GENDER GAP IN ACCESS TO CREDIT FOR SMALL BUSINESSES: PRE- AND POST-PANDEMIC

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Abstract

Small businesses play a major role in the US economy. Regardless of the business owner's gender, having access to capital is essential to support daily operations of small enterprises and to ensure their long-term viability. Using data from the Small Business Credit Surveys (SBCS) conducted by the Federal Reserve, this paper examines the disparities in access to small business credit based on the owner's gender. While both men-owned and women-owned businesses apply for bank credit at a similar rate, the data reveals that women-owned businesses experience higher barriers to credit and face more financial challenges compared to their male counterparts, suggesting a possible gender gap in access to credit. The COVID-19 pandemic had a serious impact on all small business operations, resulting in business interruptions, sharp declines in revenues, and the overall challenging financial conditions. Women-owned businesses experienced a significantly greater decline in operations, employment, and financial conditions compared to men-owned firms (NWBC, 2020). Additionally, women-owned businesses experienced greater difficulties in making payments on debt, paying for operating expenses and rent. The study shows that women's response to alleviate these challenges may have caused possible credit downgrades and loss of personal assets. The paper discusses implications of these results and proposes policy recommendations.

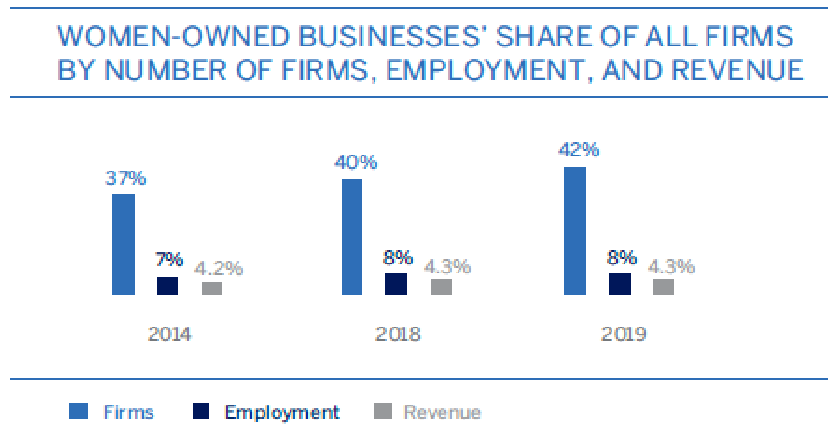
JEL classifications: G21, J16
Keywords: Banks; small business financing; gender disparities

Introduction:

Small business enterprises play an important role in the economy of the United States. There are roughly 30.2 million small businesses in the US, accounting for about 99% of all businesses this country (SBA, 2019). The Small Business Credit Survey (SBCS) by the Federal Reserve defines small-employer firms as businesses with 1-499 either full-time or part-time employees. In 2019, small businesses accounted for 47.5% of the private sector workforce (SBCS, 2020), created 1.9 million net new jobs (SBA, 2019), and collectively helped boost their local economies. Firms with fewer than 100 employees have accounted for the largest share of small business employment (SBA, 2019). Small businesses provide local job opportunities, support other small businesses, and help keep money in their local communities.

Women-owned small businesses play an important role in the US economy by providing the innovative perspective and solutions for the business world. According to the Small Business Administration (SBA), women-owned businesses are those that are at least 51% owned and controlled by women. Women-owned businesses help fuel the economy, representing 42% of all US businesses, employing 9.4 million workers, and generating revenue of $1.9 trillion (NWBC, 2020). Even though women-owned firms comprise a smaller portion of the market, the growth of the women-owned businesses between 2014 and 2019 has

outpaced the average growth (SBA, 2019). During this five-year period, the number of women-owned businesses increased 21% compared to the 9% increase for all businesses (American Express, 2019).



Source: American Express (2019)

According to the annual State of Women-Owned Businesses Report, the total employment by women-owned businesses in the US increased by far more than the overall employment between 2014 and 2019. Unfortunately, in the beginning of the COVID-19 pandemic, the number of active business owners in the U.S. plummeted by 3.3 million or 22% from February to April 2020. Fifty-three percent of firms experienced a significant drop in total sales revenues. According to the 2020 Annual Report of the National Women's Business Council (NWBC), female-owned businesses experienced a 25% drop. Eighty percent of the 1.1 million workers age 20+ who dropped out of the labor force by September 2020 were women.

In light of the importance of small businesses to local economies, there is an ever-growing body of policy and academic research that examines the issue of a gender gap in the lending ability and credit access. This study analyzes several data sources that aim to capture multiple factors and characteristics of women-owned firms and their access to credit compared to that of their men-owned counterparts. The data is primarily derived from the Federal Reserve Small Business Credit Surveys on Employer Firms. The study addresses several important research questions associated with women-owned businesses. First, we highlight key distinctions in the characteristics of women-owned versus men-owned small businesses. Second, we gauge whether women-owned businesses are more likely to be denied business credit. Finally, we discuss other sources of financing and whether women-owned businesses are more likely to seek and obtain such credit. The analysis incorporates the impacts of the COVID-19 pandemic. Among those impacts is the fact that during the pandemic, 91% of small firms applied for some type of emergency funding while non-emergency financing decreased from 2019. Approval rates for non-emergency financing also decreased, but emergency funding, particularly PPP was the most commonly used program. The paper is organized as follows. Section 2 presents the relevant literature. Section 3 describes the data used in the study. Section 4 presents the results, and Section 5 provides the discussion and policy recommendations.

2. Literature Review

Access to financing for small businesses is of the great interest to both policy-makers and researchers because of the importance of these firms for the national employment and the overall health of the US economy (Ayyagari et al., 2007; Beck & Demirgüç-Kunt, 2006; Beck et al., 2006; Berger et al., 2007; Beck et al, 2016, among others). Studies show that many small enterprises perceive access to finance as one of the greatest contributors to the firm's health (Beck et al., 2006), and the cost of credit as one of the biggest

obstacles to their growth (Schiffer & Weder, 2001; Beck et al., 2006). In general, the existing literature proposed that smaller and younger firms are generally more financially constrained (Beck & Demirgüç-Kunt, 2006; Beck et al., 2006).

Despite the developments in information technology, fintech, and other financial arrangements, traditional depository institutions remain the primary source of capital for small businesses (Jagtiani & Lemieux, 2016; Mills & McCarthy, 2016; SBA, 2020; SBCS, 2020). Compared to larger firms that enjoy access to public equity and debt markets, small firms rely primarily on bank credit and especially on term loans (SBCS, 2016; SBCS, 2020). However, driven by considerable bank consolidation during the past three decades, more stringent post-crisis financial regulations, and other structural changes, there appears to be a larger credit gap in the small business lending market. For example, the post-crisis regulations required banks to make less loans based on "softer" relationship-based credit characteristics and put more emphasis on objective credit standards (Mills & McCarthy, 2016). As a result, small business lending has decreased substantially from 50% of total bank loans in 1995 to only about 30% of total bank loans post global financial crisis (Mills & McCarthy, 2016; SBA 2020). In 2020, smaller banks (those with assets less than $10 billion) provided approximately 42% of all small business loans outstanding (SBA, 2020).

Several studies have investigated gender disparity in lending to small businesses (Ongena & Popov, 2013; Beck et al., 2018; SBCS, 2016). These studies generally found evidence of the existence of a gender bias in lending. For instance, according to SBCS (2016), 64% of women-owned businesses reported a funding gap compared to 56% experienced by men-owned businesses. The funding gap could not be explained by credit ratings. In fact, among all low-risk firms, 57% of men-owned businesses received full funding that they requested, while only 48% of women-owned firms received their full requests (SBCS, 2016). Furthermore, women-owned businesses were less likely to be approved for a loan, with the approval rates of 68% for women-owned businesses and 78% for men-owned businesses (SBCS, 2016). There is also a clear indication that women-owned firms are more reliant on financing from Small Business Administration (SBA) and credit cards compared to men-owned firms. It should be noted that SBA loans are typically more accessible compared to other financing opportunities for small businesses, including traditional bank loans (SBA, 2020). Furthermore, women-owned firms are more likely to be approved for SBA funding, with a 61% women owner approval rate and 50% men-owner approval rate.

Other research shows that there are discrepancies in the amount and sources of startup capital financing between men- and women-owned small businesses (NWBC, 2020). Generally, women-owned businesses have a start-up capital of around $75,000, while men-owned businesses average around $135,000. The gender gap disparities occur in other external equity categories, including government, venture capital, and other sources that account for 2% for women-owned compared to almost 18% for men-owned businesses. Similarly, women-owned businesses receive around $38,000 for startup financing in other external debt categories (bank business loans, credit lines, loans from governments or nonbank entities) compared to around $59,000 by men-owned businesses. Moreover, in terms of access and credit market experience, there appears to be a lower rate of new loan applications from women-owned businesses and there is a greater fear of credit denial (NWBC, 2020). Finally, there is documented evidence that suggests that women-owned businesses are less likely to be approved for loans, with 58.6% of women- and 73.2% of men-owned firms' approval, which justifies the fear of credit denial among women-owned firms (NWBC, 2020).

Recently, some studies explored the possibility of non-traditional bank competition, including online lenders and fintech companies that offer credit for small businesses to close the gap in traditional small business lending (Mills & McCarthy, 2016; Jagtiani & Lemieux, 2017). There are potentially great opportunities presented by the new technologies and fintech. New methods of assessing credit through open banking offer the possibility of promoting financial inclusion by expanding the scope of which data lenders consider and how they are used in predicting risk. Such data may include a record of rent and utility

payments to predict credit risk. Additionally, fintech platforms are increasingly playing a role in issuing loans and using artificial intelligence to make lending decisions. While presenting a very viable alternative for small business financing, according to the Federal Reserve Small Business Credit Survey, presently banks remain the top choice for credit among small businesses. The coexistence of banks, nonbanks, and increasingly online/fintech arrangements are imperative to a healthy and competitive lending environment within the United States.

3. Methodology and Data

The data for this study is derived primarily from the Small Business Credit Survey (SBCS) Reports on Employer Firms between 2017 and 2020. The latest SBCS report covers data through 2020 and incorporates the impacts of the COVID-19 pandemic. SBCS is a semi-annual establishment survey conducted by the Federal Reserve Bank of New York, reporting information about business performance, financing needs and choices, and borrowing experiences. The surveys are conducted either through an emailed questionnaire or by a direct mailing to small business owners. To reduce coverage bias, the Fed uses US Census Bureau data to weight responses based on the dimensions of industry, age, employee size, and geography.[1]

Similar surveys were conducted in 2015 and 2016, but the questions were not directly comparable to the questions included in the subsequent years. For example, earlier surveys had a different geographic breakdown, used an alternative weighting methodology, and failed to address the question of gender. Since the primary focus of this study is the gender gap in financing, we chose to limit our analysis to 2017-2020 observations.

In addition, the agency reported that about 10% of respondents failed to provide important owner-specific detail, such as gender or race. To avoid the unnecessary loss of data, the Federal Reserve used a series of statistical models to impute missing observations. The post-test analysis revealed that predictive models estimated the results with around 80% accuracy in the out-of-sample tests. The surveys found that the imputed results were consistent with other national data on lending and lender perceptions (SBCS, 2020). Overall, there were 9,693 respondents in 2020, 5,514 respondents in 2019, 6,614 respondents in 2018, and 8,169 respondents in 2017. Each of these surveys collected information on small firms, defined as companies with 1-499 full-time and part-time employees. The data includes all 50 states and the District of Columbia. In addition, we used data from Small Business Administration, National Women's Business Council, and American Express.

4. Results

The most recent SBCS report shows a significant impact of the pandemic on small businesses. Ninety-five percent of all respondents reported that the pandemic affected their business: 26% of businesses closed temporarily, 56% reduced their operations, and 48% modified their operations in some significant way (SBCS, 2021). Firms' financial conditions declined sharply during the pandemic: 78% of the respondents in 2020 reported declines in revenue and 46% reduced their workforce (SBCS, 2021). Below, we review the general business characteristics of women-owned versus men-owned firms between 2017 and 2020.

[1] See the methodology from the Federal Reserve Small Business files at:
https://www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/

Women-Owned vs. Men-Owned Firm Characteristics

Table 1 displays general business characteristics of the SBCS respondents presented by year and gender. The table captures many differences between women-owned and men-owned businesses. Specifically, women-owned firms tend to be younger. For the 2017 and 2019 period, more women-owned enterprises were considered "younger" firms in the 0-10 years category. This percentage increased from 55% in 2017 to 63% in 2019. The number of men-owned firms in this firm-age category decreased slightly, indicating that there was a decline in *de-novo* or younger men-owned businesses during the sample period.

Additionally, there are differences between firms that advanced into the 21+ firm-age bracket. In 2020, 34% of men-owned firms belonged to the mature category while only 23% of all women-owned firms were in business longer than 21 years. Additionally, there has been a decline in this firm-age bracket for women-owned firms while the representation of the men-owned firms remained steady through the study period. This suggests that women are more likely to start a new business then men, but they have a harder time staying in business for a long duration, confirming that *de-novo* and younger businesses tend to be riskier.

As with any startup firm, women-owned businesses tend to have a much lower revenue. Over 40% of all men-owned businesses reported a total revenue above $1 million in 2020. However, only about half of that percentage of women-owned businesses reported revenue of greater than $1 million, i.e., about 80% of women-owned businesses earned less than $1 million in revenues. The firm profitability mirrored this pattern. Women-owned firms were more likely to report a loss while men-owned firms were significantly more likely to report a profit between 2017 and 2020. Thus, the data shows a positive association between revenue and firm profitability.

Table 1: Distinction Between Women-Owned and Men-Owned Small Businesses

		2020		2019		2018		2017	
		Men	Women	Men	Women	Men	Women	Men	Women
#of Respondents		4865	3795	2742	1795	3381	2336	4506	2627
Age of Firms (years)									
	0-10	43.0%	56.0%	49.9%	63.1%	50.0%	62.0%	51.0%	55.0%
	11-20	23.0%	20.0%	23.8%	22.7%	24.0%	22.0%	23.0%	24.0%
	21+	34.0%	23.0%	26.2%	14.2%	26.0%	15.0%	26.0%	21.0%
Revenue									
	<$1M	59.0%	78.0%	66.0%	83.6%	65.0%	81.0%	63.0%	78.0%
	>$1M	41.0%	23.0%	34.1%	16.9%	35.0%	19.0%	37.0%	23.0%
Industry									
	Nonmanufacturing goods production	22.0%	11.0%	21.7%	11.7%	21.0%	11.0%	22.0%	11.0%
	Manufacturing	4.0%	2.0%	4.2%	2.2%	4.0%	2.0%	5.0%	2.0%
	Retail	11.0%	14.5%	12.0%	14.1%	12.0%	16.0%	11.0%	15.0%
	Leisure and hospitality	9.0%	12.0%	8.5%	12.3%	9.0%	12.0%	9.0%	11.0%
	Finance and insurance	7.0%	5.0%	6.6%	4.5%	7.0%	4.0%	7.0%	5.0%
	Healthcare and education	9.0%	22.0%	9.2%	23.6%	10.0%	22.0%	10.0%	21.0%
	Professional services & real estate	22.0%	18.0%	22.2%	16.8%	22.0%	16.0%	21.0%	19.0%
	Business support & consumer services	14.0%	16.0%	15.4%	14.9%	14.0%	16.0%	15.0%	15.0%
Profitability									
	At a loss	22.8%	29.2%	22.3%	29.5%	22.0%	31.0%	24.0%	27.0%
	Broke even	18.2%	20.1%	17.6%	21.3%	19.0%	21.0%	18.0%	18.0%
	At a profit	59.1%	50.8%	60.2%	49.3%	59.0%	48.0%	58.0%	55.0%

Source: SBCS (various years) and authors' calculations

In terms of industry representations, the SBSC surveys found that women-owned firms tend to concentrate

in leisure and hospitality, healthcare, and education industry segments. Men-owned small firms are more likely to represent capital-intensive sectors, such as non-manufacturing goods production and associated services, manufacturing, professional services and real estate. Notably, according to SBSC reports, the men-owned businesses tended to concentrate in sectors that typically generate higher revenues and are more profitable compared to those of the women-owned enterprises. About 61% of women-owned businesses operate companies with 1-4 employees compared to 52% of men-owned firms in the similar category; about 7% of men-owned firms operate between 50-499 employees while only 2% of women-owned companies fall into this category. In sum, the data shows that compared to men-owned firms, women-owned businesses are typically younger, smaller, and tend to gravitate towards sectors that generated less revenue and profits.

These findings may help explain why women-owned firms had a harder time staying in business during the pandemic. The most recent SBSC data shows that in 2020, 57% of firms reported that their financial condition was fair or poor. The majority of the firms that reporting such conditions were firms owned by smaller firms and firms in the leisure & hospitality and healthcare & education firms – exactly the types of firms that are owned by women.

Access to Credit

The majority of firms saw sharp declines in financial conditions during the pandemic: 78% of firms reported decreased revenues and 46% reduced their workforce. The share of firms that experienced financial challenges in the prior 12 months rose from 66% to 80% between 2019 and 2020. In response to those challenges, firms used a variety of options to alleviate the situation, including personal funds, reduced staff hours, or downsizing operations. More than 90% of firms sought emergency funding to weather the financial effects of the pandemic. According to the 2021 SBCS report, the PPP was the most commonly used program utilized by 82% of employer firms (SBCS, 2021).

Prior to the pandemic, women-owned and men-owned businesses experienced little change in credit-risk levels. Men-owned enterprises exhibited somewhat lower overall credit risk compared to women-owned businesses, but the differences were not significant. Thus, in 2019, 64.5% of men-owned businesses were classified as low-risk compared to 63.2% for women-owned businesses. In 2020, the percentage of low-risk respondents increased for both men and women. For the medium credit-risk category, the results were comparable with slightly more women-owned firms being classified as medium risk in 2017, 2018, and 2020. In the high credit-risk category, there was very little variation in 2017 and 2018, but there was a slightly more women (about 2-3 percentage points) in the higher-risk category in 2019 and 2020.

In terms of debt, there was a similar representation of women-owned and men-owned businesses in the no-debt category (about 30%). Women representation was higher (59%) in the less than $250,000 debt category compared to that of men (47%). There was more discrepancy in the $250,000 - $1M and $1M+ categories, where men-owned businesses held substantially more debt than women-owned businesses. During the pandemic, overall 79% of firms had debt outstanding, an increase from 71% in 2019. The amount of debt firms held also increased; the share of firms with more than $100,000 in debt rose from 31% in 2019 to 44% in 2020.

Table 2: Credit and Approval Comparisons									
		2020		**2019**		**2018**		**2017**	
		Men	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**
Credit Risk									
	Low	70.0%	66.0%	64.5%	63.2%	64.0%	62.0%	68.0%	65.0%
	Medium	24.0%	26.0%	28.4%	26.1%	28.0%	30.0%	25.0%	27.0%
	High	6.0%	8.0%	7.1%	10.8%	8.0%	8.0%	7.0%	8.0%
Amount of Debt Outstanding									
	No debt	30.0%	30.8%	29.0%	30.7%	31.0%	31.0%	N/A	N/A
	<$250,000	47.0%	59.0%	50.9%	56.7%	48.0%	58.0%	71.0%	71.0%
	$250,000-$1M	22.0%	16.0%	13.8%	13.0%	14.0%	10.0%	19.0%	11.0%
	Over $1M	13.0%	5.0%	9.0%	4.0%	10.0%	4.0%	10.0%	4.0%
Amount of Financing Sought		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	<$100,000	43.0%	61.0%	53.6%	68.6%	53.0%	68.0%	51.0%	55.0%
	$100,000-$1M	44.0%	34.0%	37.4%	27.5%	37.0%	29.0%	39.0%	41.0%
	>$1M	13.0%	4.0%	9.0%	4.0%	10.0%	4.0%	10.0%	4.0%
Approval Rate		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Overall approval rate	80.1%	77.1%	81.4%	74.3%	79.0%	78.0%	80.0%	79.0%
	Receiving full amount	48.9%	45.5%	51.6%	46.4%	48.0%	43.0%	47.0%	47.0%
Reasons for Credit Denial									
	Low credit score	32.0%	39.0%	35.1%	41.6%	35.0%	39.0%	25.0%	28.0%
	Insufficient credit history	23.0%	19.0%	26.3%	34.2%	33.0%	31.0%	38.0%	30.0%
	Insufficient collateral	41.0%	43.0%	36.3%	26.3%	35.0%	32.0%	38.0%	27.0%
	Weak business performance	44.0%	42.0%	19.7%	16.1%	23.0%	22.0%	23.0%	18.0%
	Too much debt already	34.0%	37.0%	41.6%	45.1%	35.0%	37.0%	27.0%	33.0%
	Other	8.0%	9.0%	8.8%	7.6%	5.0%	3.0%	8.0%	5.0%

Source: SBCS (various years) and authors' calculations

In addition, the SBCS data indicates that women-owned enterprises tend to seek smaller amounts of financing (less than $100,000): 69% in 2019 and 61% in 2020 compared to that of 50% and 43% for men-owned businesses, respectively. However, a much larger share of men-owned businesses sought $100,000 - $1M and over $1M in financing: 44% of men-owned firms requested between $100,000 and $1M, and 13% requested over $1M. On the other hand, 34% of women-owned businesses sought financing in the $100,000-$1M category and only 4% requested over $1M in financing.

The SBCS results show that in 2017 and 2018, both groups had a similar overall credit approval rate of about 80%. However, in 2019 there was a greater disparity in approval rates between genders: 81% of men-owned firms were approved for credit compared to 74% of women-owned firms. In 2020, the approval rates were 77% for women-owned businesses and 80% for men-owned businesses. There is also a disparity in the full-amount approvals. In 2019, 52% of approved men-owned businesses received the full amount of requested financing compared to that of 47% for women-owned businesses. The difference was someone smaller in 2020. While both gender ownership categories exhibited similar credit-risk ratings, women-owned businesses received less funding for their business needs. As mentioned above, women-owned businesses tend to request a smaller amount of financing compared to their male counterparts and women-owned businesses have lower amounts of debt outstanding. These two factors combined suggest that women-owned firms have generally less capital to cover their financing needs.

Additionally, SBCS attempts to investigate reasons for credit denial as perceived by the small business owners themselves. Between 2017 and 2020, more women respondents reported that they believed they were denied credit based on their low credit score: 39% of women-owned businesses compared to 32% of men-owned businesses in 2020 and 42% vs. 35% in 2019. This contradicts the general findings that women-owned businesses have credit ratings that are very similar to men-owned businesses. It is also notable that more women respondents believe that another possible reason for the denial of credit is due to their higher

levels of existing debt. This perception is also not substantiated by actual facts. SCSB shows that women-owned businesses have consistently carried less debt compared to men-owned businesses. Finally, women business owners believe that they were denied credit because of weak business performance, lower revenues, and lower firm profitability compared to men-owned businesses. These findings suggest that women's perception of their credit risk and firm performance indicators may not be substantiated by facts.

In terms of the participation in different sources of credit financing, unlike men-owned businesses that rely on traditional commercial banks, women-owned firms are more likely to seek credit from online lenders, finance companies, community development financial institutions (CDFI), and credit unions. These institutions are known to customize their funding offers to the needs of an individual small business owner. They use more flexible, non-standardized lending practices, which allow them to consider loan applications that may be turned down by traditional commercial banks. Notably, men-owned enterprises were more likely to be approved by each lending source in most years (Table 3). The most striking difference over the years is the fact that men-owned businesses enjoy a higher approval rate from traditional commercial banks. In contrast, women-owned businesses were more likely to apply for and get approved for funding by non-traditional and online lenders.

<u>2020</u> Approval rates for loans, lines of credit, and cash advances declined from 81% pre-pandemic to 70% post-March 1, 2020 (SBCS, 2021). Large and small banks remained the most important source of credit for small businesses: roughly 40% of firms turned to large banks and about 43% of businesses applied to small banks. Compared to men-owned businesses, women-owned businesses were more likely to be approved for financing by nonbanks and online lenders. Among all applications, the best outcome for men-owned businesses were at credit unions – roughly 70% approval rate compared to that of only 36% for women-owned businesses. Women-owned businesses were more likely to be approved for credit by online lenders and finance companies (Table 3). The reliance of women-owned businesses on online lending increased over time. Fintech and online lending offer women a convenient, viable alternative to traditional bank products. Online lenders offer more flexible solutions to making payments/transfers and easier ways of managing business finances (Fintech News, 2021). One of the important benefits of the fintech industry is its promise of financial inclusion, which allows customers to access a wide array of financial services through internet and mobile devices. Additionally, online/fintech lending helps a borrower avoid personal meetings with a loan officer, thus forcing a financial institution to rely on objective credit characteristics, which can help mitigate the possible biases impacting lending decisions.

Table 3: Participation in Various Sources of Credit

		2020		2019		2018		2017	
		Men	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**
<u>Application Rate by Source</u>									
	Large banks	50.0%	47.0%	40.3%	40.6%	50.0%	47.0%	50.0%	47.0%
	Small banks	46.0%	43.0%	35.6%	32.1%	45.0%	39.0%	47.0%	44.0%
	Online lenders	29.7%	33.1%	33.0%	35.4%	32.0%	39.0%	24.0%	25.0%
	CDFI	2.0%	3.0%	2.2%	2.7%	5.0%	6.0%	5.0%	7.0%
	Credit unions	10.0%	13.0%	8.4%	10.8%	9.0%	7.0%	8.0%	13.0%
	Finance companies	21.0%	26.0%	18.2%	17.6%	N/A	N/A	N/A	N/A
	Other	6.0%	6.0%	10.1%	8.0%	14.0%	16.0%	18.0%	17.0%
<u>Approval Rate by Source</u>									
	Large banks	63.0%	60.0%	64.2%	59.7%	60.0%	58.0%	56.0%	52.0%
	Small banks	74.0%	69.0%	72.1%	67.1%	71.0%	64.0%	67.0%	64.0%
	Online lenders	64.0%	69.0%	80.5%	76.2%	82.0%	85.0%	73.0%	79.0%
	CDFI	61.0%	48.0%	N/A	N/A	74.0%	82.0%	88.0%	84.0%
	Credit unions	54.9%	50.8%	63.7%	51.3%	49.0%	55.0%	52.0%	46.0%

Source: SBCS (various years) and authors' calculations

For the pandemic-related funding needs, 91% of employer firms sought emergency assistance, which came mostly in the form of PPP loans. Eighty-two percent of employer firms applied for PPP funding (SBCS, 2021). All firms experienced significant difficulties brought on by the global pandemic. Women were more likely to reduce operations (61% vs. 54% for men-owned businesses) or temporarily close production (32% vs. 22% for men-owned businesses). In terms of financial challenges, women-owned businesses reported somewhat greater degree of difficulties associated with making payments on debt (48% vs. 43% for men-owned businesses), paying operating expenses (71% vs. 61% for men-owned businesses), and paying rent (51% vs. 39% for men-owned businesses). Compared to men, women owners were more likely to alleviate financial challenges by using their personal finances, by paying business expenses with personal funds, by borrowing funds from friends and family, or by resorting to late payments, which can cause downgrades in credit score and loss of personal assets. Such approaches carry serious financial consequences on business and personal lives.

5. Summary and Recommendations

This study examined the continued importance of small businesses in the US economy. Any business regardless of its size and ownership requires reliable access to adequate sources of capital to ensure its success and viability. This study analyzed the Federal Reserve Small Business Credit Surveys between 2017 and 2019 to compare business characteristics, financial arrangements, and access to credit based on the gender of small business owners. Similar to previously research, the study found possible gender inequalities in the small business lending space.

First, the study revealed that women-owned businesses in the sample were typically younger and less profitable compared to men-owned businesses. They also tended to gravitate toward traditionally less profitable industry segments. Second, concerning access to credit, the study found that women- and men-owned businesses were comparable in their credit ratings, but women tended to seek smaller amounts of financing and had lower debt outstanding compared to their male counterparts. In addition, women-owned firms were on average less likely to get approval for their loan application than men. There were also documented gender differences in the likelihood of receiving the full amount of funding requested. Additionally, we found inconsistencies between why women owners felt they were experiencing credit denial versus the actual reasons for reported denials. Perhaps, the survey administrators should attempt to effectively disseminate this information to their respondents, which may improve credit access for women-owned firms. We also found that women-owned firms were more likely to apply and successfully receive credit from the online lenders than from other non-traditional banking institutions.

Policy recommendations: After evaluating the data provided by the Small Business Credit Surveys for Employer Firms, the study offers the following recommendations. First, there is a need for an expansion of education for female business owners. It is imperative that women-owned businesses are made more aware of a myriad of funding sources and how to utilize these sources. Knowing which small business loans, microloans, and grants are available for women and how to qualify for them can help increase the odds of getting credit approval. Policy makers should work to expand programs like the Small Business Administration's Office of Women's Business Ownership (OWBO). The OWBO offers programs in business training, federal contracts, and access to credit and capital. Additionally, the SBA offers various lending and funding services through the Women's Business Centers, which help women business owners succeed. Various government agencies, like the FDIC, offer specific contracting programs and initiatives to support women-owned and minority-owned small businesses. Many women may not be aware of the resources that are available to them, but these services are designed specifically to help them start and grow their enterprises in the marketplace.

Secondly, it is necessary for banking institutions to find ways to make the lending process more efficient, transparent, streamlined, and equal. Studies of small business lending find that many banks continue to use

outdated systems and credit procedures, which result in processing problems and the loss of valuable data (Moody's, 2015). Such inefficiencies result in higher cost and lower quantity of small business lending. Banks should work hard to institute more efficient, effective, and technologically advanced modern credit evaluation processes in the area of small business lending (Moody's, 2015). As traditional banks continue to struggle to maintain reasonable margins in the low interest rate environment, small businesses find an easier entry point for credit access with alternative lending providers, including online lenders and fintech companies. These firms have been gaining market share by providing financial assistance to small business borrowers who have difficulty securing traditional credit lines. The speed of credit decisions and the chance of being funded are the top reasons for why firms seek an online lending arrangement (SBCS, 2020). For women-owned businesses, fintech also offers a greater financial inclusion that allows anyone to access financial services (e-commerce, digital payments, credit products, blockchains, and digital asset markets) online or via mobile connection. Knowing the variety of services offered by fintech and how to adapt them to businesses, will improve access to capital, increase income, and generate growth strategies of small women-owned enterprises.

Finally, beyond simply discussing the differences in business characteristics, this study provides important information on the connection between gender and access to capital, credit attainment or denial. The study shows that financial success of business owners differs across some important dimensions and appear to be based on the owner's gender. Access to credit has an important impact on the success of an enterprise. Furthermore, the COVID-19 pandemic showed that female business owners responded differently to financial distress and had a different outcome in obtaining credit.

To level the playing field, the policymakers should continue to support various efforts of financial institutions that provide credit access to qualified women-owned businesses. Such efforts should be encouraged not only by traditional banks, but also by credit unions, CDFIs and online lenders. Traditional banks should recognize the importance of partnering with nonbank financial institutions and with fintechs to best serve the market. It is also important to close the loop by continuing to monitor and enforce fair lending standards. Very recently, the Consumer Financial Protection Bureau (CFPB) proposed a rule to raise transparency around loans for small businesses. The rule requires lenders to collect and report more data about credit applications from small businesses, including demographic and pricing data and reasons for which lenders deny a loan. The rule would help regulators learn how entrepreneurs fare when trying to access financing and what barriers may prevent them from doing so (CFPB, 2021). The proposal applies to a broad range of credit, including term loans, lines of credit, credit cards and merchant cash advances and it is meant to ensure that businesses have access to responsible and fairly priced credit.

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