

December 2018

Emily Ryder Perlmeter

Overview and Key Findings

Small businesses are critical to the U.S. economy, representing 99.9 percent of all businesses in the country.[1] Small employer firms (hereafter "firms"), upon which this report is based, are responsible for two out of three net job gains nationally.[2] Therefore, monitoring challenges and opportunities associated with revenue, financing and hiring for these groups is essential to understanding the U.S. economy.

In 2017, the Federal Reserve Bank of Dallas joined a Federal Reserve System effort to survey small businesses across the country on an annual basis. This report draws from the 2017 survey results, focusing on small employers in Texas. It further provides perspectives from community partners on addressing some of the challenges the survey reveals. Key findings include:

Majority of Texas firms were profitable and optimism is strong

- The majority (59 percent) of Texas firms were profitable at the end of 2016, although rural firms were less likely to be profitable than those in urban areas.
- Texas firms were optimistic—even more so than their national peers—about projected revenues for the next 12 months, with 76 percent expecting revenues to grow.

Most firms faced financial challenges

- A majority (64 percent) of Texas firms experienced at least one financial challenge, with paying operating expenses being the most common.
- Minority-owned firms struggled with credit availability much more often than their nonminority-owned counterparts (41 percent versus 25 percent).
- Forty percent of Texas firms applied for financing in the prior 12 months,[3] with half of applicants receiving all funding requested. Minority-owned firms were twice as likely to receive no funding compared with nonminority firms.
- Firms that were denied credit pointed to insufficient credit history and insufficient collateral as top reasons.

Hiring employees is a concern

- Most Texas firms attempted to hire at least one employee in the prior 12 months, with two-thirds experiencing some level of difficulty doing so.
- The largest difficulty was finding candidates with the right job-specific skills, training or education, followed closely by lack of applicants.
- To address hiring issues, firms tended to increase starting pay for the positions or restructure existing staff to cover new responsibilities.

For information on resources available for entrepreneurs, see the Eleventh District Technical Assistance Resource Guide.

Notes

- 1. "United States Small Business Profile," Office of Advocacy, U.S. Small Business Administration, 2017.
- 2. "Small Business Job Creation Deconstructed," by Brian Headd, Office of Advocacy, U.S. Small Business Administration, September 2017.
- 3. Approximately the second half of 2016 through the second half of 2017.

Author

Emily Ryder Perlmeter

Community Development Advisor, Federal Reserve Bank of Dallas

Contributor

Pamela Foster

Communications Partner, Federal Reserve Bank of Dallas

The information and views expressed in this report are the author's and do not necessarily reflect official positions of the Federal Reserve Bank of Dallas or Federal Reserve System; nor do they constitute an endorsement of any organization or program.



December 2018

Emily Ryder Perlmeter

Background

With this report, the Federal Reserve Bank of Dallas introduces a new approach to monitoring conditions for small businesses in Texas. For four years, the Dallas Fed partnered with the Texas Small Business Development Centers (SBDCs) to conduct the Texas Small Business Needs Assessment Poll (SBNAP). This year, we have joined a coordinated Federal Reserve System effort, the Small Business Credit Survey (SBCS). This survey is a national sample of small businesses, or firms with fewer than 500 employees, aimed at providing insight into firms' financing and debt needs and experiences. In this effort, the Texas SBDCs remain our largest partners, providing a majority of total responses from Texas participants.

The SBCS is designed to provide timely insights on financing needs and gaps in the country's small businesses. While many questions remain similar to the SBNAP, the SBCS illuminates how Texas businesses fit in the context of the nation and can provide more rigorous data on credit needs to inform policymakers, academics and small business owners.

This report contains information on Texas firms that employ at least one person besides the business owner. The SBCS collects information on both employer and nonemployer firms. Because nonemployers are inherently different from employer firms, and we are interested in workforce and employee challenges, we look only at employer firms for this report.

The total number of Texas respondents for all small businesses in the 2017 survey was 1,133, with 573 of those being employer firms. The survey was fielded during the third and fourth quarters of 2017. For more information on methodology, see the appendix.



December 2018

Emily Ryder Perlmeter

Demographic Snapshot: Texas vs. U.S.

The SBCS yielded 573 responses from Texas businesses with 1-499 full-time or part-time employees (hereafter "firms"), the highest number across all states in the survey. The majority of these firms have been operating 10 or fewer years, with 38 percent considered startups, firms in their first five years of operation (*Chart* 1).

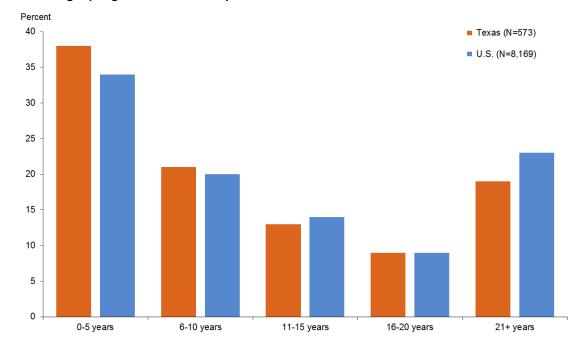


Chart 1. Texas Has Slightly Higher Share of Startups

The majority of firms have under \$1 million annual revenue, with almost a quarter seeing \$100,000 or less. Most are also microfirms, with fewer than five employees including the business owner, although Texas has a slightly higher share of larger employers than the national sample (*Chart 2*).

Chart 2. Most Businesses in U.S. and Texas Are Microfirms

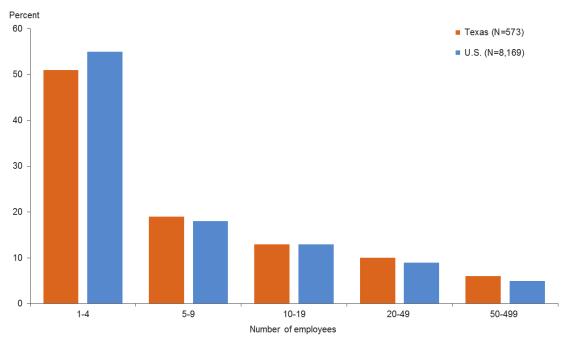


Chart 3 shows that, compared with the national average, Texas has a higher share of minority-owned firms[4] (27 versus 18 percent) and of women-owned or equally owned firms (21 and 16 percent, versus 20 and 15 percent, respectively).

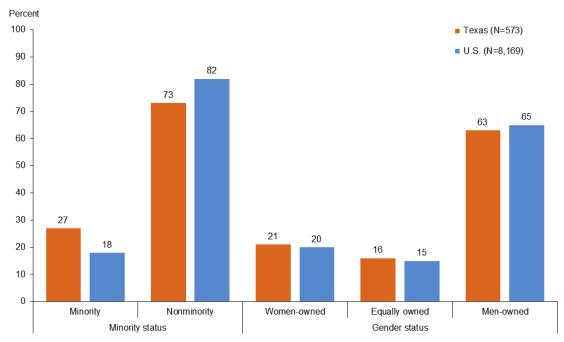


Chart 3. Texas Has Higher Share of Minority-Owned and Women-Owned Firms

The majority (57 percent) of Texas firms are in the service industry, which includes professional services except for finance, while 43 percent are in the goods, retail or finance sectors. Texas has a larger concentration of urban-based firms, with just 14 percent located in rural ZIP codes, [5] compared with 17 percent nationally.

Notes

4. We use the term "minority-owned" if the respondent reports that at least 51 percent of the company is owned by someone who identifies as black/African-American, Hispanic/Latino, Asian or Pacific Islander, Middle Eastern, American Indian/Alaskan native, or other race. The term "minority-owned" is used by the U.S. Small Business Administration, the U.S. Census Bureau and local business certification entities.

5. Businesses are considered rural if their ZIP code is not economically connected to an urban cluster of at least 50,000 people. ZIP code-level Rural-Urban Commuting Area Codes (RUCAs) can be found at depts.washington.edu/uwruca/. RUCAs of 4.0 or higher are classified as "rural."



December 2018

Emily Ryder Perlmeter

Performance

Fully 30 percent of Texas small employer firms are considered to be growing—defined as those that meet the following criteria for the past 12 months:

- Increased revenues
- Increased employees
- Plan to increase or maintain these employees

Taken individually, a majority (53 percent) of firms increased their revenue, while more than a third (36 percent) increased their number of employees in the prior 12 months. Fifty-nine percent of Texas firms overall were profitable at the end of 2016. Firms located in urban areas were much more likely to report revenue growth than their rural counterparts and to report profitability overall (*Chart* 4). Womenowned firms were less likely than men-owned firms to be profitable, while minority-ownership status did not affect this measure.

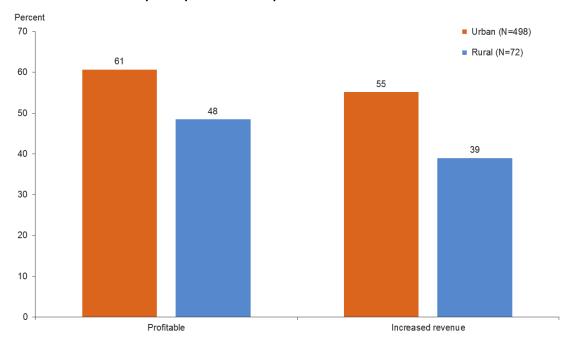
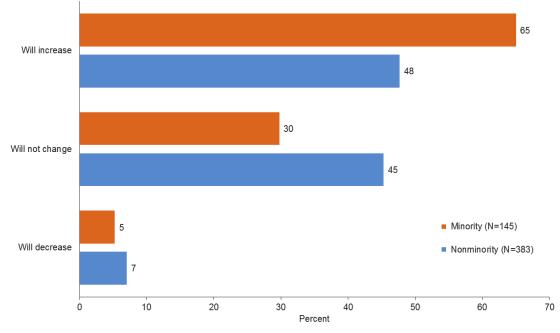


Chart 4. Rural Texas Firms Less Likely to Report Profitability or Revenue Growth in Past 12 Months

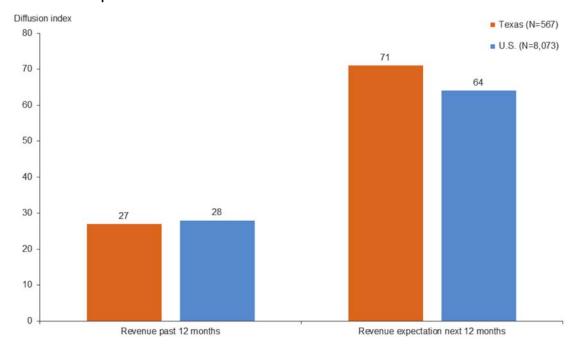
Minority-owned firms were more likely to report employee gains but less likely to report increased revenue; however, these differences are not statistically significant at a 95 percent credibility interval, meaning it cannot be certain these differences are not simply due to chance of sampling. However, minority-owned firms were significantly more likely to expect to increase employees in the next 12 months (*Chart 5*).

Chart 5. More Texas Minority-Owned Firms Expect to Gain Employees in Next 12 Months



Texas firms overall are optimistic about revenue in the next 12 months, with 76 percent of firms expecting revenue to increase. To measure relative optimism among business owners, we created a diffusion index by subtracting the percent of firms reporting decreases from the percent reporting increases. By this measure, Texas has a diffusion index of 71. This level of optimism about future earnings is significantly higher than the national average, even though reported revenue in the prior 12 months was at a similar level (*Chart 6*).

Chart 6. Texas Firms More Optimistic About Future Revenues



NOTE: This diffusion index is calculated by subtracting the percent of firms reporting decreases from the percent reporting increases.



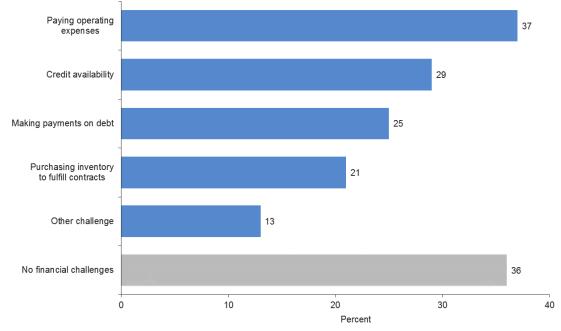
December 2018

Emily Ryder Perlmeter

Financial Challenges

Optimism notwithstanding, 64 percent of firms in Texas experienced at least one financial challenge. As Chart 7 indicates, the most commonly experienced challenge was paying operating expenses, which includes paying wages.



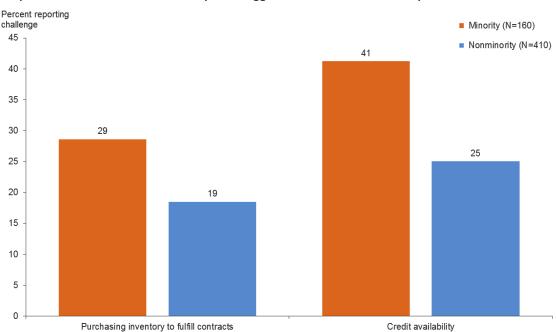


NOTE: Respondents could select more than one option. N=570

These findings reflect real experiences of the Texas small business owner, suggests Al Salgado, executive director of the South-West Texas Border SBDC Network: "Small firms are usually quite skilled in the technical discipline of their business but may lack business management skills to maximize their bottom line." To address this, small business owners can work with business advisers at SBDCs to gain a better understanding of their operating expenses, cash flow, inventory controls, and receivables collection practices, which can in turn lead the firm to yield more opportunities for growth.

Availability of credit ranked second among financial challenges, with 29 percent of firm owners reporting difficulty. In this area, there is a striking difference between minority-owned firms and nonminority ones: Only a quarter of nonminority firms reported accessing credit as a challenge, while 41 percent of minority-owned firms did. This is in keeping with prior Dallas Fed reports and other national research that indicate business owners of color struggle more with access to credit and capital. A gap also exists for purchasing inventory, but it is less significant than the 16-percentage-point gap seen with credit availability (*Chart 8*).

Chart 8. Minority-Owned Firms Much More Likely to Struggle with Credit and Inventory



Closing the gap expressed in Chart 8 is part of the mission for nonprofit small business lender LiftFund. "LiftFund was created to level the financial playing field in entrepreneurship," says President and CEO Janie Barrera. Eighty-five percent of their clients are entrepreneurs of color, and 40 percent are women-owned businesses. LiftFund partners with other agencies and groups to "bridge the knowledge gap" as well as the financial gap, Barrera says. "Our work is not just about providing capital, it's about sharing insights and empowering our clients through the process. Our advice for small business owners is: find a space with like-minded individuals and push yourself to learn beyond what you know to build your wealth."

Given the array of financial challenges faced by small businesses, what do most firm owners do to cope? The majority of firms in Texas (69 percent) used personal funds to bridge the gap. Women-owned firms and minority-owned firms appeared more likely to use personal funds than the overall average, or to make late payments (*Chart 9*). However, these differences are not statistically significant, with the exception of minority versus nonminority firm usage of personal funds.

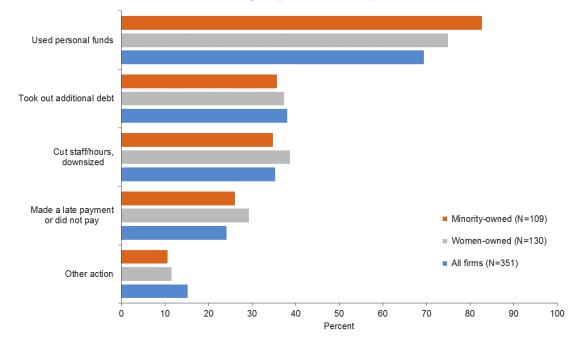


Chart 9. Actions Taken as a Result of Financial Challenges by Firm Ownership

NOTE: Respondents could select more than one option.



December 2018

Emily Ryder Perlmeter

Financing and Debt

While the primary funding source for most firms is their business's own retained earnings, a majority do hold outstanding debt (66 percent). One-quarter of Texas small employers report debt of \$25,000 or less, and one-third report amounts greater than \$25,000 but less than \$100,000. Only 9 percent report debt of over \$1 million. Women-owned firms, at less than 3 percent, are significantly less likely to hold more than \$1 million in debt than their men-owned counterparts.

Over the prior 12 months, 40 percent of Texas firms applied for new financing of some type, the same as the nationwide average. Among firms seeking financing, most (62 percent) in Texas did so to expand their business, pursue new opportunities or replace capital assets. Compared with the U.S., a significantly smaller share of Texas firms said they applied in order to refinance or pay down debt (26 versus 19 percent).

Overall, half of applying firms received all the financing they requested. But once again, this rate varies by ownership demographics. As Chart 10 indicates, minority-owned firms are twice as likely to receive none of the funding they applied for.

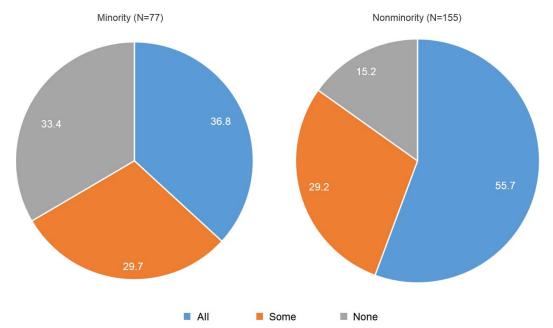


Chart 10. Financing Received by Ownership Demographics

Firms struggling to receive financing may find SBDCs to be a helpful resource. According to Steve Lawrence, executive director of the Texas Gulf SBDC Network, SBDC advisors frequently work with these firms in a variety of ways:

This usually includes reviewing their credit reports to help them identify and address derogatory credit issues that may be impacting their credit score; advising them on how to become creditworthy; introducing them to alternative credit lenders—such as nonbank lenders like LiftFund and PeopleFund, or factoring companies—that may provide "gap" financing until they can become creditworthy; and helping them evaluate whether or not they can scale back the scope of the idea or concept to explore the feasibility of self-funding the project. Exploring funding from angel investors or strategic business alliances can also be a part of this analysis. Additionally, we can connect them to trade associations within their industry that might be able to help them identify market trends and build business relationships.

Among those who specifically sought credit and were denied, firms most often cited a reason of insufficient credit history, followed by insufficient collateral (*Table 1*).

Table 1. Reasons for Credit Denial

	Percent reporting
Insufficient credit history	42.4
Insufficient collateral	28.8
Too much debt already	24.3
Low credit score	23.5
Weak business performance	22.3
Other	6.6

NOTE: Respondents could select more than one option. N=60

Firms that did not seek any financing in the prior 12 months were asked why. Texas firms were less likely than the national average to point to sufficient financing or difficulties in the application process as primary reasons. Table 2 shows that they were more likely to indicate being debt averse as a reason, but the difference is not statistically significant.

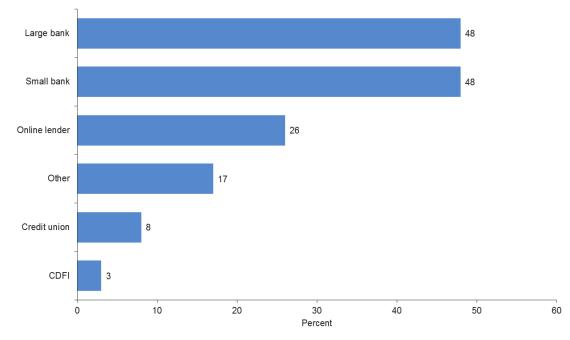
Table 2. Texas Nonapplicants Less Likely to Report Sufficient Financing

Reason for not seeking financing	Texas (percent) (N=325)	U.S. (percent) (N=4,495)
Sufficient financing	44	50
Debt averse*	32	26
Discouraged*	14	13
Credit cost too high*	5	5
Application process too difficult	1	3

*Difference is not statistically significant at the 95 percent credibility level.

For firms that did apply for financing, most sought a loan or line of credit (80 percent). Banks are the most common source for this group (*Chart* 11).

Chart 11. Banks Most Common Source of Loan, Credit or Cash Advance



NOTES: Community development financial institutions (CDFIs) are financial institutions that provide credit and financial services to underserved markets and populations. CDFIs are certified by the CDFI Fund at the U.S. Department of the Treasury. Respondents could select more than one option. N=183

Firms sought out financing from large banks and small banks equally. Experiences with small banks were rated a little more favorably and resulted in higher loan or credit approval rates (*Table 3*), but these differences are not statistically significant.

Table 3. Credit Applicant Experiences by Bank Size

	Large bank (N=72-81)	Small bank (N=80-89)
Approval rate	56.7	64.2
Satisfaction rate	40.4	56.1
Dissatisfaction rate	33.3	31.2



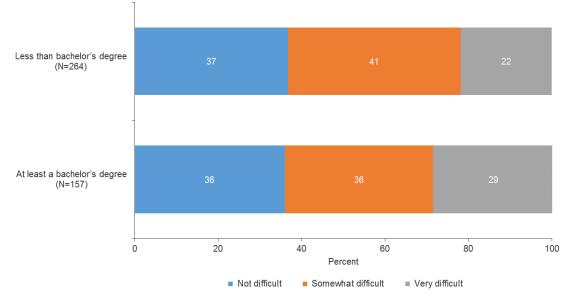
December 2018

Emily Ryder Perlmeter

Employment and Hiring

Small firms are responsible for about two-thirds of net job gains in the national economy, so understanding their experiences with hiring and workforce development is critical. On average, 71 percent of Texas firms attempted to hire staff in the previous 12 months. Threequarters of these open positions did not require a four-year college degree. On average, almost two-thirds of firms reported some level of difficulty in making hires (*Chart 12*).

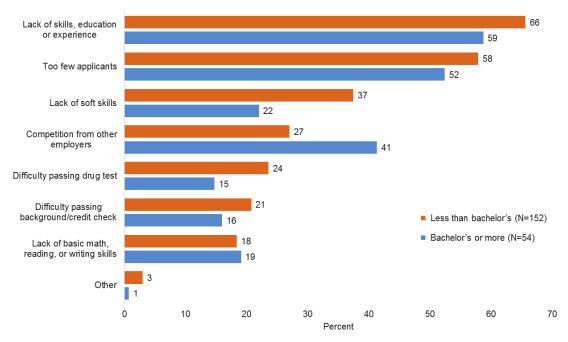
Chart 12. Hiring Challenges by Degree Type



NOTE: Totals may not add up to 100 due to rounding.

Speaking specifically to the type of hiring challenge, firms generally pointed to the lack of job-specific skills, education or experience, both for positions that required a four-year degree and for ones that did not. Many also suggested there were too few applicants to choose from. Lack of soft skills was more of an issue for positions that did not require a bachelor's, and competition from other employers plagued those who were hiring for college-degree-level positions (*Chart 13*). However, in both cases, differences were not statistically significant.

Chart 13. Hiring Challenges by Job Type



NOTE: Respondents could select more than one option.

Chart 14 shows the changes employers made when filling a position became difficult. Increasing the starting pay of the position was the first choice for those looking for a bachelor's degree or higher, followed by restructuring current employee responsibilities. For those seeking employees with less than a bachelor's, these two changes were tied.

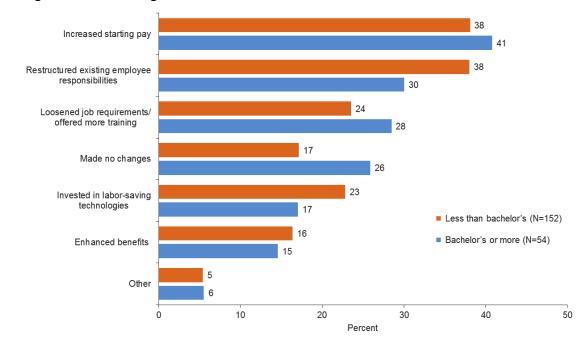


Chart 14. Changes Made from Hiring Difficulties

NOTE: Respondents could select more than one option.

In addition to reworking job descriptions, benefits or current employee structures on their own, small business owners may consult with Small Business Administration (SBA) offices, local economic development offices or SBDCs to identify opportunities for hiring or restructuring. Judy Wilhelm, executive director of the Northwest Texas SBDC Network, describes how her office worked with an entrepreneur: "A client that repairs cell phones needed to hire staff quickly to meet market demand, but could not identify strong candidates. Since SBDCs are college- and university-based, connections were quickly made and the small business was able to hire a recent Information Technology graduate, who was also a disabled veteran."

In circumstances such as these, small businesses have an opportunity to thrive while simultaneously providing strong employment opportunities for local communities—including historically disadvantaged populations.



Emily Ryder Perlmeter

Looking Ahead

The contributions of small employer firms to the state and national economies are substantial. They represent 99.7 percent of businesses, employ nearly half of the private sector labor force and carry 41 percent of the private sector payroll.[6] Texas firms appear more optimistic than national averages, but they still struggle with issues like financing. Some challenges are felt more acutely in particular subgroups, such as rural firms or those owned by veterans, women or entrepreneurs of color. Women-owned firms are less likely to report being profitable than men-owned ones, for instance, and minority-owned firms struggle with credit access at higher rates than their nonminority counterparts.

A majority of firms that tried to hire had some difficulty doing so, most often because applicants lacked job-specific experience, education or skills. This is evidence of the skills gap—the discrepancy between the skills and experience sought by employers and those possessed by workers seeking jobs. Many firms also reported a lack of applicants for positions. These hiring challenges may continue to be of concern, with unemployment in Texas under 4 percent[7] and with new technology and skillsets disrupting some industries or markets. Assessing this landscape, Mark Langford, executive director of the North Texas SBDC network, emphasizes, "A well-trained workforce has never been more important to small business owners in this rapidly changing environment."

As Texas small employers continue to navigate financing options, cash flow and expansion, numerous government and nonprofit resources are available to aid them in the process. These include lenders such as LiftFund, Business and Community Lenders of Texas and PeopleFund, and business advisers like those at SBA or SBDC locations across the state.

Notes

- 6. "What's New with Small Business?" Office of Advocacy, Small Business Administration, August 2017.
- 7. "State Employment and Unemployment—October 2018," news release, Bureau of Labor Statistics, U.S. Department of Labor, November 2018.



December 2018

Emily Ryder Perlmeter

Appendix: Methodology

Data for this report are derived from the national Small Business Credit Survey (SBCS) effort. Weights and imputations are used to create a nationally representative sample. The following methodology write-up is from the 2017 Report on Employer Firms, available at fedsmallbusiness.org.

Data Collection

The Small Business Credit Survey (SBCS) uses a convenience sample of establishments. Businesses are contacted by email through a diverse set of organizations that serve the small business community. Prior SBCS participants and small businesses on publicly available email lists are also contacted directly by the Federal Reserve Banks. The survey instrument is an online questionnaire that typically takes 6 to 12 minutes to complete, depending upon the intensity of a firm's search for financing. The questionnaire uses question branching and flows based upon responses to survey questions. For example, financing applicants receive a different line of questioning than nonapplicants. Therefore, the number of observations for each question varies by how many firms receive and complete a particular question.

Weighting

A sample for the SBCS is not selected randomly; thus, the SBCS may be subject to biases not present with surveys that do select firms randomly. For example, there are likely small employer firms not on our contact lists and this may lead to a noncoverage bias. To control for potential biases, the sample data are weighted so the weighted distribution of firms in the SBCS matches the distribution of the small (1 to 499 employees) firm population in the United States and Texas by number of employees, age, industry, geographic location (census division and urban or rural location), gender of owner(s), and race or ethnicity of owner(s). We first limit the sample in each year to only employer firms. We then post-stratify respondents by their firm characteristics. Using a statistical technique known as "raking," we compare the share of businesses in each category of each stratum (e.g., within the industry stratum, the share of firms in the sample that are manufacturers) to the share of small businesses in the nation that are in that category. As a result, underrepresented firms are up weighted and overrepresented businesses are down weighted. We iterate this process several times for each stratum in order to derive a sample weight for each respondent. This weighting methodology was developed in collaboration with the National Opinion Research Center (NORC) at the University of Chicago. The data used for weighting come from data collected by the U.S. Census Bureau. We are unable to obtain exact estimates of the combined racial and ethnic ownership of small employer firms for each state, or at the national level. To derive these figures, we assume that the distribution of small employer firm owners' combined race and ethnicity is the same as that for all firms in a given state. Given that small employer firms represent 99.7 percent of businesses with paid employees, we expect these assumptions align relatively closely with the true population. In addition to the main weight, state- and Federal Reserve Districtspecific weights are created. While the same weighting methodology is employed, the variables used differ slightly from those used to create the main weight. Estimates for Federal Reserve Districts are calculated based on all small employer firms in any state that is at least partially within a District's boundary. Federal Reserve District-level weights are created for each district using the weighting process described above, but based on observations in the relevant states.

Race/Gender Imputation

Sixteen percent of respondents completed the survey but did not provide information on the gender, race, and/or the ethnicity of their business's owner(s). This information is needed to correct for differences between the sample and the population data. To avoid dropping these observations, a series of statistical models is used to attempt to impute the missing data. When the models are able to predict with an average accuracy of 80 percent in out-of-sample tests, the predicted values from the models are used for the missing data. When the model is less certain, those data are not imputed and the responses are dropped. After data are imputed, descriptive statistics of key survey questions with and without imputed data are compared to ensure stability of estimates. In the final sample, 13 percent of observations have imputed values for either the gender, race, or ethnicity of a firm's ownership. To impute for owners' race and ethnicity, a series of logistic regression models is used that incorporate a variety of firm characteristics, as well as demographic information on the business headquarter's zip code. First, a logistic regression model is used to predict if business owners are members of a minority group. Next, for firms classified as minority-owned, a logistic probability model is used to predict whether the majority of a business's owners are of Hispanic ethnicity. Finally, the race for the majority of business owners is imputed separately for Hispanic and non-Hispanic firms using a multinomial logistic probability model.

A similar process is used to impute for the gender of a business's ownership. First, a logistic model is used to predict if a business is primarily owned by men. Then, for firms not classified as men-owned, another model is used to predict if a business is owned by women or is equally owned.