FUTURE OF BUSINESS SURVEY

FINANCING AND WOMEN-OWNED SMALL BUSINESSES: THE ROLE OF SIZE, AGE AND INDUSTRY

MARCH 2018
The Future of Business survey is a collaboration between Facebook, the OECD and the World Bank to provide monthly data to policymakers on the perceptions and challenges of online small and medium-sized enterprises (SMEs) across the world. Launched in February 2016, the monthly survey provides a pulse on the economic environment in which businesses operate.

To date, more than 336,000 businesses with a Facebook Page have responded to the Future of Business Survey and in late 2017, the Future of Business surveyed SMEs across the world on the source of capital for their business, with the goal of better understanding differences in access to capital between male and female owned small businesses.

This report has been co-authored by a team including Laura McGorman at Facebook; Nadim Ahmad and Mariarosa Lunati at the OECD; Joshua Seth Wimpey, Markus Goldstein and Ana Maria Munoz Boudet at the World Bank; and Adrian Becker at FactWorks.

---

1 The names of countries and territories used in this joint publication follow the practice of the World Bank Group. The opinions expressed and arguments employed herein are those of the author(s) and do not necessarily reflect the official views of the OECD, the World Bank Group, or of the governments of their Member countries. This document, as well as any data and any map included herein, are without prejudice to the status of or sovereignty over any territory, and to the delimitation of international frontiers and boundaries.
The target population for the Future of Business consists of SMEs with fewer than 250 employees and who have an active Facebook Page. Nearly 32,000 workers at small and medium enterprises in 42 countries responded to the survey in December 2017-January 2018, including 24,300 business owners and partners, of which 8,500 were women. The proportion of female entrepreneurs in the sample ranges from about one in two in North America to one in four in Asia.

Key findings include:
1. Significant differences exist in the way entrepreneurs around the world finance the operation of their businesses. In nearly every country and region, women report using bank loans less frequently than men do, instead relying on personal savings and spousal funds to start their businesses.
2. The age, size and activity of a firm are important factors that can explain gender differences in bank loan rates. Gender also plays a negative and significant role, especially among smaller firms where gender gaps are larger.
3. These findings in mind, policymakers and banks should focus on programs that can help to close gender gaps that address potential cultural barriers and promote gender-neutral lending. Training programs to help female enterprises grow beyond single-person businesses could also be bolstered to highlight the virtuous circle between growth and access to finance.
THE ROLE OF FEMALE ENTREPRENEURS IN THE ECONOMY

Women entrepreneurs make powerful contributions to their economies and in many countries, women are joining the labor force and starting businesses more rapidly than men. In Bangladesh, for example, the labor force participation of young women has increased dramatically in recent years and the expansion of employment opportunities for young women has increased girls’ school enrollment and lifted social restrictions on female mobility. The Future of Business Survey has also documented the rise of women in leadership in small businesses in countries like South Africa, where over 60% of SMEs surveyed have balanced gender representation on their leadership teams. In the United States, women are majority owners of roughly 10 million businesses, generating $1.4 trillion in sales and employing over 8.4 million people.

At the same time, female entrepreneurs face numerous challenges. Existing literature indicates that a lack of access to finance, disproportionate representation in sectors with lower returns, and a disproportionate burden of household responsibilities all influence women’s tendency to run smaller and less profitable firms. To better understand these elements, the Future of Business Survey asked women business owners around the world about the various sources of funding used to support their business and analyzed the factors that influence their access to financing from the formal sector. For the purpose of the analysis, the survey identified respondents who act as owners or partners in their business, as distinct from respondents who work for the business but are not owners or partners.

DESCRIPTIVE STATISTICS

Aligned with existing research, the Future of Business Survey finds that women are more likely to run smaller and younger firms. Across nearly 23,000 owners and partners who responded to the survey, women-owned firms are 19 percentage points more likely to run businesses in which they are the sole employee, compared to male-owned firms. Across the sample, women-owned firms have a median firm size of one person, compared to male-owned firms, which have a median size of three employees. Women are also 10 percentage points more likely to run firms that are less than three years old, with a median age of two years, compared to the median firm age of 4.5 years for men.

Women-owned businesses in our sample are also statistically more likely to use online tools than male-owned firms across a range of business activities, including e.g. advertising, showcasing, providing information, communicating, selling products and accepting payments; which supports previous findings from the Future of Business Survey. Given that the universe of the Future of Business is among small and medium enterprises that are already online, the high use of the internet for business purposes across both men and women is unsurprising; however, that women use online tools more often than men across nearly every category surveyed is notable.

Business size and business age

*Denotes statistical significant differences (at least on 95% level)

Using online tools for specific use cases

*Denotes statistical significant differences (at least on 95% level)
Exposing differences by industry, women are significantly more likely to run firms in industries like personal services, including hospitality, food and retail, as well as social services, including education, health care, art and non-profit work. Conversely, women are significantly less likely than men to run businesses in technical or professional services such as real estate or financial services, in the production or repair of goods, including manufacturing, automotive repair and construction, in media or in ICT.

### Industry that best categorizes the business

<table>
<thead>
<tr>
<th>Industry Type</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal &amp; hospitality services</td>
<td>30%</td>
<td>17%</td>
</tr>
<tr>
<td>Retail</td>
<td>21%</td>
<td>16%</td>
</tr>
<tr>
<td>Social services</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>Professional services</td>
<td>12%</td>
<td>15%</td>
</tr>
<tr>
<td>Goods production &amp; repair</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>ICT &amp; media</td>
<td>4%</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>11%</td>
<td>11%</td>
</tr>
</tbody>
</table>

*Denotes statistical significant differences (at least on 95% level)

Previous research has suggested that much of the difference in average firm age and size between male- and female-owned firms is attributable to industry choice, with more women-owned firms operating in lower value-added and lower-captally intensive industries. However, examining differences within industries between male- and female-owned firms reveals significant gaps in the number of employees. For example, the mean firm size for male-owned businesses operating in social services is 8.1 employees, more than twice the size of the average 3.8-employee sized firm owned by a woman. Similarly, in hospitality and personal services, the average firm size among male-owned firms is 77 employees, nearly twice that of the average 39-employee firm owned by a woman. These results suggest that there is more at play than industry choice to explain the differences in firm size between those owned by women and men, which may also be influencing their growth potential.

### Mean and median number of employees per industry

<table>
<thead>
<tr>
<th>Industry Type</th>
<th>Female-Mean</th>
<th>Female-Median</th>
<th>Male-Mean</th>
<th>Male-Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT</td>
<td>6.5</td>
<td>3</td>
<td>6.3</td>
<td>3</td>
</tr>
<tr>
<td>Goods &amp; production</td>
<td>7.6*</td>
<td>3*</td>
<td>7.6*</td>
<td>3*</td>
</tr>
<tr>
<td>Professional services</td>
<td>7.5*</td>
<td>1*</td>
<td>7.4*</td>
<td>1*</td>
</tr>
<tr>
<td>Retail</td>
<td>4.6</td>
<td>1</td>
<td>4.6</td>
<td>1</td>
</tr>
<tr>
<td>Personal &amp; hospitality services</td>
<td>6.2*</td>
<td>1</td>
<td>6.2*</td>
<td>1*</td>
</tr>
<tr>
<td>ICT &amp; media</td>
<td>7.7*</td>
<td>3</td>
<td>7.7*</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>8.1*</td>
<td>3</td>
<td>8.1*</td>
<td>3</td>
</tr>
</tbody>
</table>

*Denotes statistical significant differences (at least on 95% level)
The vast majority (70%) of both male- and female-owned SMEs rely on personal savings as a source of capital to fund their businesses. Analyzing funding from outside the household, significant differences emerge, with women accessing all other forms of financing at lower rates than men. Across the world, female-owned SMEs are six percentage points less likely to have relied on a loan from a bank, five percentage points less likely to rely on funding from friends, and three percentage points less likely to have accessed venture capital. As noted by the IFC in the micro, small and medium enterprise estimated finance gap, female-owned businesses account for an outsized share of the finance gap, despite their smaller average firm size, pointing to potential barriers to access finance among women.

*Denotes statistical significant differences (at least on 95% level)
SOURCES OF FINANCING BY REGION

Personal Savings and Spousal Funds
The proportion of women funding their enterprises from personal savings ranges from 63% in Latin America to 81% among countries surveyed in Africa. The use of spousal funds as a source of financing is significant in all countries, with a minimum of 10% of women-owned SMEs citing this as a form of funding for their business, regardless of region.

Women are much more likely to report starting their business using funding from their spouses among countries surveyed in Latin America, Africa and Asia compared to respondents in other regions. In Africa and Latin America, women are also more likely to rely on funding from their spouses than from other family members.

The higher reliance on spousal funds in a variety of regions among women, compared to men, may reflect difficulties in accessing finance from other sources, and may, in turn, partly explain lower levels of female entrepreneurial activity. While on average only 8% of male business owners rely on funding from their wives or partners as a source of business funding, women are significantly more likely to rely on spousal funds, even in richer countries.

Business Funding using SPOUSAL FUNDS

<table>
<thead>
<tr>
<th>Region</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America</td>
<td>17*</td>
<td>7</td>
</tr>
<tr>
<td>Africa (Nigeria, South Africa)</td>
<td>15*</td>
<td>6</td>
</tr>
<tr>
<td>Asia</td>
<td>15*</td>
<td>10</td>
</tr>
<tr>
<td>North America (USA, Canada, Mexico)</td>
<td>12*</td>
<td>7</td>
</tr>
<tr>
<td>Europe</td>
<td>10*</td>
<td>7</td>
</tr>
<tr>
<td>Middle East (Egypt, Israel)</td>
<td>10*</td>
<td>4</td>
</tr>
</tbody>
</table>

*Denotes statistical significant differences (at least on 95% level)

State Programs
State programs are a very rare funding source across regions, with only 1% of respondents among countries surveyed in Africa and 5% of respondents in Europe relying on such programs. In Africa and Asia, the share of male entrepreneurs accessing these programs is higher than that of female entrepreneurs, whereas in Latin America the reverse is true.5

---

5 Although the various differences reported are small, they are all nevertheless statistically significant at the 95% level.
Bank Loans

The share of women receiving a bank loan to start their business is the highest in Europe, with one in five women citing this as a source of funding. The lowest is in African countries, where fewer than one in ten female business owners report having used a loan to fund her business.

In all regions except Africa, male-owned firms are more likely to secure bank-loans than female-owned businesses. Perhaps surprisingly, this gender gap is smaller in regions where the status of women tends to be lower and larger in regions where the status of women is higher. Moreover, there is no obvious relationship between income levels of countries and gender gaps in bank loans, suggesting that gaps in access to finance are not reduced by higher levels of GDP or average income.
Examining the influence of the sector of operation on likelihood to get a loan, the Future of Business Survey finds that women in some industries are significantly more likely to report using bank lending to fund her business. For example, more than one in five women operating businesses in the goods production and repair sectors, which includes manufacturing, construction and automotive repair, say they have used a bank loan to fund their business, compared to only about one in eight in social services, professional services, or ICT.

In industries dominated by men, there are no significant differences between male and female-owned firms using bank loans. In both goods production and repair, as well as in ICT – industries where significantly more men operate – there is no significant difference in the likelihood to get a loan between male- and female-owned firms. In industries dominated by women, however, the gap is large and significant. For example, female entrepreneurs in personal services and retail are, respectively, seven and ten percentage points less likely to have received a loan than men. While previous research has found that women who operate in male-dominated industries have significantly higher revenue and profitability when compared to those operating in traditionally female-dominated industries, these findings suggest that access to bank loans among women in male-dominated industries may be part of this relationship.6

---

REGRESSION RESULTS - IMPACTS OF SIZE, AGE, INDUSTRY

Although descriptive statistics begin to explain the factors that influence female-owned firms’ likelihood to access loans, regression analysis allows us to examine these elements together. Analyzing the role of age, size, gender and industry in an ordinary least squares regression\(^7\), the results reveal that the age and size of the business are positively associated with the likelihood of using a bank loan as a source of funding. Size has a larger impact than the age of the business, revealing that the number of employees in a firm plays a significant role in whether a business will have accessed a loan. The interaction between female leadership and company size is positive and significant, indicating that the effect of company size on the likelihood to get a loan is significantly higher in female-lead companies than in male-lead companies. The interaction between company size and age is also positive and significant, meaning that effect of company size on bank loan usage is more pronounced for more mature companies.

The regression results also reveal that the sector in which a business operates is a significant determining factor, especially in capital-intensive industries such as goods production, including manufacturing, construction and automotive repair. In the ICT sector, on the contrary, the likelihood of having used a bank loan is lower, perhaps because internet consulting firms may be able to operate with limited physical infrastructure and may rely more heavily on human capital. Less capital-intensive businesses may also present more risks to lenders as there may be lower collateral to secure loans.

Examining the role of gender, the regression results show that a business owner being female has a negative and significant effect. Even when controlling for company age and size, as well as for industry effects, a business owner being female still negatively impacts the likelihood that she will have accessed a loan. These results suggest that women operating larger, more mature firms in capital-intensive industries may offset a part of the gender-based gap in access to financing; nevertheless, the negative impact of being a woman on the probability of accessing a loan is persistent.

---

\(^7\) Despite having a binary outcome variable, the authors chose to conduct an OLS regression instead of logistic regression due to desire to examine interaction terms between gender and the size of a firm, as well to have more readily interpretable coefficients.
Findings from nearly 32,000 small and medium-sized enterprises in 42 countries show that gender gaps in access to entrepreneurial finance persist around the world. In nearly every region and country surveyed, women report using bank loans at rates that are significantly lower than men, instead relying on personal savings and spousal funds to start their businesses. There are many factors that influence a firm’s likelihood to access a loan, with size, age and capital-intensive industries increasing the likelihood that a firm will have used a loan. Meanwhile, a business owner being female decreases that likelihood, even when controlling for firm-level characteristics.

While the impact of being a woman is negative and significant, the magnitude of the effects of various firm characteristics such as age, size and industry are more predictive, with the size of one’s business most heavily influencing the likelihood of having accessed bank lending. At the same time, 55% of women business owners in the global sample are running businesses by themselves, suggesting that the average size of female-owned firms contributes heavily to the gap in access to financing.

The findings in this paper are consistent with existing research on a vicious cycle that combines discrimination in lending systems alongside women being less likely than men to ask for external funding. This cycle creates a pattern of low growth in which women either don’t seek out funding or can’t get the funding they need because their ventures are judged as low growth. And because they lack funding, they don’t have the resources they need to scale their ventures.

Given that gender gaps in bank loans and firm size are persistent across developed and developing regions of the world, policymakers and the private sector should consider initiatives to address the financial challenges that disproportionately impact female entrepreneurs, including those related to cultural issues that discourage or prevent women from requesting bank loans.

Furthermore, although government initiatives exist that focus on facilitating the success of female entrepreneurs, the low rate of women business owners accessing state funding around the world suggests that more can be done to achieve gender-based parity in small business financing schemes. To that end, training programs should give adequate importance to growth-related activities and emphasize the skills and resources female business owners need to expand their businesses. Research has shown that traditional business training often does not increase profits of small businesses in developing countries; however, new approaches, such as personal initiative training, have been shown to lead to a boost in profits for micro-entrepreneurs and are particularly effective for female entrepreneurs.

Our results suggest that while the gender gap in access to financing among small business around the world persists, there is much that policymakers, banks and training institutions can do to begin to close this gap. Sustained efforts focused on closing the divide in lending between male- and female-owned small businesses are likely to help women scale their operations, paying dividends for economies in the process.

---

REFERENCES


Christina Constantinidis, Annie Cornet & Simona Asandei, 2007. Financing of women-owned ventures: The impact of gender and other owner-and firm-related variables. Venture Capital, 8:2, 133-157, DOI: 10.1080/13691060600572557 Available at: https://pdfs.semanticscholar.org/b90e/f942c23b221aeb9d9473ab26038ae22b8c8b.pdf?_ga=2.70888912.1107232953.1520425400-598180497.1520425400