared to the Census data for the population of all businesses in the U.S., the Microloan population of firms have higher proportion of firms in accommodation and food services, other services, retail trade, and transportation and warehousing industries. Microborrowers have a lower proportion of firms in construction, finance and insurance, health care and social assistance, and professional services industries than the overall population of firms in the U.S.

[16] The Census Nonemployer Statistics by Demographics series (NES-D) was explored but not used due to the most Microloan firms (over 80 percent) having employees. Whereas NES-D provides information on the characteristics of nonemployer businesses.
[17] Based on the Census Annual Business Survey 2018 that included are all nonfarm employer businesses filing the 941, 944, or 1120 tax forms, with receipts of $1,000 or more.
[18] Based on the Census 2018 County Business Patterns, includes all U.S. business establishments with paid employees.
[19] Based on the Census Business Dynamics Statistics 2019 that excludes self–employed.

**Exhibit 5.** Industry of the microloan businesses and the U.S. population of all firms

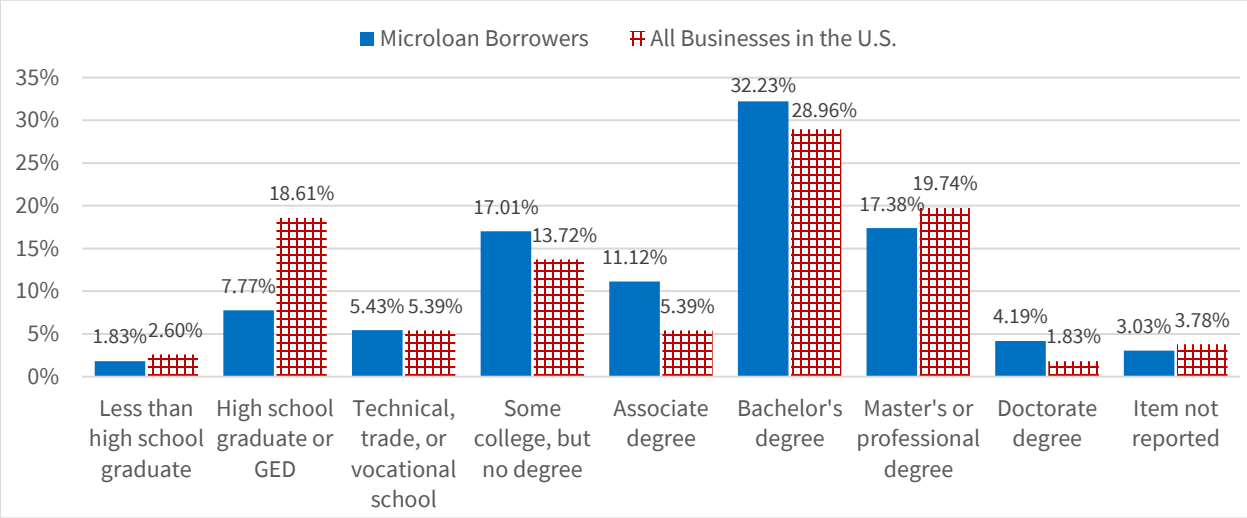
| Industry (economic sector) (two-digit NAICS) | Microloan | | Census* | |
|---|---|---|---|---|
| | Count | Percent | Count | Percent |
| Retail trade | 6,922 | 22.14 | 639,706 | 11.18 |
| Other services (repair, beauty salons, barber shops, pet care, etc.) | 3,928 | 12.56 | 395,133 | 6.91 |
| Accommodation and food services | 3,873 | 12.39 | 532,009 | 9.30 |
| Transportation and warehousing | 2,566 | 8.21 | 190,701 | 3.33 |
| Professional, scientific, and technical services | 2,454 | 7.85 | 817,532 | 14.29 |
| Manufacturing | 2,167 | 6.93 | 246,442 | 4.31 |
| Health care and social assistance | 2,136 | 6.83 | 645,357 | 11.28 |
| Construction | 1,601 | 5.12 | 710,826 | 12.42 |
| Administrative and support and waste management and remediation services | 1,420 | 4.54 | 347,382 | 6.07 |
| Arts, entertainment, and recreation | 899 | 2.88 | 133,641 | 2.34 |
| Wholesale trade | 882 | 2.82 | 297,105 | 5.19 |
| Educational services | 660 | 2.11 | 92,715 | 1.62 |
| Real estate and rental and leasing | 532 | 1.70 | 318,204 | 5.56 |
| Information | 401 | 1.28 | 81,618 | 1.43 |
| Agriculture, forestry, fishing, and hunting | 340 | 1.09 | 26,074 | 0.46 |
| Finance and insurance | 318 | 1.02 | 237,033 | 4.14 |
| Utilities | 29 | 0.09 | 6,062 | 0.11 |
| Mining, quarrying, and oil and gas extraction | 24 | 0.08 | 19,195 | 0.34 |
| Management of companies and enterprises | 15 | 0.05 | 26,309 | 0.46 |
| Industries not classified | 97 | 0.31 | 21,184 | 0.37 |
| Total for all sectors | 31,264 | 100.00 | 5,722,142 | 100.00 |

NOTES: Based on the SBA data for the microloan universe as of FY 2020. *****: based on the Census Annual Business Survey 2018; included are all nonfarm employer businesses. Frequent examples of manufacturing included breweries, retail bakeries, all other miscellaneous manufacturing, fruit and vegetable canning, commercial bakeries, custom architectural woodwork and millwork manufacturing, cut and sew apparel contractors, and ice cream and frozen dessert manufacturing.

## Characteristics of Microloan Borrowers

Most microloan business owners (80.69 percent) are from underrepresented groups (women, low-income, veterans, minorities); including ethnic or racial minorities (50.79 percent), women-owned certified firms (48.3 percent), and low-income borrowers (24.28 percent) (as defined in SBA administrative data) (Appendix D, Exhibits 4 and 9). The average age of the business owner was 49 years, and, on average, they've been in business for over nine years (Appendix D, Exhibit 9). Noteworthy, 64.92 percent have an associate degree or above (Exhibit 6). These results differ from the U.S. population of businesses. Microloan business owners have higher proportion of women (48.31% vs. 19.95%), Hispanics (15.55% vs. 5.80%), racial minorities (38.69% vs. 18.32%), and those with some college, Associate or Bachelor's degrees (60.36% vs. 48.07%) than the overall population of business owners in the U.S. (Appendix D, Table 9a and Exhibit 6). Microloan business owners are also younger and with fewer years in businesses (Appendix D, Table 9a).

**Exhibit 6.** Highest level of business owner education of the microloan businesses and the U.S. population of all firms




NOTE: Based on borrower weighted survey data and the Census Annual Business Survey 2018 that included are all nonfarm employer businesses. Sample of microloan borrowers (697). Population of All Businesses in the U.S. (4,254,974).

## Characteristics and Terms of Borrowers' Microloans

The average microloan amount was $15,000 and less than one-fifth (18.54 percent) had a microloan for more than $25,000 (Appendix D, Exhibit 10). The average interest rate and duration of the loan was 7.94 percent, and about three and a half years, respectively. According to the SBA records, loans may be used for multiple purposes, the microloans were used for working capital (70.67 percent), equipment (30.11 percent), inventory (24.56 percent), supplies (8.59 percent), or materials (6.38 percent) (Appendix D, Exhibit 11). More than a quarter of loans required collateral or guarantor (28.04 percent and 31.30 percent, respectively) (Appendix D, Exhibit 11).

A small proportion of borrowers (5.86 percent) reported ever participating in other government lending programs, with 7(a) Loan Guaranty being the most frequently (0.98 percent) reported program (Appendix D, Exhibit 12). More than a third (37.84 percent) reported ever receiving any other financing sources, with less than one-sixth (13.61 percent) reporting to receive business financing from the traditional bank (Exhibit 7 below). It is not clear whether the traditional loans were available before or after the microloan. Intermediary lenders responses to the interviews suggest that the traditional loans followed the microloan.

**Exhibit 7.** Participation in other lending and financing sources (Multiple responses)

| Financing Sources | Count | Percent |
|---|---|---|
| **Obtained financing from any other source** | 289 | 37.84 |
| **Other sources:** | | |
| Friends or family | 115 | 16.09 |
| Traditional bank | 125 | 13.61 |
| Community bank | 44 | 5.15 |
| Investor | 27 | 4.59 |
| Nonprofit lending organizations | 20 | 2.79 |
| Other (grants, line of credit, credit cards, etc.) | 53 | 9.64 |
| Respondents with missing data | 2 | 0.80 |
| Total | 697 | |

NOTE: Based on borrower weighted survey data.

Qualitative data responses mentioned that microborrowers had difficulties securing financing from other sources and used the microloan program as a steppingstone to build their financing history.

| Microborrowers' and Intermediary's Quotes |
|---|
| • "I appreciated getting a loan to start my business when I couldn't get one from the bank in 2009". — Microborrower<br>• "Numerous issues getting financing for a business that cashflows well but doesn't have assets". —Microborrower<br>• "Without a microloan, many of our borrowers would not have been able to purchase the inventory and equipment they need to operate their business". — Intermediary<br>• "The microloans are a gateway for introducing growing businesses about mainstream financing and this gives them more confidence and knowledge about safe and affordable credit options for future growth." — Intermediary |

## Borrower Experiences from the COVID-19 Pandemic

As other small businesses in the United States, most borrowers (87.79 percent) reported that they experienced business difficulties due to the COVID-19 pandemic (Exhibit 8), with the decreased revenue being the most frequently reported issue (74.15 percent). The findings for the overall effect of the pandemic on business are somewhat comparable to other surveys of small businesses. For instance, the U.S. Census Small Business Pulse Survey (SBPS) reported that during the last week of June 2020, 82.7 percent of firms reported an overall negative effect of the pandemic on business.[20] Whereas, during the last week of June 2021, 67.9 percent of firms reported the overall negative effect of pandemic on business.

[20] The target population is all nonfarm, single-location employer businesses with 1-499 employees and receipts of $1,000 or more in the 50 states, District of Columbia, and Puerto Rico. https://portal.census.gov/pulse/data/

**Exhibit 8.** Business difficulties due to the COVID-19 pandemic, based on the borrower survey

| | n | percent |
|---|---|---|
| **Experienced any business difficulties due to the COVID-19 pandemic** | 601 | 87.79 |
| **Business difficulties** | | |
| Decreased gross annual revenue | 483 | 74.15 |
| Decreased the total number of hours worked by employees | 309 | 46.59 |
| Decreased the total number of hours the business owner worked | 283 | 44.44 |
| Decreased the number of employees | 255 | 42.36 |
| Considered closing the business location(s) | 129 | 18.64 |
| Closed business location(s) | 110 | 18.46 |
| Considered permanently closing the business | 114 | 15.37 |
| Business sold or permanently closed due to the COVID-19 pandemic | 16 | 1.70 |
| Other (temporary closure, slow business, reduced sales) | 71 | 10.08 |
| Respondents with missing data | 9 | 1.56 |

NOTE: Based on borrower weighted survey data.

Most borrowers (83.65 percent) also reported participating in lending programs as a result of the COVID-19 pandemic, with Paycheck Protection Program (PPP) loans and Economic Injury Disaster Loans (EIDL) being the most frequently reported (62.48 percent and 55.80 percent) (Appendix D, Exhibit 14). In addition, nearly all microloan borrowers who had an outstanding loan received Section 1112 debt relief payments from SBA. These results are comparable to other reports of PPP use by small businesses. For instance, the SBPS reported that from March 13 through the last week of June 2020, 77.0 percent of firms reported receiving any financial assistance from the federal government, with 72.4 percent of firms reporting receiving a PPP loan and 21.3 percent receiving an EIDL.[21]

## The Relationship of Business Characteristics and Growth Outcomes

To determine how business outcomes vary by business characteristics, we ran regression models to assess business survival and growth for the two time periods of interest: 1) the loan initiation CY to CY 2019, and 2) CY 2019 to CY 2020. The regression models identified the characteristics of businesses that are statistically related to the business outcomes, while controlling for the other factors such as region, urbanicity, years since the loan initiation, and industry.

The analyses show that startups, sole proprietorships, and minority-owned firms had lower business survival and growth outcomes for both time periods than the other types of firms. The following statistics summarize the differences in business performance from the loan initiation CY year to CY 2019 between businesses with characteristics associated with lower potential for growth and other types of firms (Appendix D, Exhibit 13):

- *Startups* had 57.21 percent less revenue and were 55.41 percent less likely to be in business than non-startups.
- *Sole proprietorships* had 78.21 percent less revenue, were 43.65 percent less likely to have a larger number of employees (say, 1-2 employees relative to 3-5 employees), and were 47.71 percent less likely to be in business (survival) than other types of firms.
- *Minority-owned firms* had 63.22 percent less revenue and were 33.66 percent less likely to have a larger number of employees than non-minority owned firms. No differences in the likelihood of business survival between minority-owned firms and non-minority owned firms.

[21] The target population is all nonfarm, single-location employer businesses with 1-499 employees and receipts of $1,000 or more in the 50 states, District of Columbia, and Puerto Rico. https://portal.census.gov/pulse/data/

The analyses also show that businesses that received larger microloan amounts and obtained financing from other sources (e.g., family, bank, investor, nonprofit, etc.) had better business growth and survival outcomes for both time periods (pre- and during COVID-19 pandemic) than those who had smaller microloan amounts or did not have alternate financing. The study did not control for participation in the microloan program. It is possible that businesses that have more capacity and primed for growth are able to garner higher loan amounts as compared to otherwise similar firms with less capacity. Below are findings of the relationships between loan characteristics and business outcomes from CY 2019 to CY 2020.

- *Microloan loan amount*: Microloan amounts (for each $10,000 in) were associated to firms that had 21.51 percent greater revenue, were 20.26 percent more likely to have a larger number of employees (say, change employee category from non-employee firm to one to two employees), and 24.75 percent more likely to be in business than firms with a lower microloan amount.
- *Obtained financing from other sources:* These firms were associated with 106.36 percent greater revenue and were 135.30 percent more likely to have a larger number of employees (say, change category from non-employee firm to one to two employees) than firms that did not obtain financing from other sources.

Furthermore, businesses that received a greater microloan amounts and obtained financing from other sources reported better business outcomes during the pandemic.

- *Microloan loan amount*: For each $10,000 in microloan amount, firms had 19.04 percent greater revenue than firms with a lower microloan amount.
- *Obtained financing from other sources*: These firms were 46.80 percent more likely to have a larger number of employees than firms that did not obtain financing from other sources.
- *Obtained a greater number of COVID-19 financing sources (e.g., PPP, EIDL)*: For each financing source, these firms had 144.25 percent greater revenue and were 31.33 percent more likely to have a larger number of employees than firms that did not obtain COVID-19 financing.

Business difficulties experienced during the pandemic (described in the previous section) were found to be negatively related to business revenue and employment outcomes during the COVID-19 pandemic (Appendix D, Exhibit 16).

## Research Question 3: What types, proficiency level, frequency, duration, and delivery modes of technical assistance are being provided to microloan program borrowers?

| **Overview of Findings — Research Question 3** |
|---|
| • Almost all (96.67 percent) intermediaries reported providing (themselves or by a third party) training to borrowers.<br>• Almost half of the borrowers (43.69 percent) reported receiving any training, and of the microborrowers who received training, about a third (34.16 percent) reported receiving training from their intermediary lender. |

We analyzed survey and interview data from borrowers and intermediary lenders to depict various aspects of the training and TA provided by intermediary lenders and received by microborrowers.

## Technical Assistance and Training Provided to Microloan Borrowers

Intermediary lenders used a variety of sources to provide training and TA. Most of the intermediary lenders (94.44 percent) reported that their organization directly provided TA or training to microloan borrowers (Exhibit 9). Over half (60.00 percent) also reported using outside sources for training and TA; primarily, the intermediary lenders collaborated with Small Business Development Centers (SBDCs) and local organizations (51.11 percent and 45.65, respectively).

**Exhibit 9.** Types of training provided by intermediaries

| | n | Percent |
|---|---|---|
| **Used any *external* sources of TA and training** | 54 | 60.00 |
| ***External* sources of TA and training used** | | |
| Small Business Development Centers | 46 | 51.11 |
| Local firms, organizations, colleges, or universities | 41 | 45.56 |
| SCORE Chapters | 34 | 37.78 |
| Women's Business Centers | 30 | 33.33 |
| Community Development Financial Institutions | 14 | 15.56 |
| USDA Rural Micro-entrepreneur Assistance | 10 | 11.11 |
| Veterans Business Outreach Centers | 7 | 7.78 |
| Other | 7 | 7.78 |
| **Intermediary organization provided TA or training to microloan borrowers** | **85** | **94.44** |
| **Total intermediaries that provided TA or training themselves or used external sources** | **87** | **96.67** |
| **Total number of respondents** | **90** | **100.00** |

NOTE: Based on intermediary lender survey data.

Based on the intermediary lender survey, intermediary lenders providing training reported discussing a diversity of training topics, especially business management (97.65 percent), referrals to business resources and training programs (92.94 percent), and access to business financing, capital, and bonding (90.59 percent) (Appendix D, Exhibit 22). Almost all intermediary lenders reported using in-person, webinar, and one-on-one modalities (98.82, 91.76 percent, and 100.00 percent, respectively). A key element of the training curriculum development is based on an assessment of borrower's training or TA needs (84.44 percent). The intermediary lenders also conducted post-training surveys to gain feedback on training effectiveness (63.33 percent) (Appendix D, Exhibit 23).

Based on administrative data, roughly half of borrowers were provided pre-loan (45.44 percent) and post-loan technical assistance (54.56 percent), which reflect the program requirement of 50-50 split for the pre- and post-loan assistance (Appendix D, Exhibit 24). Intermediary lenders, on average, spent a total of 12.33 hours per borrower on TA with 6.54 of these hours spent directly with the borrower and the rest of the hours spent on preparation, travel, and administrative tasks (Appendix D, Exhibit 28).

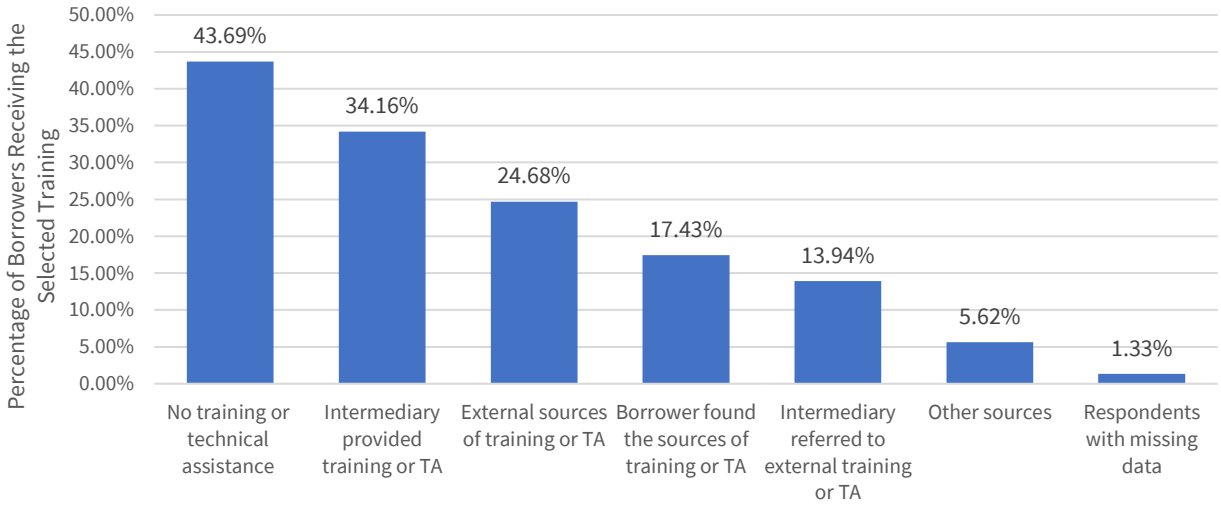
With respect to suggestions for best practices for training and TA, intermediary lenders suggested post-loan TA, one-on-one training, and matching to mentors with similar experiences as the best strategies. In terms of content, the main training and TA topics mentioned were basic business and financial management (in particular, QuickBooks), marketing, and referrals to partners for in-depth

training. Intermediary lenders described one-on-one as an important approach to attend to the client's specific needs and resources, especially during the pandemic. Intermediary lenders also described a personal relationship between the intermediary lender and microborrower as crucial for an effective training.

## Technical Assistance and Training Received by Microloan Borrowers

The majority of borrowers (56.31 percent) reported receiving some type of training and about a third of borrowers (34.16 percent) reported receiving it directly from the intermediary lender (Exhibit 10). About a quarter (24.68 percent) of microborrowers used non-microloan program training or TA, with SBDC and local organizations being the main source (13.55 percent and 7.70 percent, respectively) (Appendix D, Exhibit 33). Findings for the use of external sources of training and TA are similar to the intermediary lender findings discussed above, although at lower frequencies.

**Exhibit 10.** Sources of technical assistance and training received by borrowers, based on borrower survey




NOTE: Based on the borrower weighted survey data. Percentages do not add to 100 percent.

There are some discrepancies in the responses of training and TA provided by intermediary lenders and the training and TA received by microborrowers. Some of these discrepancies in responses are likely due to difficulties in engaging borrowers into receiving training. Intermediary lenders reported during the interviews that they encountered difficulties in recruiting borrowers into training post-loan adjudication. Optimal also asked borrowers for suggestions to improve the microloan program and almost a quarter (23.04 percent) reported difficulties getting training and the need for additional training and assistance. This is an area for the SBA to further explore on the reasons for the discrepancies in opinion. Nonetheless, there is a demand for training and TA for microborrowers.

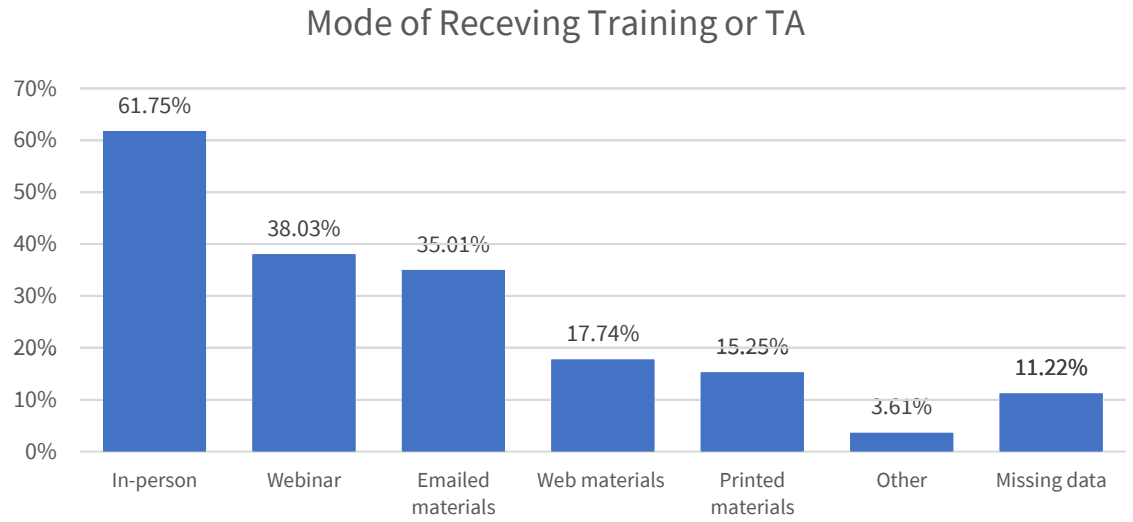
| Borrowers' Quotes |
| --- |
| • "I feel like I was on my own to learn and had not much help with moving forward."<br>• "They need to reach out to their clients more often. I never received technical support or other programs."<br>• "Would have liked to have been offered some assistance in the form of mentors or workshops. My relationship with [the intermediary] was exclusively a financial one." |

| Intermediary's Quotes |
| --- |
| • "It's easy to provide pre-TA to potential borrowers because they need the money and are willing to do what they have to do to get it. However, it's much more difficult to provide post-loan TA. Once they have the money, they do not think they need additional assistance, don't want to participate in or have time to participate in post-loan TA."<br>• "…many clients get a loan from us and are then very difficult to engage with on a TA level. They don't want our help or are just too busy to engage." |

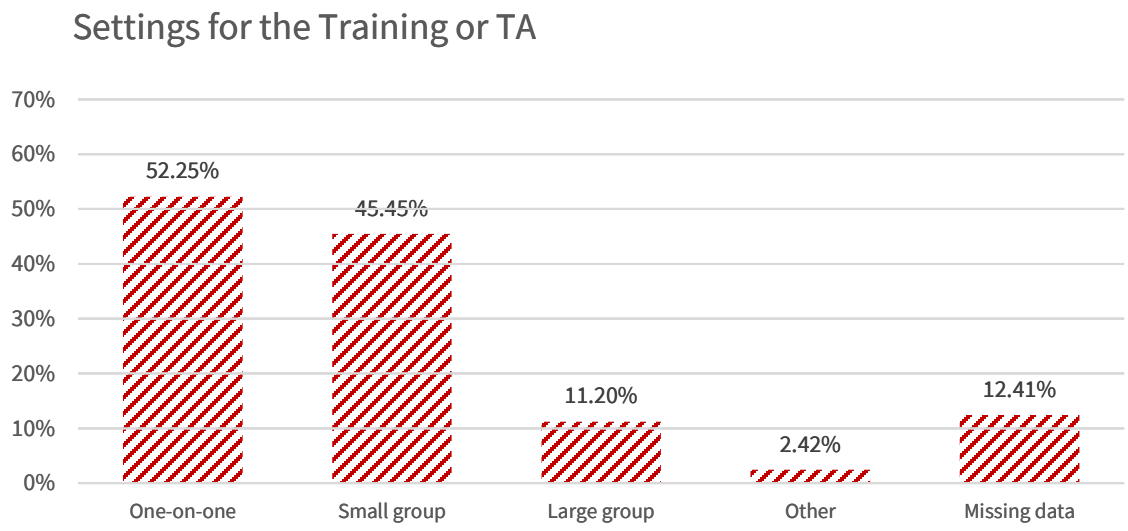
With respect to the duration and frequency of training, borrowers that received training reported an average of 22 hours of training, and half of the borrowers (54.10 percent) reported receiving training and TA once or once per quarter (or a few times) (Appendix D, Exhibit 34). These estimates of training intensity are greater than those reported by intermediaries. However, borrowers' survey responses likely include all training sources and not just the intermediary lender's provided training. With respect to the proficiency level of training, 51.16 percent reported receiving training at the basic proficiency (simple content) and 40.48 percent reported receiving training with somewhat difficult content (intermediate proficiency) (Appendix D, Exhibit 35).

Like intermediary lender responses, borrowers reported that the intermediary lender contacted them to identify the types of TA or training that the borrower needed (71.44 percent). Half of the intermediary lenders conducted post-training surveys to gain feedback on the effectiveness of the training (58.21 percent) (Appendix D, Exhibit 36). Again, borrowers had much lower frequencies for the modes and settings of training received than what the intermediary lenders reported they provided. Almost all intermediaries reported using in-person and one-on-one modalities, and most borrowers reported these same training modalities (Exhibit 11). Borrowers were less likely than intermediaries to report engagement in virtual types of training.

**Exhibit 11.** Mode and setting of technical assistance and training received by borrowers, based on borrower survey




NOTE: Based on the borrower weighted survey data among borrowers who received training




Borrowers reported receiving less diversity of training topics than intermediaries reported providing to borrowers (Exhibit 12). Half of the microborrowers reported receiving two topics: business management (56.65 percent) and growth plan (54.30 percent) training. Noteworthy, only a third (33.50 percent) reported receiving financing training, and a quarter (24.14 percent) reported receiving referrals to business resources and training programs. Subjectivity in the definition of what is considered TA and what constitutes each of training topic may cause some unexpected variations in borrower responses.

**Exhibit 12.** Topics of technical assistance and training received by borrowers, based on borrower survey

| Topics covered by the training or TA | n | Percent |
|---|---|---|
| Business management (marketing, sales, human resources, accounting, etc.) | 209 | 56.65 |
| Business growth plan | 183 | 54.34 |
| Networking with other businesses, agencies, and organizations | 114 | 33.92 |
| Access to business financing, capital, and bonding | 106 | 33.50 |
| Business formation | 111 | 32.98 |
| Taxes, licenses, permits, legal requirements, federal, state, and local laws, etc. | 79 | 23.92 |
| Innovation and entrepreneurship | 87 | 23.80 |
| Referrals to business resources and training programs | 95 | 24.14 |
| Loan servicing and addressing loan repayment difficulties | 73 | 23.50 |
| Obtaining contracts | 35 | 11.17 |
| Other | 22 | 5.61 |
| Respondents with missing data | 45 | 13.12 |

NOTE: Based on the borrower weighted survey data among borrowers who received training.

Borrowers' qualitative responses underscored the importance of financing training and referrals to business resources and training programs. These training needs were mentioned as important by borrowers' qualitative responses, see borrower's quotes below.

| Borrowers' Quotes |
|---|
| • "[need] More follow-up about the services referred to."<br>• "[need] More communication about options for help and training. I would like to know if I qualify for any other COVID help or rural loans/grants." |

## Research Question 4: How does the type, proficiency level, frequency, duration, and delivery mode of technical assistance relate to microloan borrower job creation, revenue growth, and business tenure outcomes?

| Overview of Findings — Research Question 4 |
|---|
| • Training from the intermediary lender, from sources other than microloan, and the intermediary referring borrowers to external training sources are related to business growth and survival.<br>• Intensity and scope of training are positively related to business outcomes. |

### Business Outcomes by Training Dimensions

To determine how business growth outcomes vary by training dimensions (sources and aspects), Optimal conducted regression models for the time period of the loan initiation year to CY 2019. These regression models identified training sources and aspects that were statistically related with business outcomes (the number of employees and revenue) and business survival, while controlling for other relevant factors such as region, urbanicity, years since the loan initiation, industry, and other factors.

Optimal observed a significant relationship between performance of business outcomes, controlling for background factors, when firms received (Appendix D, Exhibit 40):

- *Training from sources other than microloan*: Firms were 58.77 percent more likely to have a larger number of employees than those that did not receive this training.
- *Intermediary referral to external training sources*: Firms had 134.54 percent greater revenue than those that did not receive this referral.
- *Training from the intermediary*: Firms were 46.85 percent more likely to have a larger number of employees than those that did not receive this training.

Borrowers who reported finding the training sources themselves had lower revenue (86.23 percent less) than those who did not find the training sources themselves. There are other significant relationships with businesses training. Firms that reported receiving at least 20 hours of training had 112.04 percent greater revenue and a larger number of employees than those that received less than 20 hours of training.

Dimensions of training were weakly related to business outcomes. Receiving a greater number of training topics and virtual training modalities positively related to revenue and employees' growth. The intensity and scope of training had a positive relationship to better business outcomes.

To continue exploring the relationship of the microloan program activities to business performance, we conducted analyses of the perceived effectiveness of the program, particularly of the training received through the intermediary lenders.

## Satisfaction with the Program

Most borrowers reported satisfaction with various aspects of the program. Both borrowers and lenders reported that participation in the microloan program helped borrowers achieve business growth outcomes.

Most of the borrowers reported satisfaction with the program overall (70.20 percent), particularly with the loan amount (80.34 percent), the relationship with the intermediary lender (81.40 percent), and with the training received from the intermediary lender (77.55 percent) (Appendix D, Exhibit 37). Most of the borrowers who received training (71.70 percent) reported that the microloan's trainings or TA received was helpful to improve business management knowledge, skills, and abilities (Appendix D, Exhibit 38). A large proportion (83.75 percent) of borrowers said that they would recommend the intermediary lender to other business owners and entrepreneurs.

Most of the borrowers (82.33 percent) reported that participation in the microloan program helped them achieve business growth outcomes, particularly increases in revenue (49.28 percent) (Exhibit 13). Most of the intermediary lenders also reported that the microloan program training and the loan improved business growth outcomes for microborrowers (88.89 percent and 93.34 percent, respectively) (Appendix D, Exhibit 39). In addition, half of the borrowers (50.59 percent) indicated that participation in the microloan program helped businesses survive during the COVID-19 pandemic (Appendix D, Exhibit 38).

**Exhibit 13.** Borrower's perception that participation in the microloan program helped them achieve business growth outcomes

| | n | Percent |
|---|---|---|
| **Participation in the microloan program helped achieve any business growth outcomes:** | **574** | **82.33%** |
| Increased Gross Annual Revenue | 346 | 49.28% |
| Increased the number of employees | 180 | 28.38% |
| Opened a new location for existing business | 79 | 13.12% |
| Opened a new business that did **not** exist before receiving the loan | 137 | 19.34% |
| Became owner of another business that existed before receiving the loan | 36 | 4.43% |
| Other (business growth and survival, business management and finances, business improvements, survive pandemic, etc.) | 107 | 16.25% |
| Total | 697 | |

NOTES: Based on the borrower weighted survey data. Other included business growth and survival, management and finances, improvements, etc.

The regression analyses also showed positive correlations between the borrower's satisfaction with the microloan program training and satisfaction with the loan amount to revenue growth and business survival from the loan initiation to 2019 (Appendix D, Exhibit 41). For example, borrowers satisfied with intermediary's training and technical assistance were 85.90% more likely to stay in business than those who were not satisfied. Borrowers satisfied with the amount of microloan had 289.02% higher revenue growth than those who were not satisfied. Most of the qualitative data tells a similar story as above.

| Borrowers' Quotes |
|---|
| • "This loan program totally kept us alive through 2020! I'm hoping to take advantage of more technical assistance through the lender in 2021 and 2022!"<br>• "The [intermediary] has been one of our most valuable resources pre/during/post pandemic."<br>• "The program was extremely helpful to the growth of my business and to my understanding of financial reports."<br>• "The program helped start my business; it would have been difficult without [it]." |

## Key Findings and Recommendations

Below are the key findings to each of the four research questions. As mentioned before, the reported findings are for outcomes where there were statistically significant differences, regardless of the outcome change magnitude. These findings should be read with caution due to the previously discussed methodological limitations of the study.

### Research Question 1: What are the job creation/retention, revenue growth, and business tenure outcomes of microloan program borrowers?

Optimal observed positive outcome changes for microbusiness from loan initiation to CY 2019. However, there is a relatively small negative effect on employment during the COVID-19 pandemic. The decrease is 0.5 employees in 2020 from a mean of 5.81 employees in 2019. Microborrowers did not show a change in business revenue.

- An increase in revenue and number of employees from loan initiation to CY 2019.

- A decrease in the number of employees (0.50) during the COVID-19 crisis.

### Research Question 2: How do job creation/retention, revenue growth, and business tenure outcomes vary by business characteristic?

The negative outcomes are disproportionally observed on microborrowers and businesses that are more susceptible on average to be out of business. The microloan amount has a positive relationship with business outcomes. Microborrowers that had access to other financing sources are related to positive business outcomes.

- Startups, sole proprietorship, and minority-owned businesses had lower revenue, fewer employees, and were out of business more often than other microborrowers and their businesses (Appendix D, Exhibit 13).
- Businesses had 19.04 percent greater revenue than firms with a lower microloan amount (Appendix D, Exhibit 16).
- Having financing from other sources has a positive relationship to business outcomes (Appendix D, Exhibit 13).

### Research Question 3: What types, proficiency level, frequency, duration, and delivery modes of technical assistance are being provided to microloan program borrowers?

One of the "controversial" findings in the survey of microborrowers and of the intermediary lenders is that 44 percent of borrowers reported not receiving training or TA from their intermediary lender. This microborrower response is despite almost all intermediaries stating they offered training to their borrowers. It is possible that microborrowers may have a different understanding on what is considered training or that the intermediary lenders offered training and the microborrowers did not accept it and, as such, microborrowers did not receive the training.

- Half of microborrowers reported not receiving training or TA, while almost all intermediary lenders stated they offered training and TA to microborrowers (Appendix D, Exhibit 33).
- Of the microborrowers that received training, microborrowers received assistance once or once per quarter (or a few times) (Appendix D, Exhibit 34), and assistance was often delivered as a one-on-one training (Appendix D, Exhibit 22).

### Research Question 4: How does the type, proficiency level, frequency, duration, and delivery mode of technical assistance relate to microloan borrower job creation, revenue growth, and business tenure outcomes?

The microborrower survey responses reported that participation in the microloan program helped business performance, particularly on annual revenue. The magnitude of relationship between the training and TA to businesses' outcomes is positive although very small mostly due to the characteristics of these businesses (over 60 percent have between zero and two employees).

- Most borrowers reported that the microloan program helped with business outcomes, particularly on annual revenue (Appendix D, Exhibit 38).
- Based on results from the regression analysis, there are positive relationships between training and TA to revenue, employment, and business survival (Appendix D, Exhibit 38).

## Program Recommendations

As discussed below, further study is needed. However, based on the findings from the study, there are three areas where program changes could be explored: training and TA, loan terms, and program administration.

Regarding **training and TA**, microloan borrowers reported larger growth and better survival outcomes when intermediary lenders provided TA and training and in helping microborrowers access other training sources. Business with one-on-one assistance and training reported better business outcomes. Following those relationships, the SBA and intermediary lenders could target outreach and training and TA to the types of businesses facing challenges to growth (startups, sole proprietorships, and minority-owned firms), focus on providing training and in getting businesses to participate in these activities, and offer one-on-one, web-based training, and access to mentors and networks. Intermediary lenders recommend allowing greater flexibility on borrower and non-borrower TA funds, the 50/50 pre-post TA rule, and reporting requirements from TA grant recipients (or alternatively, provide additional funds for the reporting).

Borrowers and intermediaries suggested ways to improve the **loans** themselves: reduce interest rate, increase the maxim loan amount, allow purchase of real estate for business, longer repayment term, more flexibility on write-offs and delinquencies, allow a greater number of months for deferral. These suggestions work in different ways but allow for the program to be more comprehensive, flexible, and competitive for small business owners.

Regarding **program administration**, borrowers suggested that the SBA should simplify paperwork. Similarly, intermediary lenders suggested the SBA reduce paperwork[22]; minimize (burdensome) quarterly reimbursement requests; adopt the use of online systems for tracking business outcomes; and improve the reporting system to reduce burden and manual entry. For example, there was a frequent mention to use electronic rather than paper signatures (Appendix E). Currently, the SBA requires wet-ink signatures for documentation. This adds to the burden of processing and servicing loans by requiring borrowers to have access to printers to print and sign documents and intermediaries to physically be in an office to file the paperwork. During a time when most intermediary functions were virtual due to the COVID-19 pandemic, the terms of the microloan program made this difficult. Electronic signatures are used for other loan programs and contracts, with some using signature software like DocuSign or Adobe to authenticate the signatures. There are ways to make electronic signatures securely while allowing virtual offices to thrive.

## Suggestions for Future Evaluations

This evaluation provides a foundation on the knowledge of the outcomes of microborrowers and the reported outcomes for microborrowers receiving TA and training. However, there is still a substantial gap in knowledge regarding the causal relationship between TA and training and business outcomes. A quasi-experimental study could answer the next round of questions on what type, how and when to provide TA and training to maximize the return in investment. Our thoughts on future studies that will

[22] This issue was mentioned by more than a quarter of intermediaries (Appendix F). Some examples are: "less restrictions surrounding documentation of funds usage so that the program is more accommodating to immigrant, minority, and women-owned businesses" and "CDFIs usually deal with reduced staff and limited resources and expertise. Every time we are asked to track a new metric or produce a new report, it makes things incredibly challenging on our end."

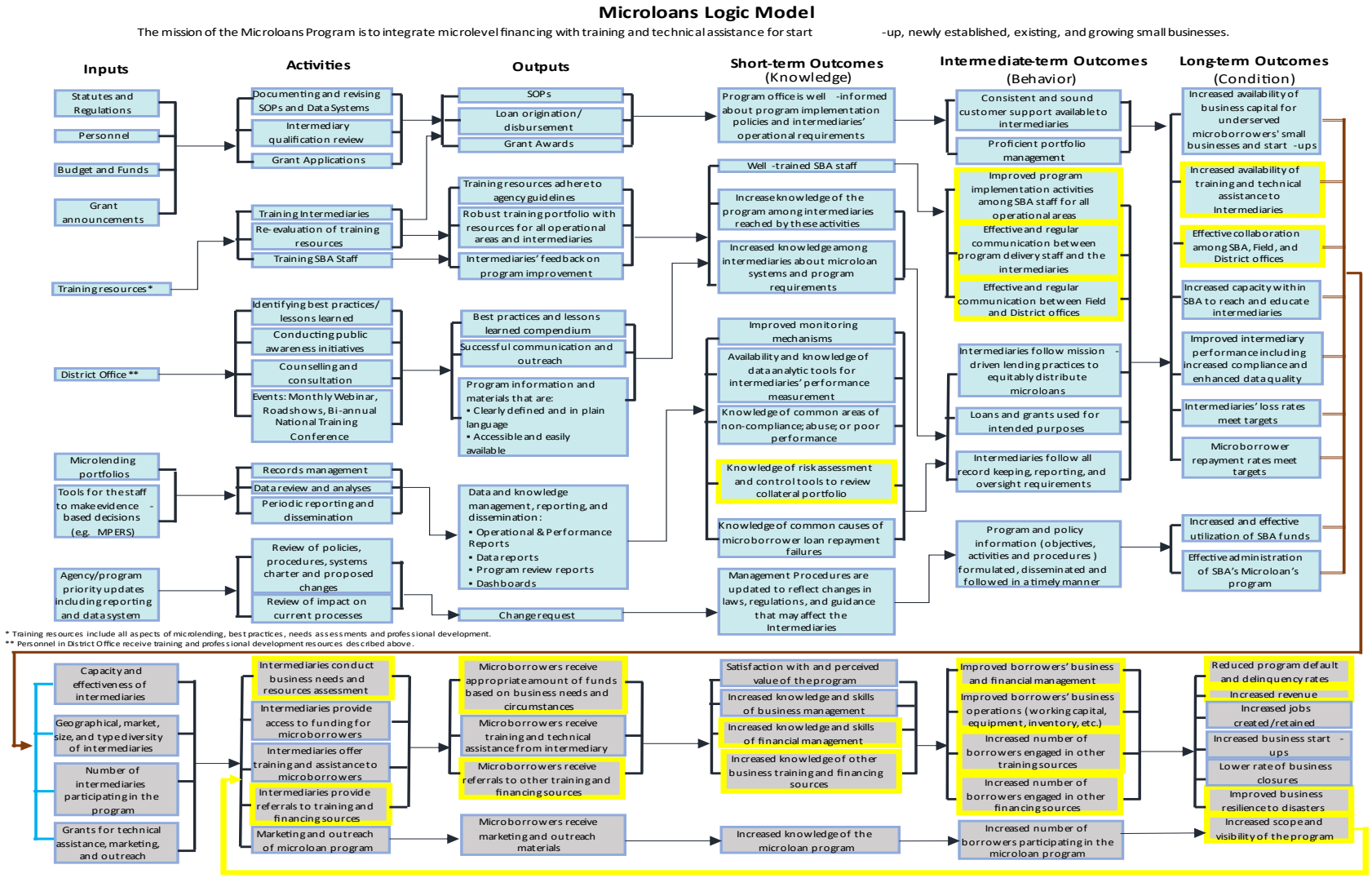
close the knowledge gap and have the potential to guide program change for better business outcomes are:

- Why do startups, sole proprietorships and minority-owned firms report lower business survival and growth outcomes than other firms? An analysis of these firms' challenges and resources would help to mitigate, address, and prevent obstacles to their business success. A qualitative inquiry would be particularly relevant to gather actionable data.
- Do program experiences and borrowers' outcomes differ by lender type (such as CDFI, MDI, etc.)? Most of the intermediaries in this study (93.33 percent) were non-profit microenterprise development organizations. However, this study did not examine differences by types of intermediaries, which might provide additional program implementation recommendations.
- What are the differences in business outcomes based on the microborrowers geographic location? This study found that businesses in urban locations had larger employment growth. However, future studies with larger samples and better response rates may find additional differences for businesses in urban, suburban, and rural locations and their business outcomes and program experiences.

In terms of suggestions for conducting studies with higher response rates or being able to establish causality, Optimal suggests:

- The SBA anticipates and mitigates low response rates from program participants. This study covered a broad timeframe for microloans (over 10 years). A narrower focus, better access to and more accurate contact information for microborrowers, and more rigorous data collection procedures (described in the previous section) may help to mitigate methodological issues associated with the low response rates. The important factor in increasing response rates is for the program to collect, track, and update the contact information for the borrowers, particularly email addresses.
- The SBA gains access to Census restricted data to test causal relationships. This would allow to build a benchmark for the microloan borrowers' business performance. Since most firms that survive the first three years after the formation tend to grow, the significant increase in business growth over time cannot be attributed solely to the program. Thus, without using a comparison group of firms that did not participate in the program, the study was not able to establish causality of the microloan or training to borrowers' business growth and survival outcomes. Future evaluations could consider developing a quasi-experimental research design by using Census Longitudinal Business Database (LBD) and Census Business Dynamics Statistics (BDS) to develop a comparison group of businesses comparable to those in the microloan program. This will allow the SBA to determine the effect of the program on business growth and survival.

# Appendix A: Revised Logic Model



Microloan Program Logic Model

The mission of the Microloan Program is to integrate micro-level financing with training and technical assistance for start-up, newly established, existing, and growing small businesses.

1. Inputs Microloan Program Office Statutes and Regulations
2. Inputs Microloan Program Office Personnel
3. Inputs Microloan Program Office Budget and Funds
4. Inputs Microloan Program Office Grant announcements
    a. Activities Microloan Program Office Documenting and revising SOPs and Data Systems
    b. Activities Microloan Program Office Intermediary qualification review
    c. Activities Microloan Program Office Grant Applications
        i. Outputs Microloan Program Office SOPs
        ii. Outputs Microloan Program Office Loan origination/disbursement
        iii. Outputs Microloan Program Office Grant Awards
            1. Short-term Outcomes (Awareness) Microloan Program Office Program office is well-informed about program implementation policies and intermediaries' operational requirements
                a. Intermediate-term Outcomes (Behavior) Microloan Program Office Consistent and sound customer support available to non-profit intermediaries
                b. Intermediate-term Outcomes (Behavior) Microloan Program Proficient portfolio management
                i. Long-term Outcomes (Condition) Microloan Program Office Increased availability of business capital for underserved borrowers small businesses and start-ups

1. Inputs Microloan Program Office Training resources
    a. Activities Microloan Program Office Training Intermediaries (this activity unilaterally connects to SOPs; Loan origination/disbursement; and Grant Awards Outputs)
    b. Activities Microloan Program Office Re-evaluation of training resources (this activity unilaterally connects to SOPs; Loan origination/disbursement; and Grant Awards Outputs)
    c. Activities Microloan Program Office Training SBA Staff
        i. Outputs Microloan Program Office Training resources adherent to agency guidelines
        ii. Outputs Microloan Program Office Robust training portfolio with resources for all operational areas and Microlenders.
        iii. Outputs Microloan Program Office Intermediaries' feedback on program improvement
            1. Short-term Outcomes (Awareness) Microloan Program Office Well-trained SBA staff

a. Intermediate-term Outcomes (Behavior) Improved program implementation activities among SBA staff for all operational areas
b. Intermediate-term Outcomes (Behavior) Effective and regular communication between program delivery staff and the intermediaries
c. Intermediate-term Outcomes (Behavior) Effective and regular communication between Field and District offices
    i. Long-term Outcomes (Condition) Microloan Program Office Strong relationships between Field and District offices and eligible pool of applicants
    ii. Long-term Outcomes (Condition) Microloan Program Office Increased capacity within SBA to reach and educate intermediaries
    iii. Long-term Outcomes (Condition) Microloan Program Office Improved microlender performance including increased compliance and enhanced data quality
    iv. Long-term Outcomes (Condition) Microloan Program Office Microlender loss rates meet targets
    v. Long-term Outcomes (Condition) Microloan Program Office Microborrower repayment rates meet targets
    vi. Long-term Outcomes (Condition) Microloan Program Office Increased availability of training and technical assistance to intermediaries
    vii. Long-term Outcomes (Condition) Microloan Program Office Effective collaboration among SBA, Field, and District Offices

1. Inputs Microloan Program Office District Office
    a. Activities Microloan Program Office Identifying best practices/lessons learned
    b. Activities Microloan Program Office Conducting public awareness initiatives
    c. Activities Microloan Program Office Counselling and consultation
    d. Activities Microloan Program Office Events: Monthly Webinar, Roadshows, Bi-annual National Training Conference
        i. Outputs Microloan Program Office Best practices and lessons learned compendium
        ii. Outputs Microloan Program Office Successful communication and outreach
        iii. Outputs Microloan Program Office Program and POC information & materials that are: Clearly defined and in plain language, and Accessible and easily available
            1. Short-term Outcomes (Awareness) Microloan Program Office Increase knowledge of the program among intermediaries reached by these activities

2. Short-term Outcomes (Awareness) Microloan Program Office Increased knowledge among intermediaries about microlending systems and microloans program requirements
    a. Intermediate-term Outcomes (Behavior) Microloan Program Office Effective and regular communication between program delivery staff and the intermediaries/ grantees
    b. Intermediate-term Outcomes (Behavior) Microloan Program Microlenders follow mission-driven lending practices to equitably distribute microloans
    c. Intermediate-term Outcomes (Behavior) Microloan Program Loans and grants used for intended purposes
    d. Intermediate-term Outcomes (Behavior) Microloan Program Intermediaries follow all record keeping, reporting, and oversight requirements
        i. Long-term Outcomes (Condition) Microloan Program Office Strong relationships between Field and District offices and eligible pool of applicants
        ii. Long-term Outcomes (Condition) Microloan Program Increased capacity within SBA to reach and educate intermediaries
        iii. Long-term Outcomes (Condition) Microloan Program Improved microlender performance including increased compliance and enhanced data quality
        iv. Long-term Outcomes (Condition) Microloan Program Microlender loss rates meet targets
        v. Long-term Outcomes (Condition) Microloan Program Microborrower repayment rates meet targets

1. Inputs Microloan Program Office Microlending portfolios
2. Inputs Microloan Program Office Tools for the staff to make evidence-based decisions (e.g. MPERS)
    a. Activities Microloan Program Office Records management
    b. Activities Microloan Program Office Data review and analyses
    c. Activities Microloan Program Office Periodic reporting and dissemination
        i. Outputs Microloan Program Office Data and knowledge management, reporting, and dissemination: Operational & Performance Reports; Data reports; Program review reports; and Dashboards
            1. Short-term Outcomes (Awareness) Microloan Program Office Improved monitoring mechanisms
            2. Short-term Outcomes (Awareness) Microloan Program Office Availability and knowledge of data analytic tools for microlenders performance measurement

3. Short-term Outcomes (Awareness) Microloan Program Office Knowledge of common areas of non-compliance; abuse; or poor performance
4. Short-term Outcomes (Awareness) Microloan Program Office Knowledge of risk assessment and control tools to review collateral portfolio, Intermediary's default and delinquency rates
5. Short-term Outcomes (Awareness) Microloan Program Office Knowledge of common causes of microborrower loan repayment failure
    a. Intermediate-term Outcomes (Behavior) Microloan Program Office Loans and grants used for intended purposes
    b. Intermediate-term Outcomes (Behavior) Microloan Program Office Intermediaries follow all record keeping, reporting, and oversight requirements
        i. Long-term Outcomes (Condition) Microloan Program Office Increased capacity within SBA to reach and educate intermediaries
        ii. Long-term Outcomes (Condition) Microloan Program Office Improved microlender performance including increased compliance and enhanced data quality
        iii. Long-term Outcomes (Condition) Microloan Program Office Microlender loss rates meet targets
        iv. Long-term Outcomes (Condition) Microloan Program Office Microborrower repayment rates meet targets

1. Inputs Microloan Program Office Agency/program priority updates including reporting and data system
    a. Activities Microloan Program Office Review of policies, procedures, systems charter and proposed changes
    b. Activities Microloan Program Office Review of impact on current processes
        i. Outputs Microloan Program Office Change request
            1. Short-term Outcomes (Awareness) Microloan Program Office Management Procedures are updated to reflect changes in laws, regulations, and guidance that may affect the Intermediaries
                a. Intermediate-term Outcomes (Behavior) Microloan Program Office Program and policy information (objectives, activities and procedures) formulated, disseminated and followed in a timely manner
                i. Long-term Outcomes (Condition) Microloan Program Office Increased and effective utilization of SBA funds
                ii. Long-term Outcomes (Condition) Microloan Program Effective administration of SBA's Microloan's program

**All long-term outcomes of Microloan Program Office as well as the following are Intermediary inputs**

1. Inputs Intermediaries Capacity and effectiveness of intermediaries
2. Inputs Intermediaries Geographical, market, size and business distribution of intermediaries
3. Inputs Intermediaries Number of intermediaries participating in the program
4. Inputs Intermediaries Grants for technical assistance, marketing and outreach
    a. Activities Intermediaries – Intermediaries provide access to funding for small businesses
    b. Activities Intermediaries – Intermediaries provide training and counseling to microborrowers
    c. Activities Intermediaries Marketing and outreach of microloans program
    d. Activities Intermediaries – Intermediaries conduct business needs and resources assessment
    e. Activities Intermediaries – Intermediaries provide referrals to training and financing sources
        i. Outputs Microborrowers receive appropriate amount of funds based on business needs and circumstances
        ii. Outputs Microborrowers receive training and technical assistance/support
        iii. Outputs Microborrowers receive marketing and outreach materials
        iv. Outputs Microborrowers receive referrals to other training and financing sources
            1. Short-term Outcomes (Awareness) Intermediaries Satisfaction and perceived value of the program among microborrowers
            2. Short-term Outcomes (Awareness) Intermediaries Increased knowledge and skills of business management
            3. Short-term Outcomes (Awareness) Intermediaries Increased knowledge of other business training and financing sources
            4. Short-term Outcomes (Awareness) Intermediaries Increased knowledge and skills of financial management
            5. Short-term Outcomes (Awareness) Intermediaries Increased knowledge about the program among potential microborrowers
                a. Intermediate-term (Behavior) Outcomes Intermediaries Increased number of borrowers engaged in other training sources
                b. Intermediate-term (Behavior) Outcomes Intermediaries Improved borrowers' business and financial management
                c. Intermediate-term (Behavior) Outcomes Intermediaries Improved borrowers' business operations (working capital, equipment, inventory, etc.)
                d. Intermediate-term (Behavior) Outcomes Intermediaries Increased number of borrowers participating in the microloan program

e. Intermediate-term (Behavior) Outcomes Intermediaries Increased number of borrowers engaged in other financing sources
    i. Long-term Outcomes (Condition) Intermediaries Jobs created/retained
    ii. Long-term Outcomes (Condition) Intermediaries Reduced program default and delinquency rates
    iii. Long-term Outcomes (Condition) Intermediaries Increased Revenue
    iv. Long-term Outcomes (Condition) Intermediaries New business start-ups
    v. Long-term Outcomes (Condition) Intermediaries Lower rate of business closures
    vi. Long-term Outcomes (Condition) Intermediaries Improved business resilience to disasters
    vii. Long-term Outcomes (Condition) Intermediaries Increased scope and visibility of the program

# Appendix B: Instruments

**SBA Microloan Microborrowers Survey OMB #3245-0422, exp. 4/30/2024**

1. I hereby agree that I understand all of the information presented in this consent form. By checking "Yes", I freely and voluntarily agree to participate in this survey. *
    a. Yes
    b. No
2. Since you received the business loan from [] in [], did you participate in any other government lending or other financial assistance program?
    a. Yes
    b. No
3. Which of the following lending programs did you participate in? (choose all that apply)
    a. Economic Injury Disaster Loan (EIDL)
    b. Paycheck Protection Program (PPP)
    c. USDA Rural Microentrepreneur Assistance (RMAP)
    d. USDA Farm Service Agency (FSA)
    e. Microloan Community Development Financial Institutions (CDFI)
    f. 7(a) Loan Guaranty
    g. 504 Certified Development Company Loan (CDC/504) Program
    h. Small Business Investment Company (SBIC)
    i. Community Advantage Program
    j. America's Recovery Capital (ARC) Loan Program
    k. USDA Rural Business Development Grants
    l. Other, please specify
4. Since you received the business loan from [] in [], did you participate in any training and technical assistance programs other than through the Microloan Program?
    a. Yes
    b. No
5. Which of the following technical assistance and training programs did you participate in? (choose all that apply)
    a. Women’s Business Centers (WBC)
    b. Veteran’s Business Outreach Centers (VBOC)
    c. Small Business Development Centers (SBDC)
    d. Service Corps of Retired Executives (SCORE)
    e. Program for Investment in Micro-Entrepreneurs (PRIME)
    f. USDA Rural Microentrepreneur Assistance Program (RMAP)
    g. USDA Farm Service Agency (FSA) Microloan
    h. Community Development Financial Institutions (CDFI)
    i. Local firms, organizations, colleges, or universities
    j. Other, please specify

6. Since you received the business loan from [] in [], did you obtain any financing from other lending sources, such as friends or family, traditional bank, investor, or others?
    a. Yes
    b. No
7. Did you obtain additional financing from any of the following sources? (choose all that apply)
    a. Friends or family
    b. Traditional bank
    c. Community bank
    d. Investor
    e. Nonprofit lending organizations
    f. Other, please specify
8. Did you receive any training or technical assistance from the following sources? (Check all that apply)
    a. No training or technical assistance received
    b. [] provided technical assistance or training referred you to
    c. [] external sources for technical assistance or training
    d. Found the sources of technical assistance or training myself
    e. Other, please specify
9. Did you receive training or technical assistance from [] during the following time periods? (choose all that apply)
    a. Prior to your loan initiation
    b. After your loan initiation
    c. Other, please specify
10. Did [] contact you to identify specific types of technical assistance or training that you needed?
    a. Yes
    b. No
11. Which types of outreach activities or assessment for technical assistance or training did your lender organization conduct?
    a. Outreach and advertisement
    b. Needs assessment measures
    c. Interviews
    d. Site visits
    e. Other methods, please specify
12. Which topics were covered by the training or technical assistance that you received? (choose all that apply)
    a. Business formation
    b. Business growth plan
    c. Business management (marketing, sales, Human Resources, accounting, etc.)
    d. Taxes, licenses, permits, legal requirements, federal, state, and local laws etc.
    e. Obtaining contracts
    f. Access to business financing, capital, bonding
    g. Networking with other businesses, agencies, and organizations

    h. Innovation and entrepreneurship
    i. Referrals to business resources and training programs
    j. Information about loan servicing and addressing loan repayment difficulties
    k. Other, please specify
13. What is the estimated total hours of training or technical assistance received from the Microloan Program?
14. Considering all training or technical assistance that you've received from the Microloan Program, how often did you participate in training or technical assistance sessions? (Choose one)
    a. Once
    b. Once per quarter
    c. Once per month
    d. Once per week
    e. More than once per week
    f. Other, please specify
15. How did you receive the training or technical assistance? (choose all that apply)
    a. In-person Webinar, teleconferencing, telephone
    b. Web information (videos, articles, peer sharing of information)
    c. Email information and materials
    d. Printed materials
    e. Other, please specify
16. What were the settings for the training or technical assistance? (choose all that apply)
    a. One-on-one
    b. Small group
    c. Large group
    d. Other, please specify
17. What were the ability/skill levels for the trainings or technical assistance that you received? (choose all that apply)
    a. Basic, novice (simple content)
    b. Intermediate (somewhat difficult content)
    c. Advanced (difficult content)
    d. Expert (very difficult content)
    e. Other, please specify
18. Did your lender organization conduct post-training survey and feedback to gain your feedback on effectiveness of technical assistance and training?
    a. Yes
    b. No
19. To what extent were the trainings or technical assistance you've received from the Microloan Program helpful to improving your business management knowledge, skills, and abilities. (Choose one)
    a. To a very large extent
    b. To a large extent
    c. To a moderate extent

    d. To a small extent
    e. Not at all
20. What was your business Gross Annual Revenue in the year of the loan initiation, []? (Please provide your best estimate)
21. What was your business Gross Annual Revenue in 2019? (Please provide your best estimate)
22. What was your business Gross Annual Revenue in 2020? (Please provide your best estimate)
23. How many employees did your business employ, excluding yourself, in the year of the loan initiation, []? (Please provide your best estimate)
24. How many employees did your business employ, excluding yourself, in 2019? (Please provide your best estimate)
25. How many employees did your business employ, excluding yourself, in 2020? (Please provide your best estimate)
26. Do you feel that your participation in the Microloan Program helped you achieve any of the following business growth outcomes? (choose all that apply)
    a. No business growth outcomes
    b. Increased Gross Annual Revenue
    c. Increased the number of employees
    d. Opened a new location for existing business
    e. Opened a new business that did not exist before receiving the loan
    f. Became owner of another business that existed before receiving the loan
    g. Other, please specify
27. Is your firm still in business?
    a. Yes
    b. No
28. Was your business sold or permanently closed due to the Coronavirus Pandemic (COVID-19)?
    a. Yes
    b. No
29. Due to the Coronavirus Pandemic (COVID-19), did you experience any of the following business difficulties? (choose all that apply)
    a. Decreased Gross Annual Revenue
    b. Decreased the number of employees
    c. Decreased the total number of hours worked by employees
    d. Decreased the total number of hours the business-owner worked
    e. Closed business location(s)
    f. Considered closing the business location(s)
    g. Considered permanently closing the business
    h. Other, please specify
30. Do you believe your participation in the Microloan Program helped your business survive during the Coronavirus Pandemic (COVID-19)?
    a. Yes
    b. No
    c. No Opinion / Not Sure

31. Did you participate in any of the following lending programs as a result of the Coronavirus Pandemic (COVID-19)?
    a. Paycheck Protection Program (PPP)
    b. Paycheck Protection Program (PPP) loan forgiveness
    c. Economic Injury Disaster Loan (EIDL) Program
    d. Paid Sick Leave and Paid Family Leave Credit
    e. Employee Retention and Rehiring Credit
    f. Other federal relief programs
    g. Other state or local economic relief programs
    h. Banks or other financial institutions
    i. Other, please specify
32. Would you recommend [] to other business owners and entrepreneurs?
    a. Yes
    b. No
33. How satisfied are you with the following: Choose one per each item.
    a. Very Satisfied
    b. Satisfied
    c. Neutral
    d. Dissatisfied
    e. Very Dissatisfied
        i. The amount of the loan provided by []?
        ii. The interest rate of the loan provided by []?
        iii. The relationship with your lender,[], such as were they responsive, easy to reach, helpful?
        iv. The training or technical assistance that you received from []?
        v. The training or technical assistance that you received from other sources?
34. Do any of the following business certificates or designations currently apply to your business? (choose all that apply)
    a. 8(a) certified business
    b. HUBZone certified business
    c. Small Disadvantaged Business
    d. Small Business
    e. Minority-owned business
    f. Veteran or service member-owned business
    g. Women-owned business
    h. Located on Native American-owned land
    i. Other, please specify
35. What year did the owner become an owner, or part owner, of the business?
36. What's the age of the business owner?
37. What's the gender of the business owner?
    a. Male
    b. Female
    c. Other

    d. Prefer not to answer
38. Is the business owner Hispanic or Latino?
    a. Yes
    b. No
    c. Prefer Not to Answer
39. What's the race of the business owner? (choose all that apply)
    a. Native Hawaiian or Pacific Islander
    b. Black or African American
    c. White
    d. Asian
    e. Native American or Alaska Native
    f. Prefer Not to Answer
40. What's the highest level of education of the business owner? (choose one)
    a. Some high school, no diploma
    b. High school or the equivalent
    c. Trade/technical/vocational training
    d. Some college, no degree
    e. Associate degree
    f. Bachelor's degree
    g. Master's degree
    h. Doctorate
41. Provide suggestions for program improvements to better meet your business needs and circumstances

**SBA Microloan Intermediary Lenders Survey OMB #3245-0422, exp. 4/30/2024**

1. I hereby agree that I understand all of the information presented in this consent form. By checking "Yes", I freely and voluntarily agree to participate in this survey. *
    a. Yes
    b. No
2. What's your organization type? Choose one.
    a. a private, nonprofit community development corporation
    b. a consortium of private, nonprofit community development corporations
    c. a quasi-governmental economic development entity
    d. an agency of a nonprofit entity established by a Native American Tribal Government
    e. Other, please specify
3. On which Date did your organization begin providing loans to small businesses?
4. On which Date did your organization begin participating in the SBA Microloan program?
5. Does your organization still participate in the SBA Microloan program?
    a. Yes
    b. No
6. On which Date did your organization stop participating in the SBA Microloan program?
7. Does your organization have any eligibility standards for Microloan program borrowers?
    a. Yes

    b. No
8. Which of the following eligibility standards does your organization have for Microloan program borrowers? (choose all that apply)
    a. Business credit score
    b. Owner's personal credit score
    c. No bankruptcies or foreclosures in the last one to two years
    d. Have sufficient income to support loan repayment
    e. Have good payment history with other business or personal creditors
    f. Demonstrate need for financing and/or inability to get bank financing
    g. Business age
    h. Business management experience
    i. Other, please specify
9. How frequently do you contact your microloan borrowers during their loan repayment period? (Choose One)
    a. Never
    b. Once
    c. Once per quarter
    d. Once per month
    e. Once per week
    f. More than once per week
    g. Other, please specify
10. What is the primary mode of communication with microloan borrowers? (Choose One)
    a. In-person Letters, printed materials
    b. Email information and materials
    c. Webinar, teleconferencing, telephone
    d. Other, please specify
11. Does your organization participate in other federal, state, or local lending programs?
    a. Yes
    b. No
12. In which lending programs does your organization participate in? (choose all that apply)
    a. USDA Rural Microentrepreneur Assistance (RMAP)
    b. USDA Farm Service Agency (FSA)
    c. Microloan Community Development Financial Institutions (CDFI)
    d. 7(a) Loan Guaranty
    e. 504 Certified Development Company Loan (CDC/504)
    f. Program Small Business Investment Company (SBIC)
    g. Community Advantage Program
    h. America's Recovery Capital (ARC)
    i. Loan Program Economic Injury Disaster Loan (EIDL)
    j. Paycheck Protection Program (PPP)
    k. Paycheck Protection Program (PPP) Loan Forgiveness
    l. Other, please specify

13. Does your organization use external sources for technical assistance and training to microloan borrowers?
    a. Yes
    b. No
14. Which of the following external sources of technical assistance and training does your organization use? (choose all that apply)
    a. Women's Business Centers (WBC)
    b. Veteran's Business Outreach Centers (VBOC)
    c. Small Business Development Centers (SBDC)
    d. SCORE Chapters (formerly Service Corps of Retired Executives)
    e. USDA Rural Microentrepreneur Assistance (RMAP)
    f. USDA Farm Service Agency (FSA)
    g. Microloan Community Development Financial Institutions (CDFI)
    h. Local firms, organizations, colleges, or universities
    i. Other, please specify
15. Does your organization provide technical assistance or training to Microloan borrowers?
    a. Yes
    b. No
16. Does your organization conduct outreach activities or assessments to identify Microloan borrowers for the specific types of technical assistance or training based on their business needs and performance?
    a. Yes
    b. No
17. Which types of outreach activities or assessment for technical assistance or training does your organization conduct with Microloan borrowers? (Choose all that apply)
    a. Outreach and advertisement
    b. Needs assessment measures
    c. Interviews
    d. Site visits
    e. Other methods, please specify
18. Which topics are typically covered by the training or technical assistance that your organization provides? (choose all that apply)
    a. Business formation
    b. Business growth plan
    c. Business management (marketing, sales, human resources, accounting, etc.)
    d. Taxes, licenses, permits, legal requirements, federal, state, and local laws etc.
    e. Obtaining contracts
    f. Access to business financing, capital, bonding
    g. Networking with other businesses, agencies, and organizations
    h. Innovation and entrepreneurship
    i. Referrals to business resources and training programs
    j. Information about loan servicing and addressing loan repayment difficulties
    k. Other, please specify

19. What are the typically delivery modes for the training or technical assistance that your organization provides? (choose all that apply)
    a. In-person Webinar, teleconferencing, telephone
    b. Web information (videos, articles, peer sharing of information)
    c. Email information and materials
    d. Printed materials
    e. Other, please specify
20. What are the settings for the training or technical assistance that your organization provides? (choose all that apply)
    a. One-on-one
    b. Small groups
    c. Large groups
    d. Other, please specify
21. Does your organization conduct post-training survey and feedback with Microloan borrowers to determine effectiveness of technical assistance and training?
    a. Yes
    b. No
22. To what extent did the ***trainings and technical assistance*** provided by your organization improve the business growth outcomes (revenue, employment, new business formation, business survival) for Microloan borrowers? (Choose One)
    a. To a very large extent
    b. To a large extent
    c. To a moderate extent
    d. To a small extent
    e. Not at al
23. Please use this space to explain your response to the question above. That is, why do you feel the ***trainings and technical assistance*** either had an impact or did not have an impact
24. To what extent did the ***loans*** provided by your organization improve the business growth outcomes (revenue, employment, new business formation, business survival) for Microloan borrowers? (Choose One)
    a. To a very large extent
    b. To a large extent
    c. To a moderate extent
    d. To a small extent
    e. Not at all
25. Please use this space to explain your response to question above. That is, why do feel the ***microloans*** either had an impact or did not have an impact.
26. Please provide suggestions for program improvements to better serve the financial and business needs of borrowers.

**Borrower Telephone Interview**

**OMB Control Number: 3245-0422**
**Expires 04 30, 2022**

## THE BORROWER INTERVIEW AND QUESTION PROMPTS (Q by Qs)

**How would you describe your relationship with your lender organization?**

- Q by Q: When you meet with or have discussions with your lender organization, can you describe how the communication and interactions make you feel?
    - What issues or difficulties did you have with your lender?
    - Q by Q: What problems or concerns do you have when interacting with your lender?
    - What are some positive aspects and benefits of your relationship with your lender?
    - Q by Q: What do you gain or feel good about when interacting your lender?

**How frequently were you in contact with your lender organization and what was the purpose of these contacts?**

- Q by Q: How many times do you typically meet or speak with your lender and what topics do you typically cover?
    - Were you able to obtain what you needed from these contacts?
    - Q by Q: Did your lender typically give you what you asked for or needed?
    - Was your lender responsive to your issues or concerns? Please describe these experiences.
    - Q by Q: Did your lender have the answers or solutions to help you? List a few examples of the help the lender provided or failed to provide.

**What improvement to the microloan program or your lender organization would make it easy for borrowers to obtain loans?**

- Q by Q: What changes would you suggest to make it better for those who need loans?
    - Did you experience any issues with applying for or receiving the loan?
    - Q by Q: Did you have any problems when you applied for a loan?
    - Did you experience any issues with your lender servicing your loan?
    - Q by Q: Did you have any problems with your lender when you applied for a loan?

**What training or technical assistance types, topics, and delivery modes you think were the most effective in promoting your business survival and growth?**

- Q by Q: What types of assistance did you receive that was most helpful in making your business successful? What about that training made it effective? How did that that training lead to business growth or survival?

**What are suggestions do you have for the improvements to training or technical assistance to help promote job creation or retention, revenue growth, and business survival and expansion?**

- Q by Q: What do you believe are the best types of assistance you can receive for improving hiring and keeping staff employed, improving sales or attracting clients and making your business profitable?
    - (if did not receive training) What kinds of training or technical assistance would be helpful for the job creation or retention, revenue growth, and expansion of your business?
    - Q by Q: If you did not receive any assistance for your business, what types of assistance do you believe would have been most helpful for improving hiring and keeping staff employed, improving sales or attracting clients and making your business profitable?
    - (if did not receive training) What would the best ways for your lender to provide you with training or technical assistance?
    - Q by Q: If you did not receive any training or technical assistance for your business, what types of training do you believe would have been most helpful?

**How do your experiences with the microloan program and your lender compare with other business lending programs?**

- Q by Q: Is the microloan program better, worse or about the same as other lending programs?
    - Are there any best practices of the other programs that you think would be relevant for the microloan program?
    - Q by Q: Do other lending programs have benefits or provide services that the microloan program should adopt?

**How do your experiences with business training or technical assistance provided by the microloan program or your lender compare with other programs?**

- Q by Q: When you think about training and technical assistance, were your experiences with the microloan programs better, worse or about the same as other training and technical assistance programs?
    - Are there any best practices of the other programs that you think would be relevant for the microloan program?
    - Q by Q: Do other training and technical assistance programs have benefits or provide services that the microloan programs should adopt?

**What are the other issues with the program and suggestions for improvements?**

- Q by Q: Are there any other issues or suggestions that would make the microloan program better for serving the needs of business owners?

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information (such as this survey) unless it displays a valid OMB control number. The control number for this information collection is 3245-0422. The time required to read this email is estimated to average 1 minute (0.017 hours). However, the total time required for your participation is estimated at 20 minutes. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to U.S. Small Business Administration, Director, Records Management Division, 409 3rd St., S.W., Washington, DC 20416 and Desk Officer for the Small Business Administration, Office of Management and Budget, New Executive Building, Room 10202, Washington, DC 20503.

**Intermediary Telephone Interview**

## THE INTERMEDIARY INTERVIEW AND QUESTION PROMPTS (Q BY Qs)

**OMB Control Number: 3245-0422**
**Expires 04 30, 2022**

**How frequently do you contact your microloan borrowers, what is the primary mode of communication, and what are the purposes of these contacts?**

- Q by Q: How often do you reach out to microloan borrowers, how do you typically reach out to them (face-to-face, letters, phone, email), and why do you typically need to contact them?
    - Were borrowers able to obtain what they needed from these contacts? Please describe an example of these contacts.
    - Q by Q: Are you typically successful in helping borrowers with their needs when you contact them?

**What are suggestions for the improvements to the program to facilitate small business access to microloans?**

- Q by Q: What do you believe are the best ways to improve how the program can help business owners?
    - What are your best practices for ensuring that borrowers successfully apply for and receive loans?
    - Q by Q: What do you do to make sure business owners are successful when they apply for and receive loans?
    - What are your best practices for servicing loans to prevent defaults?
    - Q by Q: What do you do to make sure business owners do not fail to repay their loans?

**What training or technical assistance types, topics, and delivery modes are the most and the least effective in promoting job creation or retention, revenue growth, and business survival and expansion?**

- Q by Q: What types of trainings and technical assistance work best and what types do not work to help business owners hire and keep staff employed, improve sales or attract clients and make the business profitable?
    - What are your best practices for providing training or technical assistance?
    - Q by Q: What do you typically do to provide the best training or technical assistance to business owners?
    - Are there any issues or problems that your organization had in providing training or technical assistance?
    - Q by Q: What types of problems or issues do you typically encounter when providing training or technical assistance to business owners?

- (if did not provide training) What kinds of training or technical assistance would be helpful for the job creation or retention, revenue growth, and expansion of your borrowers' business?
- Q by Q: If you did not provide training or technical assistance, what do you believe would have been the services that would be most helpful to business owners for hiring and keeping staff employed, improving sales and attracting clients and making their business profitable?

**What factors do you consider in deciding which borrowers to deliver technical assistance or trainings to? Which factors are most important in selecting the business owners for training or technical assistance services?**

- Q by Q: What types of assessment or selection criteria do you use to select borrowers for trainings and technical assistance? Do you use risk assessment, knowledge and skills assessment, business characteristics, owner characteristics, or other factors in identifying the types of borrowers in need of training and assistance?
- Q by Q: Do you modify the types or intensity of training based on the borrower feedback or mid-training assessment, for example if risks become apparent or other issues emerge?

**What are suggestions for the improvements to training/assistance to promote job creation or retention, revenue growth, and business survival and expansion?**

- Q by Q: How can the types of trainings and technical assistance be improved to help business owners with hiring and keeping staff employed, improving sales or attracting clients and making their business profitable?

**How do the microloan program experiences compare with other business loan and training programs that your organization participates in?**

- Q by Q: Is the microloan programs the better than, worse than or the same as other business lending programs and other training programs that you participate in?
    - Are there any best practices of the other programs that you think would be relevant for the microloan program?
    - Q by Q: Do the other lending programs and training programs have features or offer services which the microloan program should adopt?

**What are the other issues with the microloan program and suggestions for improvements?**

- Q by Q: Are there any other issues or suggestions that can make the microloan program better for serving the needs of business owners?

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information (such as this survey) unless it displays a valid OMB control number. The control number for this information collection is 3245-0422. The time required to read this email is estimated to average 1 minute (0.017 hours). However, the total time required for your participation is estimated at 20 minutes. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to U.S. Small Business Administration, Director, Records Management Division, 409 3rd St., S.W., Washington, DC 20416 and Desk Officer for the Small Business Administration, Office of Management and Budget, New Executive Building, Room 10202, Washington, DC 20503.

# Appendix C: Methodology for Analyses

EVALUATION DESIGN

The evaluation design was guided by the Microloan program logic model that outlined the program's theory of change, depicting how the program's assumptions, resources, strategies, activities, and contextual factors are expected to lead to the desired outcomes (Figure 1). Based on the results of the evaluation, the logic model was revised to provide additional details for the program implementation factors and outcomes, particularly at the borrower level.

The methodological design for the evaluation involved the pre-post program assessment of business performance outcomes for a borrower's business, including 1) number of employees, 2) revenue, 3) new business formation that did not operate before the loan, and 4) existing business survival. The evaluation focused on borrowers who received Microloans during Fiscal Years (FY) 2010-2019 period. Given the SBA's need to examine the program outcomes before and after the economic crisis due to the Coronavirus Disease 2019 (Covid-19), the post-program outcomes were assessed for the two years of 2019 and 2020. The change in business performance and tenure outcomes from the baseline, pre-program participation period (i.e., at obtaining the loan) beginning in 2009 to 2019 determined the business growth of Microloan borrowers' businesses before the pandemic. The change in business outcomes from 2019 to 2020 was used to gauge the effect of the Covid-19 economic crisis on business performance and survival, as well as to identify characteristics of resilient small businesses during the Covid-19 pandemic.

SAMPLING

*Microborrowers Survey*

A national survey of microloan borrowers was conducted to examine program outcomes and the relationship of various dimensions of technical assistance and training to business growth. The SBA Microloan Portfolio Electronic Reporting System datafile was used to construct the sampling frame that contains 45,146 loans that borrowers received during the evaluation timeframe, Fiscal Years (FY) 2010-2019 (Table 1). The universe included all participating Microloan borrowers and intermediary lenders within the study period, including closed businesses and lenders no longer participating in the program. The frame was cleaned and deduplicated to develop the final sampling universe of 31,264 unique borrowers.

The evaluation used a stratified, random sample of microborrowers to provide nationally representative results. The number of strata was minimized based on the most important business and owner characteristics provided in the SBA administrative data, including 1) rural[23]/urban, 2) underrepresented owner (yes/no)[24], 3) geographic region (Northeast, Midwest, South, and West). The needed sample size of 820 resulted in 55 cases per 12 strata and 80 cases per two West strata; sufficient for national and regional representation (see Table 1).[25] Based on the similar surveys conducted by Optimal for the SBA and the pretesting conducted for this evaluation, the estimated response rate was 10%. The borrower sample size released for the data collection was 8,200.

[23] Defined in 13 CFR 120.10

[24] Women, low-income, veterans, minorities.

[25] West Region Rural strata were small and had to be combined with West Urban strata, for a total of 14 strata.

**Table C1:** Sampling Universe, Expected Response Rate, and Borrower Sample by Strata

| Region | Urban/rural | Underrepresented owner | Frequency borrowers | Drawn sample size | Expected response rate | The sample size of completed surveys |
|---|---|---|---|---|---|---|
| Midwest | Rural | No | 897 | 550 | 10% | 55 |
| Midwest | Rural | Yes | 1,259 | 550 | 10% | 55 |
| Midwest | Urban | No | 2,136 | 550 | 10% | 55 |
| Midwest | Urban | Yes | 3,654 | 550 | 10% | 55 |
| Northeast | Rural | No | 627 | 550 | 10% | 55 |
| Northeast | Rural | Yes | 695 | 550 | 10% | 55 |
| Northeast | Urban | No | 2,351 | 550 | 10% | 55 |
| Northeast | Urban | Yes | 6,713 | 550 | 10% | 55 |
| South | Rural | No | 815 | 550 | 10% | 55 |
| South | Rural | Yes | 981 | 550 | 10% | 55 |
| South | Urban | No | 2,099 | 550 | 10% | 55 |
| South | Urban | Yes | 4,173 | 550 | 10% | 55 |
| West | Urban and rural | No | 1,568 | 800 | 10% | 80 |
| West | Urban and rural | Yes | 3,296 | 800 | 10% | 80 |
| **TOTAL** | | | **31,264** | **8,200** | **10%** | **820** |

Note: West Region Rural strata were small and had to be combined with West Urban strata, for a total of 14 strata.

*Intermediary Survey*

A census of all 202 SBA-approved Microloan intermediaries, including current and former intermediaries, for FY 2010-2019 was intended to be used for the data collection. The SBA administrative data, Microloan Portfolio Electronic Reporting System, has no flag for intermediaries currently participating in the program. Therefore, the intermediary data set (FY 09-19 Microloans to Microlenders EIS detail (As of 6-16-20)) was used to identify 38 former intermediaries using the maximum date for the loan payoff for the borrowers (if it was prior to FY 2020). However, during the SBA contact with the intermediaries to collect emails and baseline outcomes for the borrowers, 19 intermediaries could not be contacted due to being out of business and 4 opted out of the study. Thus, 179 intermediaries were contacted by Optimal for the survey data collection.

*Qualitative Interviews*

To ensure the diversity of perspectives for the interviews, the participants were sampled using the implicit stratification. The strata for the business owner interviews was the underrepresented owner population (yes, no), business tenure (start up (<2 year) or existing business (2+ years), and during or

after the loan repayment. The total business owner sample size needed was 24. For intermediary interviews the stratification was the size based on the annual number of borrowers (<5, 5-14, and 15 or more) and current and former intermediaries. The total intermediary qualitative interviews sample was intended to be 24. However, due to the data collection difficulties, described below, this data collection approach had to be abandoned. Thus, borrowers and intermediaries that completed web surveys and were willing to further share their program experiences and were asked to participate in the interviews.

NONRESPONSE BIAS ANALYSES

This section presents the response rates to the intermediary and borrower web surveys. It also presents the analyses that examined differences between the borrowers with completed web surveys and sampled cases that did not participate in the study, with respect to the variables used for the sampling design.

*Response Rates*

Ninety intermediaries completed web surveys, which corresponds to the 50.3% response rate overall and 51.4% response rate among cases that could be reached (Table 2).

**Table C2.** Lender Survey Dispositions

| | Count | Percent |
|---|---|---|
| **Survey Completed** | 90 | 50.28% |
| **Surveys started but not completed** | 5 | 2.79% |
| **Surveys not opened** | 75 | 41.90% |
| **Declined to participate in Optimal' Survey** | 5 | 2.79% |
| **Nonworking Number** | 4 | 2.23% |
| **Total for data collection** | **179** | **100.00%** |
| **Total overall (including 19 out of business and 4 that SBA informed Optimal that the business opted out to participate in the study)** | **202** | |
| **RESPONSE RATE (among reachable, excludes nonworking number)** | | **51.43%** |
| **COOPERATION RATE (among reached, includes partial completes and refusals)** | | **90.00%** |

Among borrowers, the overall response rate was 11.0% and 13.0% response rate among cases that could be reached (Table 3). The final dispositions reflected a very low refusal rate (1%) and a relatively large proportion of borrowers (66.98%) that did not respond to repeated e-mail and phone contacts per the data-collection protocol. There was also a substantial proportion (14.76%) with bounced emails; possibly reflecting businesses closed during the pandemic.

**Table C3.** Borrower Survey Dispositions

| | Count | Percent |
|---|---|---|
| **Surveys completed** | 697 | 11.01% |
| **Surveys started but not completed** | 375 | 5.92% |
| **Surveys not opened** | 4,240 | 66.98% |
| **Bounced emails** | 934 | 14.76% |
| **Refusal** | 61 | 0.96% |
| **Wrong Contact** | 23 | 0.36% |
| **WEB SURVEYS SENT** | **6,330** | **100.00%** |
| **RESPONSE RATE (among reachable, excludes bounced and wrong contact)** | | **12.97%** |
| **COOPERATION RATE (among reached, including partial completes and refusals)** | | **61.52%** |

The nonresponse analysis revealed that borrowers with the completed surveys differed minorly from the total sample and from borrowers released for the data collection (those with emails) with respect to the stratification variables (Tables 4-6). A Chi-Square test would necessarily produce a statistically significant result due to the large cell counts. However, a visual inspection of the percentages shows small deviations between the expected values (total sample) and the observed values (with emails and with completed surveys).

**Table C4.** Completed and Sampled Surveys, by Region

| Region | Northeast | Midwest | South | West | Total |
|---|---|---|---|---|---|
| **Total Sample** | 2200 | 2200 | 2200 | 1600 | 8200 |
| | 26.8% | 26.8% | 26.8% | 19.5% | 100.0% |
| **With emails** | 1547 | 1935 | 1716 | 1132 | 6330 |
| | 24.4% | 30.6% | 27.1% | 17.9% | 100.0% |
| **With completed surveys** | 183 | 226 | 169 | 119 | 697 |
| | 26.3% | 32.4% | 24.2% | 17.1% | 100.0% |

**Table C5.** Completed and Sampled Surveys, by Urbanicity

| Urbanicity | Rural | Urban | Total |
|---|---|---|---|
| **Total Sample** | 3381 | 4819 | 8200 |
| | 41.2% | 58.8% | 100.0% |
| **With emails** | 2686 | 3644 | 6330 |
| | 42.4% | 57.6% | 100.0% |
| **With completed surveys** | 306 | 391 | 697 |
| | 43.9% | 56.1% | 100.0% |

**Table C6.** Completed and Sampled Surveys, by Minority Owner Status

| Minority Owned | No | Yes | Total |
|---|---|---|---|
| **Total Sample** | 4100 | 4100 | 8200 |
| | 50.0% | 50.0% | 100.0% |
| **With emails** | 3312 | 3018 | 6330 |
| | 52.3% | 47.7% | 100.0% |
| **With completed surveys** | 370 | 327 | 697 |
| | 53.1% | 46.9% | 100.0% |

ANALYTIC WEIGHTS

The steps for calculating analytic weights for cases are outlined below.

*Base Weight Calculation*

The first step in weighting the sample was to calculate the sampling weight. The borrowers were divided into Strata based on region (Northeast, Midwest, South, and West), Urbanicity (Rural vs Urban), and borrower minority status. The resulting strata in the West Region were very small, and thus the Urban and Rural Western Strata were collapsed together. This resulted in a total of 14 strata.

The cases were assigned a base weight, $BW_{strata}(i)$ for the sampled case, calculated as the inverse of the probability of selection or:

$$BW_{strata}(h) = \frac{N_h}{n_h}$$

where:

- $N_h$ is the total number of borrowers in strata $h$.
- $n_h$ is the number of borrowers selected for contact in strata $h$.

*Nonresponse-Adjusted Weight*

After the data collection, responding and non-responding borrowers have their base weight adjusted. A case was identified by Optimal as providing a complete response if a survey was obtained. Nonresponse adjustments were made within strata within each sample.

The first nonresponse adjustment adjusted the base weight to account for data loss from cases whose eligibility could not be determined, either due to a lack of contact information or erroneous contact information.

- For ***records where the sample unit's eligibility was determined,*** the nonresponse adjustment $ADJ_{screen}(i)$for record *i* in stratum *h* is defined as:

$$ADJ_{screen}(hi) = \frac{\sum_{i=1}^{nh} BW_{strata}(hi)}{\sum_{i=1}^{nh} screenresp(hi)\, BW_{strata}(hi)}$$

  where *BW*(*hi*) is the base weight for record *i* in strata h, *screenresp(hi)* is equal to 1 for selected units that responded to the questionnaire and 0 otherwise.
- For sampled units whose eligibility was not determined, because the unit could not be contacted, the eligibility adjustment $ADJ_{screen}(hi)$ is equal to 0.
- The screener-adjusted weight $NR_{screen}(i)$was then calculated as the product of the base weight and the screener completion nonresponse adjustment factor as follows:

$$NR_{screen}(i) = BW(i) \times ADJ_{screen}(ci)$$

The second nonresponse adjustment adjusted the analytic weight to account for data loss from eligible units who did not complete a survey. This adjustment was applied to cases who were contacted and either refused to participate or for whom a survey interview was scheduled but that survey could not be completed due to noncooperation. This nonresponse adjustment was defined as follows:

- For ***records where the sampled unit completed the survey,*** the survey completion nonresponse adjustment $ADJ_{quest}$(hi) for record *i* in strata *h* is defined as:

$$ADJ_{quest}(hi) = \frac{\sum_{i=1}^{nh} elig(hi) NR_{screen}(hi)}{\sum_{i=1}^{nh} questresp(hi) NR_{screen}(hi)}$$

where $NR_{screen}(hi)$ is the screener-adjusted weight for record *i* in strata *h*, *eligspon(hi)* is equal to 1 for eligible cases and 0 otherwise, and *questrep(hi)* is equal to 1 for sampled units that responded to the survey and 0 otherwise.

- For records ***where the sampled unit was contacted but did not complete the survey,*** the survey completion nonresponse adjustment $ADJ_{quest}\ (hi)$ is equal to 0.
- There were no ***ineligible units,*** since the frame was of participating borrowers.

The nonresponse-adjusted weight $W_1(i)$ was then calculated as the product of the screener-adjusted weight and the survey completion nonresponse adjustment factor as follows:

$$W_1(i) = NR_{screen}(i) \times ADJ_{screen}(hi)$$

DATA ANALYSES

The data analyses to address the research questions involved the following.

- Descriptive analyses of characteristics of Microloan borrowers, their businesses, and intermediaries.
- Descriptive analyses of borrowers' and intermediaries' experiences with the program.
- The univariate analyses comparing Microloan borrowers' business growth outcomes from the baseline (i.e., the loan initiation) to 2019 and 2019 to 2020.
- The multivariate analyses to identify the key drivers of business growth outcomes including business and intermediary characteristics, and dimensions of training and assistance received by borrowers.

*Research Question 1: What are the job creation/retention, revenue growth, and business tenure outcomes of Microloan Program borrowers?*

*Objectives*

- Examine Microborrowers' business performance for the number of employees and revenue from the baseline (i.e., the loan initiation) to 2019 and 2020.
- Determine the business tenure outcomes of whether existing businesses were in operation, new businesses were created, or existing or new businesses were closed from the baseline to 2019 and/or 2020.

*Data Sources*

- The survey data were used for the revenue, employment, new business formation, and business closures. For cases with missing data for the loan initiation year, the SBA and intermediaries' administrative data were used for gross annual revenue and the total number of employees for the business.
- The unit of analyses is Microloan borrowers' businesses.

*Data Analyses and Results*

T-tests and chi-squares were used for measures of business growth outcomes.

*Research Question 2: How do job creation/retention, revenue growth and business tenure outcomes vary by business characteristic?*

*Objectives*

- Provide the description of characteristics of Microloan borrowers, their businesses, loan experiences, and intermediaries.
- Examine the differences in business growth outcomes for the number of employees and revenue from the baseline (i.e., the loan initiation year) to 2019 and 2019 to 2020 by key characteristics of businesses.

- Determine the differences in business survival from the baseline to 2020 by key characteristics of businesses.

*Data Sources*

- The survey data were used for the revenue, employment, new business formation, and business closures. For cases with missing data for the loan initiation year, the SBA and intermediaries' administrative data were used for gross annual revenue and the total number of employees for the business.
- The unit of analyses is Microloan borrowers' businesses.

*Data Analyses and Results*

The characteristics of Microloan borrowers, their businesses and intermediaries, as well as their lending and Covid-19 experiences were examined by the descriptive analyses. All quantitative analyses were conducted using STATA.

The Ordinary Least Squares (OLS) regressions were used to measure the change in continuous business performance outcomes (the number of employees and revenue) between baseline and two follow-up years. The results identified the significant characteristics of businesses, while controlling for relevant covariates (years since the baseline, SBA region, urbanicity RUCA codes, currently in business, and the baseline levels of the outcomes). For the dichotomous business tenure outcomes (new business formed that did not exist before the program, and the business was closed) the logistic regressions were used determining the significance of the key characteristics of businesses, while controlling for relevant covariates (years since the baseline, SBA region, and urbanicity). The regressions were conducted using the unweighted data.

Four models were conducted for the business growth outcomes from the baseline to the 2019 follow-up year. These models provided the results for the characteristics of businesses associated with 1) revenue, 2) number of employees, 3) business closures, and 4) new businesses created.[26] Two similar models were conducted for the business growth outcomes (revenue and employees) from 2019 to 2020. The business survival outcome during the pandemic had a small frequency and could not be modeled. These 2019 to 2020 models provided the results for the characteristics of businesses associated with resilience to the Covid-19 crisis.

The models were parsimonious and retain only the significant predictors of the outcomes, while controlling for relevant covariates. The models explored all of the available business and owner characteristics and relevant factors, including the following.

- Contextual factors (region, urbanicity, county area deprivation index, county industry concentration, county SES, etc.).
- Baseline levels of the outcomes (for revenues and employees).
- Intermediary characteristics (current lender, size (annual number of borrowers and loan amounts), default and delinquency rates of loans).
- Borrower loan experiences (years since the loan, the type (personal/business), purpose, amount, duration, interest rate, collateral, guarantor, status (delinquent, current, charged off, paid)).

[26] The results for the new business formation did not produce relevant results. The significant predictors were the length from the loan initiation and being a start-up.

- Business characteristics (age, type (e.g., LLC), startup/existing, primary industry, disadvantaged business certifications or designations, etc.).
- Owner characteristics (age, gender, education, years in business).

The revenue OLS regressions required log transformation of the outcome to address the heteroscedasticity of residuals (Breusch-Pagan Test). However, this did not mitigate the issue for the employment outcome. Thus, the employment was modeled via the ordinal logistic regression using four employment groups: 0; 1-2; 3-6; and 7+. Being in business was modeled via the binary logistic regression.

*Research Question 3: What types, proficiency level, frequency, duration and delivery modes of technical assistance are being provided to Microloan Program borrowers?*

*Objectives*

- Provide the description of types, proficiency level, frequency, duration and delivery modes of training and technical assistance provided to and received by Microloan borrowers.

*Data Sources*

- The SBA administrative data and survey data with borrowers and intermediaries.
- The unit of analyses is the Microloan borrower for the training and technical assistance received.
- The unit of analyses is the intermediary for the training and technical assistance provided.

*Data Analyses and Results*

The descriptive analyses of SBA administrative data and surveys of intermediaries provided the results for the dimensions of technical assistance and training provided to Microloan borrowers. The descriptive analyses of surveys provided the results for the dimensions of technical assistance and training received by Microloan borrowers.

*Research Question 4: How does the type, proficiency level, frequency, duration, and delivery mode of technical assistance relate to Microloan borrower job creation, revenue growth and business tenure outcomes?*

*Objectives*

- Examine the differences in business growth outcomes for the number of employees and revenue from the baseline (i.e., the loan initiation) to 2019 by dimensions of training and assistance received by borrowers.
- Determine the differences in business tenure outcome of new business formation and business closures from the baseline to 2019 by dimensions of training and assistance received by borrowers.
- Provide the description of perceived effectiveness of training and assistance on the business management procedures used by Microloan borrowers and their business outcomes.

*Data Sources*

- The survey data were used for the revenue, employment, new business formation, and business closures. For cases with missing data for the loan initiation year, the SBA and

intermediaries' administrative data were used for gross annual revenue and the total number of employees for the business.
- The borrower survey data were used for the dimensions and perceived effectiveness of training and assistance received.

*Quantitative Data Analyses and Results*

To appropriately address the research question, only the changes in business outcomes from the baseline to 2019 was modeled. The results identified the dimensions of training and assistance that were predictive of the business outcomes. However, the change from 2019 to 2020 that reflects the effect of the economic downturn due to the pandemic was not explored by the evaluation. The study did not expect the effect of the training and technical assistance on business resilience and survival during the Covid-19 economic crises due to a variety of conceptual and methodological issues.

The models that were used to address the research question 2 were augmented by adding dimensions of training predictors, while controlling for the variables retained by these models. Due to the multicollinearity issue, the dimensions of training were tested separately to identify significant predictors of the outcomes. The predictors tested by the models included:

- Sources of training:
    - Received training and technical assistance from the lender
    - Lender referred to external sources for technical assistance or training
    - Found the technical assistance or training self
    - Other sources of technical assistance or training
    - Participated in training and technical assistance programs other than Microloan
- The dimensions of training:
    - Timing (pre/post loan)
    - Topics
    - Mode (in-person webinar, etc.)
    - Settings (one-on-ne, small group, etc.)
    - Skills (basic, intermediary, etc.).

These models provided the results for the dimensions of training/assistance that were significantly associated with 1) revenue growth, 2) number of employees' growth, and 3) business closures. The models were parsimonious and retain the control factors and only the significant predictors of the outcomes.

Furthermore, the descriptive analyses of survey data provided results for the perceived effectiveness of the program overall and the technical assistance and training received by borrowers. Intermediary survey data analyses were also used provide descriptive results for the perceived effectiveness of the program for borrowers.

*Qualitative Data Analyses and Results*

The qualitative interviews data was collected from 9 intermediaries (including 2 pretest interviews) and 9 borrowers (including 2 pretest interviews). The qualitative data also included open-ended survey responses. The results were used to gain detailed contextual information on:

- the most and the least effective types of training or technical assistance;
- how experiences with the microloan program compare with other business lending programs;
- how experiences with business training or technical assistance provided by the microloan program compare with other programs;
- best practices used by intermediaries to provide training and assistance to Microloan borrowers.
- suggestions for the improvements to the loan, training and technical assistance to promote business growth and tenure outcomes;
- other issues with the program and suggestions for improvements.

Analyses of the qualitative data involve coding interviews and open-ended survey items for the major themes and subthemes. The first step involved the systematic coding for the key themes and data patterns using Excel software. Then, themes and patterns that emerge were revised to enhance the initial coding scheme. Coding was conducted using the primary and senior coders, with checks for consistency. Discrepancies were reviewed and discussed to achieve consensus to revise and finalize the coding scheme. The qualitative data results were integrated with the result of the quantitative analyses of microborrowers' and intermediaries' surveys to provide explanations for the key findings using people's voice. Furthermore, the qualitative data results were used to identify suggestions for the program improvements.

# Appendix D: Detailed Tables of the Results

## Research Question 1: What are the job creation/retention, revenue growth and business tenure outcomes of Microloan Program borrowers?

**Exhibit D1.** Revenue and employment by time period, based on the borrower survey

| | Borrowers with the loan initiation year 2009-2018 | | Borrowers with the loan initiation year 2009-2019 | |
|---|---|---|---|---|
| | **The loan initiation year** | **2019** | **2019** | **2020** |
| **Revenue** | | | | |
| Mean | $253,785 | $532,605(p<.001) | $486,967 | $455,959 |
| Standard deviation | $973,513 | $2,069,427 | $1,922,071 | $1,960,983 |
| Median | $75,835 | $173,498 | $148,205 | $115,000 |
| Min | -$554 | -$14,820 | -$14,820 | -$70,000 |
| Max | $23,517,484 | $47,874,045 | $47,874,045 | $45,838,000 |
| Percent with zero or negative revenue | 8.33% | 7.26% | 7.01% | 10.07% |
| *Number of respondents with revenue data* | *531* | *531* | *629* | *629* |
| <$5,000 | 14.38% | 10.97% | 11.04% | 14.40% |
| $5,000-$24,999 | 11.66% | 7.91% | 9.53% | 8.77% |
| $25,000-$49,999 | 10.61% | 6.01% | 6.92% | 8.36% |
| $50,000-$74,999 | 7.63% | 7.17% | 6.96% | 7.92% |
| $75,000--$99,999 | 6.71% | 4.34% | 5.66% | 2.84% |
| $100,000--$199,999 | 13.32% | 10.86% | 10.93% | 13.20% |
| $200,000--$299,999 | 8.94% | 11.13% | 10.24% | 8.54% |
| $300,000--$399,999 | 4.24% | 6.68% | 6.08% | 6.90% |
| $400,000--$499,999 | 4.15% | 8.27% | 7.47% | 4.61% |
| $500,000--$999,999 | 4.78% | 9.60% | 9.48% | 7.15% |
| $1,000,000--$1,999,999 | 1.52% | 3.92% | 3.77% | 4.78% |
| $2,000,000--$4,999,999 | 1.00% | 1.09% | 0.98% | 1.74% |
| >=$5,000,000 | 0.44% | 1.42% | 1.27% | 1.09% |
| Respondents with missing revenue data | 10.61% | 10.61% | 9.69% | 9.69% |
| **Number of employees** | | | | |
| Mean | 4.23 | 6.18(p<.001) | 5.81 | 5.26(p<.01) |
| Standard deviation | 8.33 | 12.01 | 11.38 | 10.80 |
| Median | 2 | 3 | 3 | 2 |
| Min | 0 | 0 | 0 | 0 |
| Max | 150 | 264 | 264 | 287 |
| *Number of respondents with employee data* | *569* | *569* | *670* | *670* |
| 0 | 19.27% | 19.01% | 19.81% | 24.07% |
| 1-2 | 28.89% | 24.28% | 26.16% | 26.40% |
| 3-4 | 20.94% | 16.93% | 16.38% | 12.60% |
| 5-6 | 11.91% | 8.84% | 8.40% | 10.04% |
| 7-8 | 4.31% | 8.10% | 7.42% | 4.94% |
| 9-10 | 4.15% | 3.82% | 4.25% | 3.50% |
| 11-19 | 2.80% | 9.48% | 8.79% | 9.80% |
| 20-49 | 2.21% | 3.01% | 2.83% | 3.40% |
| >=50 | 0.67% | 1.67% | 1.52% | 0.81% |
| Respondents with missing employee data | 4.86% | 4.86% | 4.44% | 4.44% |
| **Total number of respondents** | **593** | **593** | **697** | **697** |

Note 1: based on the borrower weighted survey data, supplemented by the intermediary and SBA administrative data for the missing baseline data (n=5).

Note 2: revenue was adjusted for inflation using Price Deflators for Gross Domestic Product (in 2020 dollars).

**Exhibit D2.** Businesses sold or permanently closed, based on the borrower survey

| | n | % |
|---|---|---|
| In business | 632 | 89.95% |
| Sold or permanently closed | 56 | 8.49% |
| Respondents with missing data | 9 | 1.56% |
| **When business was sold or permanently closed:** | | |
| Before the Covid-19 Pandemic | 40 | 6.79% |
| Due to the Covid-19 Pandemic | 16 | 1.70% |
| **Total number of respondents** | **697** | |

Note: based on the borrower weighted survey data.

**Exhibit D3.** Business age, based on the SBA administrative data for the survey respondents

| | Statistics |
|---|---|
| **Establishment age, as of the loan closure date** | |
| Mean | 4.58 |
| Standard Deviation | 7.16 |
| 25th percentile | 0.35 |
| 50th Percentile | 1.87 |
| 75th percentile | 6.16 |
| **Years from the loan initiation year to FY 2020** | |
| Mean | 3.47 |
| Standard deviation | 2.65 |
| 25th Percentile | 1.36 |
| 50th Percentile | 2.76 |
| 75th Percentile | 5.35 |
| **Total number of respondents** | **697** |

Note: based on the SBA administrative data for the survey respondents.

## Research Question 2: How do job creation/retention, revenue growth and business tenure outcomes vary by business characteristic?

### *Borrower Business and Owner Characteristics*

**Exhibit D4.** Business characteristics, based on the SBA data

| | n | % |
|---|---|---|
| **Business type** | | |
| Existing | 17,154 | 54.87 |
| Start-up | 14,110 | 45.13 |
| **Legal structure of the business** | | |
| Sole Proprietorship | 13,285 | 42.49 |
| Limited Liability Company (LLC) | 12,180 | 38.96 |
| Partnership | 425 | 1.36 |
| Corporation | 5,316 | 17.00 |
| Joint Venture | 11 | 0.04 |
| Non-Profit Organization | 47 | 0.15 |
| **Childcare organization** | | |
| No | 30,414 | 97.28 |
| Yes | 850 | 2.72 |
| **Industry (economic sector) (2-digit NAICS)** | | |
| Agriculture, Forestry, Fishing and Hunting | 340 | 1.09 |
| Mining | 24 | 0.08 |
| Utilities | 29 | 0.09 |
| Construction | 1,601 | 5.12 |
| Manufacturing | 2,167 | 6.93 |
| Wholesale Trade | 882 | 2.82 |
| Retail Trade | 6,922 | 22.14 |
| Transportation and Warehousing | 2,566 | 8.21 |
| Information | 401 | 1.28 |
| Finance and Insurance | 318 | 1.02 |
| Real Estate Rental and Leasing | 532 | 1.70 |
| Professional, Scientific, and Technical | 2,454 | 7.85 |
| Management of Companies and Enterprises | 15 | 0.05 |
| Administrative and support and waste management and remediation services | 1,420 | 4.54 |
| Educational Services | 660 | 2.11 |
| Health Care and Social Assistance | 2,136 | 6.83 |
| Arts, Entertainment, and Recreation | 899 | 2.88 |
| Accommodation and Food Services | 3,873 | 12.39 |
| Other Services (repair, beauty salons, barber shops, pet care, etc.) | 3,928 | 12.56 |
| Industries not classified | 97 | 0.31 |
| **Women-owned firms (>=51%)** | | |
| No | 16,159 | 51.69 |
| Yes | 15,105 | 48.31 |
| **Veteran owned** | | |
| Veteran | 1,285 | 4.11 |
| Non-veteran | 24,122 | 77.16 |
| Unknown/Not Stated | 5,857 | 18.73 |
| **Low-income borrower** | | |
| No | 23,674 | 75.72 |
| Yes | 7,590 | 24.28 |
| **Number of borrowers** | 31,264 | 100.00 |

Note: based on the SBA data for the universe.

**Exhibit D4a.** Business characteristics of firms, based on the Census and the SBA data

| | CENSUS | | MICROLOAN | | Difference |
|---|---|---|---|---|---|
| | Count | Statistics | Count | Statistics | |
| **Industry (economic sector) (2-digit NAICS) *** | | | | | |
| Accommodation and food services | 532,009 | 9.30% | 3,873 | 12.39% | **3.09%** |
| Administrative and support and waste management and remediation services | 347,382 | 6.07% | 1,420 | 4.54% | -1.53% |
| Agriculture, forestry, fishing, and hunting | 26,074 | 0.46% | 340 | 1.09% | 0.63% |
| Arts, entertainment, and recreation | 133,641 | 2.34% | 899 | 2.88% | 0.54% |
| Construction | 710,826 | 12.42% | 1,601 | 5.12% | **-7.30%** |
| Educational services | 92,715 | 1.62% | 660 | 2.11% | 0.49% |
| Finance and insurance | 237,033 | 4.14% | 318 | 1.02% | **-3.12%** |
| Health care and social assistance | 645,357 | 11.28% | 2,136 | 6.83% | **-4.45%** |
| Information | 81,618 | 1.43% | 401 | 1.28% | -0.15% |
| Management of companies and enterprises | 26,309 | 0.46% | 15 | 0.05% | -0.41% |
| Manufacturing | 246,442 | 4.31% | 2,167 | 6.93% | 2.62% |
| Mining, quarrying, and oil and gas extraction | 19,195 | 0.34% | 24 | 0.08% | -0.26% |
| Other Services (repair, beauty salons, barber shops, pet care, etc.) | 395,133 | 6.91% | 3,928 | 12.56% | **5.65%** |
| Professional, scientific, and technical services | 817,532 | 14.29% | 2,454 | 7.85% | **-6.44%** |
| Real estate and rental and leasing | 318,204 | 5.56% | 532 | 1.70% | **-3.86%** |
| Retail trade | 639,706 | 11.18% | 6,922 | 22.14% | **10.96%** |
| Transportation and warehousing | 190,701 | 3.33% | 2,566 | 8.21% | **4.88%** |
| Utilities | 6,062 | 0.11% | 29 | 0.09% | -0.02% |
| Wholesale trade | 297,105 | 5.19% | 882 | 2.82% | -2.37% |
| Industries not classified | 21,184 | 0.37% | 97 | 0.31% | -0.16% |
| Total for all sectors | 5,722,142 | 100.00% | 31,264 | 100.00% | |
| **Business age †** | | | | | |
| 0 years | 437,926 | 8.22% | 1,116 | 3.57% | **-4.65%** |
| 1 year | 337,328 | 6.34% | 1,823 | 5.83% | -0.51% |
| 2 years | 297,194 | 5.58% | 2,198 | 7.03% | 1.45% |
| 3 years | 268,589 | 5.04% | 2,240 | 7.16% | 2.12% |
| 4 years | 234,696 | 4.41% | 2,168 | 6.93% | 2.52% |
| 5 years | 212,613 | 3.99% | 2,215 | 7.08% | **3.09%** |
| 6-10 years | 813,173 | 15.27% | 12,518 | 40.04% | **24.77%** |
| 11-15 years | 691,935 | 12.99% | 3,801 | 12.16% | -0.83% |
| 16-20 years | 488,746 | 9.18% | 1,557 | 4.98% | **-4.20%** |
| 21-25 years | 401,165 | 7.53% | 688 | 2.20% | **-5.33%** |
| 26+ years | 782,174 | 14.69% | 913 | 2.92% | **-11.77%** |
| Missing | 359,119 | 6.74% | 27 | 0.09% | -6.65% |
| Total | 5,324,658 | 100.00% | 31,264 | 100% | |
| **Location †** | | | | | |
| All Metro/Micro Areas | 5,040,301 | 94.31% | 29,526 | 94.45% | 0.14% |
| All Non-Metro/Non-Micro Areas | 303,176 | 5.67% | 1,738 | 5.56% | -0.11% |
| Missing | 1,007 | 0.02% | 0 | 0.00% | -0.02% |
| Total | 5,344,484 | 100.00% | 31,264 | 100.00% | |
| **Legal structure ‡** | | | | | |
| Corporation | 935,928 | 15.40% | 5,316 | 17.00% | 1.60% |
| S-Corporation/ Limited Liability Company (LLC) | 3,161,467 | 52.03% | 12,180 | 38.96% | **-13.07%** |
| Partnership | 727,699 | 11.98% | 425 | 1.36% | **-10.62%** |
| Sole Proprietorship | 828,702 | 13.64% | 13,285 | 42.49% | **28.85%** |
| Nonprofit | 433,400 | 7.13% | 47 | 0.15% | **-6.98%** |
| Other | 10,785 | 0.18% | 11 | 0.04% | -0.14% |
| Total | 6,075,937 | 100.00% | 31,264 | 100.00% | |

Note: based on the SBA data for the Microloan universe, as of FY 2020.

Note *: based on the Census Annual Business Survey 2018, included are all nonfarm employer businesses filing the 941, 944, or 1120 tax forms, with receipts of $1,000 or more.
Note †: Census Business Dynamics Statistics 2019, excludes self–employed.
Note ‡: Census 2018 County Business Patterns, includes all U.S. businesses with paid employees (counts do not sum-up to total).

## **Exhibit D4b.** Business size of firms, based on the Census and the borrower survey data

| | Census | Microloan | Difference |
|---|---|---|---|
| Average sales, value of shipments, or revenue | $6,711,742 | $486,967 | -$6,224,775 |
| Average number of employees | 22.4 | 5.81 | -17 |
| Number of firms | 5,722,142 | 697 | |

Note 1: based on the weighted borrower survey data, as of 2019.
Note 2: based on the Census Annual Business Survey 2018, included are all nonfarm employer businesses filing the 941, 944, or 1120 tax forms, with receipts of $1,000 or more.

## **Exhibit D4c.** Number of employees of firms, based on the Census and the borrower survey data

| | CENSUS | | MICROLOAN | | Difference |
|---|---|---|---|---|---|
| | Count | Statistics | Count | Statistics | |
| <5 employees | 3,752,163 | 61.75% | 427 | 65.24% | **3.49%** |
| 5-9 employees | 1,013,047 | 16.67% | 130 | 17.56% | 0.89% |
| 10-19 employees | 645,970 | 10.63% | 72 | 12.64% | 2.01% |
| 20-99 employees | 550,877 | 9.07% | 39 | 4.44% | **-4.63%** |
| 100-499 employees | 93,364 | 1.54% | 2 | 0.11% | -1.43% |
| 500+ employees | 20,516 | 0.34% | 0 | 0.00% | -0.34% |
| Total | 6,075,937 | 100.00% | 670 | 100.00% | |

Note 1: based on the weighted borrower survey data, as of 2019.
Note 2: based on the Census 2018 County Business Patterns, includes all U.S. business establishments with paid employees.

## **Exhibit D5.** Business certificates or designations, based on the borrower survey

| | n | % |
|---|---|---|
| **Any business certificates or designations** | | |
| No | 111 | 13.80% |
| Yes | 571 | 83.80% |
| Respondents with missing data | 15 | 2.40% |
| **Business certificates or designations (multiple select):** | | |
| 8(a) certified business | 18 | 2.63% |
| HUBZone certified business | 19 | 3.98% |
| Small Disadvantaged Business | 76 | 15.62% |
| Small business | 427 | 62.57% |
| Minority-owned business | 181 | 33.92% |
| Veteran or service member-owned business | 49 | 7.41% |
| Women-owned business | 252 | 43.31% |
| Located on Native American-owned land | 5 | 0.51% |
| Other | 23 | 2.11% |
| **Total number of respondents** | **697** | |

Note: based on borrower weighted survey data.

**Exhibit D6.** Business location, based on the SBA data

| | n | % |
|---|---|---|
| **SBA region** | | |
| Region I New England | 1,980 | 6.33 |
| Region II Atlantic | 7,004 | 22.40 |
| Region III Mid-Atlantic | 4,038 | 12.92 |
| Region IV Southeast | 3,353 | 10.72 |
| Region V Great Lakes | 4,722 | 15.10 |
| Region VI South Central | 2,444 | 7.82 |
| Region VII Great Plains | 2,981 | 9.53 |
| Region VIII Rocky Mountains | 1,469 | 4.70 |
| Region IX Pacific | 2,280 | 7.29 |
| Region X Pacific Northwest | 993 | 3.18 |
| **Geographic region** | | |
| Midwest | 7,946 | 25.42 |
| Northeast | 10,386 | 33.22 |
| South | 8,068 | 25.81 |
| West | 4,864 | 15.56 |
| **Number of borrowers** | **31,264** | **100.00** |

Note: based on the SBA data for the universe.

**Exhibit D7.** Characteristics of borrower business location, based on SBA and secondary data

| | n | % |
|---|---|---|
| **Location *** | | |
| Rural | 5,527 | 17.68 |
| Urban | 25,737 | 82.32 |
| **Census Rural-Urban Commuting Area (RUCA) †** | | |
| Metro - Counties in metro areas of 1 million population or more | 20,011 | 64.01% |
| Metro - Counties in metro areas of 250,000 to 1 million population | 5,721 | 18.30% |
| Metro - Counties in metro areas of fewer than 250,000 population | 1,730 | 5.53% |
| Nonmetro - Urban population of 20,000 or more, adjacent to a metro area | 699 | 2.24% |
| Nonmetro - Urban population of 20,000 or more, not adjacent to a metro area | 491 | 1.57% |
| Nonmetro - Urban population of 2,500 to 19,999, adjacent to a metro area | 874 | 2.80% |
| Nonmetro - Urban population of 2,500 to 19,999, not adjacent to a metro area | 1,116 | 3.57% |
| Nonmetro - Completely rural or less than 2,500 urban population, adjacent to a metro area | 202 | 0.65% |
| Nonmetro - Completely rural or less than 2,500 urban population, not adjacent to a metro area | 420 | 1.34% |
| **Number of borrowers** | **31,264** | **100.00** |
| **County industry concentration ‡** | | |
| Farm-dependent county | 537 | 1.73 |
| Mining-dependent county | 615 | 1.98 |
| Manufacturing-dependent county | 1,487 | 4.78 |
| Federal/State government-dependent county | 4,448 | 14.30 |
| Recreation-dependent county | 2,471 | 7.94 |
| Low education county | 3,414 | 10.98 |
| Low-employment county | 3,101 | 9.97 |
| Population loss county | 2,238 | 7.19 |
| Persistent poverty county | 4,462 | 14.34 |
| Nonspecialized county | 22,138 | 71.17 |
| **Number of borrowers** | **31,107** | |

Note *: rural is based on the SBA definition of an area in a non-metropolitan county, or, if in a metropolitan county, any such subdivision or area with a resident population under 20,000 (13 CFR 120.10; https://www.law.cornell.edu/cfr/text/13/120.10).
Note †: RUCA codes were based on the USDA Economic Research Service data https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/documentation (non-Metro counties are defined as rural, https://www.hrsa.gov/rural-health/about-us/definition/).
Note ‡: based on the USDA Economic Research Service, County Typology Codes (not available for PR).

**Exhibit D8.** Socio-Economic Status of County of borrower business, based on secondary data

| | Area Deprivation Index (1-100) | Labor Force Participation Rate | Employment to Population Ratio | Unemployment Rate | Median Household Income | % Below Poverty Level |
|---|---|---|---|---|---|---|
| Mean | 44.67 | 64.52 | 60.03 | 6.69 | $59,833 | 15.52 |
| Standard deviation | 17.76 | 5.29 | 5.69 | 2.06 | $16,442 | 5.87 |
| 25th Percentile | 27.31 | 62.10 | 57.50 | 5.40 | $49,290 | 11.40 |
| 50th Percentile | 44.07 | 64.80 | 60.00 | 6.50 | $57,882 | 14.90 |
| 75th Percentile | 58.89 | 67.90 | 63.60 | 7.80 | $65,522 | 18.00 |
| Number of borrowers | 31,264 | 31,107 | 31,107 | 31,107 | 31,107 | 31,107 |

Note 1: county Area Deprivation Index (1-100) is based on the Health Resources & Services Administration (HRSA) data.
Note 2: county SES based on Census American Community Survey (ACS), 2013-2017 5-Year Estimates (not available for PR).

**Exhibit D9.** Business owner demographic Characteristics, based on the borrower survey

| | n | statistics |
|---|---|---|
| **Gender** | | |
| Male | 356 | 41.21% |
| Female | 305 | 52.79% |
| Missing | 36 | 6.00% |
| **Age of the business owner** | | |
| Mean | | 49.21 |
| Standard deviation | | 12.10 |
| 25th Percentile | | 40 |
| 50th Percentile | | 49 |
| 75th Percentile | | 57 |
| Respondents with available data | 665 | |
| **Borrower's years in business (as of 2021)** | | |
| Mean | | 9.39 |
| Standard Deviation | | 8.82 |
| 25th percentile | | 4 |
| Median | | 7 |
| 75th percentile | | 11 |
| Respondents with available data | 671 | |
| **Highest level of education** | | |
| Some high school, no diploma | 12 | 1.83% |
| High school or the equivalent | 66 | 7.77% |
| Trade/technical/vocational training | 45 | 5.43% |
| Some college, no degree | 106 | 17.01% |
| Associate degree | 89 | 11.12% |
| Bachelor's degree | 215 | 32.23% |
| Master's degree | 115 | 17.38% |
| Doctorate degree | 27 | 4.19% |
| Respondents with missing data | 22 | 3.03% |
| **Hispanic, Latino *** | | |
| No | 631 | 83.43% |
| Yes | 61 | 15.55% |
| Respondents with missing data | 5 | 1.03% |
| **Race *** | | |
| White | 471 | 57.55% |
| Black or African American | 169 | 29.98% |
| Asian | 29 | 6.52% |
| Native American, Alaska Native, Native Hawaiian or Other Pacific Islander | 21 | 3.01% |
| Respondents with missing data | 18 | 4.73% |
| Racial minority * | 214 | 38.69% |
| **Racial/ethnic minority *** | 264 | 50.79% |
| Respondents with missing data | 3 | 0.93% |
| **Underrepresented owner (women, low-income, veterans, minorities) *** | 452 | 80.69% |
| **Total number of respondents** | **697** | |

Note: based on borrower weighted survey data.
Note *: based on survey data supplemented with SBA data.

**Exhibit D9a.** Owner demographics, based on the Census, the SBA, and borrower survey data

| | Census | | Microloan | | Difference |
|---|---|---|---|---|---|
| | Count | % | Count | % | |
| **Gender** | | | | | |
| Female | 1,141,410 | 19.95% | 15,105 | 48.31% | **28.36%** |
| Male | 3,496,959 | 61.11% | 16,159 | 51.69% | **-9.42%** |
| Equally male/female | 860,754 | 15.04% | | | |
| Unclassifiable | 223,020 | 3.90% | | | |
| Total | 5,722,142 | 100.00% | 31,264 | 100.00% | |
| **Ethnicity** | | | | | |
| Hispanic | 331,625 | 5.80% | 61 | 15.55% | **9.75%** |
| Equally Hispanic/non-Hispanic | 49,285 | 0.86% | | | |
| Non-Hispanic | 5,118,211 | 89.45% | 631 | 83.43% | **-6.02%** |
| Unclassifiable | 223,020 | 3.90% | 5 | 1.03% | -2.87% |
| Total | 5,722,142 | 100.00% | 697 | 100.00% | |
| **Race** | | | | | |
| Minority | 1,048,323 | 18.32% | 214 | 38.69% | **20.37%** |
| Equally minority/nonminority | 86,633 | 1.51% | | | |
| Nonminority | 4,364,169 | 76.27% | 465 | 56.57% | **-19.70%** |
| Unclassifiable | 223,020 | 3.90% | 18 | 4.73% | 0.83% |
| Total | 5,722,142 | 100.00% | 697 | 100.00% | |
| **Veteran** | | | | | |
| Veteran | 337,934 | 5.91% | 1,285 | 4.11% | -1.80% |
| Equally veteran/nonveteran | 145,782 | 2.55% | | | |
| Nonveteran | 5,015,409 | 87.65% | 24,122 | 77.16% | **-10.49%** |
| Unclassifiable | 223,020 | 3.90% | 5,857 | 18.73% | **14.83%** |
| Total | 5,722,142 | 100.00% | 31,264 | 100.00% | |
| **Education** | | | | | |
| Less than high school graduate | 110,743 | 2.60% | 12 | 1.83% | -0.77% |
| High school graduate - diploma or GED | 791,649 | 18.61% | 66 | 7.77% | **-10.84%** |
| Technical, trade, or vocational school | 229,223 | 5.39% | 45 | 5.43% | 0.04% |
| Some college, but no degree | 583,812 | 13.72% | 106 | 17.01% | **3.29%** |
| Associate degree | 229,161 | 5.39% | 89 | 11.12% | **5.73%** |
| Bachelor's degree | 1,232,195 | 28.96% | 215 | 32.23% | **3.27%** |
| Master's or professional degree | 839,757 | 19.74% | 115 | 17.38% | -2.36% |
| Doctorate degree | 77,752 | 1.83% | 27 | 4.19% | 2.36% |
| Item not reported | 160,686 | 3.78% | 22 | 3.03% | -0.75% |
| Total | 4,254,974 | 100.00% | 697 | 100.00% | |
| **Age** | | | | | |
| Under 25 | 15,627 | 0.37% | 7 | 1.23% | 0.86% |
| 25 to 34 | 220,886 | 5.19% | 52 | 8.64% | **3.45%** |
| 35 to 44 | 692,737 | 16.28% | 166 | 26.32% | **10.04%** |
| 45 to 54 | 1,094,449 | 25.72% | 207 | 28.02% | 2.30% |
| 55 to 64 | 1,249,570 | 29.37% | 169 | 21.45% | **-7.92%** |
| 65 or over | 840,871 | 19.76% | 64 | 9.16% | **-10.60%** |
| Item not reported | 140,835 | 3.31% | 32 | 5.19% | 1.88% |
| Total | 4,254,974 | 100.00% | 697 | 100.00% | |
| **Years in business** | | | | | |
| <1 | 51,213 | 1.20% | 3 | 0.43% | -0.77% |
| 1 to 5 | 918,274 | 21.58% | 262 | 36.70% | **15.12%** |
| 6 to 10 | 635,074 | 14.93% | 205 | 29.65% | **14.72%** |
| 11 to 18 | 831,465 | 19.54% | 130 | 19.17% | -0.37% |
| 19 to 28 | 605,611 | 14.23% | 52 | 7.12% | **-7.11%** |
| 29 to 38 | 338,444 | 7.95% | 14 | 1.48% | **-6.47%** |
| 39+ | 146,045 | 3.43% | 5 | 1.15% | -2.28% |
| Item not reported | 152,748 | 3.59% | 26 | 4.30% | 0.71% |
| Don't know | 576,097 | 13.54% | 0 | 0.00% | |
| Total | 4,254,974 | 100.00% | 697 | 100.00% | |

Note 1: based on the Census Annual Business Survey 2018, the SBA data for the Microloan universe, and weighted borrower survey data.
Note 2: Census data included are all nonfarm employer businesses, with receipts of $1,000 or more (some counts may not sum-up to the total).

**Exhibit D9b.** Industry group by college education, based on the borrower survey (post hoc)

| | College Education | | | Total |
|---|---|---|---|---|
| | No | Yes | Missing data | |
| Construction or Manufacturing | 33.75% | 65.10% | 1.15% | 100.00% |
| | 39 | 81 | 2 | 122 |
| Wholesale/Retail Trade | 38.05% | 58.39% | 3.56% | 100.00% |
| | 43 | 64 | 4 | 111 |
| Transportation and Warehousing | 52.31% | 42.57% | 5.12% | 100.00% |
| | 32 | 23 | 5 | 60 |
| Professional, Scientific, and Technical Services | 16.26% | **83.74%** | 0.00% | 100.00% |
| | 13 | 56 | 0 | 69 |
| Health Care and Social Assistance | 15.45% | **81.51%** | 3.04% | 100.00% |
| | 8 | 42 | 2 | 52 |
| Accommodation and Food Services | 33.32% | 59.54% | 7.14% | 100.00% |
| | 37 | 56 | 3 | 96 |
| Other Services (repair, personal care, dry-cleaning, etc.) | 53.82% | 44.00% | 2.18% | 100.00% |
| | 31 | 36 | 2 | 69 |
| All other industries | 21.43% | **76.59%** | 1.98% | 100.00% |
| | 26 | 88 | 4 | 118 |
| Total | 32.05% | 64.92% | 3.03% | 100.00% |
| | 229 | 446 | 22 | 697 |

Note 1: based on borrower weighted survey data.
Note 2: significant at p<.001.
Note 3: for more information on industries see https://www.naics.com/search/

**Exhibit D9c.** All other industries group by college education, based on the borrower survey (post hoc)

| | College Education | | | Total |
|---|---|---|---|---|
| | No | Yes | Missing data | |
| Agriculture, Forestry, Fishing and Hunting | 14.30% | 80.35% | 5.34% | 100.00% |
| | 2 | 12 | 1 | 15 |
| Mining | 100.00% | 0.00% | 0.00% | 100.00% |
| | 1 | 0 | 0 | 1 |
| Utilities | 0.00% | 100.00% | 0.00% | 100.00% |
| | 0 | 1 | 0 | 1 |
| Information | 22.85% | 77.15% | 0.00% | 100.00% |
| | 1 | 9 | 0 | 10 |
| Finance and Insurance | 14.86% | **85.14%** | 0.00% | 100.00% |
| | 1 | 7 | 0 | 8 |
| Real Estate Rental and Leasing | 25.10% | 74.90% | 0.00% | 100.00% |
| | 3 | 4 | 0 | 7 |
| Administrative and Support and Waste Management and Remediation Services | 42.40% | 54.35% | 3.25% | 100.00% |
| | 9 | 19 | 1 | 29 |
| Educational Services | 14.04% | **85.96%** | 0.00% | 100.00% |
| | 3 | 14 | 0 | 17 |
| Arts, Entertainment, and Recreation | 8.44% | **90.15%** | 1.41% | 100.00% |
| | 6 | 21 | 1 | 28 |
| Public Administration | 0.00% | 68.13% | 31.87% | 100.00% |
| | 0 | 1 | 1 | 2 |
| Total | 21.43% | 76.59% | 1.98% | 100.00% |
| | 26 | 88 | 4 | 118 |

Note 1: based on borrower weighted survey data.
Note 2: not significant.
Note 3: for more information on industries see https://www.naics.com/search/

### *Borrowers Loan Experiences*

**Exhibit D10.** Borrower loan characteristics, based on the SBA data

| | statistics |
|---|---|
| **Microloan amount** | |
| Mean | $14,499.48 |
| Standard deviation | $14,335.77 |
| <$2,500 | 17.98% |
| $2,500-$6,999 | 22.96% |
| $7,000-$14,999 | 21.29% |
| $15,000-$25,000 | 19.24% |
| >$25,000 | 18.54% |
| Minimum | $100 |
| Maximum | $50,000 |
| **Microloan interest percent** | |
| Mean | 7.94 |
| Standard deviation | 1.88 |
| 25th Percentile | 7.25 |
| 50th Percentile | 8.13 |
| 75th Percentile | 8.88 |
| Minimum | 0 |
| Maximum | 15 |
| **Microloan maturity in months** | |
| Mean | 41.08 |
| Standard deviation | 22.30 |
| 25th Percentile | 24 |
| 50th Percentile | 36 |
| 75th Percentile | 60 |
| Minimum | 1 |
| Maximum | 180 |
| **Number of borrowers** | **31,264** |

Note 1: based on the SBA data for the universe.
Note 2: monthly payments were calculated based on the loan value, the interest rate, and maturity in months.

**Exhibit D10a.** Borrower loan amount by college education, based on borrower data (post hoc)

| College Education | Mean | Std. Dev. |
|---|---|---|
| No | $17,851 | $13,522 |
| Yes | $18,955 | $15,664 |
| Missing data | $13,809 | $14,443 |

Note 1: based on borrower weighted survey data.
Note 2: not significant.

**Exhibit D10b.** Total amount of loans by region, based on the SBA data (post hoc)

| | Mean | St. Dev. | Median | Sum | N |
|---|---|---|---|---|---|
| Region I New England | $22,079 | $15,087 | $18,732 | $43,717,270 | 1,980 |
| Region II Atlantic | $10,454 | $12,138 | $5,000 | $73,221,750 | 7,004 |
| Region III Mid-Atlantic | $13,718 | $15,067 | $7,200 | $55,391,275 | 4,038 |
| Region IV Southeast | $17,208 | $15,878 | $10,841 | $57,696,960 | 3,353 |
| Region V Great Lakes | $15,001 | $13,841 | $10,000 | $70,835,302 | 4,722 |
| Region VI South Central | $15,909 | $12,520 | $12,444 | $38,881,470 | 2,444 |
| Region VII Great Plains | $8,905 | $9,636 | $5,085 | $26,545,765 | 2,981 |
| Region VIII Rocky Mountains | $16,256 | $13,167 | $11,841 | $23,879,891 | 1,469 |
| Region IX Pacific | $22,101 | $16,796 | $20,000 | $50,389,888 | 2,280 |
| Region X Pacific Northwest | $12,842 | $15,092 | $5,300 | $12,752,140 | 993 |
| Total | $14,499 | $14,336 | $10,000 | $453,311,713 | 31,264 |

Note: based on the SBA data for the universe.

**Exhibit D10c.** Total amount of loans by RUCA, based on the SBA data (post hoc)

| | Mean | St. Dev. | Median | Sum | N |
|---|---|---|---|---|---|
| Metro - 1 million population or more | $12,591 | $13,738 | $7,500 | $251,951,652 | 20,011 |
| Metro - 250,000 to 1 million population | $18,152 | $14,831 | $14,838 | $103,846,327 | 5,721 |
| Metro - fewer than 250,000 population | $17,518 | $14,771 | $13,000 | $30,305,985 | 1,730 |
| Nonmetro - 20,000 or more population | $17,633 | $14,817 | $12,930 | $20,983,035 | 1,190 |
| Nonmetro - 2,500 to 19,999 population | $18,323 | $14,689 | $15,000 | $36,463,654 | 1,990 |
| Nonmetro - rural or less than 2,500 population | $15,693 | $13,660 | $10,000 | $9,761,059 | 622 |
| Total | $14,499 | $14,336 | $10,000 | $453,311,713 | 31,264 |

Note 1: based on the SBA data for the universe.

**Exhibit D11.** Borrower loan description, based on the SBA data

| | n | % |
|---|---|---|
| **Fiscal year of the loan initiation** | | |
| 2010 | 2,899 | 9.27 |
| 2011 | 2,834 | 9.06 |
| 2012 | 2,731 | 8.74 |
| 2013 | 3,062 | 9.79 |
| 2014 | 2,567 | 8.21 |
| 2015 | 2,489 | 7.96 |
| 2016 | 3,158 | 10.1 |
| 2017 | 3,496 | 11.18 |
| 2018 | 3,904 | 12.49 |
| 2019 | 4,124 | 13.19 |
| **Purpose or proceeds towards which the loan amount was used (multi-select item)** | | |
| Working capital | 22,094 | 70.67 |
| Equipment | 9,414 | 30.11 |
| Inventory | 7,678 | 24.56 |
| Supply | 2,685 | 8.59 |
| Materials | 1,995 | 6.38 |
| Other | 441 | 1.41 |
| **With Collateral** | 8,767 | 28.04 |
| **With Guarantor** | 9,786 | 31.30 |
| **Loan status among all loans** | | |
| Charged Off | 3,596 | 11.50 |
| Current (30 days & under) | 7,403 | 23.68 |
| Delinquent (31 - 60 days) | 263 | 0.84 |
| Delinquent (61 - 90 days) | 148 | 0.47 |
| Delinquent (91 - 120 days) | 169 | 0.54 |
| Delinquent (121 days & over) | 137 | 0.44 |
| Paid in Full | 19,548 | 62.53 |
| *Total Delinquent* | *717* | *2.29* |
| **Number of borrowers** | **31,264** | **100** |

Note: based on the SBA data for the universe.

**Exhibit D11a.** Borrower loan amount by status, based on the SBA data (post hoc)

| Loan status among all loans | Mean | St. Dev. | Median | Sum | N |
|---|---|---|---|---|---|
| Charged Off | $11,939 | $13,147 | $6,000 | $42,931,066 | 3,596 |
| Current (30 days & under) | $20,232 | $15,615 | $15,000 | $149,774,618 | 7,403 |
| Delinquent (31 - 60 days) | $14,326 | $14,646 | $10,000 | $3,767,648 | 263 |
| Delinquent (61 - 90 days) | $14,367 | $13,605 | $10,000 | $2,126,282 | 148 |
| Delinquent (91 - 120 days) | $11,916 | $13,026 | $8,000 | $2,013,782 | 169 |
| Delinquent (121 days & over) | $7,872 | $11,287 | $2,575 | $1,078,441 | 137 |
| Paid in Full | $12,872 | $13,465 | $8,000 | $251,619,876 | 19,548 |
| Total | $14,499 | $14,336 | $10,000 | $453,311,713 | 31,264 |
| *Total Delinquent* | *12,533* | *13,661* | *8,000* | *8,986,152* | *717* |

Note: based on the SBA data for the universe.

**Exhibit D11b.** Borrower loan status, based on the SBA and the federal reserve data

| Fiscal year | Statistics | MICROLOAN | | | | | FEDERAL RESERVE |
|---|---|---|---|---|---|---|---|
| | | Paid in Full | Current | Charged Off | Delinquent | Total | Delinquency Rates |
| **2010** | **Count** | 2,323 | 103 | 444 | 29 | 2,899 | |
| | **Percent** | 80.13 | 3.55 | 15.32 | 1.00 | 100 | 3.89 |
| **2011** | **Count** | 2,328 | 86 | 388 | 32 | 2,834 | |
| | **Percent** | 82.15 | 3.03 | 13.69 | 1.13 | 100 | 2.42 |
| **2012** | **Count** | 2,284 | 62 | 364 | 21 | 2,731 | |
| | **Percent** | 83.63 | 2.27 | 13.33 | 0.77 | 100 | 1.52 |
| **2013** | **Count** | 2,660 | 40 | 347 | 15 | 3,062 | |
| | **Percent** | 86.87 | 1.31 | 11.33 | 0.49 | 100 | 1.10 |
| **2014** | **Count** | 2,099 | 108 | 345 | 15 | 2,567 | |
| | **Percent** | 81.77 | 4.21 | 13.44 | 0.58 | 100 | 0.90 |
| **2015** | **Count** | 1,814 | 301 | 353 | 21 | 2,489 | |
| | **Percent** | 72.88 | 12.09 | 14.18 | 0.84 | 100 | 1.02 |
| **2016** | **Count** | 1,983 | 622 | 500 | 53 | 3,158 | |
| | **Percent** | 62.79 | 19.7 | 15.83 | 1.68 | 100 | 1.60 |
| **2017** | **Count** | 1,832 | 1,130 | 452 | 82 | 3,496 | |
| | **Percent** | 52.4 | 32.32 | 12.93 | **2.35** | 100 | **1.55** |
| **2018** | **Count** | 1,521 | 1,912 | 284 | 187 | 3,904 | |
| | **Percent** | 38.96 | 48.98 | 7.27 | **4.79** | 100 | **1.12** |
| **2019** | **Count** | 704 | 3,039 | 119 | 262 | 4,124 | |
| | **Percent** | 17.07 | 73.69 | 2.89 | **6.35** | 100 | **1.17** |
| **Total** | **Count** | 19,548 | 7,403 | 3,596 | 717 | 31,264 | |
| | **Percent** | 62.53 | 23.68 | 11.5 | 2.29 | 100 | |

Note: based on the SBA data for the universe and federal reserve data (commercial and industrial loans, highest rate for a quarter in a year).

Source: FRB: Charge-Off and Delinquency Rates on Loans and Leases at Commercial Banks (federalreserve.gov)

**Exhibit D12.** Participation in other lending and financing programs, based on the borrower survey

| | n | statistics |
|---|---|---|
| **Participated in any other government lending programs** | | |
| No | 645 | 94.05% |
| Yes | 51 | 5.86% |
| Respondents with missing data | 1 | 0.08% |
| **Participated in other government lending programs:** | | |
| USDA Rural Micro-entrepreneur Assistance (RMAP) | 1 | 0.04% |
| USDA Farm Service Agency (FSA) Microloan | 1 | 0.06% |
| Community Development Financial Institutions (CDFI) | 5 | 0.46% |
| 7(a) Loan Guaranty | 11 | 0.98% |
| 504 Certified Development Company Loan (CDC/504) Program | 2 | 0.22% |
| Small Business Investment Company (SBIC) | 2 | 0.37% |
| Community Advantage Program | 1 | 0.08% |
| America's Recovery Capital (ARC) Loan Program | 2 | 0.09% |
| USDA Rural Business Development Grants | 5 | 0.36% |
| Other | 26 | 3.50% |
| *Number of lending programs* | | |
| *Mean* | | 0.06 |
| *Standard deviation* | | 0.25 |
| *Respondents with available data* | *696* | |
| **Obtained financing from any other source** | | |
| No | 406 | 61.37% |
| Yes | 289 | 37.84% |
| Respondents with missing data | 2 | 0.80% |
| **Obtained financing from other sources:** | | |
| Friends or family | 115 | 16.09% |
| Traditional bank | 125 | 13.61% |
| Community bank | 44 | 5.15% |
| Investor | 27 | 4.59% |
| Nonprofit lending organizations | 20 | 2.79% |
| Other | 53 | 9.64% |
| *Number of financing sources* | | |
| *Mean* | | *0.52* |
| *Standard deviation* | | *0.79* |
| *Respondents with available data* | *695* | |

Note: based on borrower weighted survey data.

**Exhibit D13.** Significant business characteristic predictors of business growth and survival from the loan initiation to 2019, based on the borrower survey

| | Outcomes | | |
|---|---|---|---|
| | **Revenue (exponentiated coefficients)** | **Employment (4 groups)** | **Currently in business** |
| **Control factors** | | | |
| Urban - 1 million population or more | | 1.78 (77.76%)p<.01 | |
| **Loan experiences** | | | |
| Microloan loan amount (in ten thousand) | 1.22 (21.51%)p<.05 | 1.20 (20.26%)p<.01 | 1.25 (24.75%)p<.05 |
| Obtained financing from other sources | 2.06 (106.36%)p<.01 | 2.35 (135.30%)p<.001 | |
| **Business characteristics** | | | |
| Start-up | 0.43 (-57.21%)p<.01 | | .45 (-55.41%)p<.05 |
| Sole proprietorship | 0.22 (-78.21%)p<.001 | 0.56 (-43.65%)p<.01 | .52 (-47.71%)p<.05 |
| Minority-owned | 0.37 (-63.22%)p<.01 | .66 (-33.66%)p<.05 | |
| Women-owned certificate | | | 2.07 (106.53%)p<.05 |
| **Industry** | | | |
| Health Care and Social Assistance | | 5.76 (475.53%)p<.001 | |

Note 1: controlling for region, currently in business, years since the loan initiation, industry, and the baseline levels of the outcomes.
Note 2: revenue regressions required log transformation of the outcome to address the heteroscedasticity of residuals.
Note 3: employment was modeled via the ordinal logistic regression using four employment groups: 0, 25.2%; 1-2, 27.6%; 3-6, 23.7%; 7+, 23.5%.
Note 4: in business was modeled via the binary logistic regression.
Note 5: revenue exponentiated regression coefficients could be interpreted as percent change in outcome for the predictor relative to the reference group.
Note 6: employment regression coefficients are the odds ratios and interpreted as times more or less likely to be in each group than in the combined other categories for the predictor. They could also be interpreted as percent change in the odds of the outcome for the predictor.
Note 7: in business regression coefficients are the odds ratios and interpreted as an outcome is times more or less likely for the predictor relative to the reference group. They could also be interpreted as percent change in the odds of the outcome for the predictor.

## *Borrowers Covid-19 Experiences*

**Exhibit D14.** Participation in Covid assistance programs, based on the borrower survey

| | n | statistics |
|---|---|---|
| **Participated in any lending programs as a result of the Covid-19 Pandemic** | | |
| No | 108 | 15.58% |
| Yes | 582 | 83.65% |
| Respondents with missing data | 7 | 0.77% |
| **Participated in lending programs as a result of the Covid-19 Pandemic:** | | |
| Paycheck Protection Program (PPP) | 444 | 62.48% |
| Economic Injury Disaster Loan (EIDL) Program | 381 | 55.80% |
| Paycheck Protection Program (PPP) loan forgiveness | 369 | 51.84% |
| Paid Sick Leave and Paid Family Leave Credit | 28 | 5.28% |
| Employee Retention and Rehiring Credit | 29 | 4.99% |
| Other federal relief programs | 56 | 7.98% |
| Other state or local economic relief programs | 113 | 16.40% |
| Banks or other financial institutions | 20 | 2.63% |
| Other | 43 | 5.45% |
| *Number of Covid-19 lending programs* | | |
| *Mean* | | *2.15* |
| *Standard deviation* | | *1.49* |
| *Respondents with available data* | *690* | |

Note: based on borrower weighted survey data.

**Exhibit D15.** Business difficulties due to the Covid-19 Pandemic, based on the borrower survey

| | n | statistics |
|---|---|---|
| **Experienced any business difficulties due to the Covid-19 Pandemic** | | |
| No | 87 | 10.64% |
| Yes | 601 | 87.79% |
| Respondents with missing data | 9 | 1.56% |
| **Experienced business difficulties due to the Covid-19 Pandemic:** | | |
| Business sold or permanently closed due to the Covid-19 Pandemic | 16 | 1.70% |
| Decreased Gross Annual Revenue | 483 | 74.15% |
| Decreased the number of employees | 255 | 42.36% |
| Decreased the total number of hours worked by employees | 309 | 46.59% |
| Decreased the total number of hours the business-owner worked | 283 | 44.44% |
| Closed business location(s) | 110 | 18.46% |
| Considered closing the business location(s) | 129 | 18.64% |
| Considered permanently closing the business | 114 | 15.37% |
| Other (temporary closure, slow business, reduced sales) | 71 | 10.08% |
| *Number of Covid-19 business difficulties* | | |
| *Mean* | | *2.76* |
| *Standard deviation* | | *1.85* |
| *Respondents with available data* | *688* | |

Note: based on borrower weighted survey data.

**Exhibit D16.** Significant business characteristic predictors of business growth from the 2019 to 2020, based on the borrower survey

| | Outcomes | |
|---|---|---|
| | Revenue (exponentiated coefficients) | Employment (4 groups) |
| **Control factors** | | |
| Number of Covid-19 related business difficulties | 0.86 (-13.52%)p<.05 | .77 (-23.04%)p<.001 |
| **Loan experiences** | | |
| Microloan loan amount (in ten thousand) | 1.19 (19.04%)p<.01 | |
| Obtained financing from other sources | | 1.47 (46.80%)p<.05 |
| Number of lending programs participated in as a result of the Coronavirus Pandemic | 2.44 (144.25%)p<.001 | 1.31 (31.33%)p<.001 |
| **Business characteristics** | | |
| Startup | 0.51 (-49.01%)p<.05 | |
| Sole proprietorship | 0.28 (-71.84%)p<.001 | |
| Minority-owned | 0.50 (-50.02%)p<.001 | |
| **Industry group based on NAICS economic sector** | | |
| Health Care and Social Assistance | | 1.42 (41.59%)p<.05 |
| Professional, Scientific, and Technical Services | 2.04 (103.93%)p<.05 | |
| Construction or Manufacturing | 1.99 (99.03%)p<.05 | |

Note 1: also controlling for rural, region, currently in business, years since the loan initiation, and the baseline levels of the outcomes.
Note 2: revenue regressions required log transformation of the outcome to address the heteroscedasticity of residuals (Breusch-Pagan Test).
Note 3: employment was modeled via the ordinal logistic regression using employment groups: 0, 25.2%; 1-2, 27.6%; 3-6, 23.7%; 7+, 23.5%.
Note 4: revenue exponentiated regression coefficients are interpreted as percent change in outcome for the predictor relative to the reference group.
Note 5: employment regression coefficients are the odds ratios and interpreted as times more likely to be in each group than in the combined other categories for the predictor. They could also be interpreted as percent change in the odds of the outcome for the predictor.
Note 6: frequent examples of manufacturing included Breweries, Retail Bakeries, All Other Miscellaneous Manufacturing, Fruit and Vegetable Canning, Commercial Bakeries, Custom Architectural Woodwork and Millwork Manufacturing, Cut and Sew Apparel Contractors, and Ice Cream and Frozen Dessert Manufacturing.
Note 7: frequent examples of construction included All Other Specialty Trade Contractors, Commercial and Institutional Building Construction, Highway; Street; and Bridge Construction, Painting and Wall Covering Contractors, Plumbing; Heating; and Air-Conditioning Contractors.

## Research Question 3: What types, proficiency level, frequency, duration and delivery modes of technical assistance are being provided to Microloan Program borrowers?

### *Intermediary Characteristics*

**Exhibit D17.** Intermediary characteristics, based on the intermediary survey

| | n | statistics |
|---|---|---|
| **Current intermediary, based on self-report** | | |
| No | 4 | 4.44 |
| Yes | 86 | 95.56 |
| Total number of respondents | 90 | 100.00 |
| **Years since stopped participating in the Microloan program** | | |
| Mean | | 6.25 |
| Standard deviation | | 4.57 |
| Number of respondents | 4 | |
| **Intermediary organization type** | | |
| a private, nonprofit community development corporation | 84 | 93.33 |
| a quasi-governmental economic development entity | 4 | 4.44 |
| an agency of a nonprofit entity established by a Native American Tribal Government | 2 | 2.22 |
| **Age of the intermediary organization (as of 2021)** | | |
| Mean | | 26.18 |
| Standard deviation | | 10.18 |
| <20 | 21 | 23.33 |
| 20-25 | 15 | 16.67 |
| 26-30 | 17 | 18.89 |
| >30 | 27 | 30.00 |
| Respondents with missing data | 10 | 11.11 |
| **Years of participation in the Microloan Program** | | |
| Mean | | 18.06 |
| Standard deviation | | 8.41 |
| <10 | 14 | 15.56 |
| 10-15 | 18 | 20.00 |
| 16-24 | 22 | 24.44 |
| 25+ | 24 | 26.67 |
| Respondents with missing data | 12 | 13.33 |

Note: based on the intermediary survey data.

**Exhibit D18.** Intermediary size, based on the SBA data

| | n | statistics |
|---|---|---|
| **Annual number of borrowers** | | |
| Mean | | 18.52 |
| Standard deviation | | 36.70 |
| 25th Percentile | | 3.86 |
| 50th Percentile | | 8.52 |
| 75th Percentile | | 17.66 |
| **Annual total microloans amount** | | |
| Mean | | $265,817 |
| Standard deviation | | $308,475 |
| 25th Percentile | | $59,716 |
| 50th Percentile | | $151,650 |
| 75th Percentile | | $363,381 |
| **Current intermediary (SBA data)** | | |
| No | 38 | 18.81 |
| Yes | 164 | 81.19 |
| **Number of intermediaries** | **202** | **100** |

Note 1: based on the SBA administrative data.
Note 2: current intermediaries were identified as those with currently active Microloans.

**Exhibit D19.** Intermediary location, based on the SBA data

| | n | % |
|---|---|---|
| **Geographic region** | | |
| Midwest | 47 | 23.27 |
| Northeast | 60 | 29.70 |
| South | 55 | 27.23 |
| West | 40 | 19.80 |
| **SBA region** | | |
| Region I New England | 23 | 11.39 |
| Region II Atlantic | 24 | 11.88 |
| Region III Mid-Atlantic | 28 | 13.86 |
| Region IV Southeast | 27 | 13.37 |
| Region V Great Lakes | 34 | 16.83 |
| Region VI South Central | 15 | 7.43 |
| Region VII Great Plains | 11 | 5.45 |
| Region VIII Rocky Mountains | 8 | 3.96 |
| Region IX Pacific | 22 | 10.89 |
| Region X Pacific Northwest | 10 | 4.95 |
| **Number of intermediaries** | **202** | **100** |

Note: based on the SBA administrative data.

### *Intermediary Program Implementation*

**Exhibit D20.** Intermediary program implementation procedures, based on the intermediary survey

| | n | statistics |
|---|---|---|
| **Has eligibility standards for borrowers** | | |
| No | 6 | 6.67 |
| Yes | 84 | 93.33 |
| **Eligibility standards for borrowers:** | | |
| Business credit score | 9 | 10.00 |
| Owner's personal credit score | 53 | 58.89 |
| No bankruptcies or foreclosures in the last one to two years | 41 | 45.56 |
| Have sufficient income to support loan repayment | 79 | 87.78 |
| Have good payment history with other business or personal creditors | 54 | 60.00 |
| Demonstrate need for financing and/or inability to get bank financing | 75 | 83.33 |
| Business age | 9 | 10.00 |
| Business management experience | 38 | 42.22 |
| Other | 24 | 26.67 |
| *Number of eligibility standards for borrowers* | | |
| *Mean* | | *4.24* |
| *Standard deviation* | | *1.94* |
| **Participated in any other federal, state, or local lending programs** | | |
| No | 9 | 10.00 |
| Yes | 81 | 90.00 |
| **Participated in other federal, state, or local lending programs:** | | |
| USDA Rural Micro-entrepreneur Assistance (RMAP) | 32 | 35.56 |
| USDA Farm Service Agency (FSA) Microloan | 2 | 2.22 |
| Community Development Financial Institutions (CDFI) | 63 | 70.00 |
| 7(a) Loan Guaranty | 11 | 12.22 |
| 504 Certified Development Company Loan (CDC/504) Program | 17 | 18.89 |
| Small Business Investment Company (SBIC) | 5 | 5.56 |
| Community Advantage Program | 35 | 38.89 |
| America's Recovery Capital (ARC) Loan Program | 3 | 3.33 |
| Economic Injury Disaster Loan (EIDL) | 6 | 6.67 |
| Paycheck Protection Program (PPP) | 35 | 38.89 |
| Paycheck Protection Program (PPP) Loan Forgiveness | 32 | 35.56 |
| Other | 24 | 26.67 |
| USDA Intermediary Relending Program | 13 | 14.44 |
| Economic Development Administration (EDA) | 11 | 12.22 |
| *Number of lending programs* | | |
| *Mean* | | *3.21* |
| *Standard deviation* | | *2.04* |

Note: based on intermediary survey data.

### *Technical Assistance and Training Provided by Intermediaries*

**Exhibit D21.** Sources of technical assistance and training provided by intermediaries, based on the intermediary survey

| | n | statistics |
|---|---|---|
| **Used any *external* sources of technical assistance and training** | | |
| No | 36 | 40.00 |
| Yes | 54 | 60.00 |
| ***External* sources of technical assistance and training used:** | | |
| Women's Business Centers (WBC) | 30 | 33.33 |
| Veteran's Business Outreach Centers (VBOC) | 7 | 7.78 |
| Small Business Development Centers (SBDC) | 46 | 51.11 |
| SCORE Chapters | 34 | 37.78 |
| USDA Rural Micro-entrepreneur Assistance (RMAP) | 10 | 11.11 |
| USDA Farm Service Agency (FSA) Microloan | 0 | 0.00 |
| Community Development Financial Institutions (CDFI) | 14 | 15.56 |
| Local firms, organizations, colleges, or universities | 41 | 45.56 |
| Other | 7 | 7.78 |
| *Number of technical assistance and training sources* | | |
| *Mean* | | *2.10* |
| *Standard deviation* | | *2.09* |
| **Intermediary organization provided technical assistance or training to Microloan borrowers** | **85** | **94.44** |
| **Total intermediaries that provided technical assistance or training themselves or using external sources** | **87** | **96.67** |
| **Total number of respondents** | **90** | **100.00** |

Note: based on intermediary survey data.

**Exhibit D22.** Dimensions of technical assistance and training provided by intermediaries, based on the intermediary survey

| AMONG INTERMEDIARIES THAT PROVIDED TRAINING | n | % |
|---|---|---|
| **Topics covered during the training or technical assistance** | | |
| Business formation | 63 | 74.12 |
| Business growth plan | 70 | 82.35 |
| Business management (marketing, sales, Human Resources, accounting, etc.) | 83 | 97.65 |
| Taxes, licenses, permits, legal requirements, federal, state, and local laws etc. | 63 | 74.12 |
| Obtaining contracts | 43 | 50.59 |
| Access to business financing, capital, bonding | 77 | 90.59 |
| Networking with other businesses, agencies, and organizations | 61 | 71.76 |
| Innovation and entrepreneurship | 47 | 55.29 |
| Referrals to business resources and training programs | 79 | 92.94 |
| Information about loan servicing and addressing loan repayment difficulties | 67 | 78.82 |
| Other | 11 | 12.94 |
| Respondents with training | 85 | |
| *Number of training topics* | | |
| *Mean* | | *7.81* |
| *Standard deviation* | | *2.31* |
| **Delivery modes for the training or technical assistance** | | |
| In-person | 84 | 98.82 |
| Webinar, teleconferencing, telephone | 78 | 91.76 |
| Web information (videos, articles, peer sharing of online information) | 57 | 67.06 |
| Email information and materials | 71 | 83.53 |
| Printed materials | 47 | 55.29 |
| Other | 8 | 9.41 |
| Respondents with training | 85 | |
| *Number of delivery modes* | | |
| *Mean* | | *4.06* |
| *Standard deviation* | | *1.12* |
| **Settings for the training or technical assistance** | | |
| One-on-one | 85 | 100.00 |
| Small groups | 72 | 84.71 |
| Large groups | 33 | 38.82 |
| Other | 8 | 9.41 |
| Respondents with training | 85 | 100.00 |

Note: based on intermediary survey data.

**Exhibit D23.** Intermediary engagement with borrowers, based on the intermediary survey

| | n | % |
|---|---|---|
| **Frequency of contact with microloan borrowers during the loan repayment (at least)** | | |
| Never | 1 | 1.11 |
| Once or twice per year | 10 | 11.11 |
| Once per quarter | 27 | 30.00 |
| Once per month | 33 | 36.67 |
| Once per week | 1 | 1.11 |
| More than once per week | 1 | 1.11 |
| Other, as needed | 16 | 17.78 |
| Respondents with missing data | 1 | 1.11 |
| **Primary mode of communication with microloan borrowers** | | |
| In-person | 6 | 6.67 |
| Letters, printed materials | 5 | 5.56 |
| Email information and materials | 41 | 45.56 |
| Webinar, teleconferencing, telephone | 21 | 23.33 |
| Other (mixed) | 11 | 12.22 |
| Respondents with missing data | 6 | 6.67 |
| **Conducted any outreach activities or assessment for technical assistance or training needs** | | |
| No | 7 | 7.78 |
| Yes | 76 | 84.44 |
| Respondents with missing data | 7 | 7.78 |
| **Conducted outreach activities or assessment for technical assistance or training needs:** | | |
| Outreach and advertisement | 52 | 57.78 |
| Needs assessment surveys and measures | 48 | 53.33 |
| Interviews | 45 | 50.00 |
| Site visits | 60 | 66.67 |
| Other methods | 12 | 13.33 |
| *Number of outreach activities* | | |
| *Mean* | | *2.63* |
| *Standard deviation* | | *1.38* |
| **Conducted post-training survey and feedback to determine effectiveness** | | |
| No | 27 | 30.00 |
| Yes | 57 | 63.33 |
| Respondents with missing data | 6 | 6.67 |

Note: based on intermediary survey data.

**Exhibit D24.** Technical assistance and training provided to borrowers, based on SBA data

| | Borrowers Receiving Pre-Loan T.A. | Borrowers Receiving Post-Loan T.A. | Total Number of Borrowers | Percent of Borrowers with Pre-Loan T.A. | Percent of Borrowers with Post-Loan T.A. |
|---|---|---|---|---|---|
| Mean | 154.54 | 164.70 | 319.25 | 45.44 | 54.56 |
| Standard deviation | 271.52 | 311.74 | 508.36 | 22.45 | 22.45 |
| 25th Percentile | 24 | 38 | 80 | 29.66 | 37.01 |
| 50th Percentile | 60 | 68 | 154 | 42.5 | 57.5 |
| 75th Percentile | 141 | 135 | 298 | 62.99 | 70.33 |
| Number of borrowers | 149 | 149 | 149 | 149 | 149 |

Note: based on the SBA administrative data.

**Exhibit D25.** Technical assistance and training hours, based on SBA data

| | Total Hours Pre-Loan T.A. | Total Hours Post-Loan T.A. | Total Pre/Post Loan TA Hours | % of Hours Spent on Post-Loan T.A. | % of Hours Spent on Pre-Loan T.A. |
|---|---|---|---|---|---|
| Mean | 450.07 | 1,641.15 | 2,091.22 | 78.62 | 21.38 |
| Standard deviation | 663.34 | 2,137.58 | 2,781.93 | 5.05 | 5.05 |
| 25th Percentile | 135 | 487 | 639 | 75.42 | 20.73 |
| 50th Percentile | 274 | 998 | 1295 | 76.69 | 23.31 |
| 75th Percentile | 512 | 1971 | 2531 | 79.27 | 24.58 |
| Number of borrowers | 149 | 149 | 149 | 149 | 149 |

Note: based on the SBA administrative data.

**Exhibit D26.** Technical assistance and training cost, based on SBA data

| | Total T.A. Hours | Total Cost Requested | Cost Per Total Hours | Cost Per Borrower |
|---|---|---|---|---|
| Mean | 2,668.40 | $131,233 | $53.80 | $647.82 |
| Standard deviation | 3,726.71 | $165,055 | $22.94 | $464.35 |
| 25th Percentile | 827 | $34,432 | $40.91 | $290.93 |
| 50th Percentile | 1,529 | $75,169 | $52.02 | $525.84 |
| 75th Percentile | 2,939 | $163,325 | $63.16 | $889.57 |
| Number of borrowers | 149 | 149 | 149 | 149 |

Note 1: based on the SBA administrative data.
Note 2: Total T.A. Hours includes administrative hours, see table below.

**Exhibit D27.** Types of total technical assistance and training hours, based on SBA data

| | Total T.A. Hours Provided Directly to Borrowers | Total Travel Hours | Total T.A. Preparation Hours | Total Administrative Hours |
|---|---|---|---|---|
| Mean | 1,414.59 | 154.14 | 480.83 | 578.21 |
| Standard deviation | 2,166.53 | 216.14 | 1,000.96 | 1,727.20 |
| 25th Percentile | 315 | 16 | 46 | 25 |
| 50th Percentile | 865 | 67 | 153 | 146 |
| 75th Percentile | 1578 | 204 | 467 | 479 |
| Number of borrowers | 149 | 149 | 149 | 149 |

Note 1: based on the SBA administrative data.

**Exhibit D28.** Total technical assistance and training hours per borrower

| | Percent of Total T.A. Hours Spent Directly with Borrowers | Total T.A. Hours Spent Directly with Borrowers Per Borrower | Total T.A. Hours Per Borrower |
|---|---|---|---|
| Mean | 55.37 | 6.54 | 12.33 |
| Standard deviation | 26.89 | 5.30 | 7.87 |
| 25th Percentile | 34.07 | 2.64 | 6.52 |
| 50th Percentile | 53.45 | 4.87 | 10.84 |
| 75th Percentile | 75.73 | 8.91 | 15.65 |
| Number of borrowers | 149 | 149 | 149 |

Note 1: based on the SBA administrative data.
Note 2: Percent of Hours Spent with Borrowers Total T.A. includes administrative hours.

**Exhibit D29.** Types of pre-loan technical assistance and training hours, based on SBA data

| | Pre-Loan T.A. Hours Spent with Borrowers | Pre-Loan T.A. Travel Hours | Pre-Loan T.A. Preparation Hours |
|---|---|---|---|
| Mean | 318.90 | 38.20 | 99.10 |
| Standard deviation | 501.73 | 73.02 | 201.33 |
| 25th Percentile | 88 | 0 | 0 |
| 50th Percentile | 195 | 11 | 38 |
| 75th Percentile | 375 | 42 | 91 |
| Number of borrowers | 147 | 147 | 147 |

Note 1: based on the SBA administrative data.
Note 2: two intermediaries reported providing no pre-loan T.A.

**Exhibit D30.** Pre-loan technical assistance and training hours per borrower, based on SBA data

| | Percent of Pre-Loan T.A. Hours Spent with Borrowers | Pre-Loan T.A. Hours Spent with Borrowers Per Borrower | Total Pre-Loan T.A. Hours Per Borrower |
|---|---|---|---|
| Mean | 73.14 | 4.20 | 5.88 |
| Standard deviation | 23.62 | 4.17 | 5.35 |
| 25th Percentile | 54.82 | 1.53 | 2.26 |
| 50th Percentile | 75.00 | 2.81 | 4.22 |
| 75th Percentile | 99.09 | 5.21 | 7.41 |
| Number of borrowers | 147 | 147 | 147 |

Note 1: based on the SBA administrative data.
Note 2: two intermediaries reported providing no pre-loan T.A.

**Exhibit D31.** Types of post-loan technical assistance and training hours, based on SBA data

| | Hours Spent with Borrowers Post-Loan T.A. | Travel Hours Post-Loan T.A. | Preparation Hours Post-Loan T.A. |
|---|---|---|---|
| Mean | 1,165.25 | 111.17 | 364.73 |
| Standard deviation | 1,711.71 | 161.28 | 814.55 |
| 25th Percentile | 286 | 3 | 17 |
| 50th Percentile | 777 | 48 | 118 |
| 75th Percentile | 1224 | 129 | 371 |
| Number of borrowers | 149 | 149 | 149 |

Note: based on the SBA administrative data.

**Exhibit D32.** Post-loan technical assistance and training hours per borrower, based on SBA data

| | Percent of Hours Spent with Borrowers Post-Loan | Hours Spent with Borrowers Post-Loan T.A. Per Borrower | Total Hours Post-Loan T.A. Per Borrower |
|---|---|---|---|
| Mean | 70.52 | 11.35 | 18.82 |
| Standard deviation | 26.00 | 10.05 | 28.88 |
| 25th Percentile | 49.67 | 4.06 | 7.53 |
| 50th Percentile | 75.76 | 8.05 | 11.45 |
| 75th Percentile | 91.99 | 15.28 | 21.11 |
| Number of borrowers | 149 | 149 | 149 |

Note: based on the SBA administrative data.

### *Technical Assistance and Training Received by Borrowers*

**Exhibit D33.** Sources of technical assistance and training received by borrowers, based on borrower survey

| | n | statistics |
|---|---|---|
| **Overall sources of technical assistance and training** | | |
| *No training or technical assistance received* | 325 | 43.69% |
| Used external sources of technical assistance or training | 161 | 24.68% |
| The intermediary organization provided technical assistance or training | 218 | 34.16% |
| The intermediary organization referred to external sources for technical assistance or training | 96 | 13.94% |
| Found the sources of technical assistance or training myself | 108 | 17.43% |
| Other | 34 | 5.62% |
| Respondents with missing data | 7 | 1.33% |
| **External sources of technical assistance and training** | | |
| Small Business Development Centers (SBDC) | 88 | 13.55% |
| Local firms, organizations, colleges, or universities | 49 | 7.70% |
| Women's Business Centers (WBC) | 33 | 6.11% |
| Service Corps of Retired Executives (SCORE) | 17 | 2.56% |
| Community Development Financial Institutions (CDFI) | 13 | 1.88% |
| Program for Investment in Micro-Entrepreneurs (PRIME) | 3 | 0.63% |
| Veteran's Business Outreach Centers (VBOC) | 4 | 0.39% |
| USDA Rural Micro-entrepreneur Assistance (RMAP) | 1 | 0.04% |
| USDA Farm Service Agency (FSA) Microloan | 0 | 0.00% |
| Other | 48 | 6.98% |
| Respondents with missing data | 1 | 0.72% |
| *Number of technical assistance and training sources* | | |
| *Mean* | | *0.40* |
| *Standard deviation* | | *0.83* |

Note: based on the borrower weighted survey data.

**Exhibit D34.** Intensity of technical assistance and training received by borrowers, based on borrower survey

| AMONG THOSE WHO RECEIVED TRAINING | n | statistics |
|---|---|---|
| **Total hours of training or technical assistance received** | | |
| Mean | | 22.34 |
| Standard deviation | | 25.62 |
| 25th Percentile | | 5 |
| 50th Percentile | | 15 |
| 75th Percentile | | 30 |
| Number of respondents | 309 | |
| Respondents with missing data | 56 | 13.94% |
| **Frequency of participation in training or technical assistance sessions** | | |
| Once | 95 | 25.03% |
| Once per quarter (or a few times) | 104 | 29.07% |
| Once per month | 58 | 16.13% |
| Once per week | 32 | 8.27% |
| More than once per week | 7 | 2.39% |
| Other (as needed) | 13 | 5.17% |
| Respondents with missing data | 56 | 13.94% |
| **Total number of respondents** | **365** | **100.00%** |

Note: based on the borrower weighted survey data.

**Exhibit D35.** Dimensions of technical assistance and training received by borrowers, based on borrower survey

| AMONG THOSE WHO RECEIVED TRAINING | n | % |
|---|---|---|
| **Type of training or technical assistance** | | |
| Prior to the loan initiation | 157 | 47.14% |
| After the loan initiation | 224 | 61.60% |
| Other | 15 | 4.01% |
| Both pre- and post-loan training or technical assistance | 82 | 26.16% |
| Respondents with missing data | 58 | 15.35% |
| **Topics covered by the training or technical assistance** | | |
| Business formation | 111 | 32.98% |
| Business growth plan | 183 | 54.34% |
| Business management (marketing, sales, HR, accounting, etc.) | 209 | 56.65% |
| Taxes, licenses, permits, legal requirements, federal, state, and local laws etc. | 79 | 23.92% |
| Obtaining contracts | 35 | 11.17% |
| Access to business financing, capital, bonding. | 106 | 33.50% |
| Networking with other businesses, agencies, and organizations | 114 | 33.92% |
| Innovation and entrepreneurship | 87 | 23.80% |
| Referrals to business resources and training programs | 95 | 24.14% |
| Loan servicing and addressing loan repayment difficulties | 73 | 23.50% |
| Other | 22 | 5.61% |
| Respondents with missing data | 45 | 13.12% |
| *Number of training topics* | | |
| *Mean* | | 3.72 |
| *Standard deviation* | | 2.59 |
| *Respondents with available data* | 320 | |
| **Mode of receiving training or technical assistance** | | |
| In-person | 233 | 61.75% |
| Webinar, teleconferencing, telephone | 131 | 38.03% |
| Web information (videos, articles, peer sharing of online information) | 62 | 17.74% |
| Email information and materials | 124 | 35.01% |
| Printed materials | 53 | 15.25% |
| Other | 9 | 3.61% |
| Respondents with missing data | 46 | 11.22% |
| **Settings for the training or technical assistance** | | |
| One-on-one | 212 | 52.25% |
| Small group | 150 | 45.45% |
| Large group | 35 | 11.20% |
| Other | 9 | 2.42% |
| Respondents with missing data | 49 | 12.41% |
| **Proficiency (ability and skill) levels for the trainings or technical assistance** | | |
| Basic, novice (simple content) | 176 | 51.16% |
| Intermediate (somewhat difficult content) | 168 | 40.48% |
| Advanced (difficult content) | 83 | 20.34% |
| Expert (very difficult content) | 31 | 9.10% |
| Other | 7 | 1.33% |
| Respondents with missing data | 49 | 12.22% |
| **Total number of respondents** | **365** | **100.00%** |

Note: based on the borrower weighted survey data.

**Exhibit D36.** Borrowers' report of engagement with intermediary, based on borrower survey

| AMONG THOSE WHO RECEIVED TRAINING | n | % |
|---|---|---|
| **The intermediary contacted borrowers to identify types of technical assistance or training needed** | | |
| No | 89 | 20.71% |
| Yes | 247 | 71.44% |
| Respondents with missing data | 29 | 7.85% |
| **Types of outreach activities or assessment for technical assistance or training conducted** | | |
| Outreach and advertisement | 108 | 32.52% |
| Needs assessment | 95 | 28.97% |
| Interviews | 56 | 17.16% |
| Site visits | 81 | 21.44% |
| Did not specify method | 43 | 11.53% |
| Other methods | 30 | 10.67% |
| **The intermediary conducted post-training survey to gain feedback on effectiveness of TA and training** | | |
| No | 127 | 31.47% |
| Yes | 199 | 58.21% |
| Respondents with missing data | 39 | 10.33% |

Note: based on the borrower weighted survey data.

## Research Question 4: How does the type, proficiency level, frequency, duration, and delivery mode of technical assistance impact Microloan borrower job creation, revenue growth and business tenure outcomes?

**Exhibit D37.** Borrowers' program satisfaction, based on borrower survey

| SATISFACTION WITH: | n | % |
|---|---|---|
| **The amount of the loan received** | | |
| Very dissatisfied | 13 | 1.92% |
| Dissatisfied | 22 | 3.63% |
| Neither satisfied nor dissatisfied | 69 | 11.49% |
| Satisfied | 186 | 24.05% |
| Very satisfied | 396 | 56.29% |
| Respondents with missing data | 11 | 2.62% |
| **The interest rate for the loan** | | |
| Very dissatisfied | 21 | 2.98% |
| Dissatisfied | 59 | 7.89% |
| Neither satisfied nor dissatisfied | 112 | 13.71% |
| Satisfied | 206 | 27.93% |
| Very satisfied | 279 | 43.90% |
| Respondents with missing data | 20 | 3.58% |
| **The relationship with your intermediary lender organization** | | |
| Very dissatisfied | 21 | 3.11% |
| Dissatisfied | 17 | 2.81% |
| Neither satisfied nor dissatisfied | 50 | 8.44% |
| Satisfied | 158 | 20.13% |
| Very satisfied | 428 | 61.27% |
| Respondents with missing data | 23 | 4.24% |
| **The training or technical assistance received from the intermediary lender organization (among those with training)** | | |
| Very dissatisfied | 9 | 2.49% |
| Dissatisfied | 15 | 3.48% |
| Neither satisfied nor dissatisfied | 51 | 11.32% |
| Satisfied | 100 | 24.59% |
| Very satisfied | 175 | 52.96% |
| Respondents with missing data | 15 | 5.16% |
| **The training or technical assistance received from other sources (among those with training)** | | |
| Very dissatisfied | 5 | 1.32% |
| Dissatisfied | 7 | 1.59% |
| Neither satisfied nor dissatisfied | 75 | 16.32% |
| Satisfied | 118 | 31.41% |
| Very satisfied | 146 | 45.05% |
| Respondents with missing data | 14 | 4.30% |
| **Satisfaction measure score** | | |
| Mean | | 4.20 |
| Standard deviation | | 0.87 |
| Respondents with available data | 686 | |
| **Overall satisfied with the program (average score of >=4)** | | |
| No | 192 | 27.19% |
| Yes | 494 | 70.20% |
| Missing data | 11 | 2.62% |

Note: based on the borrower weighted survey data.

**Exhibit D38.** Borrower perceived program effectiveness, based on borrower survey

| | n | % |
|---|---|---|
| **Would recommend the organization lender organization to other business owners and entrepreneurs** | | |
| No | 33 | 4.65% |
| Yes | 599 | 83.75% |
| Respondents with missing data | 65 | 11.60% |
| **Participation in the Microloan Program helped achieve any business growth outcomes** | | |
| Yes | 574 | 82.33% |
| No | 103 | 14.99% |
| Respondents with missing data | 20 | 2.68% |
| **Participation in the Microloan Program helped achieve business growth outcomes:** | | |
| Increased Gross Annual Revenue | 346 | 49.28% |
| Increased the number of employees | 180 | 28.38% |
| Opened a new location for existing business | 79 | 13.12% |
| Opened a new business that did **not** exist before receiving the loan | 137 | 19.34% |
| Became owner of another business that existed before receiving the loan | 36 | 4.43% |
| Other (business growth and survival, business management and finances, business improvements, survive pandemic, etc.) | 107 | 16.25% |
| *The number of issues the Microloan Program helped with* | | |
| *Mean* | | 1.34 |
| *Standard deviation* | | 0.96 |
| *Respondents with available data* | 677 | |
| **The trainings or technical assistance received from the Microloan Program was helpful to improve business management knowledge, skills, and abilities (among those with training)** | | |
| Not at all | 24 | 5.75% |
| To a small extent | 42 | 12.11% |
| To a moderate extent | 97 | 24.53% |
| To a large extent | 82 | 24.07% |
| To a very large extent | 77 | 23.10% |
| Respondents with missing data | 43 | 10.44% |
| **Participation in the Microloan Program helped business survive during the Covid-19 Pandemic** | | |
| No | 147 | 20.13% |
| Not sure | 187 | 26.13% |
| Yes | 344 | 50.59% |
| Respondents with missing data | 19 | 3.15% |

Note: based on the borrower weighted survey data.

**Exhibit D39.** Intermediary perceived program effectiveness, based on intermediary survey

| | n | % |
|---|---|---|
| **The trainings and technical assistance improved business growth outcomes for Microloan borrowers** | | |
| Not at all | | |
| To a small extent | 4 | 4.44 |
| To a moderate extent | 28 | 31.11 |
| To a large extent | 38 | 42.22 |
| To a very large extent | 14 | 15.56 |
| Respondents with missing data | 6 | 6.67 |
| **The loans improved business growth outcomes for Microloan borrowers** | | |
| Not at all | | |
| To a small extent | 2 | 2.22 |
| To a moderate extent | 16 | 17.78 |
| To a large extent | 41 | 45.56 |
| To a very large extent | 27 | 30.00 |
| Respondents with missing data | 4 | 4.44 |

Note: based on the intermediary survey data.

**Exhibit D40.** Significant training and technical assistance predictors of business growth and survival from the loan initiation to 2019, based on borrower survey

| | Outcomes | | |
|---|---|---|---|
| | **Revenue (exponentiated coefficients)** | **Employment (4 groups)** | **Currently in business** |
| **Sources** | | | |
| Intermediary provided training | | 1.47 (46.85%)p<.05 | |
| Found the technical assistance or training self | 0.14 (-86.23%)p<.001 | | |
| Technical assistance or training other than Microloan | | 1.59 (58.77%)p<.01 | 5.43 (442.73%)p<.01 |
| Intermediary referred to external sources for training | 2.35 (134.54%)p<.01 | | |
| **Intensity** | | | |
| Total hours of training or technical assistance (>=20) | 2.12 (112.04%)p<.01 | 1.84 (84.38%)p<.01 | |
| **Topics** | | | |
| The number of training topics | | 1.08 (7.86%)p<.05 | |
| **Mode** | | | |
| Virtual | 2.13 (113.39%)p<.01 | | |
| Webinar | | 1.68 (68.31%)p<.05 | |

Note 1: controlling for region, urbanicity, currently in business, years since the loan initiation, industry, and baseline levels of the outcomes.
Note 2: revenue regressions required log transformation of the outcome to address the heteroscedasticity of residuals.
Note 3: employment was modeled via the ordinal logistic regression using four employment groups: 0, 25.2%; 1-2, 27.6%; 3-6, 23.7%; 7+, 23.5%.
Note 4: in business was modeled via the binary logistic regression.
Note 5: revenue exponentiated regression coefficients could be interpreted as percent change in outcome for the predictor relative to the reference group.
Note 6: employment regression coefficients are the odds ratios and interpreted as times more or less likely to be in each group than in the combined other categories for the predictor. They could also be interpreted as percent change in the odds of the outcome for the predictor.
Note 7: in business regression coefficients are the odds ratios and interpreted as an outcome is times more or less likely for the predictor relative to the reference group. They could also be interpreted as percent change in the odds of the outcome for the predictor.

**Exhibit D41.** Significant program perceptions predictors of business growth and survival from the loan initiation to 2019, based on borrower survey

| | Outcomes | | |
|---|---|---|---|
| | **Revenue (exponentiated coefficients)** | **Employment (4 groups)** | **Currently in business** |
| **Perceptions of training and the program** | | | |
| Helped open a new business that didn't exist before the loan | | 2.46 (145.78%)p<.01 | |
| The Microloan program helped increase gross annual revenue | 2.59 (159.21%)p<.001 | | 6.05 (504.75%)p<.001 |
| The Microloan program helped increase the number of employees | 3.35 (234.85%)p<.001 | 3.94 (294.25%)p<.001 | 2.90 (189.72%)p<.05 |
| The Microloan program training helped improve business management | | 1.52 (52.05%)p<.01 | |
| The Microloan program helped business survive Covid-19 pandemic | | | 21.24 (2,023.81%)p<.001 |
| Satisfied with intermediary's training and technical assistance | 1.72 (72.16%)p<.05 | | 1.86 (85.90%)p<.05 |
| Satisfied with the amount of microloan | 3.89 (289.02%)p<.01 | | |

Note 1: controlling for region, urbanicity, currently in business, years since the loan initiation, industry, and baseline levels of the outcomes.
Note 2: revenue regressions required log transformation of the outcome to address the heteroscedasticity of residuals.
Note 3: employment was modeled via the ordinal logistic regression using four employment groups: 0, 25.2%; 1-2, 27.6%; 3-6, 23.7%; 7+, 23.5%.
Note 4: in business was modeled via the binary logistic regression.
Note 5: revenue exponentiated regression coefficients could be interpreted as percent change in outcome for the predictor relative to the reference group.
Note 6: employment regression coefficients are the odds ratios and interpreted as times more or less likely to be in each group than in the combined other categories for the predictor. They could also be interpreted as percent change in the odds of the outcome for the predictor.
Note 7: in business regression coefficients are the odds ratios and interpreted as an outcome is times more or less likely for the predictor relative to the reference group. They could also be interpreted as percent change in the odds of the outcome for the predictor.

# Appendix E: Qualitative Analysis

Interview data was collected from nine intermediaries (including two pretest interviews) and nine borrowers (including two pretest interviews). The qualitative data also included open-ended survey responses. Analyses of the qualitative data involve coding for the major themes and subthemes. The first step involved the systematic coding for key themes using Excel software. Then, themes and their descriptions were revised to enhance the initial coding scheme. Coding was conducted using primary and secondary coders, with checks for consistency. Discrepancies were reviewed and discussed to achieve consensus to revise and finalize the coding scheme.

The responses to interviews and open-ended survey items broadly covered borrowers' and intermediaries' perceptions of the program, including issues and benefits and detailed suggestions for improvements to the microloans program and the training and technical assistance provided microborrowers.

BORROWERS

***Perceptions of the Program***

On the web survey, when asked to provide suggestions for program improvements to meet business needs and circumstances better, the borrowers described their experiences with the program, including issues and perceived benefits. The responses covered the following major themes.

- A third of borrowers (70 of 203, 34.48%) reported being satisfied with the program, the relationship with the lender, the amount of the loan, and the training and technical assistance received. Some examples are:
  - *This loan program totally kept us alive through 2020! I'm hoping to take advantage of more technical assistance through the lender in 2021 and 2022!*
  - *The program was extremely helpful to the growth of my business and to my understanding of financial reports. I would suggest that you increase the budget for such resources, so they are able to help more people.*
  - *The program help start my business, it would have been difficult without [intermediary].*

- Some (22 of 203, 10.84%) also reported challenges in their relationship with the lender:
  - *Prompt and respectful communication was sorely lacking, causing great concern and negatively impacting my ability to conduct my work and generate income.*
  - *In 4 years, I have never been contacted or reached the same person twice. The person who originated my loan had big plans and promises but quit months later and somewhat left me on my own with this big loan to carry.*
  - *There's not enough support for minority owned businesses it is very difficult and the staff at [intermediary] are not sensitive to diversity issues.*

- Some (33 of 203, 16.26%) described the lack of adequate loan terms (interest, amount, collateral, co-signer, credit history, paperwork, fees, lack of flexibility, lack of deferment, changing terms):
  - *My house was used as a collateral on a $10,000.00 loan.*
  - *The interest rate is extremely high given the loan interest rate environment in the country.*

- *It was very difficult to get the loan... the interest rate was really high. The fee was really high. I had to use my home to secure the loan. SBA loans over the past 7 years has been very difficult to access based upon my business revenues and performance.*

- Some (14 of 203, 6.90%) mentioned the lack of or insufficient training or technical assistance:
  - *I didn't get the support that I need. They need to reach out to their clients more often. I never received technical support or other programs.*
  - *I feel like I was on my own to learn and had not much help with moving forward then hit hard by the pandemic.*
  - *Would have liked to have been offered some assistance in the form of mentors or workshops. My relationship with [intermediary] was exclusively a financial one.*

***Suggestions for the Program Improvements***

On the web survey, when asked to provide suggestions for program improvements to meet business needs and circumstances better, the borrowers provided the following suggestions.

- Almost a third (64 of 203; 31.53%) suggested improving the microloan settings (interest, amount, paperwork, online services, wider range of loans, more repayment flexibility):
  - *The program was not adequate for a construction company performing the scope of work relative to roadways and commercial, industrial. Our type of work requires loans 500K and upwards. The program is excellent for small businesses of 1-3 employees.*
  - *The program need improve or change the interest rate and fund more money will help the company to grow.*
  - *…More streamlined and less comprehensive and invasive documentation for loan approval.*
  - *Lower interest rates/ more funding to minority owned businesses without collateral.*
  - *Defer payments at startup for 3 months.... helps get some funds built and a stronger start for success.*

- More than a quarter (56 of 203; 27.59%) suggested improving technical assistance and training (more training, one-on-one, web-based, mentors, business networks, referrals, follow-ups):
  - *Would love to have a mentor. Would also love classes on website/SEO.*
  - *Realistic trainings and mentorships with like businesses and industry professionals. Real help with startup, marketing, networking, growing the business.*
  - *Provide QuickBooks training.*
  - *More training/counseling prior to the loan being given - find opportunities for networking with other businesses that are start-up or have owners that have never run a business before.*
  - *More one on one training. Bookkeeper, business management curriculum.*
  - *More information on how to use the loan.*
  - *…more 1:1 check-ins initiated by the loan officers to provide business development/planning/technical assistance.*

Similar findings were obtained for the borrower interviews. They described positive experiences with the program, training, and the intermediary relationship, particularly the ongoing contacts to check for business growth progress and issues encountered. Some also described having a better experience with the microloan than other lending sources.

Interviewees also mention challenges with the program, including needing additional one-on-one assistance, insufficient loan amount, high-interest rate, and prepayment penalties.

The suggestions for the program improvement included additional training, financial analyses assistance, online training, a partnership with an intermediary that would check business needs, and referrals to training and additional funding sources.

INTERMEDIARIES

***Suggestions for the Program Improvements***

The intermediaries also provided detailed suggestions for the program improvements via survey open-ended responses.

- More than a quarter (14 out of 50; 28.00%) suggested improving training and technical assistance (the restrictions on borrower and non-borrower TA funds, 50/50 pre-post training, provide training toolkit, additional funds for the training):
  - *The program dictates that pre-loan time has to equal post-loan time which causes us to forfeit TA hours - particularly since we work with many start-ups who typically require a much higher level of TA.*
  - *Consider changing the % of TA funds to be more directed to pre-loan borrowers. We spend considerable amounts of time working with individuals who are not approved for a loan.*
  - *More funding for pre technical assistance as businesses require assistance in financial literacy, business registrations, business planning, credit repair and IRS reporting.*
  - *It's easy to provide Pre-TA to potential borrowers because they need the money and are willing to do what they have to do to get it. However, it's much more difficult to provide Post-TA. Once they have the money, they don't think they need additional assistance, don't want to participate in or have time to participate in Post-TA.*
  - *More training, more frequently (monthly or quarterly), for Microloan intermediaries on topics such as counseling and how to provide TA, reviewing Microloan applications, Microloan grant and program management, Microloan program marketing, servicing Microloans.*

- Almost a half (24 out of 50; 48.00%) suggested improving loans (interest, amount, allow to purchase real-estate for business, more program funds, more flexibility on write-offs, delinquencies, and repayment period)
  - *Increase allowable loan amounts up to $100K per borrower for long time lenders with good track records.*
  - *If SBA Micro lenders could be allowed to have a little more flexibility on loan collection our write offs and delinquencies would be even lower than they are. Many times, write offs and delinquencies are caused by medical conditions or circumstances beyond the Micro Borrowers control.*
  - *The longer repayment term extended during COVID should stay in place.*
  - *Over the past year+ we have repeatedly run out of lending capital because of increased demand. If that doesn't happen within the window where the SBA budget has available funds, we find ourselves left out, waiting for the next round.*

- More than a quarter (14 out of 50; 28.00%) suggested improving the program administration (reduce paperwork, quarterly reimbursement requests, reporting metrics, electronic signatures, MPERS)
    - *The quarterly reimbursement requests are burdensome.*
    - *Less paperwork and additional time frame to assist microborrowers.*
    - *Make E-Tran and MPERS more user-friendly.*
    - *Allow electronic signatures for loan documents. Permanently eliminate the additional documentation required for 'no-credit elsewhere'.*

Similar issues and recommendations were discussed with intermediaries during the interviews. These included the following:

- *Importance of creating the online learning community with web-based training and resources.*
- *Continuous, one-on-one engagement with borrowers based on developing a personal relationship.*
- *Proactive training, assistance, and referral to additional training, financing, and business resources.*
- *Other suggestions included more loan flexibility, electronic signatures, increase the microloan amount, flexibility for 50/50 pre/post-loan assistance, improve the online system to reduce burden and avoid manual entry, and improve communication with the SBA.*

***Perceptions of the Program***

The intermediaries also provided detailed responses to the two open-ended survey questions about best practices and issues with training and microloans. These responses further underscored the main themes described above.

- A few (6 out of 68) described the borrowers' needs for training and technical assistance.
    - *Many of the microloan borrowers do not have access to a support network and resources…*
    - *We work with small businesses that do not have the personnel/resource/experience in owning/operating and/or starting up a business successfully.*
    - *Small business borrowers of this size need an advisor to consult with on different decisions and plans. Typically, there is one owner and no other management personnel they can get share business concerns with.*
    - *Most of our potential borrowers do not have knowledge and experience in lending.*

- A few (7 out of 68) reported difficulties getting borrowers to engage in training.
    - *It is difficult to get Microloan borrowers to participate in TA once they have received the loan. They get the money and feel that they don't need any additional assistance.*
    - *The Micro borrower has to be willing to accept training and practice it when we are not present.*
    - *…some clients don't engage and therefore our average impact becomes moderate!*

- Most (48 out of 68; 70.59%) described the perceived effectiveness of training for business management, growth, survival, and new business formation.

- *The entrepreneurs gained additional knowledge which enabled them to make more informed decisions about operating their business.*
- *We have been very fortunate to have very few write offs and restructures in our portfolio. We believe this is a direct result of the technical assistance that our borrowers receive.*
- *The training and TA provided has direct impact on the development, feasibility, implementation, administration and growth of the companies and clients served.*
- *We continuously hear from our clients that they would never have been able to start without our one on one technical assistance.*
- *The vast majority of clients receiving post-loan technical assistance did not have to shut down as a result of COVID-19.*

- Almost a half (32 out of 68; 47.06%) reported best practices for training and technical assistance, including one-on-one access to case manager, tracking business outcomes and financial data, training impact assessment, customized assistance, continuous follow-ups, and tailoring assistance to populations, such as immigrants and minorities.
  - *They receive a combination of services including one-on-one customized technical assistance and trainings. By having a constant interaction with our small business clients allow us to always check on their business status.*
  - *Our default rate is extremely low due to our diligent follow-up with borrowers.*
  - *Our organization have been focusing on one-on-one TA, which have been proven to be more personalized and effective on business needs.*
  - *[Intermediary] forms long-lasting relationships with clients by continuing to provide post-closing counseling long after loans are closed. This post-closing counseling has a significant impact on clients' long-term prospects.*
  - *Each small business owner is assigned their personal small business adviser who develops a custom advising program to address the pressing needs of the small business.*

- Most (50 out of 71; 70.42%) also described the perceived effectiveness of microloans for the business formation, growth, and survival due to access to capital unavailable from other sources, loans for equipment and inventory, and the ability to obtain more financing after the Microloan program.
  - *We have been able to finance new businesses to borrowers that were not able to obtain access to credit through other financial institutions.*
  - *…personalized counseling and training allow our clients, many of whom speak limited English and have little experience with the American financial system, access affordable capital that would otherwise be out of reach.*
  - *The ability to pay back the microloan and the subsequent ability to ''graduate'' to more traditional banking relationships is one way we measure our success with the companies we work with.*
  - *The microloans are a gateway for introducing growing businesses about mainstream financing and this gives them more confidence and knowledge about safe and affordable credit options for future growth.*
  - *An additional goal of our program is to be their interim/initial lender and work with each borrower to get them into a position where they can graduate to the credit standards of the mainstream banking industry.*