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COLOMBIA

small firm DIARIES

Country Report

DATA FROM THE SMALL FIRM DAIRIES

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1. Introduction

STUDY GOALS AND METHODOLOGY

The Small Firm Diaries is a global research initiative to understand the role of low-income small firms in poverty reduction, and the barriers to growth and productivity of those firms that limit their contribution to local economies. The study uses financial diaries, a high frequency quantitative and qualitative data collection process. In each country, a team of locally-hired field researchers visited a sample of small business owners weekly for a year, gathering data about financial flows and the decisions behind those flows. From 2021 to 2023, the project was active in 7 countries: Colombia, Ethiopia, Kenya, Nigeria, Indonesia, Fiji, and Uganda. For more details on the study methodology, see *Methodology and Process: An Introduction to the Small Firm Diaries*, available at smallfirmdiaries.org.

The financial diaries methodology allows us to explore crucial areas of knowledge on the firms that are a central part of the economies of low-income populations with a new level of detail. For example we use high frequency data to see the volatility firms face, and combine survey data on aspirations with growth measurements based on financial data.

By tracking cash flows and listening to small firm owners themselves, the Small Firm Diaries study offers insight into a segment of low-income economies that has, until now, been little studied and less understood. The Small Firm Diaries attempts to fill in several blind spots—between large formal firms and the non-employer household businesses that are the focus on microfinance; between the "snapshot" data of large, nationally-representative surveys and the focused data of individual business case studies. Our goal in this study was to inform policy and practice by a wide variety of actors: financial services providers, business support organizations, government policy makers, funders and other researchers can all use the data and findings of the Small Firm Diaries project to deeply understand and address challenges of small firms in low- and middle-income countries.

PURPOSE OF THIS REPORT

The Colombia Country Report presents data on key study topics, including financial access, aspirations, and employee management, and shares findings on a subset of firms that participated in business training programs, and on women-led firms. This report is intended to be an overview of the data gathered during the study. This report may be updated with additional in-depth analysis in the future. We will also publish more detailed analysis on specific topics, and individual firm profiles. The current version of this report and any additional reports using data from the Colombia sample will be published at smallfirmdiaries.org.

2. Sample Overview

SUMMARY

In this section, we provide an overview of the Small Firm Diaries Colombia samples, including gender, location, and sector distribution along with an overview of firms' cash flows.

In Colombia, data collection began in May 2021 and was completed in May 2022. We recruited 174 firms to participate in the study from three research sites: Bogotá, Cali, and Barranquilla. Our final sample contains 122 firms, roughly evenly spread across the cities. In this context it is difficult to have a consistent and objective definition of firm ownership; consequently the study allowed participants to self-define the owner of the firm. Based on the self-description, 31% of the firms are owned by women (the study protocol set a floor of 30% of firms with a female owner), and 23% are co-owned by a man and a woman; the remaining firms are men-owned. The study was limited to firms in three industries: light manufacturing, agri-processing and services. In Colombia, half of the firms are engaged in small-scale manufacturing (e.g., carpentry, metal works, and construction materials); 36% in services (e.g., printing, repair and maintenance, and food preparation); and 12% in agri-processing (e.g., leather goods, food preservation).

SAMPLING METHODOLOGY

The Small Firm Diaries was designed to illuminate a class of firms that are little studied and even less understood: firms that have hired employees (typically a major distinction between types of small businesses in high income countries) but have not yet reached a scale to have professional management (e.g., employees whose only responsibility is managing other employees). Furthermore, the study is focused on firms in low-income neighborhoods where owners, employees and customers are likely to be near poverty lines.

In other words, the Diaries was focused on firms larger than those that have been the focus of the global microfinance movement, which are typically firms that do not have (and never grow to have) employees, and those that are more formal, higher income and more integrated into the financial system and economy. For more details about the motivation of the study and the methodology, refer to *Methodology and Process: An Introduction to the Small Firm Diaries* published at smallfirmdiaries.org.

The sites for the study—Bogota, Cali and Barranquilla—were selected in conversation with local partners and advisors to provide a reasonably representative look into the varied regional economies of Colombia. Within each city, we then worked to identify neighborhoods that met the study criteria and were likely to have a density of small firms. To recruit firms, the field team visited each selected neighborhood to conduct an initial census, counting and recording the details of thousands of potentially eligible businesses. They noted the business sector, firm owner gender,

number of employees (as reported by the owner), and level of interest in participating in the study. From the results of the census, we selected a set of firms which would allow us to meet the study's objectives in terms of number of employees, industry and ownership.

The field researchers returned to the selected firms to gather more information about the history of the firm, types of employees, revenue patterns, and the firm ownership structure, and we used this data to select the final sample. Of note, very few firms who were invited to participate in the study declined the opportunity.

SAMPLING RESULTS

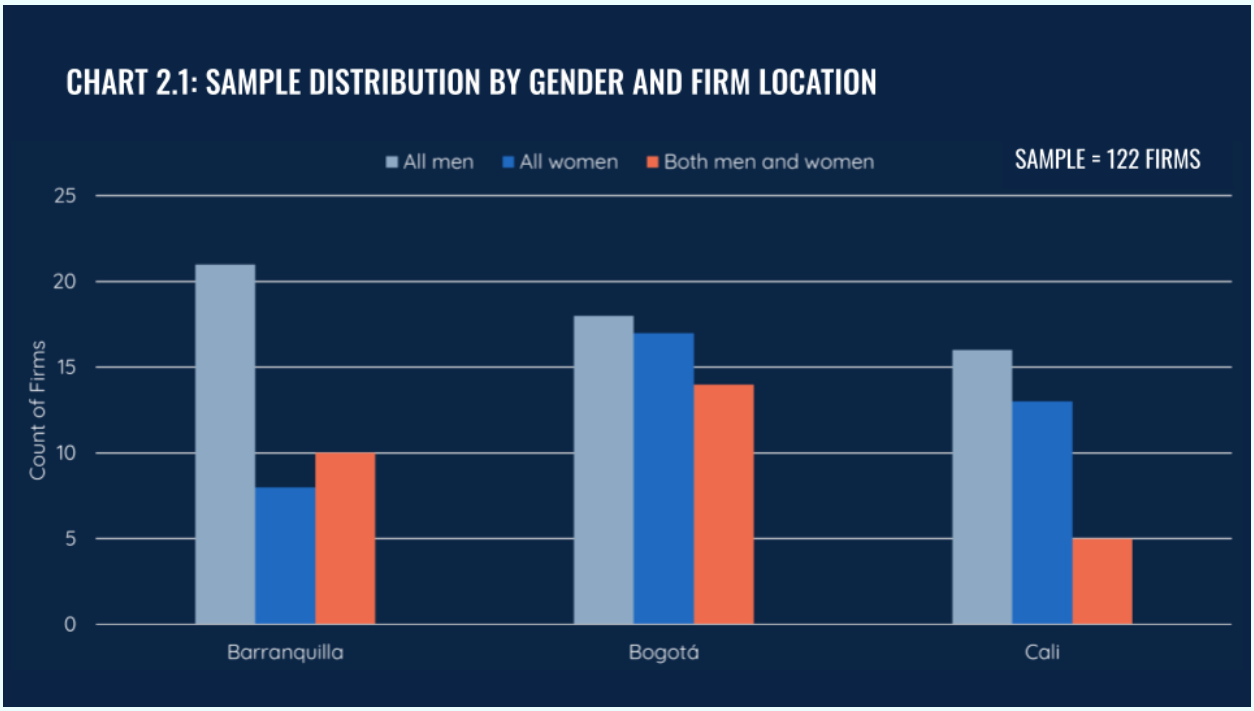
We began the study with 174 firms: 58 firms from Bogotá, 61 firms from Barranquilla, and 55 firms from Cali. Of the 174 firms, 47 (27%) dropped out at various points during the study, resulting in 127 active firms. In our cleaning process, we removed 5 firms that were marked as "untrustworthy" by our field researchers. In the end, we had 122 firms left for our analysis, representing 70% of the initial sample.

TABLE 2.1: SAMPLING RESULTS

All Firms	Dropout Firms	Post-Cleaning Sample for Analysis
174	47 (27%)	122 (70%)

Location

As shown in Chart 2.1, the highest number of firms in the final sample was in Bogotá, which has a more balanced proportion of firms by gender than the other cities. In Bogotá, of the total 49 firms, 18 were men-led, 17 were women-led, and 14 were co-owned (men and women). In Barranquilla, of the 39 firms, 21 were men-led, 10 were co-owned, and 8 were women-led. Of the 34 firms in Cali, 16 were men-led, 13 were women-led, and 5 were co-owned.



Industry

We selected firms from three sectors: agri-processing, light manufacturing, and services (Table 2.2). 36% of the firms are in the services sector, and are engaged in activities such as printing, repair and maintenance, health clinics, and private school. Light manufacturing (including carpentry, metal works, and construction materials) constitutes half of the total firms. The remaining 12% of firms are in the agri-processing sector (food preparation, food preservation, meat and fish preservation, agricultural input products, and dairy/farm production).

TABLE 2.2: SECTORS AND SUB-SECTORS

AGRI-PROCESSING 12% (15 FIRMS)

Sub-sector	%
Food preparation	40%
Food preservation	27%
Preservation of meat and fish	20%
Agricultural input preparation	7%
Dairy/agricultural production	7%

LIGHT MANUFACTURING 52% (62 FIRMS)

Sub-sector	%
Carpentry	22%
Leather goods (production)	21%
Garment production/sewing	17%
Metal works (production)	14%
Construction material	8%
Non-agri resource extraction	5%
Textile cloth	5%
Other	7%

SERVICES 36% (44 FIRMS)

Sub-sector	%
Printing	52%
Repair & maintenance	16%
Health Clinics	11%
Service for energy	9%
Private School	5%
Entertainment/connectivity	2%
Veterinary Services	2%
Garment production/sewing	2%

Cash Flows

The Small Firm Diaries is explicitly focused on the role of small firms in poverty alleviation and inclusive growth. However, using revenue or profit measures to define a sample ex-ante is fraught. What research has uncovered about the micro-firms[1] that are a notch below the firms in this study suggests that small firms' revenues and profits were likely to be highly variable and that extrapolating annual revenue or profit from short-term measures was unlikely to be reliable. We also were unsure whether owners' estimates of their firms annual revenues or profits would be accurate. Nevertheless, these are important measures for understanding the firms that are in the study. Here we present the sample distribution on revenues, expenses and operating margins (see box) based on the data gathered during the study.

[1] Within the Small Firm Diaries, "micro" always means firms with 0 non-family employees.

OPERATING MARGIN AS AN APPROXIMATION OF PROFIT

Measuring the profits of firms without formal accounting mechanisms and practices is very difficult. Accounting standards call for profit measures to include amortized values of assets, loans and future commitments (not to mention the use of cash flow or accrual methods)—something well beyond the ability of a study like ours to accurately measure. Given that, our measures focus not on "profit" as formally defined, but on operating margins: monthly revenues less monthly expenses. Of note, our measure of expenses excludes any payments the owners make to themselves; we also exclude any measure of the value of owners' time.

Median annual revenue and median annual operating margin for participating firms was COP 85.8 million and COP 30.6 million respectively. Given the month-to-month variability in these figures (see Section 3 on firm finances), however, we think it is much more instructive to focus on monthly measures.

The firms that were part of our study had monthly median revenues of COP 8.5 million. This of course obscures the differences between firms and the distribution of revenues. More than half (56%) of our sample has a median monthly income lower than COP 10 million and 33% of our sample has a median monthly income lower than COP 5 million.

Firms' monthly median operating margin was COP 2,885,500. Of all firms, 89% (109) had positive monthly median margins. While most firms had positive operating margins, their margins were slim. Three quarters of our sampled firms with positive median monthly margin (85) have a median monthly operating margin below COP 6 million, and half have a median monthly operating margin below COP 3.3 million. Only 8% of firms have a monthly operating margin above COP 12 million. Of the 13 firms from our sample who had a negative median monthly operating margin, they ranged from COP 27,000 to COP 6.1 million in losses. Financial performance will be outlined in further detail in the following section.

3. Firm Finances Overview

SUMMARY

Data collected through the financial diaries methodology allows us a detailed glimpse into the weekly finances of a firm, as well as their performance across the full year. We typically use monthly figures to understand a firm's cash flows in a summarized form. In part, this is because of the inevitable difficulty in precisely dating all reported flows—firms would often bundle several days' worth of revenues or transactions, or be uncertain about the exact day a payment was made or received.

In this section we describe our firms' monthly cash flows in more detail and explore whether there are meaningful demographic patterns to cash flows. We also introduce our preferred growth metric: linear slope of monthly revenue. The majority of our sample shows little change over the year on this measure (neither exhibiting rapid growth or large declines), which is in itself significant given the context of the study in the midst of the global pandemic. Little in the cash flows of small firms is linear, so we explore volatility of cash flows extensively. To measure volatility in firms, we use the coefficient of variation or CV[2]. Our firms experience significant volatility in revenue and expenses, and extremely high levels of variability in operating margins. Growth itself can cause high levels of measured volatility—consistent with our overall growth measure we find that volatility is not driven by growth. In fact, firms with higher variability likely have lower growth rates.

FINANCIAL PERFORMANCE DATA

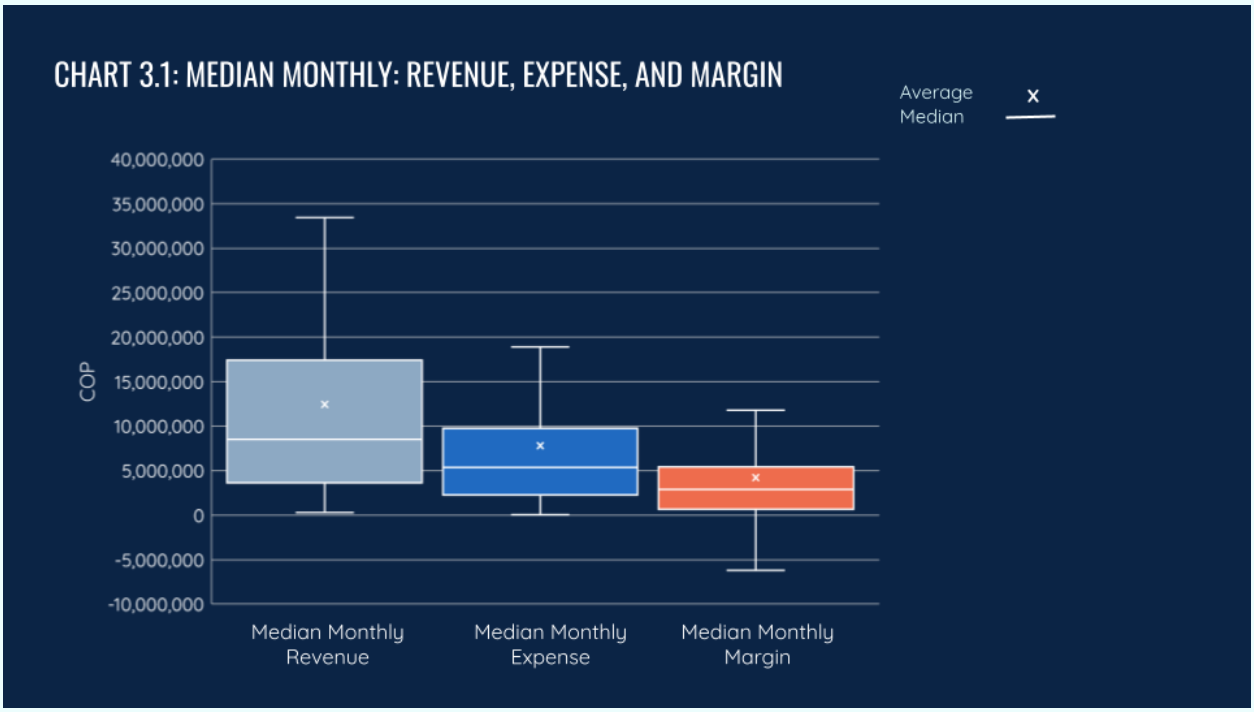
Revenue, Expenses, and Operating Margin

The median monthly revenue of our sample firms ranges from COP 290.000 to COP 33 million. Half have a median monthly revenue of COP 8 million or less, and around 75% of them COP 16 million or less.

The range of the median monthly expense distribution across our sample firms is narrower than that of the revenue: from COP 73.000 to COP 18.9 million. Half of the firms have a median monthly expense of COP 5 million or less, and around 75% have a median monthly expense of COP 9 million or less.

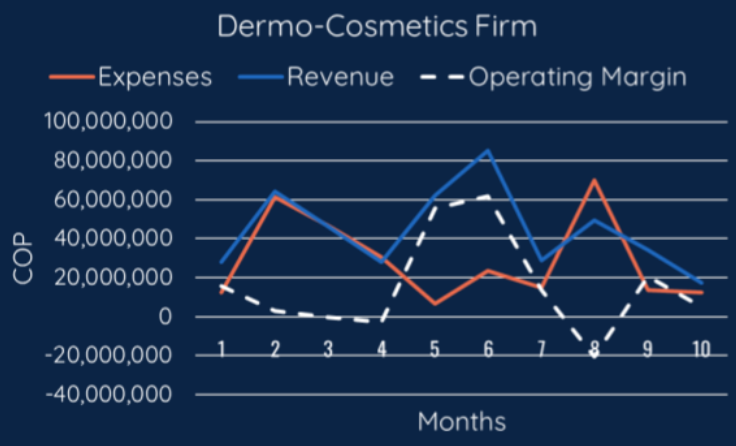
[2] The coefficient of variation (CV) is a statistical measure defined as the ratio of the standard deviation to the mean. It is a useful way of comparing variation between months given the dispersion in sizes of cash flows.

With respect to operating margin, half of our firms have a median monthly margin between COP 560.000 and COP 4.7 million. Most of our firms have operating margins of less than 5 million pesos a month. Thirteen firms show a negative median monthly margin, going as low as COP 6 million of negative median monthly margin.



While medians are useful for understanding the size of the small firms, they obscure one of the key findings of the study: the very large amount of volatility the firms experience from month-to-month. The coefficient of variation (CV) is a measure used to understand the spread of data, especially when comparing different subjects with different ranges of values. The median CV of monthly revenue is 0.48. To better understand CV, consider the case of a particular firm as seen in Chart 3.2.

CHART 3.2: OPERATING MARGIN VOLATILITY



	Monthly Average	Monthly St. Dev.	Monthly CV
Operating Margin	COP 15,162,428	COP 27,162,692	1.79
Revenue	COP 46,180,984	COP 21,558,527	0.47
Expenses	COP 31,018,556	COP 22,976,384	0.74

This firm's monthly average revenue is about COP 46 million, but rarely is the actual monthly figure within COP 10 million of that average; specifically the standard deviation tells us that monthly income tends to be about COP 20 million from the average. Standard deviations are hard to compare across firms that may be of radically different sizes in terms of monthly revenue.

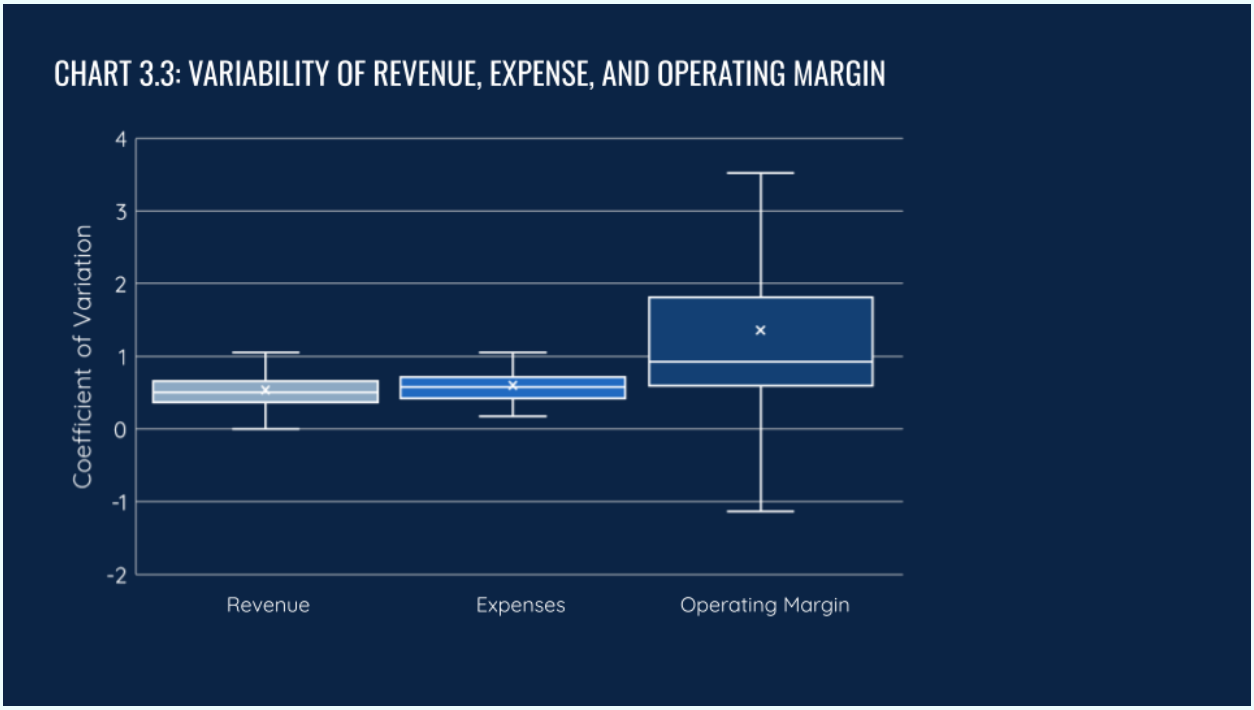
This is where the CV comes in. The CV is found by dividing the standard deviation by the mean, and it tells us how distant the data points are from the mean, expressed as a proportion of the mean value.

For example, if the dermo-cosmetics firm has a revenue CV value of 0.47, it means that on average, the monthly revenues are about 47% greater or lesser than the average monthly revenue. This reflects the high volatility of that firm's monthly revenues. The median CV of monthly revenue for all the firms in the study is 0.52, meaning that, on average, the monthly revenue of all the firms tends to be 52% greater or lesser than their average monthly revenue.

While much analysis remains to be done, we see very little evidence in our data that the volatility of revenue is planned, desired or predictable. A major theme of the Small Firm Diaries, therefore, is the challenges that firms' encounter managing this amount of volatility.

There are two main ways that a firm could manage revenue volatility. A firm that has reserves of working capital or ready access to credit could essentially ignore revenue volatility and keep expenses constant, drawing on working capital or credit when revenues were low and topping up those accounts when revenues were high. A firm without those tools would adjust expenses to the extent possible (some expenses may be fixed) to match revenues. In our data we see that the variability of expenses is very similar to that of revenue, with a median CV of monthly expense of 0.57.

Firms are not able to perfectly match the volatility of revenue by managing expenses up and down. Operating margin volatility is much larger—the median CV of monthly margin is 1.00—and also has a higher range (indicating that firms have different capacity to manage expenses).[3] (Chart 3.3)



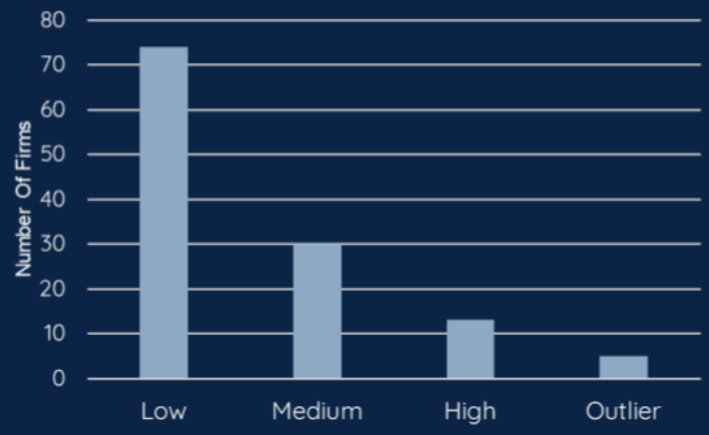
Gender and Industry

To better understand how our sample differs across revenue levels, we use the sample median monthly revenue distribution to categorize our firms into four buckets: low, medium, high and

[3] No measure of volatility is perfect, CV included. The higher volatility of operating margin is in part driven by operating margins being necessarily smaller than revenue, making the mean lower.

outlier revenue firms (exact cutoffs in Chart 3.4). The majority of our firms typically have revenue less than COP 11 million per month (~2,500 USD).[4]

CHART 3.4: FIRMS DIVIDED INTO REVENUE CATEGORIES



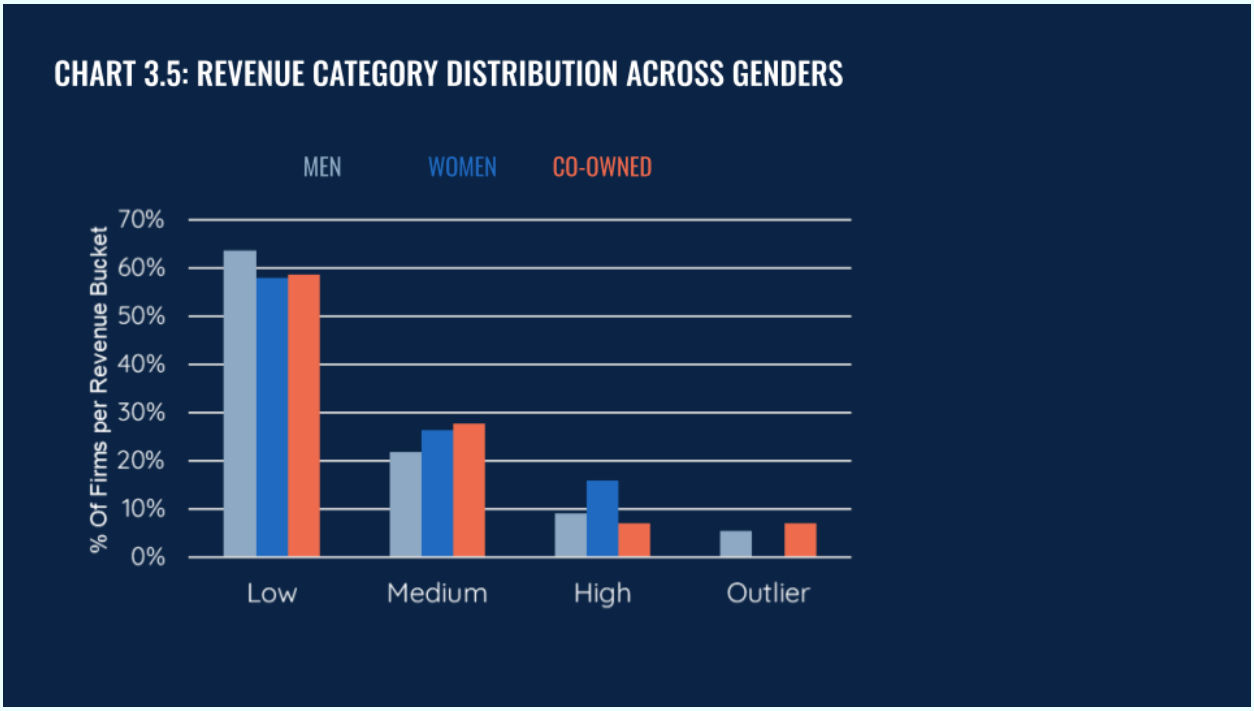
Bucket	Median Monthly Income
Low	< COP 11 M
Medium	[COP 11 M, COP 22 M)
High	[COP 22 M, COP 35 M)
Outlier	>= COP 35 M

Large gender differences persist in Colombia—and globally—when it comes to firm ownership, size, income and wealth. For instance, according to the DANE[5], on average, 65.7% of firms that are active economically in Colombia reported a man as the owner or legal representative. However, this gap increases in large firms, where female ownership was reported to be only 20%. The global average of firms with female participation in ownership, is 32.9%, as reported by the World Bank.[6] These gender gaps also show up in Colombia and around the world in terms of firm size, profits and access to credit, among other measures.

Given this background, we specifically sought to have at least a third of our sample made up of women-owned firms so we could gain insight into the performance, challenges, and successes of women-led small firms in Colombia. Ultimately we were somewhat surprised that we see relatively few meaningful gender gaps in our sample. This is discussed in more detail in the section that focuses on women-led firms. Here we'll describe the basic measures of firm size and operations.

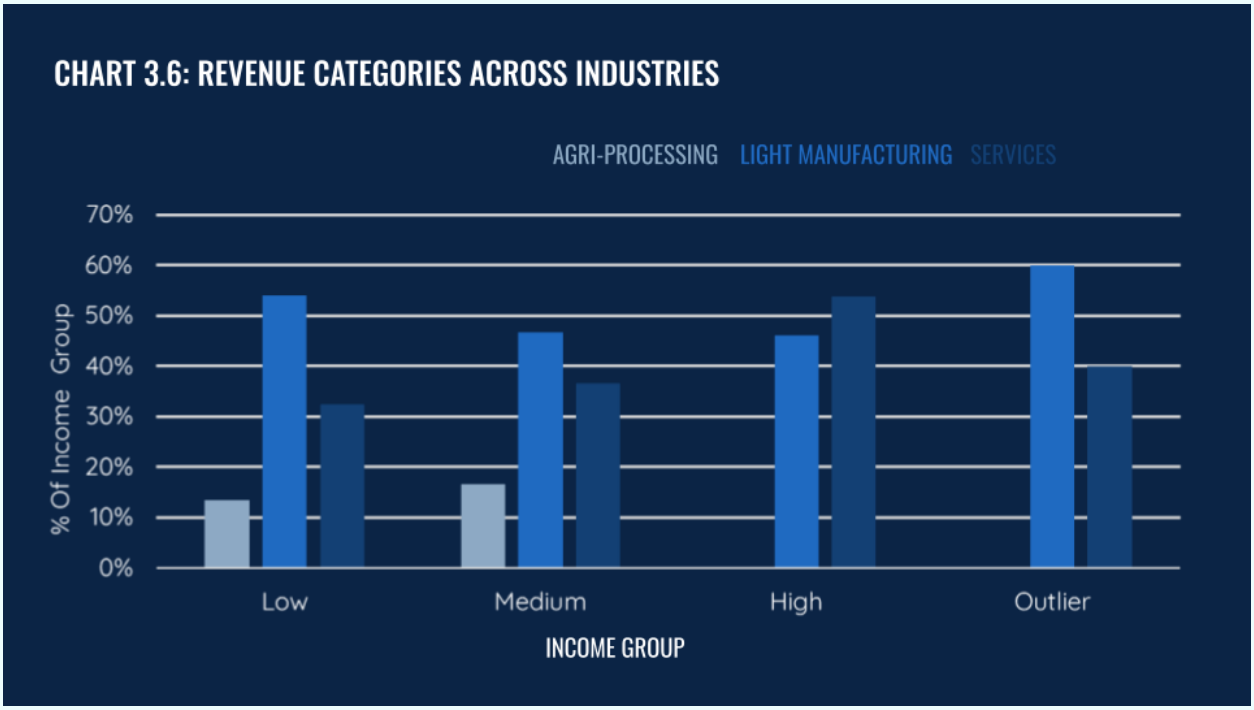
[4] For context, GDP per capita in Colombia is 6,100 USD but minimum monthly wages are 287 USD.
[5] DANE, 2022
[6] World Bank Gender Data Portal, "Firms with female participation in ownership (% of firms)"

The distribution of firms across the revenue categories above is close to equal across genders (Chart 3.5). About 60% of men, women, and co-owned firms are low earners. Women are slightly more represented among high earners, where around 15% of women typically earn "high" monthly revenue compared to less than 10% of men. However, no women-led firms are 'outliers' in terms of revenue. There is a significant gap between women-owned firms and men-owned firms in terms of median monthly operating margin, but the total difference is driven by the top and bottom of the distributions: there are a few women-owned firms who have significantly negative operating margins, while there are a few men-owned firms who have much higher positive operating margins than other firms. When we compare only firms with positive operating margins, men-owned firms have median monthly operating margins of COP 3.2 million compared to COP 2.7 million for women-owned firms. Of note, women-owned firms have a higher median number of monthly employees, which we discuss more in Section 7 on employment and in the Focus on women-led firms.



We believe that the general parity between men and women in our sample is in large part a function of the selection criteria for our study: women who start and own firms with employees are those that have already overcome many of the gender gaps that exist and are responsible for women being overrepresented among microenterprises. According to ANIF survey (2021), 44% of Colombian commercial microenterprises are women-owned, compared to 25% and 17% for small and medium firms respectively. However, given the upper bounds of our selection criteria, it is likely that gender gaps reemerge among firms larger than the ones in the Small Firm Diaries.

While there was less ex-ante expectation of an industry gap than a gender gap, we also see that there are no meaningful differences between firms across the three industries that we study (Chart 3.6). No agri-processing firms are "outlier" earners and a higher proportion of these firms are "medium" revenue earners, while light manufacturing and service industries have a slightly higher proportion in the "high" revenue buckets. We also find minimal difference in terms of operating margin. In all industries there are outlier firms on the negative and positive ends of the operating margin range, but most firms have median monthly margins between COP -1 million and COP 5 million.



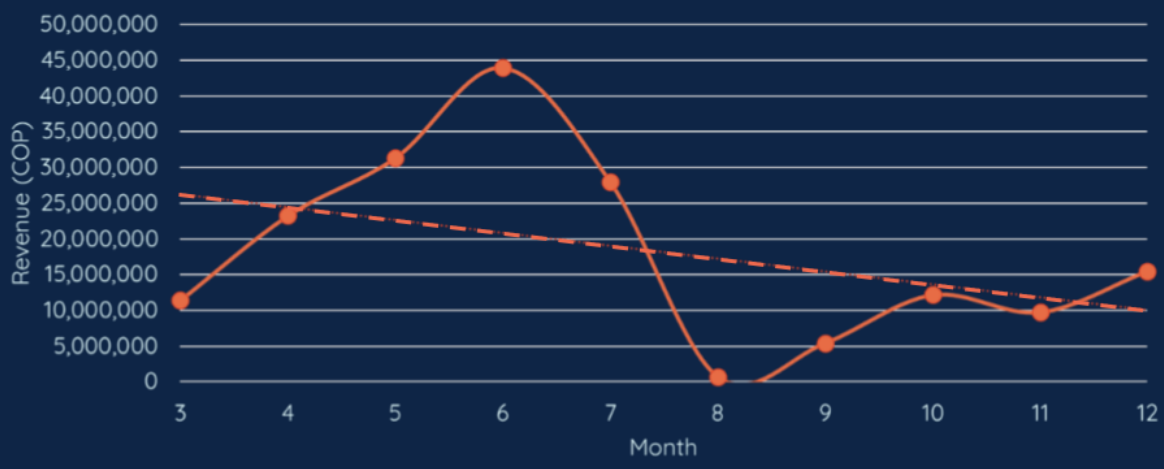
Growth

Measuring growth (by revenue or operating margin) is a challenge in an environment with such high volatility. Comparing first month to last month revenues or margins is very susceptible to unusually high or low months, for instance. To best measure the direction of change, while accounting for month-to-month volatility, we use the slope for the best linear fit for monthly revenue. To do so, we regress monthly revenue totals to find the best match as if monthly revenues were more consistent.

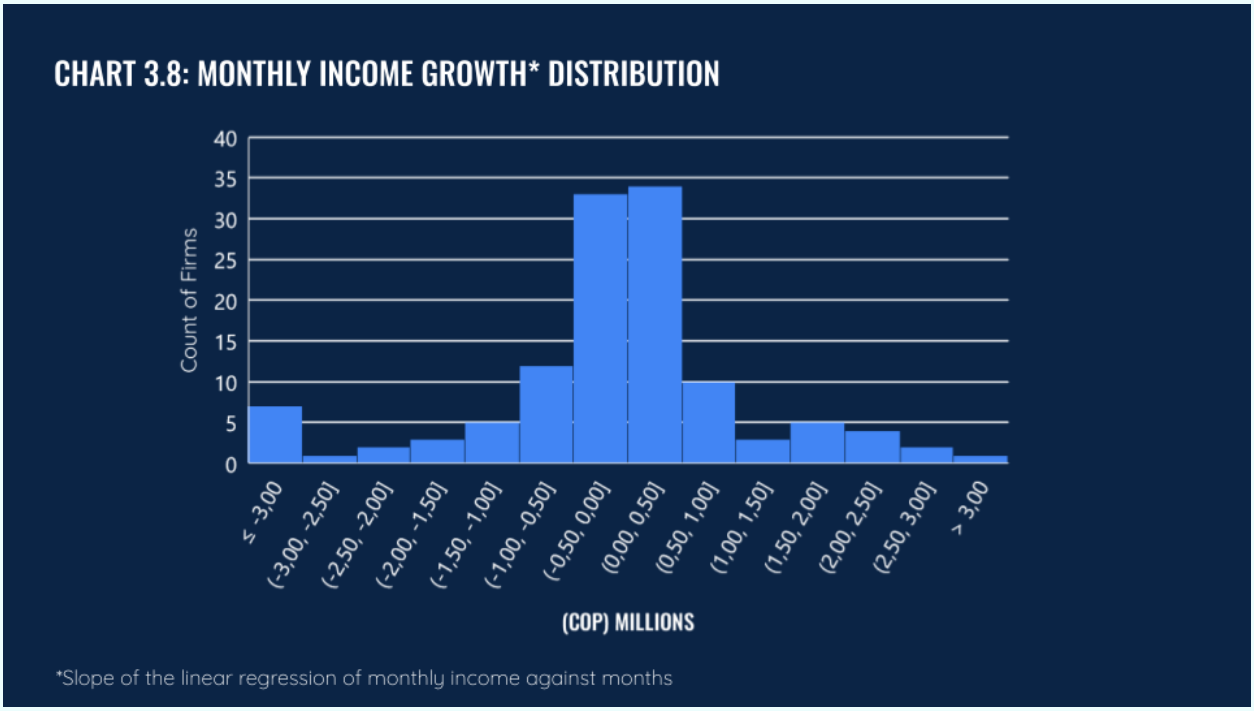
We see an example firm in Chart 3.7 which shows the monthly revenue for months 3 through 12 (we disregard the first 2 months of data as part of the cleaning process). If we only compared the two data points of months 3 and 12, we would categorize this firm as a "grower," as the revenue in month 12 was 36% higher than the revenue in month 3. However, this would be an

oversimplification of the high levels of volatility the firm experienced throughout the year, evidenced by the peak in month 6 and trough in month 8. Taking the average of the monthly change (i.e., how much has this firm grown between month 3 and month 4?) would miscategorize the high volatility for growth. This firm's average monthly change is 93%; in other words, on average, the firm's revenue grows by 93% from one month to the next. Once again, looking at the graph, we can see that this is an overestimation of their sustained revenue growth. Because of these shortcomings in the other measurements, we have chosen to look at the slope of the monthly revenue trend to (1) account for months without revenues (e.g., due to temporary firm closings) and (2) utilize our full year's worth of data rather than comparing two point-in-time data points such as month 3 and month 12. The line of best fit for this firm shows a negative slope of COP -1.8 million, suggesting an average decline in monthly revenue by COP 1.8 million. Using the slope, we categorize the firm as a "not-grower."

CHART 3.7: MONTHLY REVENUE FOR EXAMPLE FIRM, MONTHS 3–12



Using this metric we find that most firms do not see much change over the course of the year. As seen in Chart 3.8, half of our firms are either slightly declining (COP -500,000 to COP 0 monthly revenue) or slightly increasing (COP 0 to COP 500,000). The remaining firms are spread across the distribution.



The growth measure helps confirm that the measures of volatility of revenues and operating margins are not simply because firms are growing (a rapidly growing firm would show a high CV). Instead, we find that there is a very weak negative relationship between variability of revenues and growth in revenues.

FOCUS: Women-Led Firms

SUMMARY

Throughout the Colombia Country Report we discuss gender-disaggregated data. In this section we summarize those analyses of differences and similarities between men-owned and women-owned[7] firms in the study, and we examine the entrepreneurial motivations and confidence of our women-owned sample.

As noted at the beginning of the report, on the most basic measures of revenue we do not see meaningful differences between men- and women-owned firms. There is a gap in median operating margin, but the total difference is driven by the top and bottom of the distributions: There are a few women-owned firms who have significantly negative operating margins, while there are a few men-owned firms who have much higher positive operating margins than other firms. We believe that the general parity between men and women in our sample is in large part a function of the selection criteria for our study: Women who start and own firms with employees are those who have already overcome many of the existing gender gaps that are responsible for women being overrepresented among microenterprises. However on some measures there are notable differences. For instance, we see differences between the men-led and women-led firms on means of measuring success, and strategies for dealing with competition. Women in our sample also report more structured approaches to running their businesses than men, and their firms show greater levels of formalization, higher median levels of formal financial integration, and greater adoption of strategic marketing and research.

We must say clearly at the outset that our sample is not representative of either men- or women-led small firms in Colombia, much less of men and women globally. The findings we note here should not be directly extrapolated to other contexts or to the sector as a whole. However, we do believe that these comparisons help illuminate areas for further study, and for gender-specific approaches to the challenges of small firms.

[7] Women-owned firms have one or more female owners while co-owned firms have mixed-gender ownership with at least one man and one woman.

OVERVIEW

Throughout this report we look at the role gender plays in the core aspects of running a small firm. Below is a summary of the points addressed in the other sections of this report.

Firm Finances

Using median monthly revenue to group our firms into earning categories, we find no meaningful difference between men- and women-owned firms' distribution across earning categories: about 60% of men, women, and co-owned firms are low earners. Women are slightly more represented among high earners, where around 15% of women-led firms typically earn "high" monthly revenue compared to less than 10% of men-led firms.

While there is a gap between women-owned and men-owned firms in terms of median monthly operating margin, the difference is largely driven by outlier firms in both groups. When we compare only firms with positive operating margins, men-owned firms have median monthly operating margins of COP 3.2 million compared to COP 2.7 million for women-owned firms, in part because of a few men-owned firms with significantly higher operating margins than the rest of the sample.

Business Development Services

Women firm owners were more likely to have received business development training, and make up a larger proportion of our total BDS sample than men-owned firms (the BDS sample is 30% women-owned, 20% men-owned, and 50% co-owned by at least one man and one woman). Significantly more women have received vocational, marketing, and bookkeeping training than men.

Financial Access

In contrast to global trends, male firm owners are more likely to be unbanked (38%), while only about a quarter of women-owned and co-owned firms are unbanked. Female firm owners also use their bank accounts for more of their business - the median percent of transaction value through a bank account is 50% for women, compared to 33% for men.

Female firm owners are more likely to separate their finances than male firm owners—85% and 76% have separate accounts for their businesses respectively. Female firm owners say they need loans slightly more frequently than male firm owners, although very few owners across either gender report needing loans "constantly" or "often."

Digitalization

We found no meaningful differences in the share of women and men who adopted technology for their businesses.

Formalization

A higher proportion of women-owned firms are formal, based on self-perception, than men-owned firms.

Employment

Women-owned firms have a higher median number of monthly employees.

Business Practices

On the McKenzie and Woodruff Business Practices Index score, women in our sample typically score higher than men. Men-owned firms have a median score of 0.50, with half of the firms ranging between 0.35 and 0.63. Women-owned firms have a slightly higher median score of 0.54, with half of the firms ranging from 0.42 to 0.71. Among our firms, record keeping was the most common set of practices, with women being more likely to report doing so (86% women vs. 74% men). Practices in the stock control category were also quite common (similar numbers of firms reported preventing stock outs as did tracking product profitability) though in this case men were more likely to report it than women owners (60% women vs. 75% men).

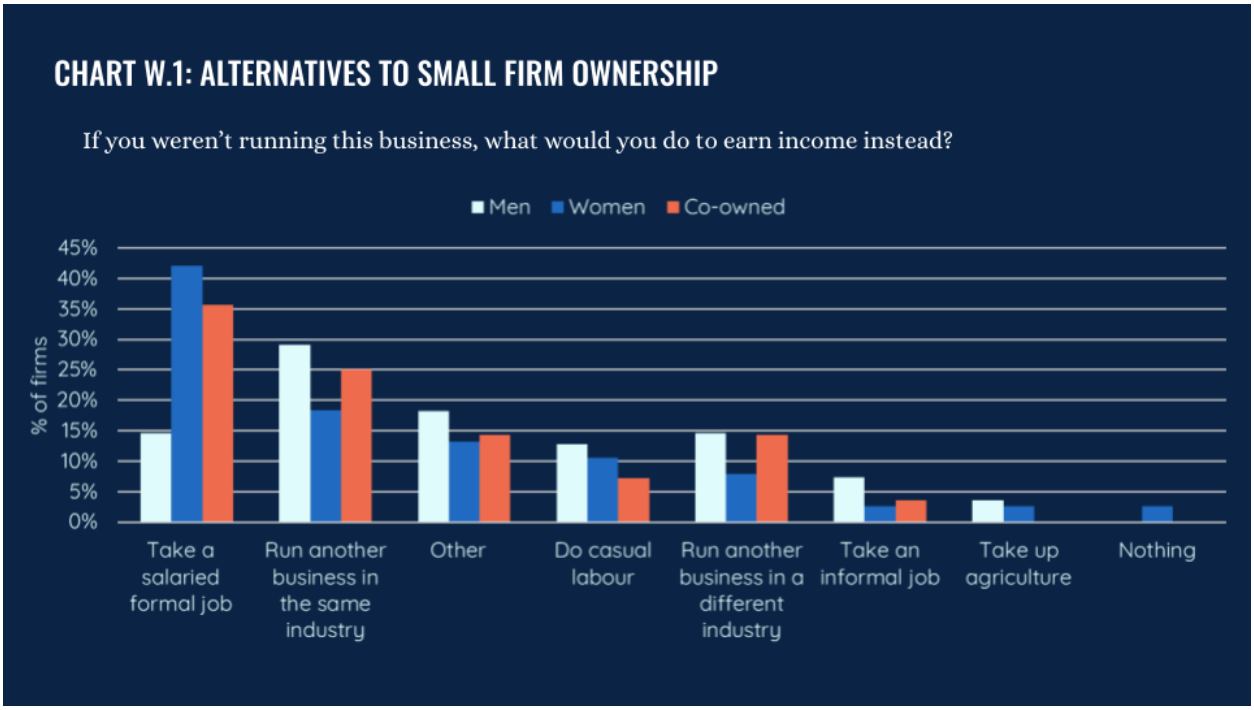
Aspirations

In our sample we saw no meaningful differences between women and men in aspirations or growth rates.

ENTREPRENEURIAL CONFIDENCE AND PERFORMANCE: A CLOSER LOOK

We wanted to understand if firm owners of different genders had differing motivations for starting a business that might impact their management practices and performance. Most of our sample opened their business due to the desire for independence, passion for the area of work, desire for higher income, and family connections; we did not find differences large enough to be meaningful in the responses of men and women in our sample.

Despite having similar motivations for opening the business, when we asked firm owners what they would do for income if they were not running their current small firm (Chart W.1) we saw that women said they would be more likely to take a formal job, while men said they would be more likely to try to start a new small business. There are several possible explanations for this disparity, including that women may find it harder to secure the necessary capital to start a new firm, or that the women who have run employer firms are more employable in the formal sector due to the same factors that allowed them to start and run a small business. The disparity could also be explained by women having less confidence in their entrepreneurial skills; if this were the case, their lack of confidence would not be based on actual management performance (as noted in Section 8 on business practices, women score higher on the Business Practices Index), nor does it translate into higher risk aversion (we found no meaningful difference in the risk tolerance of women-owned firms compared to men-owned firms[8]).

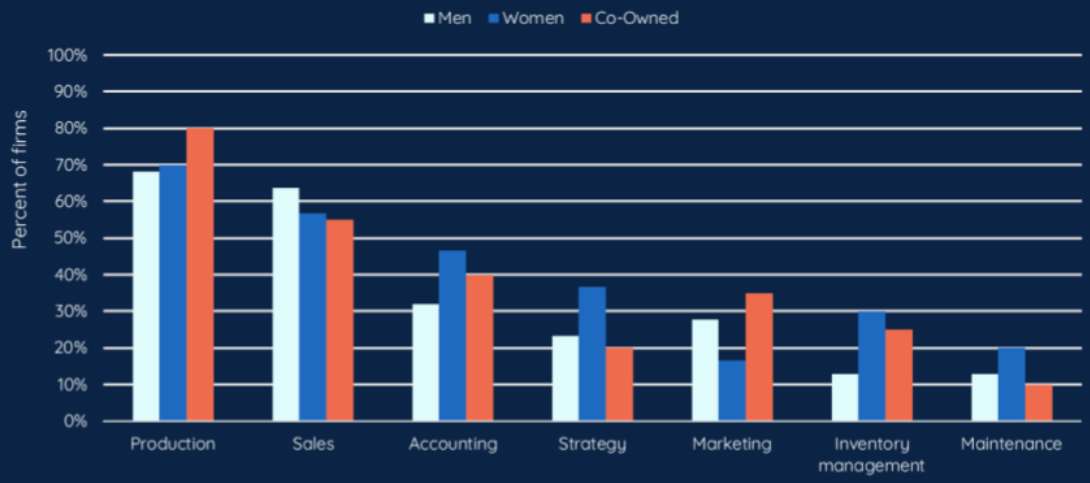


[8] We asked firms: "If you had to choose between earning no income for one month or one third less income for three months, which would you choose?" and consider firms willing to bear no income for one month as more risk tolerant.

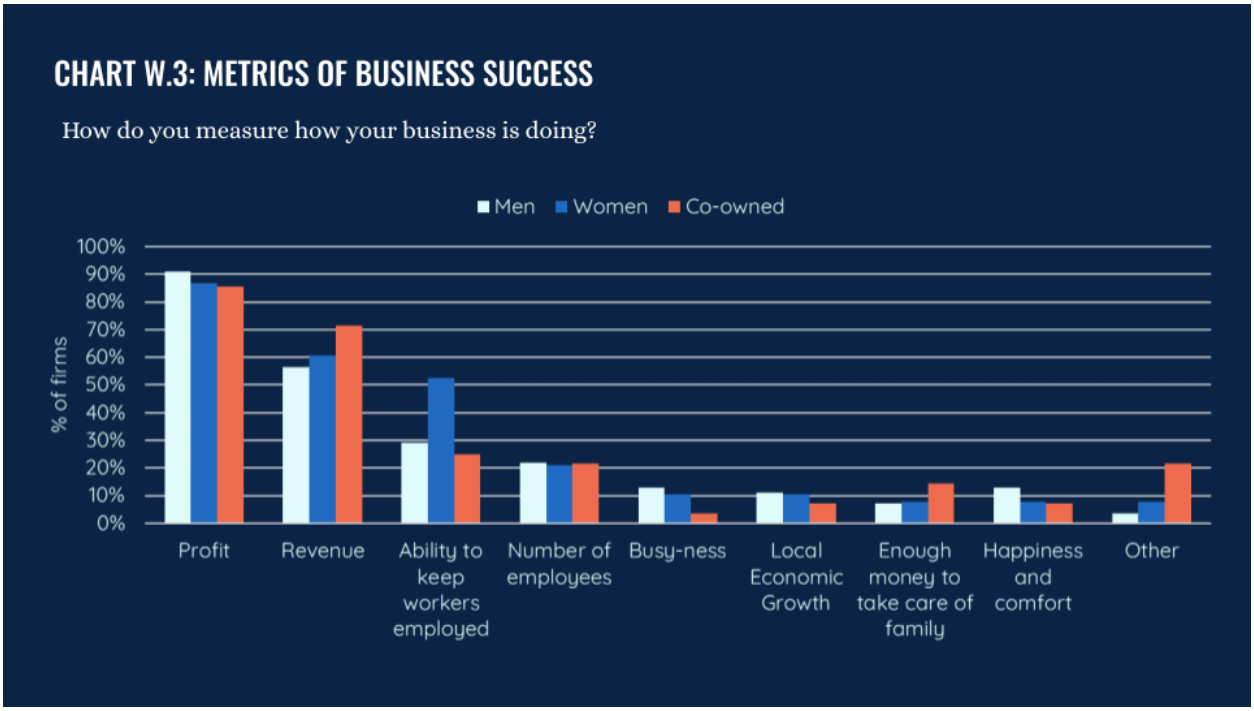
Diving deeper into confidence levels, when asked about specific business practices, women reported the same levels of confidence as men. For instance, about one-third of both men and women reported a "very strong ability" to manage financial accounts, though women reported spending time on key business activities like accounting and strategy at higher rates than men (Chart W.2).

CHART W.2: TIME USE

Which activities from the following list did you spend any time on in the past two weeks?



Confidence aside, we also wanted to understand if owners measure performance differently, and whether that affects how they run their businesses. When we asked firms how they measure business performance, profit was the most important metric for both men and women. However, a higher share of women than men (52% vs 30%) cited their firm's ability to keep workers employed as a success metric (Chart W.3).

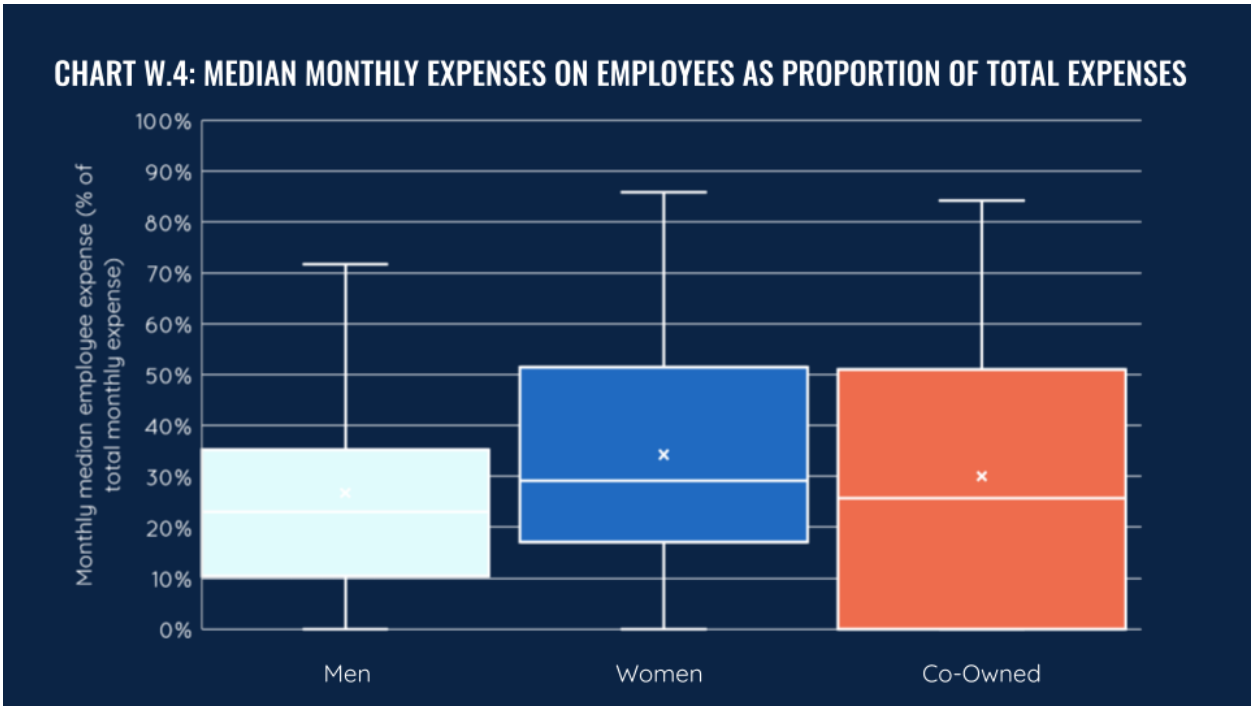


Looking at our cash flow data, we do see that employee payments typically make up a slightly higher percent of monthly expenses for women-owned firms than men-owned firms (median employee payment proportion of monthly expenses was 29% vs. 22%). However, the women-owned firms are skewed right: for half of women-owned firms, employee payments typically make up between 20% and 50% of their monthly expenses. On the other hand, for half of men-owned businesses, employee payments typically make up between 10% and 35% of their monthly expenses (Chart W.4).

Qualitatively we observed numerous examples of women business owners who use their position to employ and create opportunities for other women specifically:

> *"Todas, todas nuestras empleadas en nuestra empresa, somos mujeres, desde la parte de la gerencia (mi mamá que es la socia), a las colaboradoras. Y también buscamos los proveedores y las proveedoras que fuesen emprendimientos o asociaciones de productores, principalmente, también de mujeres." - Empresaria mujer, firma de procesamiento agrícola*

> *["All of the employees in our company are women, from the management (my mother, who is the partner) to the collaborators. We also look for suppliers who are enterprises or producer associations, mainly, also women." - Women-owned, agricultural processing firm]*



In sum, as in other sections of this report, we find few differences between men-owned and women-owned firms in terms of entrepreneurial motivations, but find that women would be less likely to open another business, if they no longer ran their current business. However, this high level skepticism is not reflected in their current business practices or confidence levels. We do see that more female than male firm owners measure their performance on their ability to keep their workers employed, for most in addition to measuring their performance against profit. This performance metric aligns with higher spending on employees, contributing to lower operating margins than male owned firms, despite the similar motivations, business practices, and levels of confidence.

4. Financial Access

SUMMARY

A major policy focus for the last decade has been bringing more people into the formal financial sector, spurred on by findings that half the world was "unbanked." In this section, we explore how "banked" our firms are in terms of account ownership and then dive deeper into how truly integrated firms are into the formal financial system by looking at account usage, separation of finances, and access to credit. The findings here are an abbreviated version of the Colombia Issue Brief on Financial Access, *Financial Services: How small firms in Colombia manage their finances,* available on smallfirmdiaries.org.

We find that 68% of the firms in our sample own bank accounts *and* use them at least once. Using the percent of value of transactions through a bank account to categorize a firm's financial integration, we see that 33% of our sample is unbanked, 26% is marginally integrated (less than 20% of activity through a bank account), 17% are partially integrated and 24% highly integrated (more than 70% of activity) into the formal financial system. We also find that firms typically use their bank account for larger value transactions, both expenses and revenues. However, even firms that own a bank account typically pay their employees in cash due to employee preferences. In terms of separation of finances, just over 80% of our total sample (including firms that are unbanked) report keeping specific separate accounts for their business.

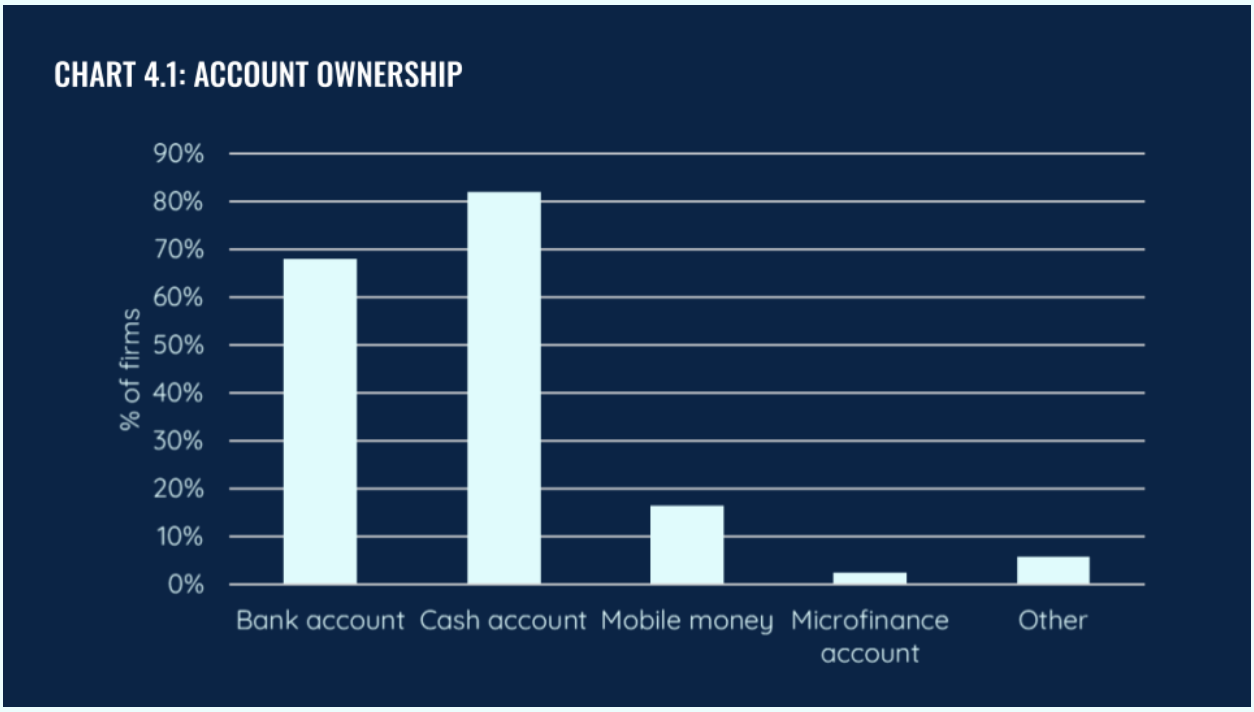
Less than half (43%) of our firms reported holding a loan of any kind during the study and commercial banks were the most common loan source. We did not find that being significantly integrated into the formal system is a prerequisite for access to bank credit - 20% of unbanked firms report having a commercial bank loan. Use cases for loans varied across the sample, with the most popular needs being to address cash flows, make an investment, or expand stock. Deeper dives on what firms consider an investment showed that most of the time an "investment" is a large purchase of raw materials and inventory. Thus, we believe that the vast majority of the expressed interest in borrowing is for working capital purposes.

Given this need for working capital, we explore the use of supply chain finance, including getting credit and giving credit. About 40% of our firms use supply chain finance and a higher proportion of users give credit than take it.

LEVEL OF BANKEDNESS

Efforts to bring more people into the formal banking system have borne fruit in many parts of the world as shown in the 2021 Global Findex, with the number of unbanked people cut in half globally; in Colombia the number of people over the age of 15 who do not have any account stands at 40%.

Originally measurements of formal financial inclusion focused on account ownership, but researchers realized that simply owning an account did not mean much if the account is rarely or never used. More recently, measures of inclusion have attempted to incorporate measures of use, not just ownership. In our sample, 70% of firms own bank accounts (Chart 4.1). We can also look at whether the bank account was used even once during the study. Unlike many measures of household bank account ownership and usage, we don't see a meaningful gap: 68% of all firms—all but 2 firms that report owning an account—use their bank accounts at least once.



Using an account once is a better measure than just ownership, but it still falls far short of understanding how integrated into the formal financial system a firm is. The financial diaries methodology allows us to record all of a participant's financial flows, regardless of what form (e.g., bank transfer or cash) or accounts (e.g., a bank account, mobile wallet, or cash box) are used. We're also able to ask whether a firm owner separates firm and household finances, and about desire for and happiness with formal accounts. All of this data allows us to construct a novel measure not just of whether a firm is "banked" but the degree to which they are integrated into the formal financial system. Specifically, we use both account ownership and percent of value of transactions through a bank account to categorize a firm's financial integration.

Using this measure we see that 33% of our sample is unbanked, 26% is marginally integrated (less than 20% of activity through a bank account), 17% are partially integrated and 24% highly integrated (more than 70% of activity) into the formal financial system.

In sum, there are two important dimensions for integrating small firms like we studied more firmly into the formal banking system: 1) reducing the substantial portion of the firms (~30%) that are still unbanked and operating essentially completely outside formal finance, 2) increasing the usage of formal finance of the firms (again ~30%) who are using formal finance but for less than half of their financial activity. It will likely be much easier to increase the usage of firms that are already part of the system than bringing those outside of it into the system. The former can likely be addressed through marketing and product design tweaks; the latter probably requires more significant interventions and potentially policy changes.

A second key metric for understanding the finances of small firms is the degree to which owners separate their finances from their household finances. This is a fundamental business practice that has been shown to be important to firm performance, and obviously is important for understanding administrative data about small firms' accounts. Just over 80% of our total sample (including firms that are unbanked) report keeping specific separate accounts for their business. In terms of the firms who do not have a bank account, 76% keep their business finances separate. They do this via maintaining a cash box (72%) but some also use mobile wallets (15%); the use of digital financial services is discussed in more detail in Section 5. Ownership and usage of a bank account is not a perfect proxy for separation of finances. Nearly 15% of firms that meet the simple criteria for being banked commingle household and firm finances. Size of firm (in terms of revenue) is a better proxy: 100% of firms in our highest revenue segment separate finances, while only 80% of those in the lower two tiers of revenue segmentation do so. Interestingly, women-owned and co-owned firms (more than 85%) are more likely to separate their finances than men-only owned firms (76%). This may reflect household gender dynamics where women have greater risk of losing control of funds that are commingled.

We did not ask owners or verify the legal status of the bank accounts they told us about. However, we do ask owners about their registrations and their perceptions of whether the firm is formal. Officially, many banks require a Tax ID to register a business bank account. Since less than a third of the firms have a Tax ID, we surmise that the vast majority of the accounts are not legally registered to the business, but to the owner. There is an important interplay between separation of finances, integration into the financial system, and firms' self-perceptions of formality: Firms that are more integrated are both more likely to separate their finances and to perceive themselves as formal. For instance, ¾ of the firms who have tax registrations have a separate business account, and 90% of firms who perceive their firms as formal have a separate business bank account.

FORMAL FINANCIAL INTEGRATION

In this section we examine how firms differ across levels of formal financial integration, across gender, sector, formality, and earnings. We also examine the different ways firms use their bank accounts in terms of income and expenses.

In general, highly integrated firms have higher revenues than less integrated firms. However, there is not a strict alignment between integration and revenue. Some of the highly integrated firms' revenues are among the lowest in the sample. Clearly, then, there is opportunity to significantly increase the integration of firms at the lower end of the revenue distribution.

TABLE 4.1: REVENUE PARAMETERS OF LEVELS OF FINANCIAL INTEGRATION

Level of Integration	Minimum	Median	Maximum	Standard Deviation
High	COP .8 M	COP 14.3 M	COP 70.0 M	COP 15.5 M
Partial	COP 1.0 M	COP 12.0 M	COP 50.0 M	COP 11.5 M
Marginal	COP 1.0 M	COP 10.1 M	COP 67.1 M	COP 12.8 M
Unbanked	COP .3 M	COP 3.4 M	COP 13.3 M	COP 3.7 M

Using our measure of growth, the slope of the linear best fit line of monthly operating margin, we examined the relationship between growth and formal financial integration and found no clear patterns.

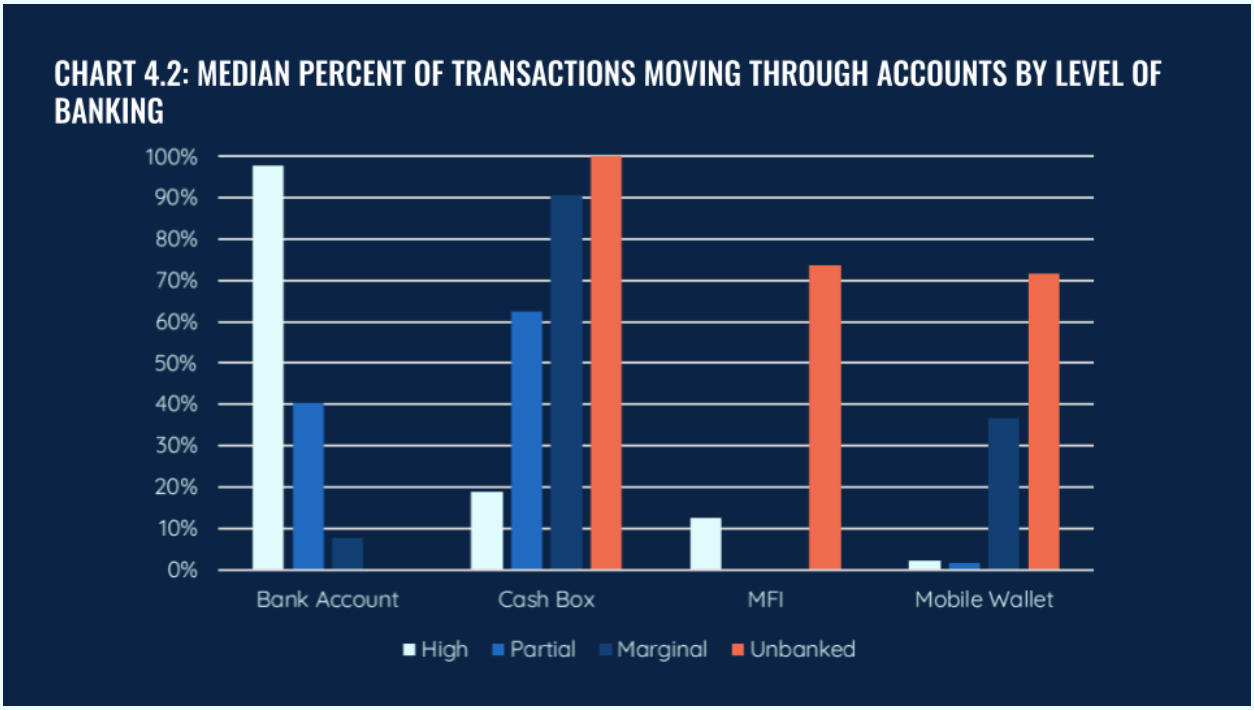
As shown in Table 4.2, only 40% of our highly integrated firms are growers, compared to over half of marginally integrated firms.

TABLE 4.2: LEVEL OF FINANCIAL INTEGRATION, GROWERS VS NON-GROWERS

Level of Integration	Grower (%)	Non-Grower (%)
High	40%	60%
Partial	52%	48%
Marginal	59%	41%
Unbanked	41%	59%

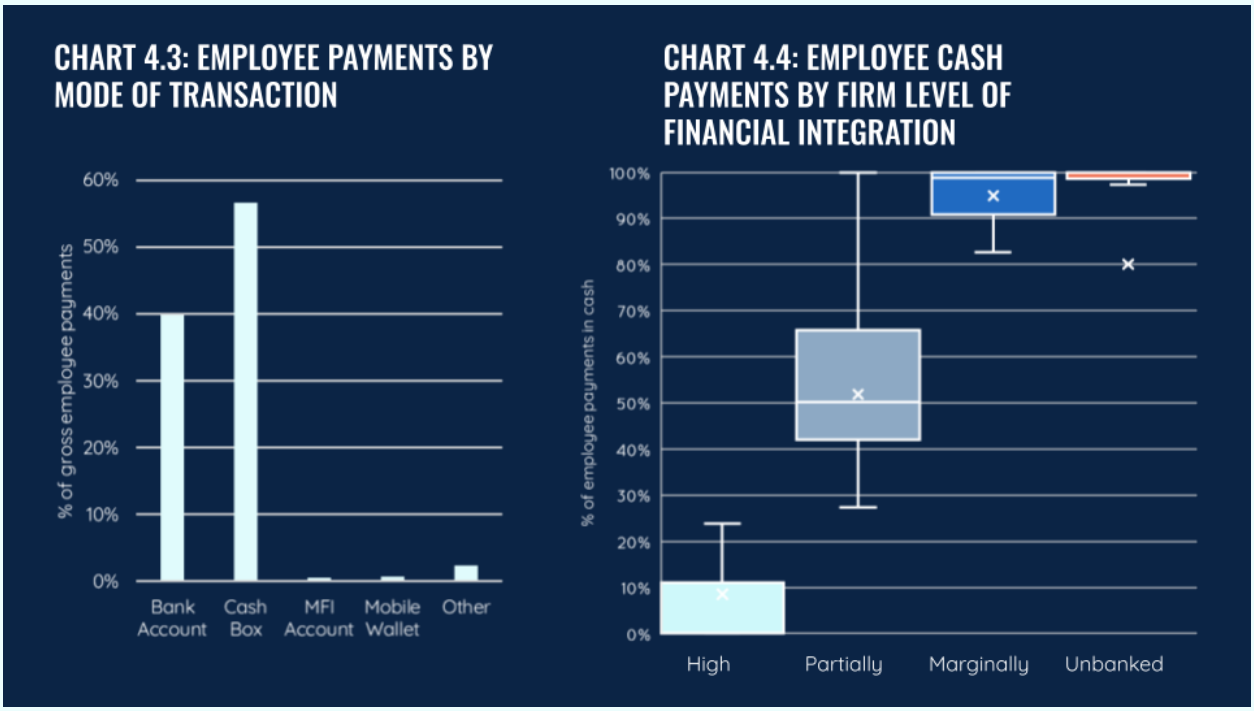
We also examine how firms at varying levels of integration use their accounts and find that the small firms tend to concentrate their use in just one type of account. Obviously, the highly integrated firms are channeling most of their business through bank accounts. But unbanked firms and marginally integrated firms that don't use bank accounts or use them very little consolidate their use in just one alternative type of account rather than spreading their activity with different tools. Unbanked firms primarily consolidate their usage in cash/cash box, but a few unbanked firms use mobile wallets as their dominant form of account, using them for ⅔ of their flows. There are 2

firms who use an account at an MFI, again using that account for 80% of their flows. In contrast, the firms who are at least marginally integrated do not use mobile wallets or MFIs for any of their business—the bank accounts are a pure substitute for these other types of accounts (Chart 4.2).



We find that firms at all levels of integration use bank accounts for their higher value transactions. The median transaction value per firm through a bank account is COP ~500,000, while the value through a cash box is COP ~400,000. This is partially driven by unbanked firms, who primarily rely on cash boxes, typically making lower value transactions (COP ~300,000), than banked firms (COP ~500,000).

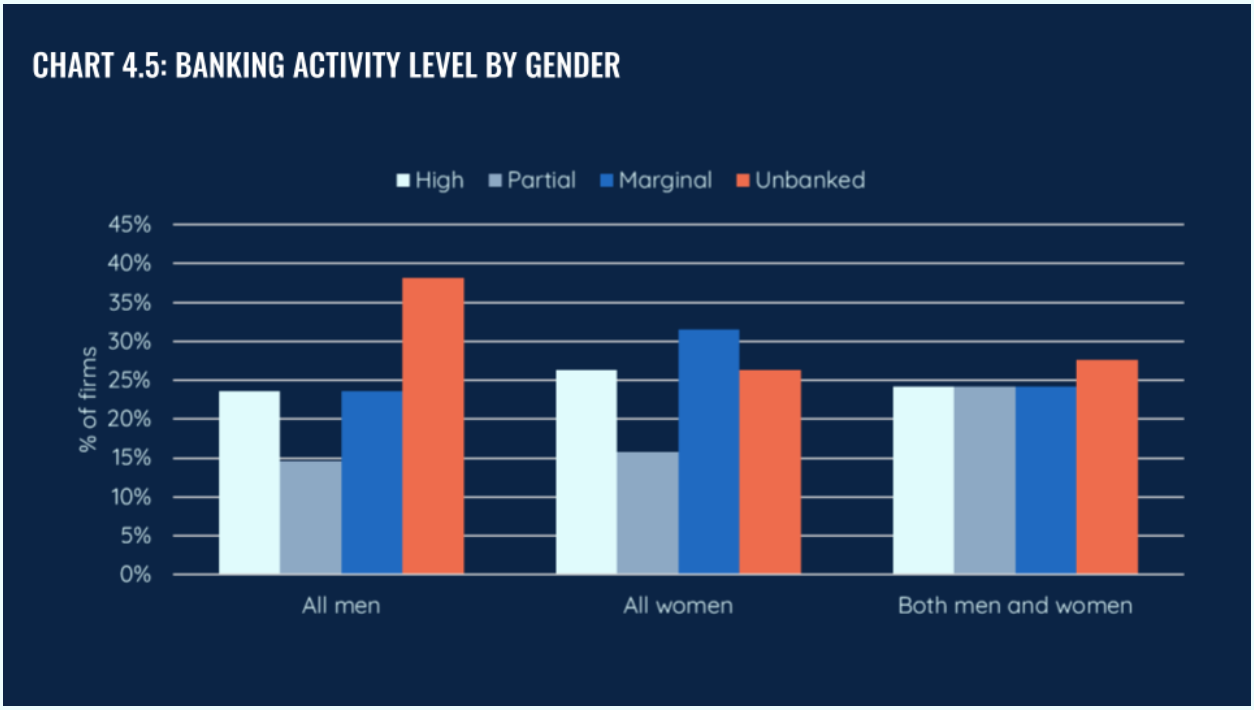
To confirm the implications of the consolidation pattern, we looked at what types of transactions the firms made from each account (Chart 4.3). There is little difference between revenue and expenses in terms of value flowing through different account types. However, firms across all sizes and levels of integration use bank accounts much less frequently for paying employees (Chart 4.4). These payments are in cash and come from cash boxes. The only exception to this is the highly integrated firms who use bank accounts for more than 90% of their flows. This pattern of paying employees and managing employee payments in cash likely comes from employee preferences, though we do not have complete data on employee preferences that would answer this question definitively. That the most integrated firms do use bank accounts for employee payments does provide hope that once firms are deeply integrated into the financial system, they can "pull" employees into the formal financial system as well.



INTEGRATION AND FIRM/OWNER CHARACTERISTICS

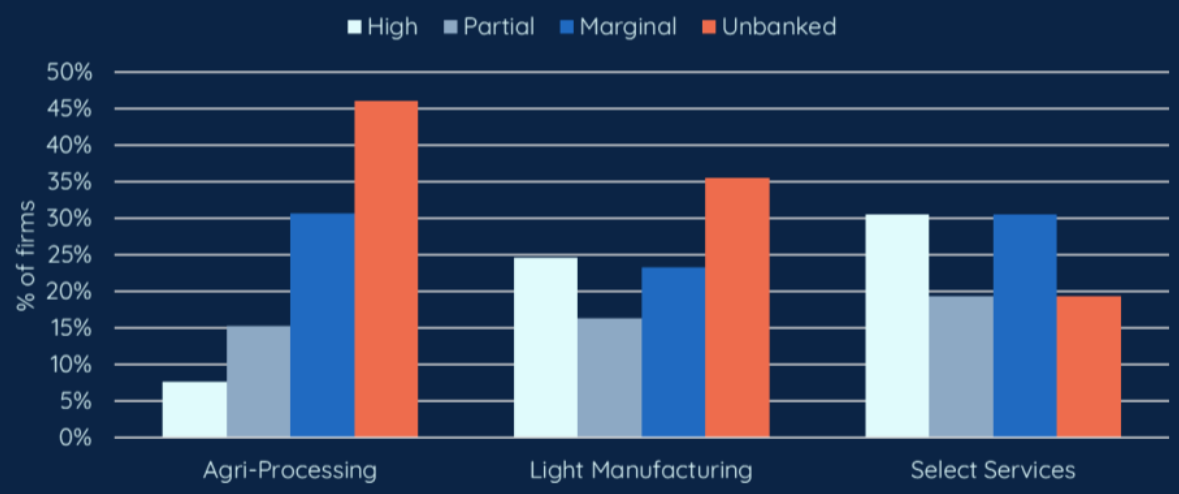
Male firm owners have the highest rates of being unbanked, at 38% (Chart 4.5). In contrast, only about a quarter of women-owned and co-owned firms are unbanked. Female firm owners also use their bank accounts for more of their business - the median percent of transaction value through a bank account is 50% for women, compared to 33% for men.

Our results here vary from global trends, as well as national data. Findex 2021 reported that men were banked at a higher level than women, 64% vs. 56%. The difference in our sample is likely driven by sampling bias—the women in our sample are those who had already overcome significant barriers to start and run firms with employees.



In terms of industry, agri-processing firms are unbanked at higher rates than light manufacturing and select services (Chart 4.6). These firms also have the lowest levels of banking activity. Services have the lowest proportion of unbanked firms and the highest proportion of highly integrated firms. The median percent of value flowing through a bank account is significantly lower for agri-processing firms, at 18%, compared to 61% and 57% for light manufacturing and services firms respectively.

CHART 4.6: BANKING ACTIVITY LEVEL BY INDUSTRY



Looking at formalization, we find that, while firms with a tax registration are much less likely to be unbanked, having a tax registration does not perfectly predict financial system integration, as partially integrated firms are most likely to have tax registration (Chart 4.7).

CHART 4.7: PERCENT OF FIRMS WITH TAX REGISTRATION, BY LEVEL OF BANKING ACTIVITY

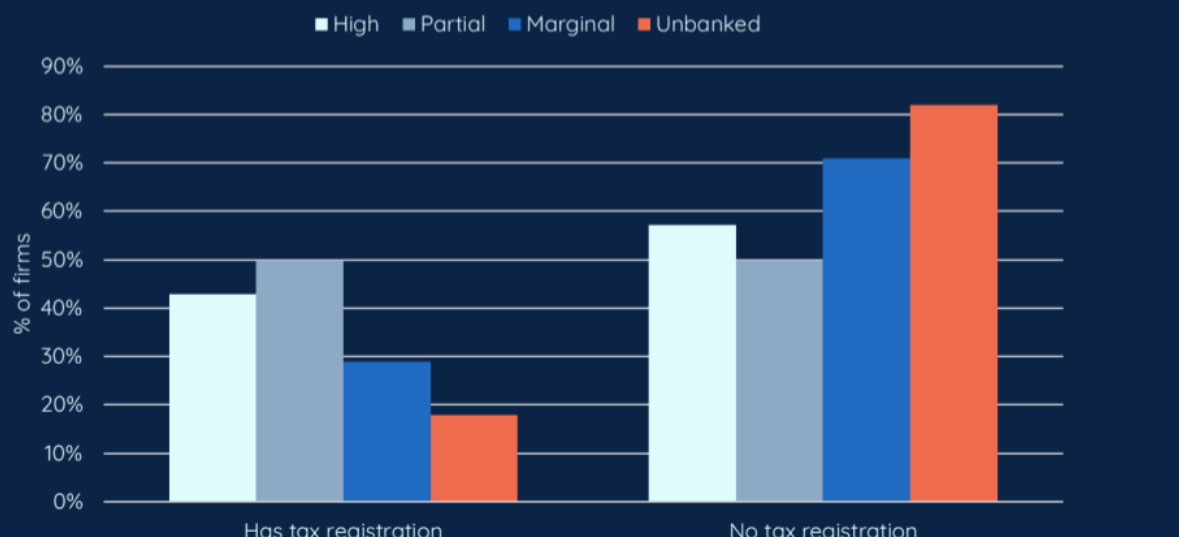
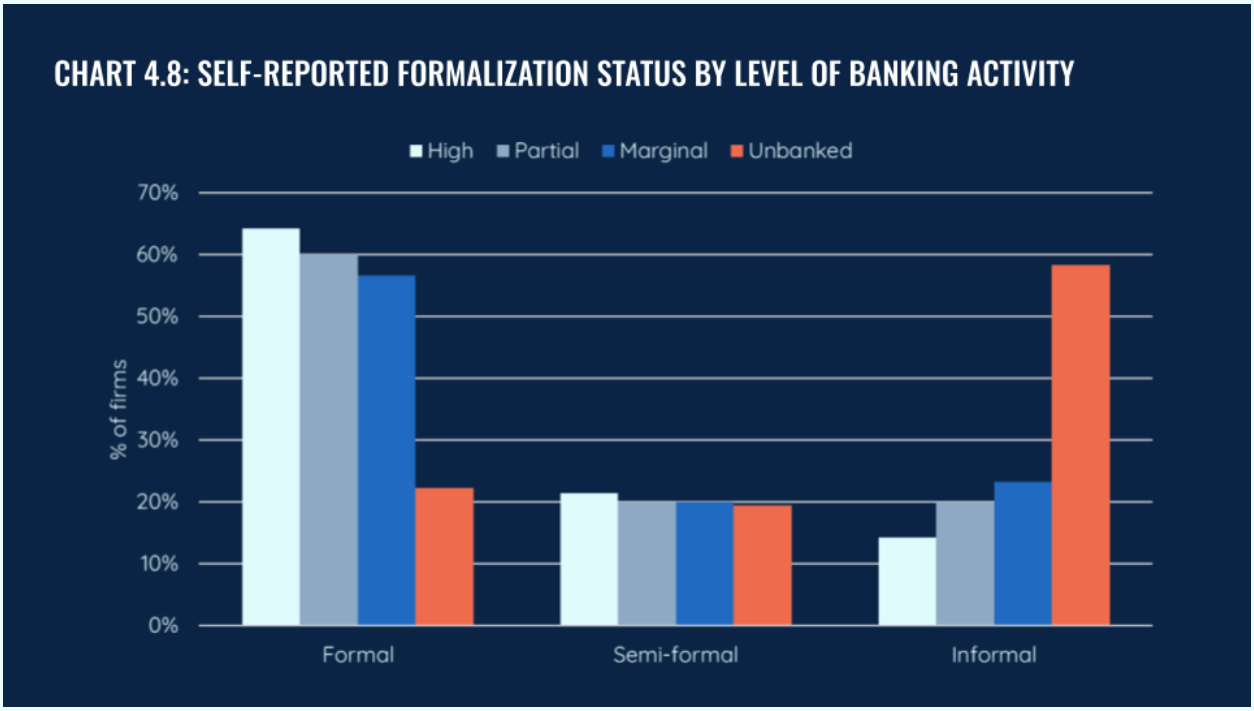


Chart 4.8 shows that there is a close correlation between level of integration with the firms' own perceptions of their formality.



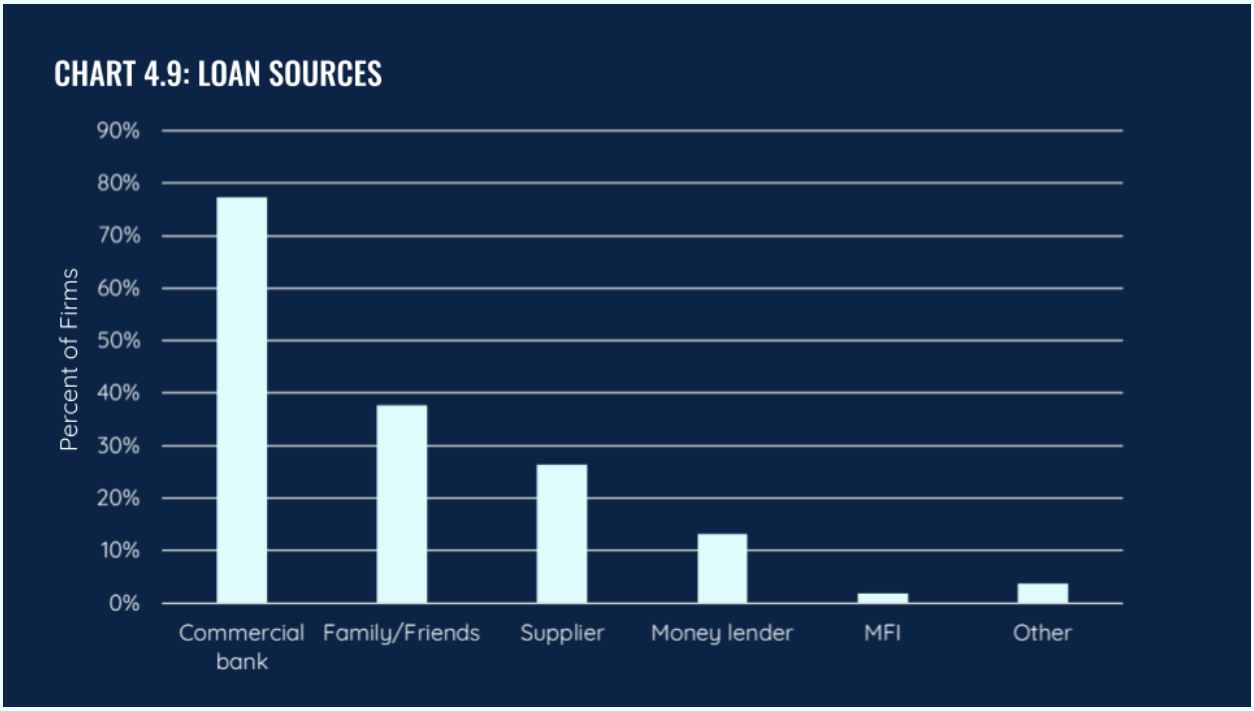
CREDIT

Credit Access

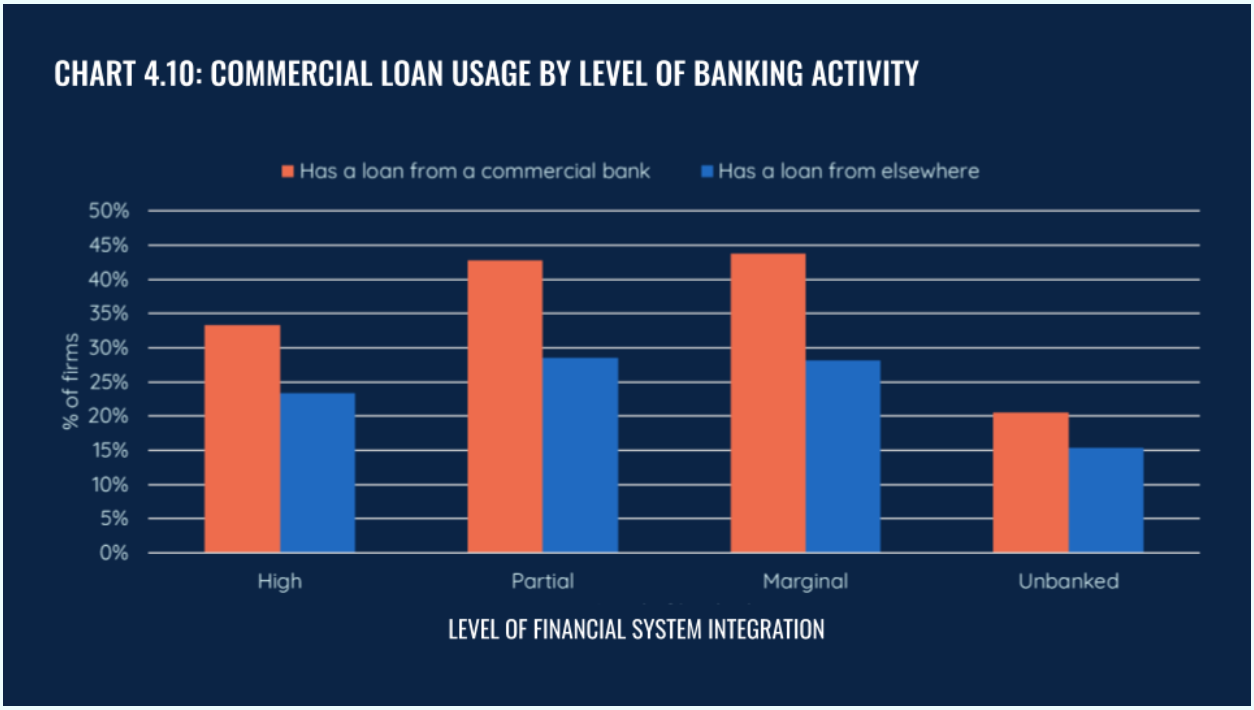
In the Small Firm Diaries we were eager to understand the credit access, needs and behaviors of small firms. Were the firms "graduates" of microfinance programs? Did they have access to credit at all? If so, where was the credit coming from? How big of a barrier was credit access to their growth and aspirations? The answers to these questions turned out to be surprising, especially given what we saw in terms of the number of firms who were partially or highly integrated into the formal financial system.

Less than half (43%) of our firms reported holding a loan of any kind during the study. A higher proportion of our female firm owners (55%) took loans than male firm owners (40%). There were minimal differences across industries: services firms were most likely to take a loan at 45%, compared to 40% for light manufacturing firms, and 38% of agri-processing firms.

Commercial banks are the most common loan source in Colombia (see Chart 4.9). In other countries in the Small Firm Diaries, we find that firms rely on supplier loans or friends and family more often than bank loans. Interestingly, despite being able to take loans from financial institutions, none of our firms took a loan from an MFI or mobile money lender.



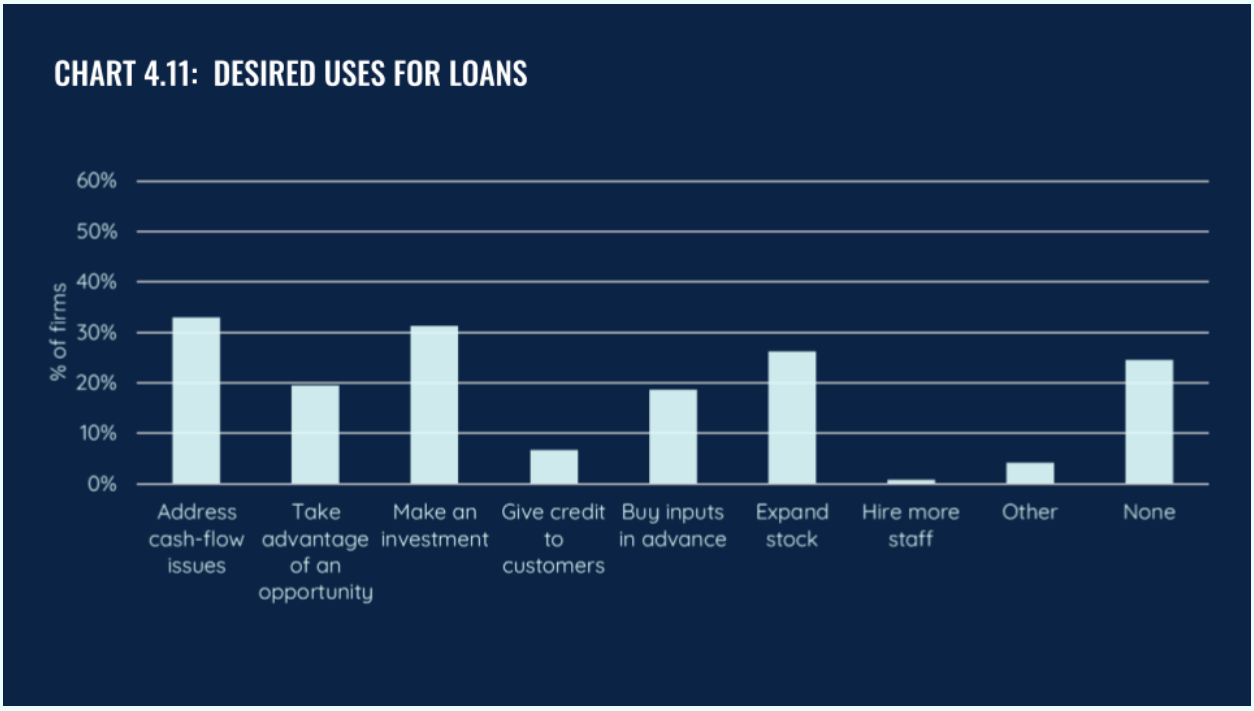
Being significantly integrated into the formal system is not a prerequisite for access to bank credit. The marginally integrated firms have the highest rate of borrowing from banks; even 20% of our unbanked firms report having a commercial bank loan. (Chart 4.10)



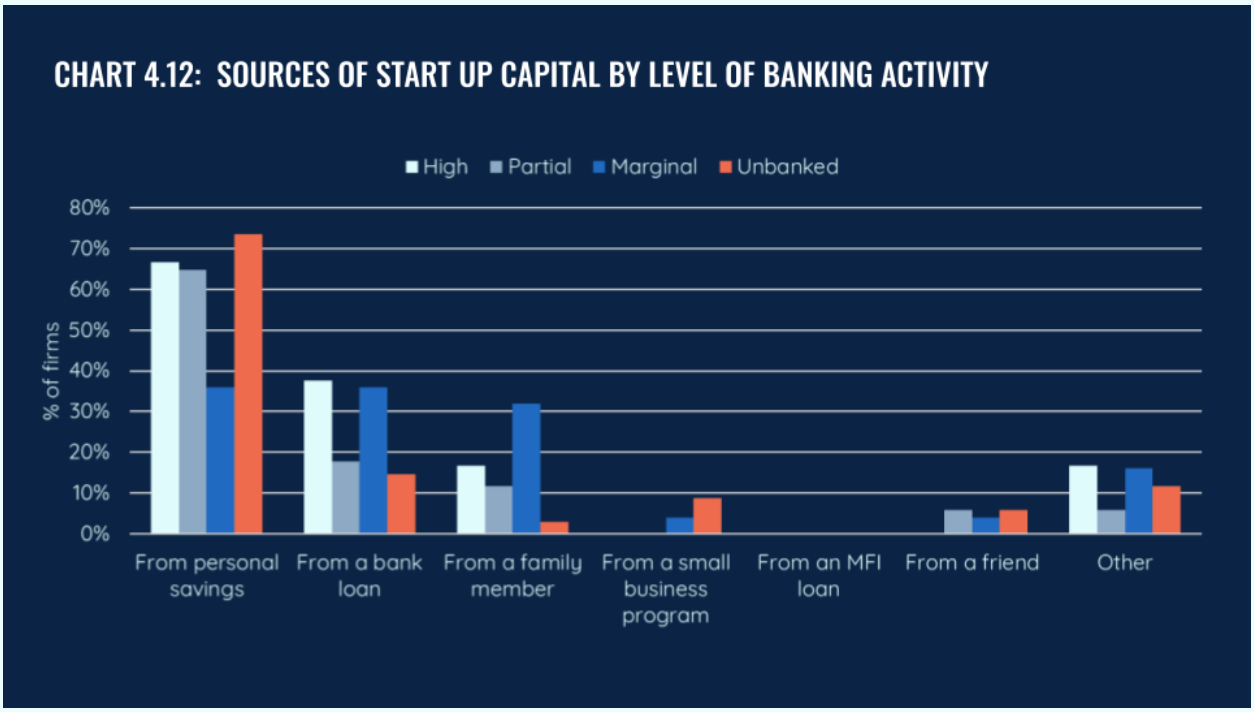
Credit Usage

During the study, we asked firm owners what they use or would want to use a loan for, with a variety of options. The possible answers were not fully mutually exclusive—for instance, a firm owner could respond "Address cash-flow issues" and "buy inputs in advance." Still, less than a third of firms chose any particular category (Chart 4.11). The most popular options (address cash flow issues, make an investment, and expand stock) were of interest to only slightly more firms than said they did not want to take loans.

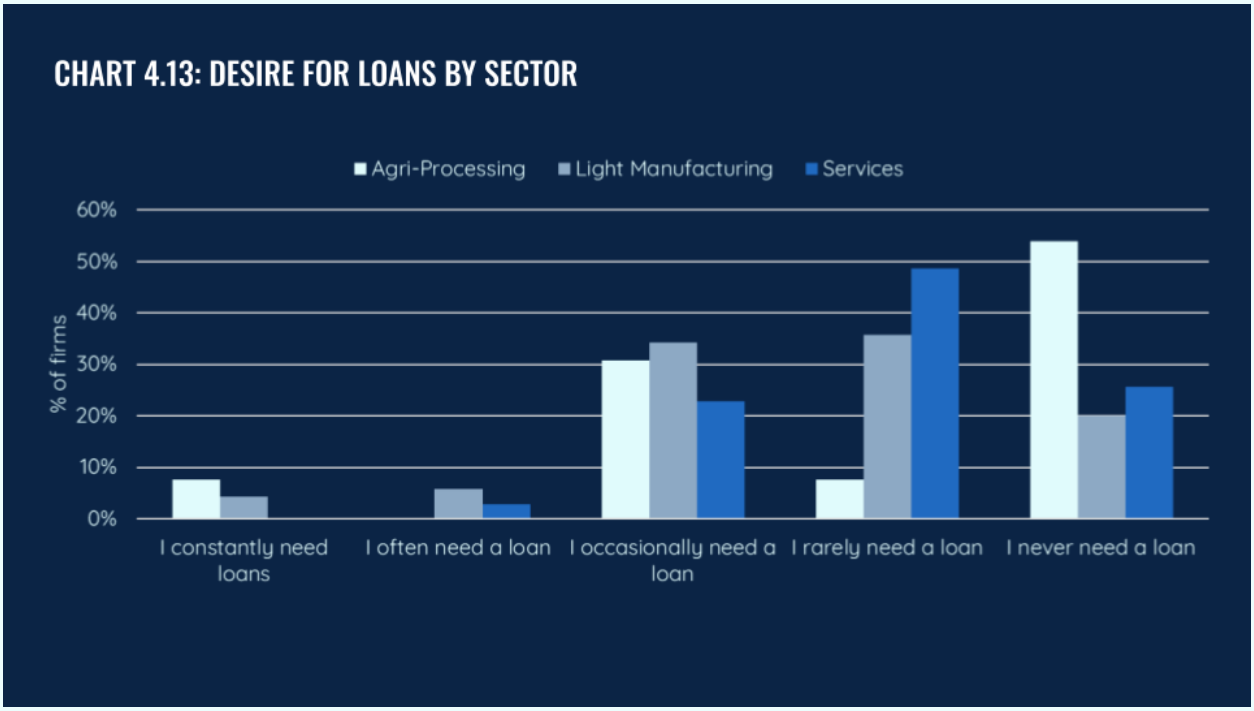
However, it's important not to over-interpret the desire for "investment." As a check on what firms meant when they said "make an investment" we also looked at the firms' reports of "assets" acquired during the study. The majority of these asset investments were raw materials/inventory, not a capital good (such as a machine or expanded/improved facilities). We also see that most large purchases are similarly for raw materials/inventory. We believe, therefore, that the majority of the expressed interest in borrowing is for working capital purposes (i.e., the combination of address cash flow issues, give credit to customers, buy inputs in advance, expand stock and at least part of make an investment).



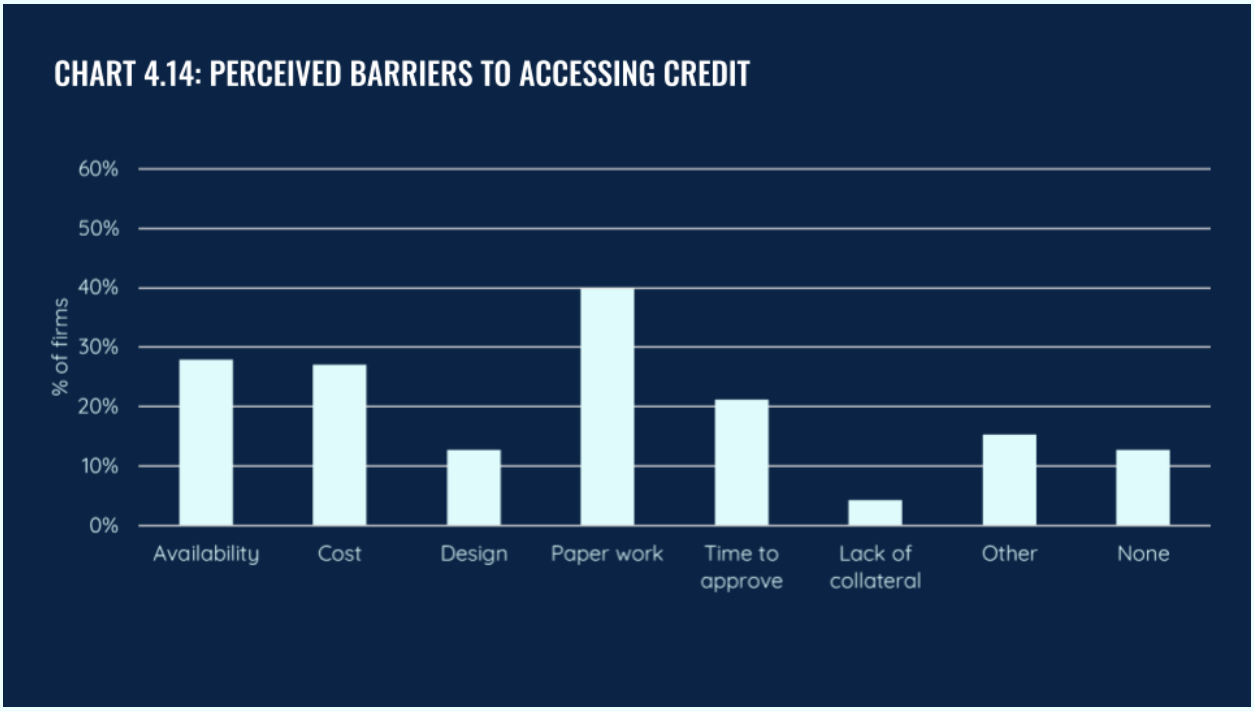
In alignment with our low credit usage during the period of the study, firms also reported low usage of any form of credit, notably including MFI loans, to start their businesses. Regardless of banking activity, the majority of firm owners used their own savings for start-up capital. (Chart 4.12)



Most firms report relatively low desire to actively use credit, noting only an occasional, rare, or nonexistent need for a loan. In Chart 4.13, over 50% of agri-processing firms report never needing a loan. Light manufacturing firms mostly need loans occasionally or rarely, while almost 50% of services firms only rarely need a loan, and roughly 25% never need a loan. Overall, women say they need loans slightly more frequently than men although very few firms across both genders report needing loans constantly or often.



We also asked firms about the barriers they perceived that prevented them from accessing credit. No strong trends emerged—none of the barriers was cited by more than half of the firms no matter how they were segmented. Most notably, less than a third of firms said that credit was not available. Paperwork was the main barrier cited by those who used informal loans; for those who used formal loans, cost was more likely to be cited as a barrier. (Chart 4.14)



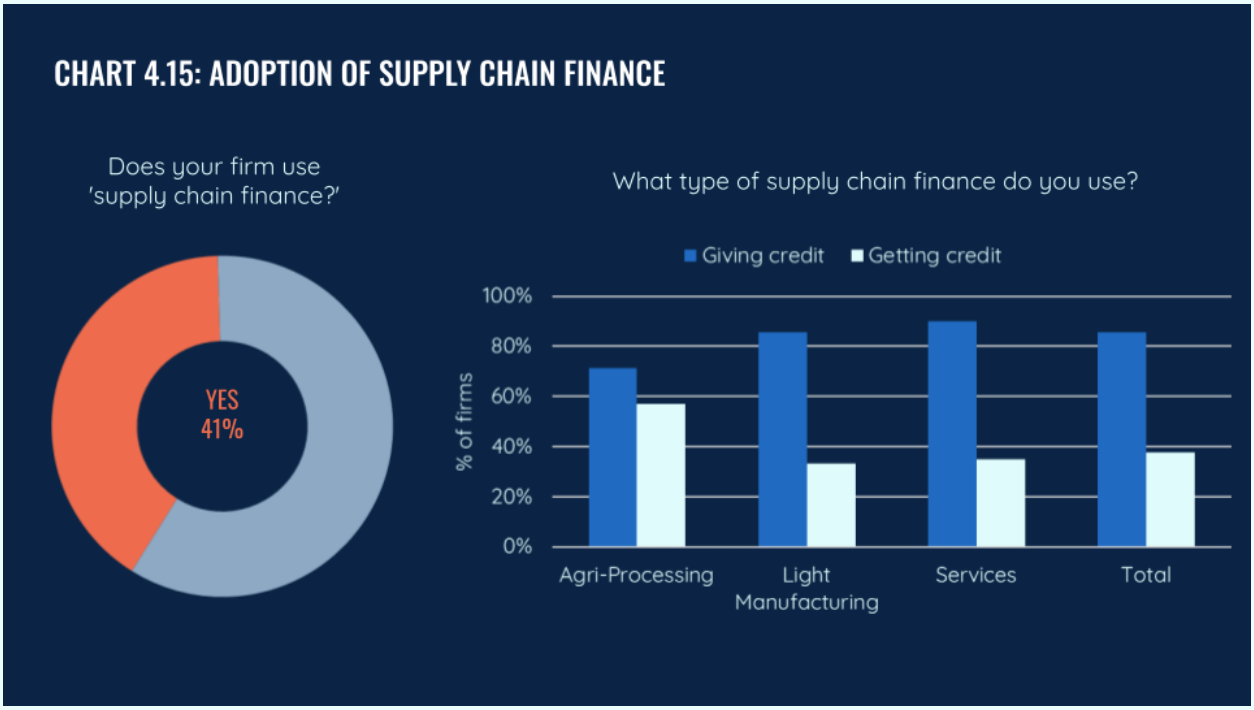
In addition to looking at firms' perceptions of barriers to credit, we can also look at other firm characteristics to see which firms are less likely to use credit. Based on a firm's perceived level of formality, two-thirds of informal firms have no loans, in contrast to about half of formal and semi-formal firms. Between perceived formal and semi-formal firms, we see differences in the usage rate of "informal loans"; 40% of semi-formal firms took one during the study, compared to only 20% of formal firms. Similar to the formal financial integration measure above, a firm's level of perceived formality may be driven by its use of financial institution loans rather than the inverse.

Supply Chain Finance

Given what we see of firms' interest in using credit for working capital and liquidity management, understanding the opaque domain of supply chain finance for small firms is particularly interesting. We attempt to get a complete picture of supply chain finance as it illuminates the tools, challenges and opportunities around working capital and liquidity management for small firms. We define supply chain finance broadly to include both financial flows and tacit or in-kind transfers—in other words, the lack of a financial flow, and find that about 40% of our firms use supply chain finance. Given the flexibility or informality, we believe our measures of supply chain

finance flows are an underestimate—there is likely more liquidity being exchanged in this way, and our measures can be thought of as a lower bound.

We can separate out the use of supply chain finance into two categories: getting credit and giving credit. Based on the struggles with liquidity that firms face it is at first glance surprising that the firms give credit—transferring liquidity to customers—more than they receive it (Chart 4.15). On further thought however, it is likely true that the firms are serving low-income customers who have even greater liquidity challenges than they do. Thus, while these firms are liquidity constrained, they are providing a lot of liquidity to their customers and play a very large role in the financial lives of low-income households and neighborhoods. Overall use of supply chain finance is fairly similar across industries, but agri-processing firms receive more credit and give less credit than light manufacturing or services.



Firms see a variety of advantages of supply chain finance compared to other sources of credit (Chart 4.16). Of note is that those who do not borrow from suppliers perceive that it can strengthen relationships at twice the rate of actual borrowers. Of course there are risks as well as advantages. Non-users and users of supply chain finance alike believe that it poses a risk to their relationships with suppliers and customers (Chart 4.17).

CHART 4.16: ADVANTAGES OF SUPPLY CHAIN FINANCE

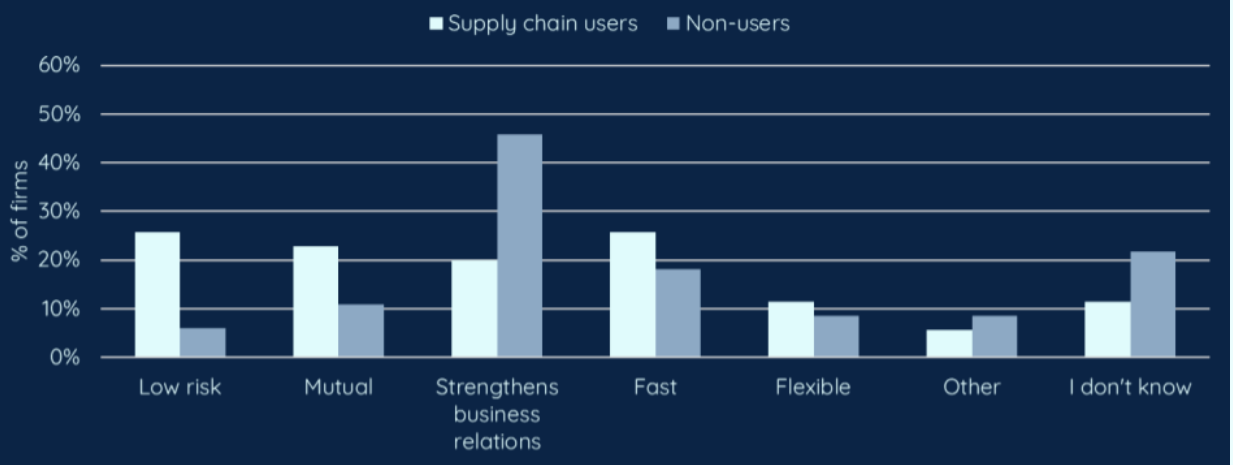
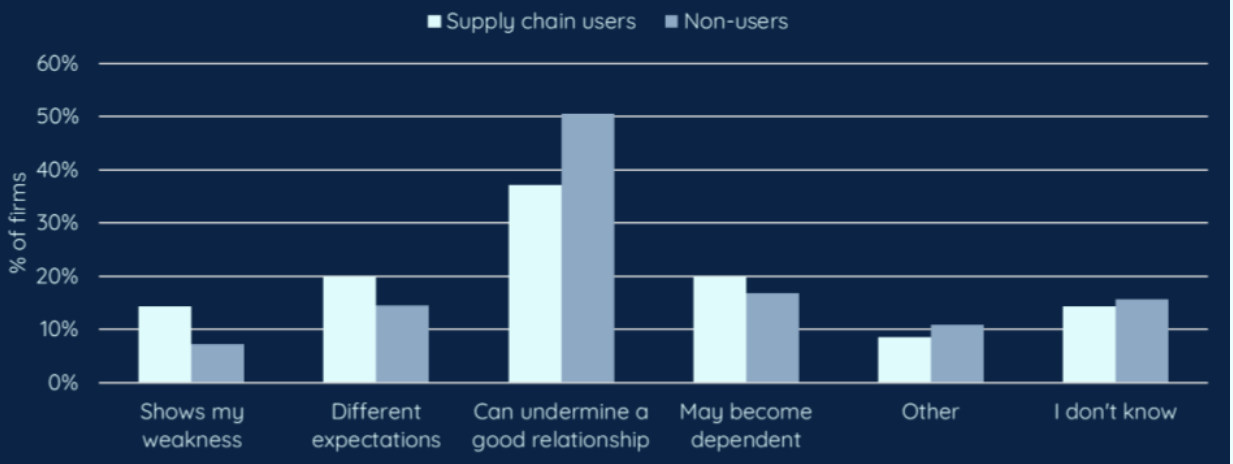


CHART 4.17: DISADVANTAGES OF SUPPLY CHAIN FINANCE



Overall, supply chain finance seems to be an underexploited opportunity for supporting small firms and their customers. Using the knowledge of suppliers can solve one of the major challenges of business lending—understanding credit risk in the context of limited and incomplete information.

Providing liquidity to suppliers to enhance their provision of credit or gathering information from suppliers in order to underwrite working capital loans to the firms themselves would also likely trickle-down to the firms' customers by allowing the firms to offer more credit than they already do.

5. Digitalization

SUMMARY

In this section we examine our sample's adoption of technology for business, specifically mobile money and digital financial services more broadly. Here we use the term "mobile money" or "mobile wallets" only for payment accounts accessed through a mobile phone. We use Digital Financial Services (DFS) as an umbrella term that includes banking and payments services delivered through the internet (which may be accessed via a smartphone or a PC), banking apps accessed via a smartphone, and what might be called "traditional" alternatives to cash like credit cards and debit cards that allow non-cash payments (as opposed to simply being used for withdrawing physical cash from an ATM).

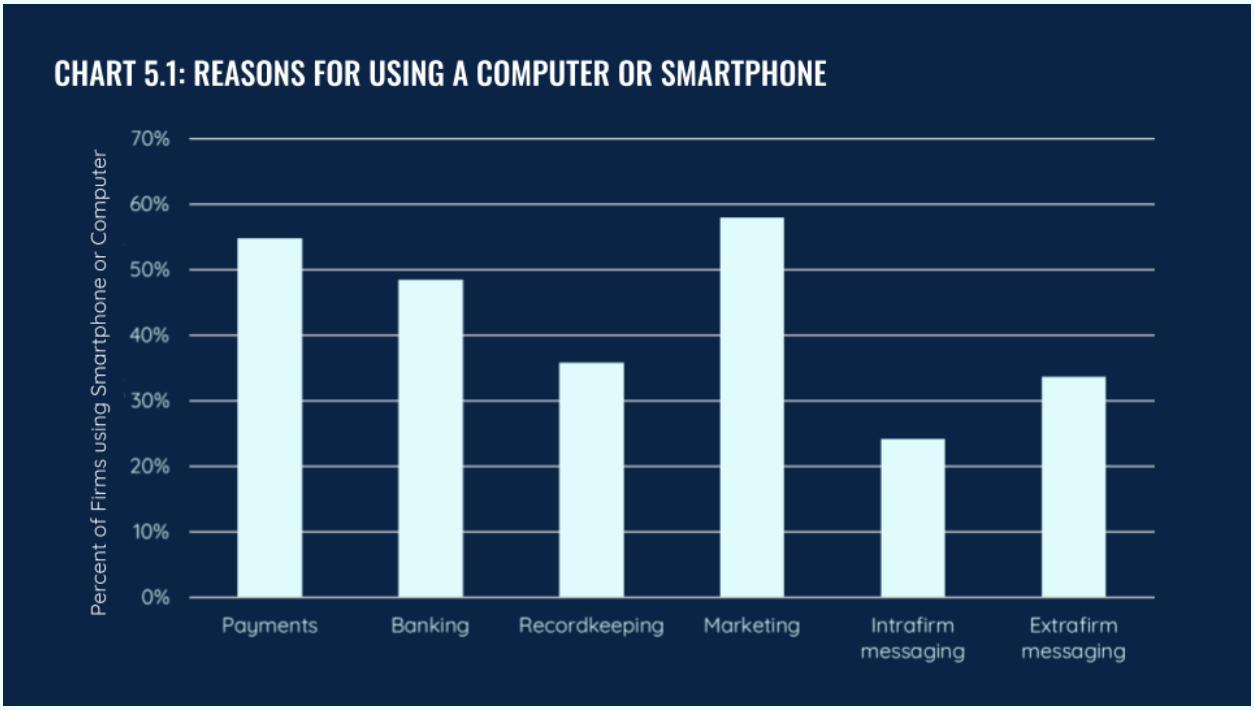
While mobile money has spread to more than 50 countries, it's become clear that East Africa and South Asia are outliers rather than templates for the rest of the world. That is in part because many different types of service providers quickly recognized the potential uncovered by mobile money's rapid growth in a few countries, leading to the expansion of DFS. However, the subtle distinctions between the terms, which are often used interchangeably, make conducting research difficult as users don't always make clear cut differentiations between types of services. As a result, while we offer our own categorizations and statistics, throughout this section we try to be clear about the exact questions we asked in case others would categorize or analyze the responses differently

Digital Financial Services offer significant possibilities for bringing households and firms into, or further into, the formal financial system. DFS also potentially enables business models for delivering financial services to customers who have been viewed as too expensive or unprofitable to serve by financial services providers. Thus, a key area of investigation for the Small Firm Diaries was the extent to which the small firms used DFS, the reasons they did or didn't use DFS, and the factors that might induce them to use DFS more.

In summary, we find that the small firms in the study were generally proficient users of technology, but had very low usage of mobile money, and large segments of the sample showed relatively little usage of DFS, but a capacity and willingness to increase usage significantly. For more details on digital adoption, read the Colombia Issue Brief on Financial Access, *Financial Services: How small firms in Colombia manage their finances*, available on smallfirmdiaries.org.

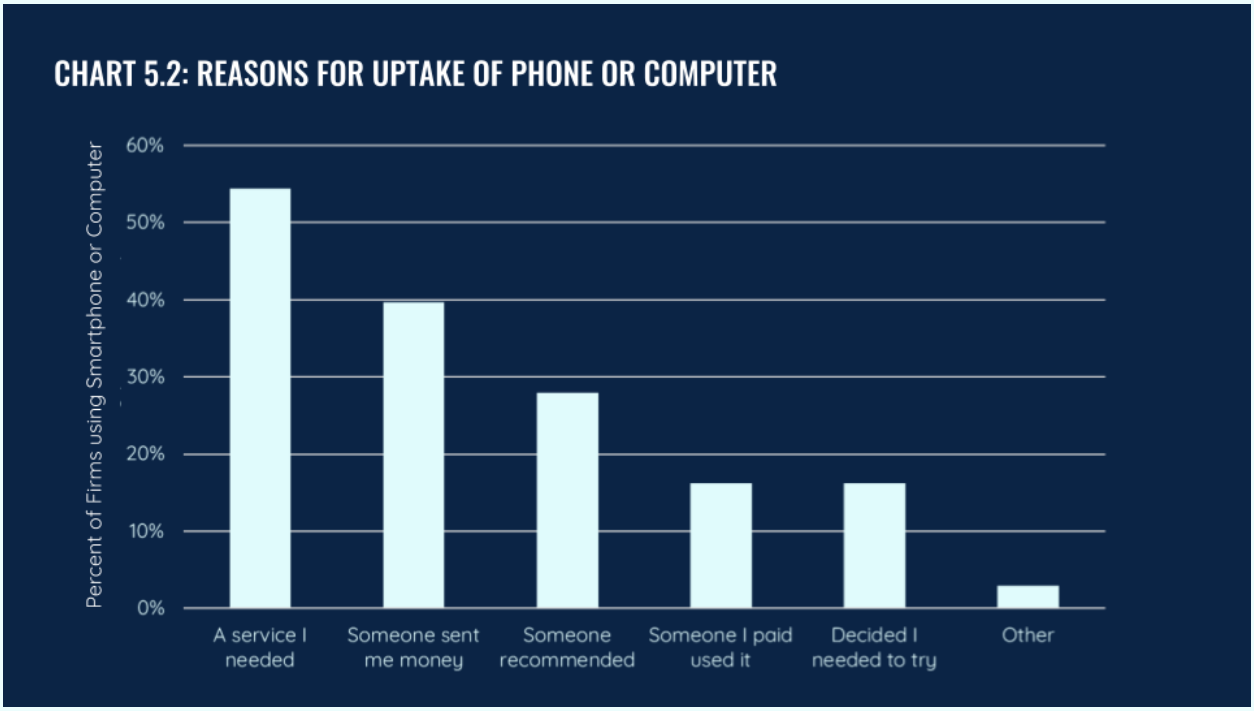
USE OF TECHNOLOGY

Smartphones are important tools for the majority of businesses in our Colombian sample. Over three quarters of our firms use either a smartphone or computer or both for their business, almost all firms that use a computer also use a smartphone for their business. Of these firms, about three quarters use these tools for payments and/or banking (Chart 5.1). There are 27 firms who report using smartphones or computers in their business, but not doing any banking or payments—these firms use technology for marketing, recordkeeping, and messaging.

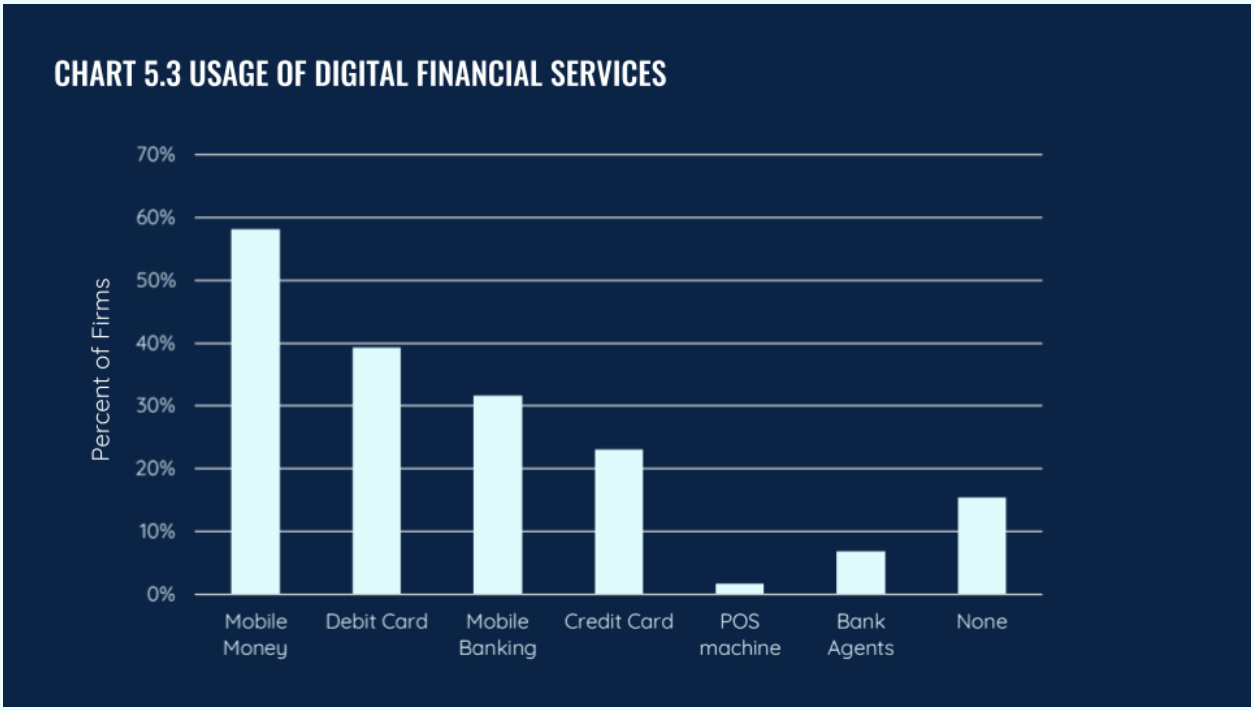


In a separate survey on attitudes towards and adoption of technology, we asked firms what prevents them from using technology broadly. Over half of firms reported cost as a barrier to using technology, while about a third reported a skills barrier. Interestingly, less than 10% of firms reported concerns over privacy and fraud.

We also asked the firms who used a smartphone/computer for business purposes why they had begun using the tool. The most common response was essentially self-driven adoption: the firms saw the digital tools as something that benefited their business. Consistent with patterns of digital adoption from many other surveys, the second most commonly cited reason (in aggregate) was encouragement from existing users—either receiving a digital payment or a request for a digital payment, or a recommendation from a trusted associate (Chart 5.2).

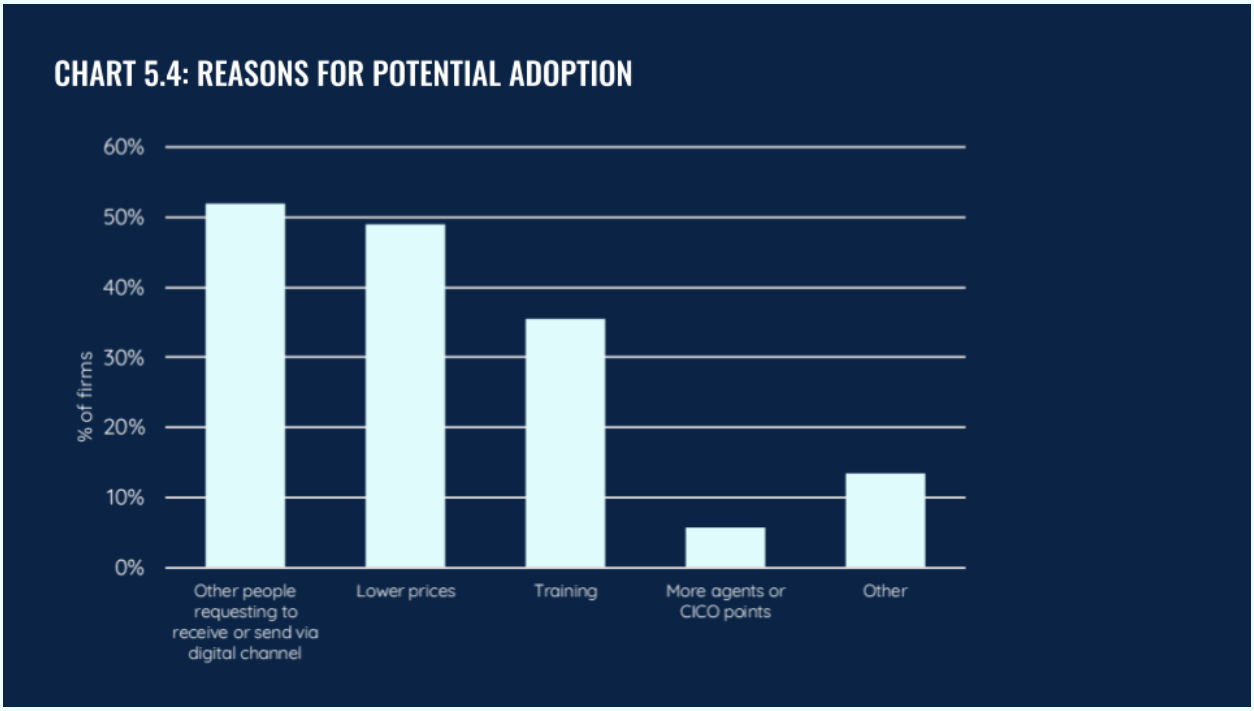


In addition to general technology usage, we specifically ask all firms about what forms of digital financial services they use generally - not just for business, regardless of whether they report using a smartphone/computer for business. There is a wide disparity between tools: POS terminals and credit cards, staples of the move away from cash in high-income countries, are much less in use than mobile money, mobile banking and debit cards (which are more closely tied to physical cash than credit cards) (Chart 5.3).



We also asked the above users of DFS what challenges they've experienced. Less than one-fifth of our sample of DFS users reported experiencing issues with the services. The most common issue reported varied across financial integration levels. Highly and partially financially integrated firms mostly experienced missing or delayed funds and surprise fees. While marginally integrated firms were also impacted by missing and delayed funds, they experienced fraud and stolen funds in addition. Unbanked firms only reported loss of access as an issue.

In a set of questions on attitudes towards and adoption of technology, we asked about what changes to digital payments, specifically, would increase firms' usage (Chart 5.4). Half of firms reported other people, like suppliers or customers, requesting to send or receive a digital payment, and lower prices as reasons to use digital payments more. A third of firms also noted training would encourage them to use the services more.



6. Formalization

SUMMARY

For many years, policies and programs for microenterprises and small firms emphasized formalization. Formalization was imagined to be a key step toward growth and access to finance. However, few programs that emphasized formalization seemed to have a discernible effect on the number of firms that pursued formalization; meanwhile, other studies called into question the benefits of formalization for firms. It also became clear that formalization was best thought of as a spectrum rather than a binary. In most countries there are a range of registrations, licenses and interactions with state and financial institutions that are part of being fully formalized.

Given the sampling approach we took to in the Small Firm Diaries, it was unclear whether the firms recruited would be formal or informal, and what their perceptions of formalization would be. In this section, we look at the firms' reported levels of formalization, perceptions of what it means to be formalized, barriers to formalization and the advantages and disadvantages of formalization. Finally, we look at whether levels of actual or perceived formalization are strongly correlated with other firm behaviors or outcomes.

LEVEL OF FORMALIZATION

In Colombia, firms must have at least a tax registration to be considered formal by the government. Within our sample, less than a third of our firms have a tax registration.

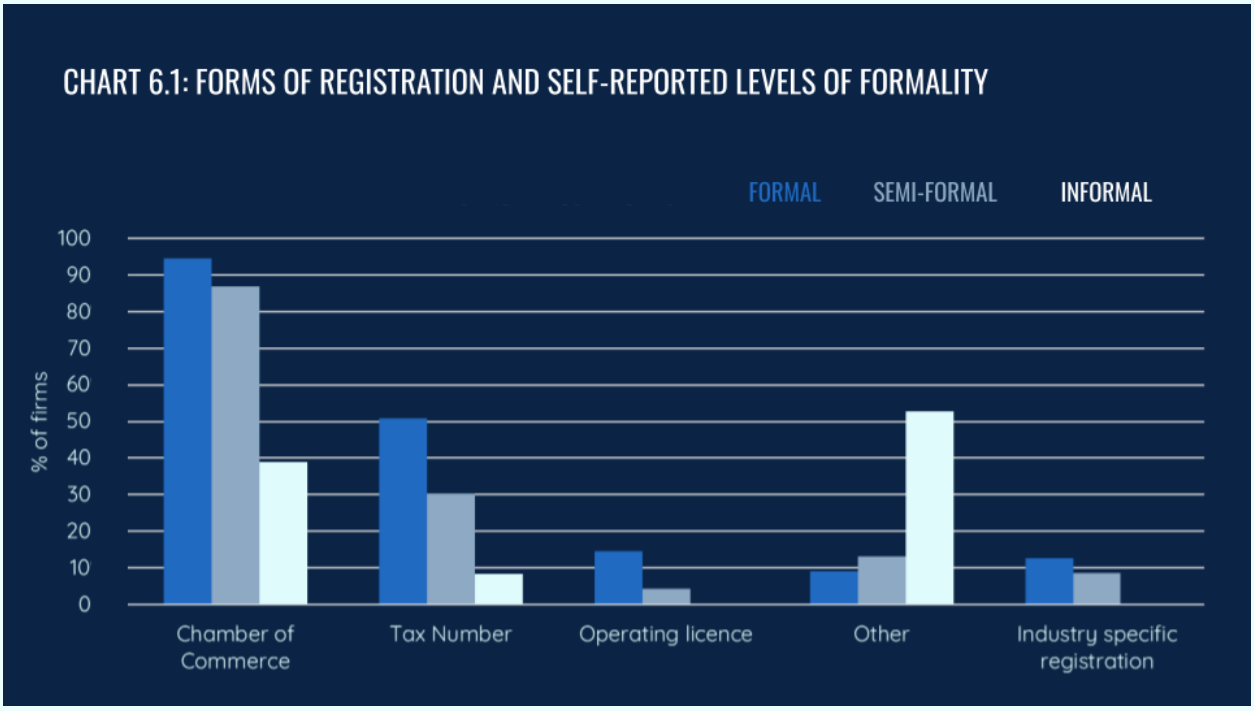
In Colombia, there is a separate process of registering with the local Chambers of Commerce which serve as important intermediaries between small businesses and private and public resources. The registration provides access to business development and legal services as well as some tax benefits. Registration with the Chamber of Commerce is far more common than tax registration, with more than 70% of firms reporting it. No other form of formal registration was held by more than 10% of firms.

TABLE 6.1: SELF-REPORTED LEVELS OF FORMALIZATION

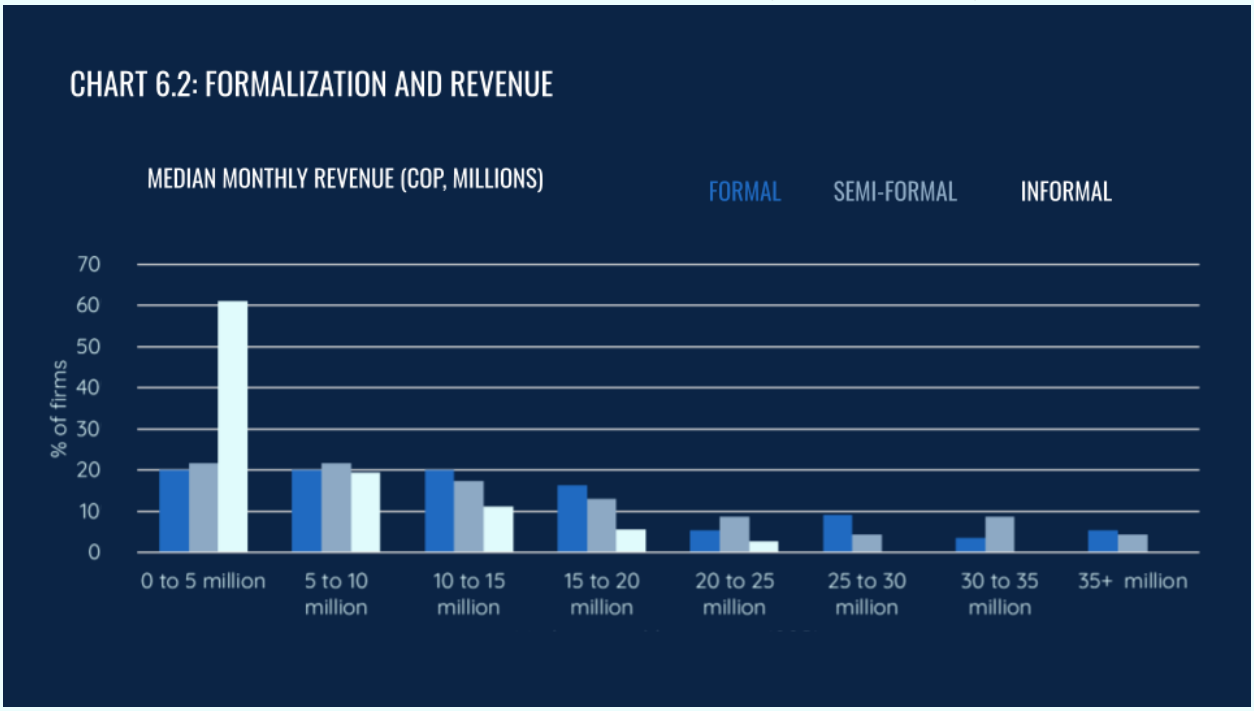
Level of Formalization	Percent
Formal	47%
Semi-Formal	19%
Informal	31%

PERCEPTIONS COMPARED TO OFFICIAL FORMALIZATION

Firms clearly, however, don't feel that tax registration is necessary to be considered formal. Nearly half the sample considered themselves formal based on other registrations such as with the Chamber of Commerce. At the same time, a number of firms didn't perceive that tax registration was sufficient to be formal: 30% of the firms that consider themselves semi-formal and almost 10% of the firms that consider themselves informal also had tax registration.



Unsurprisingly, the bulk of the firms who reported they were informal were the lowest earning: 60% of them earn less than COP 5 million monthly (Chart 6.2). Services firms were more likely to report they were formal, as were women-owned firms. While this may be surprising, as with other features of women-owned firms in the sample, we believe this is most likely due to a selection effect: women who are able to start and maintain firms with employees are a highly-selected group who have more access and connections to the formal economy and financial system.

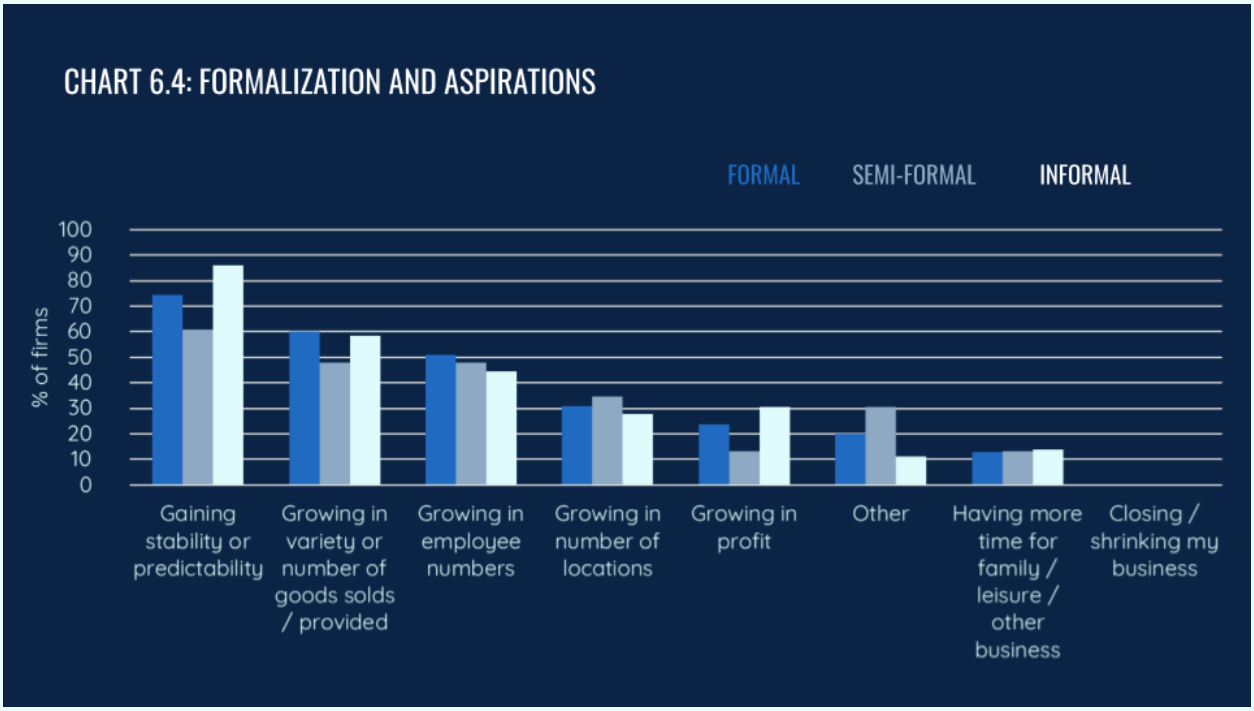


REASONS FOR FORMALIZING

The primary reason for firms having a registration is because "A government or local authority told [them] it was required." Other incentives such as benefits or prestige do not seem to be a significant driver.

Meanwhile, the reasons for not registering were largely expected: Direct cost of registering, tax liability, time and paperwork. Still, these reasons were reported by less than a quarter of firms. Only about 10% of firms reported that they did not know how to register (Chart 6.3).

Formalization also does not appear to be a factor of aspirations (Chart 6.4). Formal and informal firms reported growth aspirations at similar levels (for all forms of growth; see Section 9 for more on firm aspirations). While informal firms were slightly more likely to cite "stability" as a 5-year aspiration for their business, stability was the most common aspiration of formal firms as well.



ADVANTAGES AND DISADVANTAGES OF FORMALIZATION

We asked about the advantages of formalization to firms that self-identified as formal or semi-formal. Some examples of common answers provided by the firms:

- **The ability to tap into larger markets**: "Allows you to grow, being formal opens doors to be a supplier to large companies." *- A formal construction materials production firm owner in Barranquilla*
- **Access to finance**: "Ease with loans and state issues" *- A formal printing firm owner in Bogota*
- **Heightened credibility**: "There is credibility, trust, quality service is guaranteed, and users prefer it that way." *- A formal private school owner in Cali*

On the other hand, self-perceived formal or semi-formal firms cited the following disadvantages:

- **Taxes:** "The high costs of taxes and duties" *- A semi-formal food preparation firm owner in Cali*
- **Administrative costs**: "[...] the requirements to meet sometimes you have to hire expensive advisors" *- A formal food preservation firm owner in Barranquilla*

- **No inherent benefit**: “In itself, no guarantee is given, and you have to pay a lot for a piece of paper.” - *A formal carpentry firm owner in Barranquilla*

The perceptions of informal firms about the advantages and disadvantages of formalization (or the lack thereof) mirrored those of more formalized firms. Formalization allows access to certain government programs and financing opportunities but is costly—too costly to justify taking the step.

Firms' level of actual or perceived formalization, however, did not change their perceptions of barriers to the success of their business, except in a few instances. For both formal and informal firms, rising costs and supply chain issues were the biggest challenge. Meanwhile, formal and informal firms reported access to finance as a barrier at similar rates. Firms that considered themselves semi-formal did perceive access to finance as a larger barrier, suggesting that they are “stuck in the middle” between formal and informal financing arrangements.

7. Employment

SUMMARY

Increasing the number and quality of jobs is a high-ranking priority in most developing countries. The ILO estimates that MSMEs (which they define as firms from 0 to 250 employees) generate more than 50% of the jobs in most countries, and up to 90% of the jobs in some[9]. In Colombia, an ANIF study states that MSMEs make up 99% of companies in the country, generate around 79% of employment, and contribute 40% to the Gross Domestic Product[10].

However, understanding these jobs at a deeper level—exactly how many there are, how much they pay, the proportion of them in various firm sizes—is very difficult. Estimates of the number of jobs that MSMEs provide typically come from household surveys (not ideal for understanding firm-level measures of employment), and the few that are from firm surveys have a variety of sample and estimation challenges. None of these estimates reveal anything about the nature of the jobs, including such key measures of job quality as pay rates, permanence and outcomes.

A key aim of the Small Firm Diaries was to shed light on employment in small firms, including a better understanding of who the employees of small firms are, and the quality of jobs in the small firm sector. The Diaries include data on employment from the firm and the employee's perspective. From the firm's perspective we gather data on the number of employees, the individuals employed, whether they are paid in kind or in currency, and the payment mechanism, among other features. We also conduct one survey of owners on their employee management practices and challenges. From the employee's perspective we survey one employee per firm to understand their household income, employment history, and more.

The Small Firm Diaries reveal important facts about employment in small firms:

- The number of jobs in a firm changes from month-to-month.
- The individuals filling those jobs changes frequently.
- Employees are largely drawn from a distinct pool whose income is only from working in small firms (e.g., the employees are not running their own microenterprises, or working casually or in larger firms when not employed at the small firm).
- Employee pay varies even during the months they are working at a small firm.

These facts suggest that one-time household surveys and firm surveys obscure important and policy-relevant details of MSME employment—a major source of employment in developing countries.

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[9] ILO, "The power of small: How SMEs are driving job creation and inclusive growth"

[10] ANIF, "Retos y oportunidades de las pymes en Colombia"

NUMBER OF EMPLOYEES

Who qualifies as an employee is a major challenge to measuring employment in countries where many firms are not fully formal; it's increasingly a problem in high-income countries, as contractor workers and platform work (e.g., delivery apps) proliferate. Given that only about a third of our firms have tax registration, and the nature of the Colombian labor market (see call out box below), we designed the Diaries to allow firm owners to define who is an "employee" according to their perspective, rather than a more objective definition. We asked owners, at the time of our initial census how many "employees" they had (we specifically, however, asked them to exclude "casual workers" such as people hired on a one-off basis to, for instance, deliver a product to a customer), and then at each Diaries visit, to list the "empleados" working at the firm at that time.

THE COLOMBIAN LABOR MARKET

The Labor Code (Código Sustantivo del Trabajo) stipulates four types of formal arrangements that constitute an employee-employer relationship in Colombia. These legally force the employer to pay at least the minimum wage and contribute to pension, healthcare, and occupational risks within the Social Security System:

1. Indefinite-term or permanent contracts are verbal or written arrangements with no stipulated end date.

2. Fixed-term contracts are written agreements with a specific time limit. The length of time cannot exceed three years.

3. Temporary contracts are verbal or written agreements for temporary jobs that cannot exceed one month.

4. Contracts for projects or services are arrangements in which a person is hired to complete a specific project or service without stipulating a length of time.

The contract of provision of services (contrato de prestación de servicios), which is not formally an employment contract governed by labor law but a civil agreement, is widely used in the Colombian labor market. In this type of agreement, the contractor assumes the risk and obligations of covering social security costs and is not entitled to the rights and protections of an employee. Legally, contractors have technical and directive autonomy, which exempts them from complying with a job schedule and other obligations. Nevertheless, it has occasionally been distorted from its purpose and become a mechanism to hire a less-costly labor force since social security costs are transferred entirely to the contractor. According to data from the

Comprehensive System of Social Security, in 2022, more than 2 million people were registered as independent contractors.

According to the DANE, there are more than 13 million informal workers, accounting for nearly 60% of workers in the country. This number includes employees that work in firms that: are not registered with the Chamber of Commerce, have not updated their commercial registry, employ less than five people, or that do not pay monthly fees associated with social security. According to this definition, virtually all of the employees in our study would be classified as informal.

We used the responses to our census to select our sample of firms who stated they had 1-20 non-family employees. We then were able to compare this number to the weekly employee payment reports during the study. We find little consonance between the number of employees initially reported and the number of people paid each month. Further, we found that the number of jobs provided each month fluctuated, and the number of unique individuals who filled those jobs fluctuated even more so.

The distribution of reported employment from the baseline census is shown in Table 7.1.

TABLE 7.1: DISTRIBUTION OF REPORTED NUMBER OF EMPLOYEES FROM BASELINE SURVEY

Reported employees	Number of firms	Percent of firms
1 to 2	17	14%
3 to 5	48	39%
6 to 20	55	45%
20+	2	2%

Based on employee payments, however, almost all firms are closer to the lower bound for participation in our study (including a few who reported employees at census, but never recorded a payment to an employee during the study). In any given month, firms paid on average three to five employees. However, employees turned over frequently during the study: on average, firms paid six unique individuals over the year. The average number of employees paid also obscures that the number of employees paid in any given month frequently fluctuated. In Chart 7.1, we show the breakdown of firms in four categories of employee headcount based on the median number of employees in a month and the total number of unique individuals paid during the year. The rightward skew in the distribution of the total unique employee category illustrates that firms have more employees than they are paying on a monthly basis, indicating a significant amount of employee turnover.

The high turnover is further confirmed when analyzing the data from the employee's perspective. Overall, only about 1 in 5 employees get paid 8 months or more in a 10-month period; 60% of employees work at the same firm for fewer than 5 months. Turnover is particularly high in agri-processing firms, perhaps unsurprisingly, where less than half of the employees work for more than 3 months in a 10-month period. However, it's important to note that this turnover is not due to "seasonality"—the firms do not show significant spikes in total employment in specific months.

TABLE 7.2: NUMBER OF MONTHS PAID TO A SINGLE EMPLOYEE

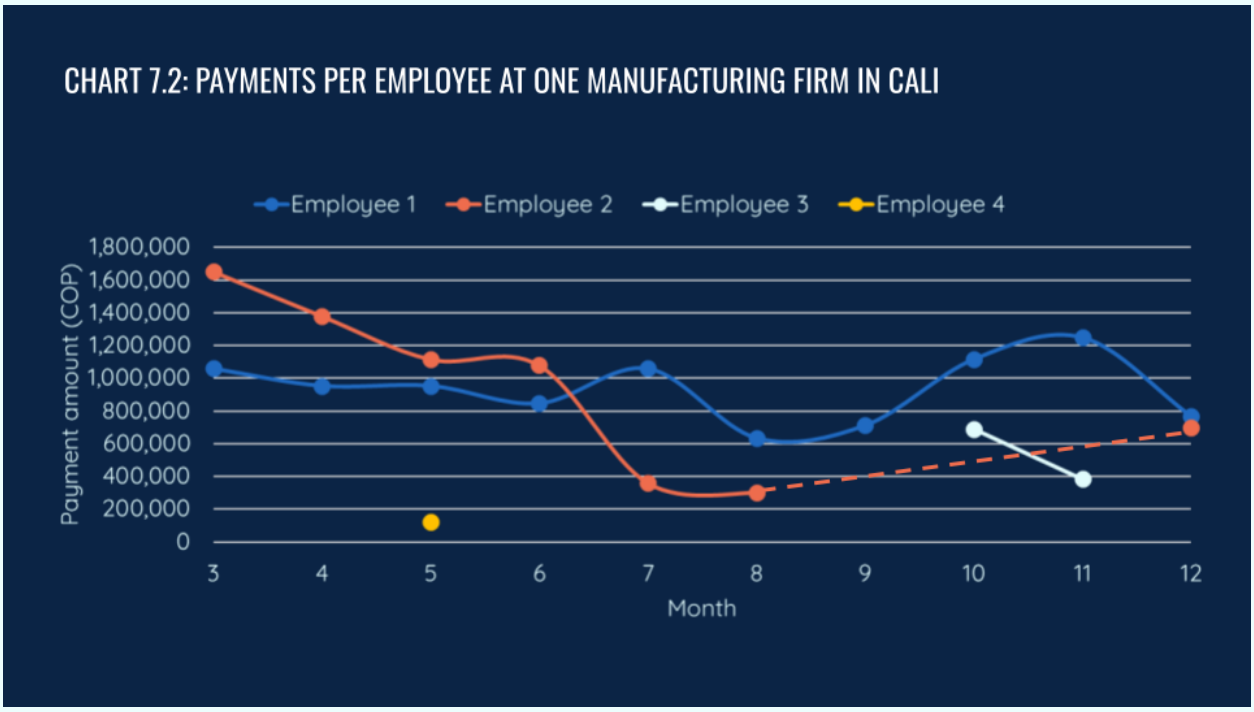
Number of months paid to a single employee	Number of employees	Percent of employees
1 month	154	23%
2 to 4 months	251	37%
5 to 7 months	129	19%
8 to 10 months	142	21%

While most employees are short-lived, more than half of the firms in our study have at least one "core" employee, defined as an employee who gets paid for 8 months or more in a 10-month period.

TABLE 7.3: MAXIMUM NUMBER OF MONTHS PAID TO A SINGLE EMPLOYEE

Maximum number of months paid to a single employee	Number of firms	Percent of firms
1 month	5	5%
2 to 4 months	23	21%
5 to 7 months	22	20%
8 to 10 months	60	55%

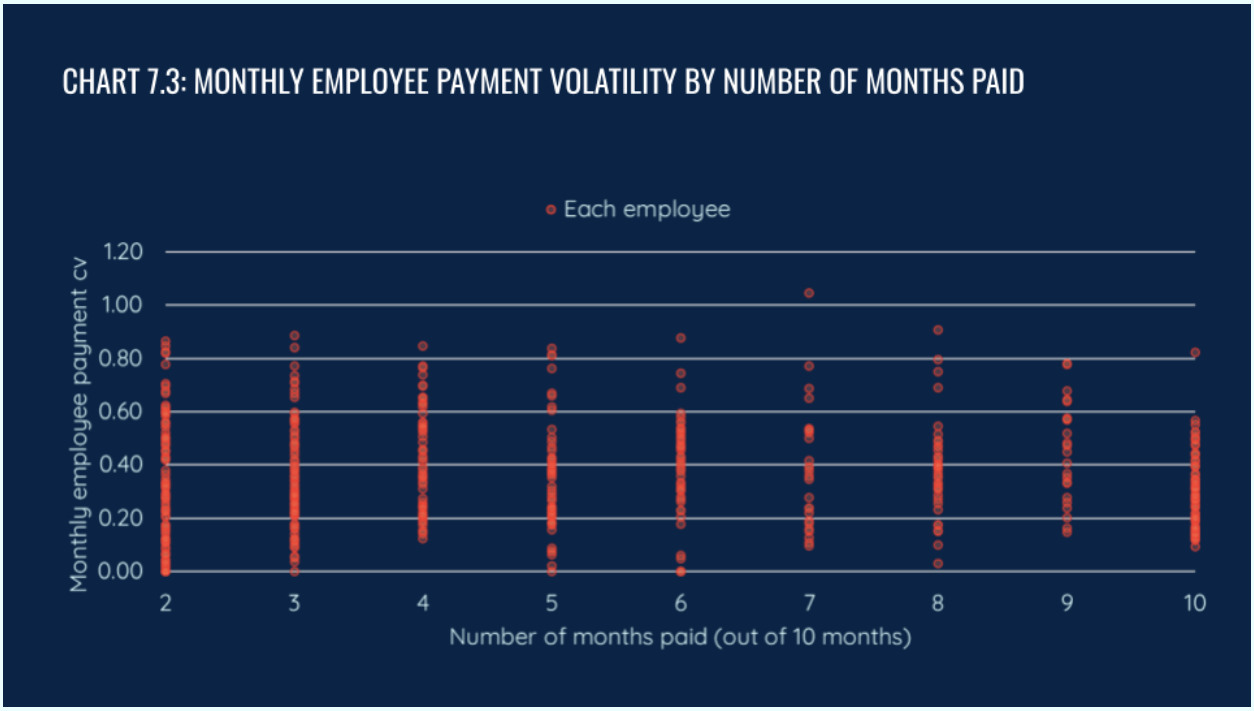
To better understand the shape of employment, Chart 7.2 gives an example from a single firm. During 1 month of the study (Month 5) the firm reaches its peak employment, and pays 3 workers. During 8 of the months of the study (Months 3, 4, 6, 7, 8, 10, 11, and 12) the firm pays 2 workers (but they are not consistently the same 2 people from month to month). During 1 month of the study (Month 9) the firm pays just 1 worker. The blue line shows the firm's single "core" employee, who was paid during all 10 months, while the other employees have shorter spells of employment—of 7 months, 2 months and 1 month.



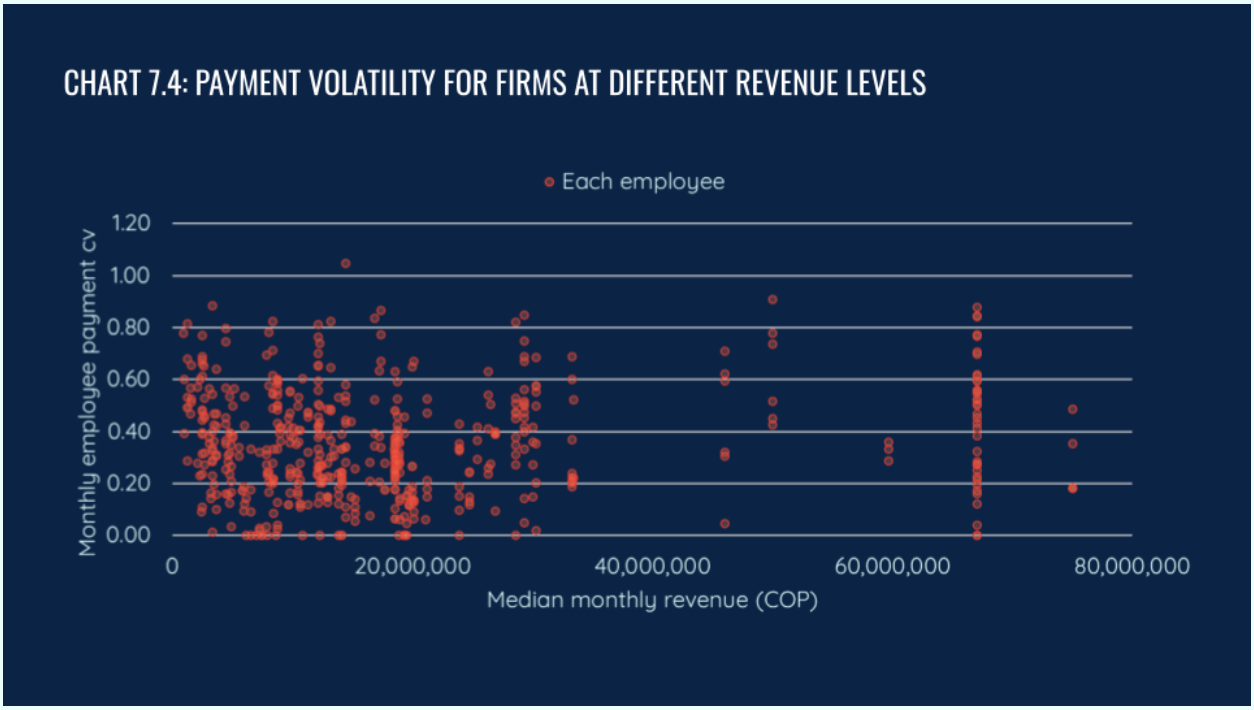
EMPLOYEE PAYMENT

The most common payment arrangements are informal salaries (50% of employees) and piece-rate-pay (27% of employees). 77% of total payment value and 89% of individual employee payments are made in cash, measured by total payment value and total payment count, respectively.

The most important feature of employee payment we uncovered is how much employees earn changes from month-to-month, even while they remain in a job. Regardless of how many months they were paid, employees face similar levels of payment volatility—employees who are paid in more than 7 months are no less likely to see large swings in their monthly pay than employees who are only paid in 3 months. Chart 7.3 shows the range of CV of each employee's payments by the number of months they were paid—both levels of volatility and the dispersion of CV are similar at each number of months paid.



It's easy to imagine reasons why employee payment volatility would be higher for small firms. Larger, more established firms likely have better systems in place and can weather fluctuating demand with less disruption; it could be posited that larger firms have more marginal workers who are brought in (or laid off) to deal with demand spikes where small firm with more precarious finances push the volatility onto their regular employees. For the firms in our sample, however, we do not see any relationship between decreasing volatility and firm size (Chart 7.4), implying that any stabilization of employee payments is occurring when firms reach a much greater size than is represented in our sample.



There are a number of factors that play into the volatility of employee payments. The first and most obvious is that, as reflected by the volatility of firm revenues, the firms have different levels of demand for labor month-to-month. This is obviously passed along to the 25% of workers who are paid piece-rates, but the data suggests that almost all workers' pay is subject to demand fluctuations. Indeed, preliminary analysis suggests that firms cut labor expenses immediately, with lower monthly employee payments matched directly with lower monthly revenues (as opposed to a one or more months-lag).

However, some of the volatility is due to decisions made by the owners and workers, independent of demand. Firm owners sometimes issue partial payments to employees when short on cash for the business. Interestingly, though, this is not just a one-way street where firm owners are exercising power over their workers. Some employees use their employers as a short-term savings mechanism, asking to be paid when they need it, rather than on a regular schedule. We also

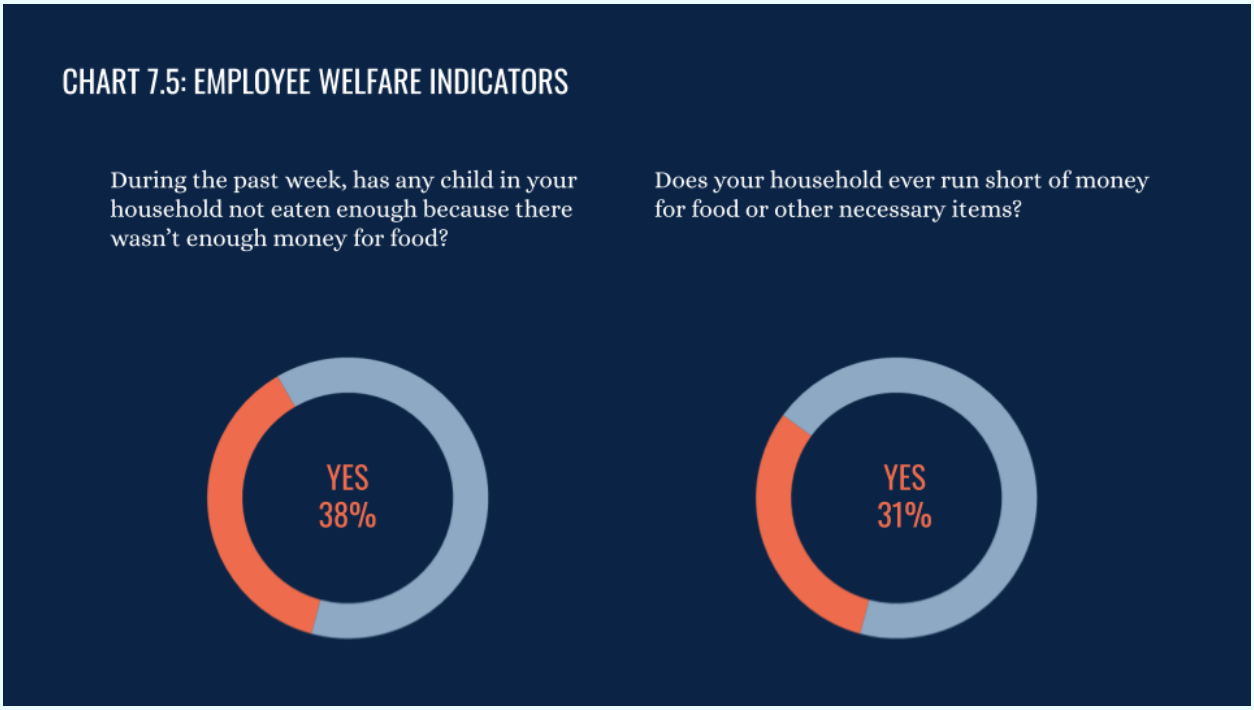
anecdotally see instances of employers loaning money to employees when the employee needs cash they have not yet earned.

EMPLOYEES

Who are the employees of small firms? Where do they sit in the income distribution? Did they formerly own microenterprises or work in larger firms?

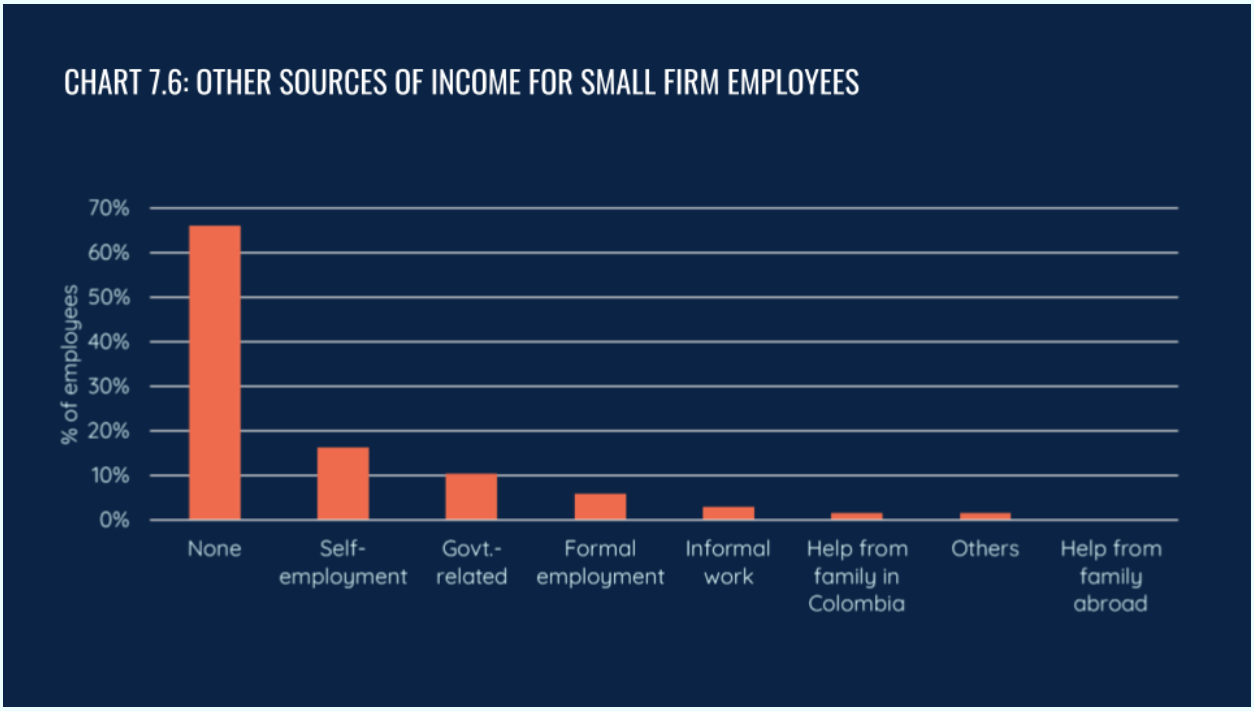
In each firm, we asked the firm owner to allow us to interview one employee about their work at the firm. We were able to successfully interview 62 employees (51% of the sample). Each employee who consented to an interview completed a slightly modified version of the Progress out of Poverty Index as a proxy for the relative income of small firm employees. Given the firms' location (in low-income neighborhoods), we expected employees to be drawn from low-income households.

Indeed, as we see in Chart 7.5, roughly a third of employees reported difficulties with finances indicative of low-income status, including 38% who reported that a child in their household had not eaten enough in the past week.[11]

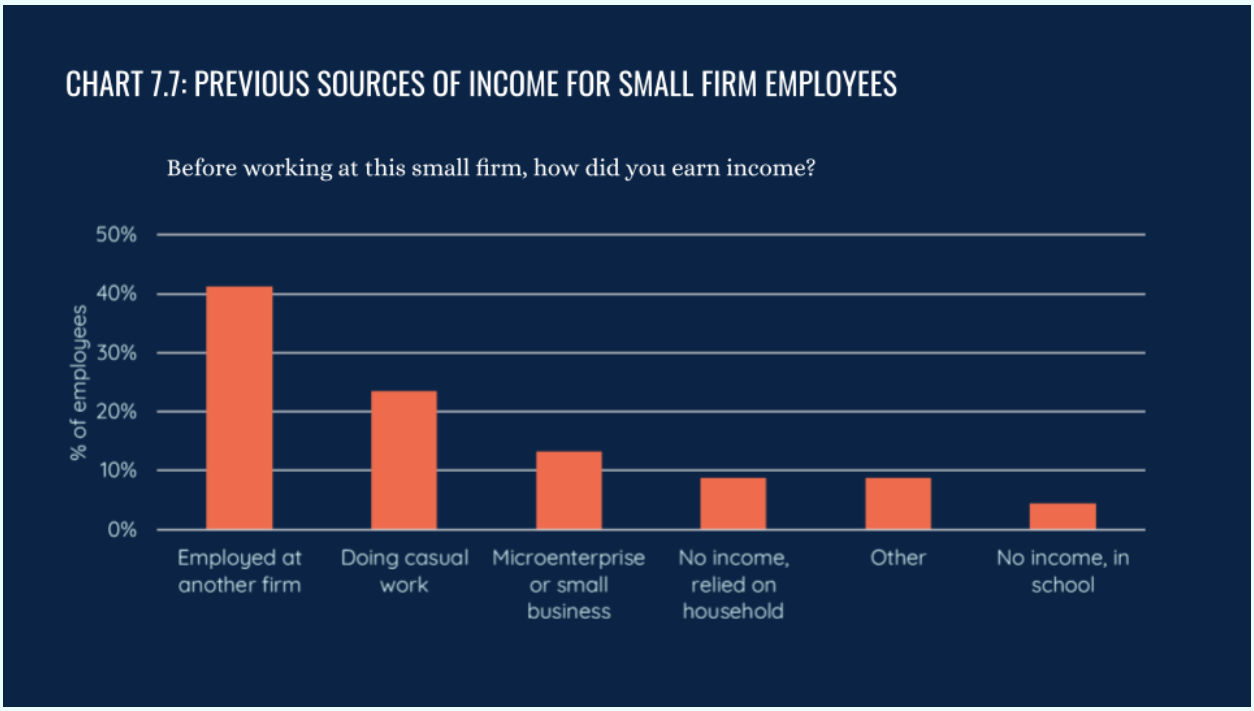


[11] While we expected that firm owners would be more likely to nominate higher paid, longer tenured employees to participate in our surveys, those who took the surveys were not meaningfully different than other employees in our data.

The volatility of employee income from the small firms appears to matter a great deal to the employees' households. As shown in Chart 7.6, almost 70% of employees report having no other source of income, so their household must cope with the volatility of small firm employment through other means. It's important to note that we do not see employees moving between employment in a small firm and other parts of the labor market.



To the extent that we can see in our data, employees of the small firms are drawn from a distinct labor pool who work in small firms (Chart 7.7). When a job at one firm ends, the employees move to another small firm—40% of employees, the largest group, reported working at another firm prior to their job at the firm in the study. While our survey did not specify the size of other firms that workers formerly worked at, our field visits and conversations with firm owners and employees lead us to believe that the "other firms" were similarly sized firms in the same industry and neighborhood. It's particularly interesting that few employees, less than 15%, report formerly owning a microenterprise—suggesting that the labor pool for small firms is not drawn from the population that is the target of microfinance. While some employees told us they had contemplated opening a business, particularly those in industries like carpentry or leatherwork, they also shared that they were concerned about the risk that running a business of their own would entail.



FOCUS: Business Development Services

SUMMARY

A common policy intervention to support micro- and small firms is delivery of business training. This can span the gamut from online courses to intensive "business incubators," but all are built on the belief that a significant barrier to firms' success is that firm owners do not have the skills and knowledge necessary to run a profitable, growing business. In the section on Business Practices we discuss the business practices of our participating firms and find that while some may find the level of business and management practices surprisingly high given the size and type of firm we study, there is room for improvement.

That does not necessarily mean, however, that additional investment in training for small firms is an appropriate policy. While there is evidence that improved practices lead to better business outcomes, the evidence that training programs lead to improved practices isn't as clear cut. While the best current evidence suggests that training programs can have modestly positive effects at low cost, just as there is room for improvement of the firms' business practices, there is a great deal of room for improvement of training programs.[12] There are several important questions to answer, including:

- What type of training (classroom, on-demand, experiential, etc.) works best for specific types of firms?
- What skills and practices are most needed by different types of firms?
- Are there general skills and practices that may be less suited for firms of certain sizes, stages or contexts?

While the Small Firm Diaries is not set up to provide definitive answers to these questions, the research is well-positioned to provide important input on these questions. In our Colombian sample, we specifically recruited a subset of firms who had participated in business training programs. We refer to these firms as our BDS firms—firms that have received business development services. It's especially important to note that while the data presented here is relevant to understanding the training experiences and needs of firms, the Small Firm Diaries does not address causality—we do not have any data on whether, for instance, firms with better practices sought out training, or training induced them to adopt better practices.

We find that the firms who had participated in a training program have higher and more stable revenues, as well as operating margins, than non-BDS firms. However, the participants did not grow at faster rates. BDS firms are more likely to have implemented cornerstone business practices, including separation of finances and business registration. They also typically score higher on the

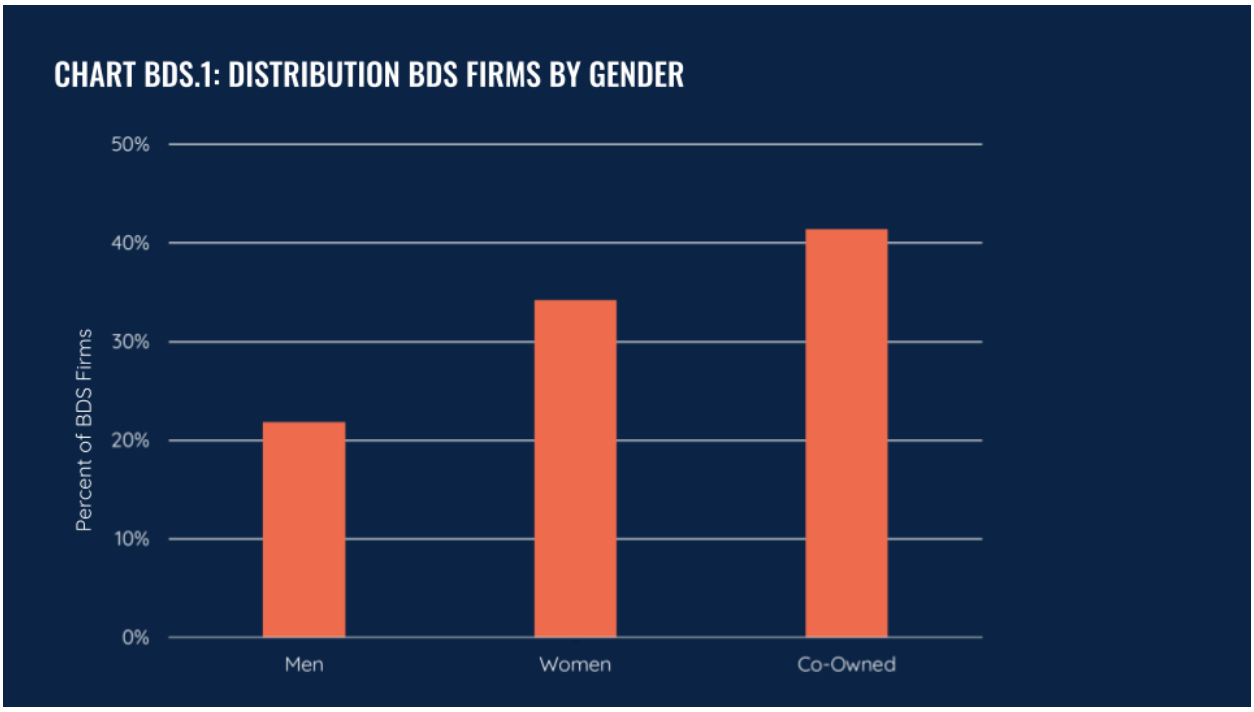
[12] See McKenzie and Woodruff, eds., 2021

McKenzie and Woodruff Business Practices Index. However, their ability to retain employees is similar to non-BDS firms. Both groups also have similar aspirations and report the same barriers to success.

Last, we explore alternatives to formal training and areas desired for future training. We find that most of our firms, including those who had formal training, attribute their practices and skills to on-the-job training. In terms of additional training, both BDS and non-BDS firms are interested in learning about marketing.

BDS SAMPLE OVERVIEW

Overall, 30% of our Colombian sample reported receiving business development training at some point before the study. These firms were almost equally spread across industries, but less so across genders. The largest portion of firms who participated in training were co-owned (both male and female owners, usually a husband and wife). Women-owned firms made up a third of our BDS sample, while men-owned firms make up only one-fifth. (Chart BDS.1).

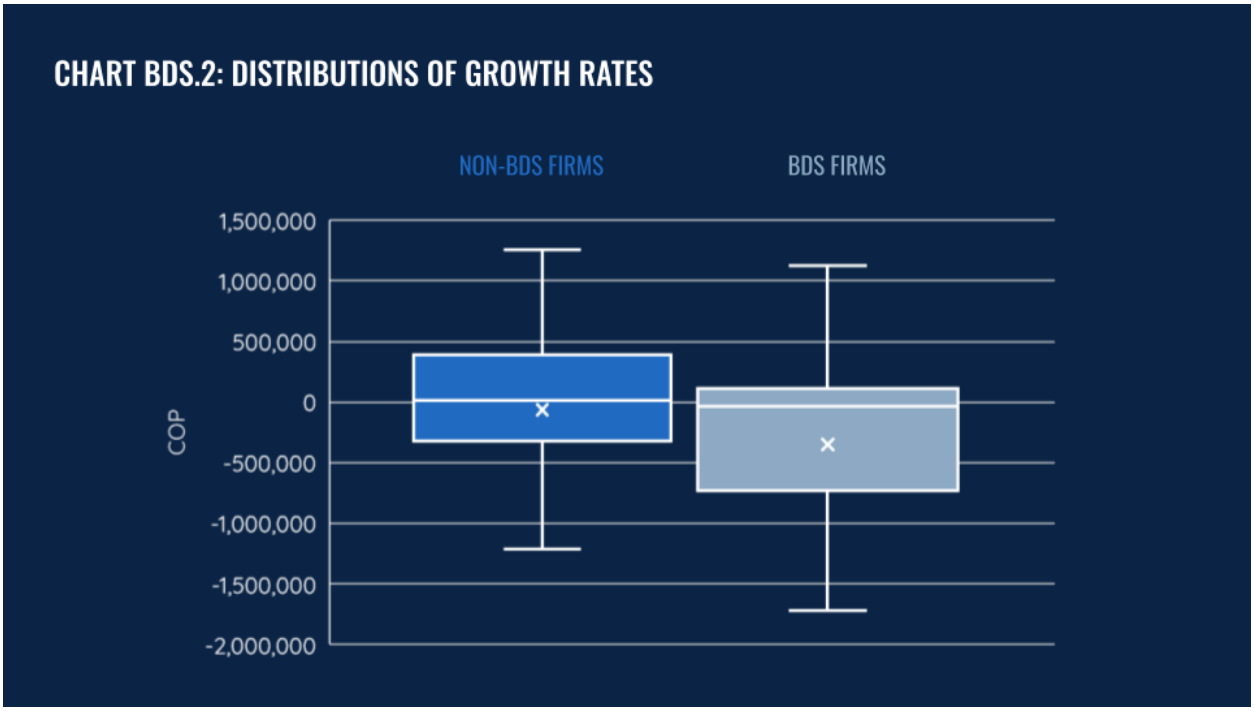


Our BDS firms have higher median revenues and operating margins than the non-BDS firms. They also have lower variability in revenue, expenses, and margins compared to non-BDS firms. The median CV of BDS firms' monthly operating margins is 1.03 compared to 1.93 for non-BDS firms.

TABLE BDS.1: SUMMARY COMPARISON

Monthly Median	Revenue	Expenses	Operating Margin	CV of Operating Margin
BDS	COP 11.700.750	COP 6,742,208	COP 3,574,805	1.03
Non-BDS	COP 6,560,000	COP 3,935,000	COP 2,456,000	1.93

Despite the higher stability of margins, we do not find that BDS firms are growing faster than non-BDS firms. Measuring the slope of the line of best fit of monthly operating margin, the median and average slope for BDS firms is more negative than the non-BDS firms (Chart BDS.2).

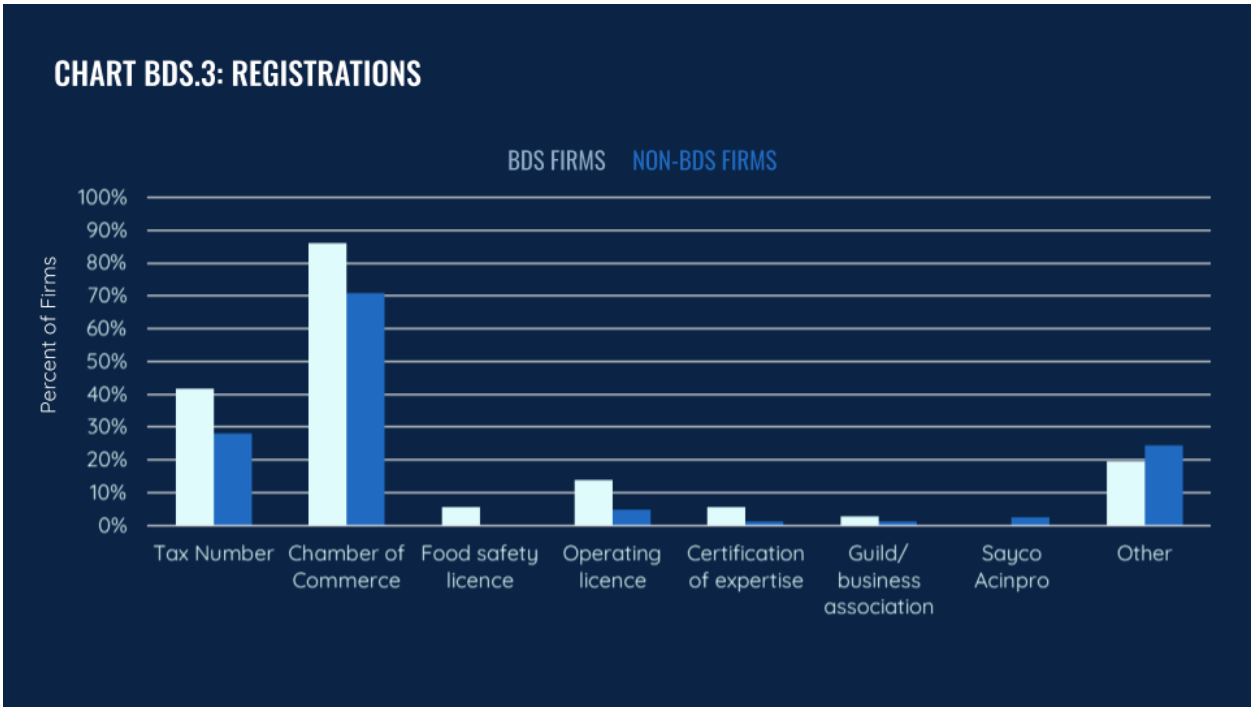


BUSINESS MANAGEMENT AND PRACTICES

One of the most fundamental business practices taught to small firms in development courses is the separation of business finances. In our total sample in Colombia, 82% of firms have separate business accounts. BDS firms separate finances at higher rates than non-BDS firms (95% vs. 78%).

More generally, a higher proportion of BDS firms own bank accounts than non-BDS firms (84% vs. 65%).

In addition to separation of finances, many business training programs help firms to register their businesses so that they can, theoretically, benefit from formalization. As shown in Chart BDS.3, more BDS firms are registered with the tax authorities and chamber of commerce than non-BDS firms. Registrations aside, BDS firms also perceive themselves to be "formal" at higher rates than non-BDS firms—60% of BDS firms consider themselves formal compared to 40% of non-BDS firms. We explore measures of formality further in Section 6 of this report.



Employee management is another cornerstone of a successful firm. In the employee section of the report, we detail the high levels of employee turnover in the small firms. Employee retention could be an important area for business training programs to address. We see little difference in turnover levels between non-BDS and BDS firms. Table BDS.2. shows that about half of both BDS and non-BDS firms pay at least one employee for 8 to 10 months of the study; the remaining firms did not have an employee that remained employed for the entire duration of the study.

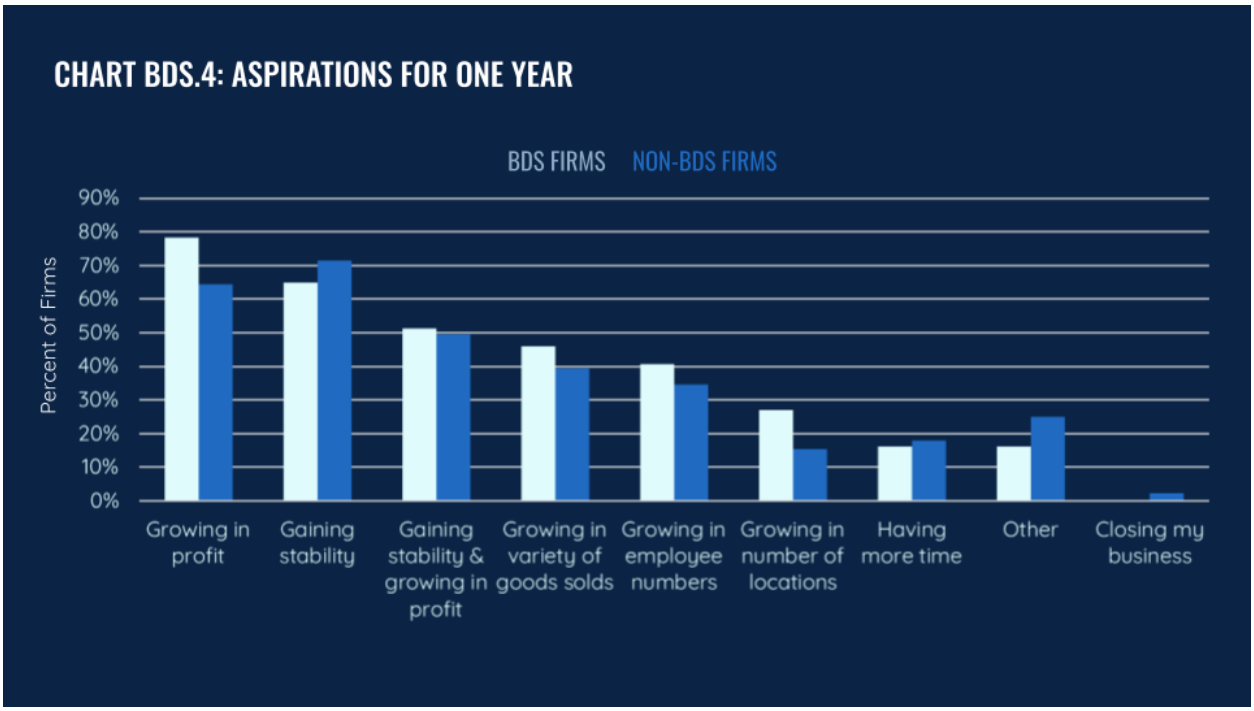
TABLE BDS.2: EMPLOYEE TURNOVER COMPARISON

Maximum number of months paid to a single employee	Percent of non-BDS firms	Percent of BDS firms
1 month	6%	0%
2 to 4 months	21%	21%
5 to 7 months	17%	27%
8 to 10 months	56%	52%

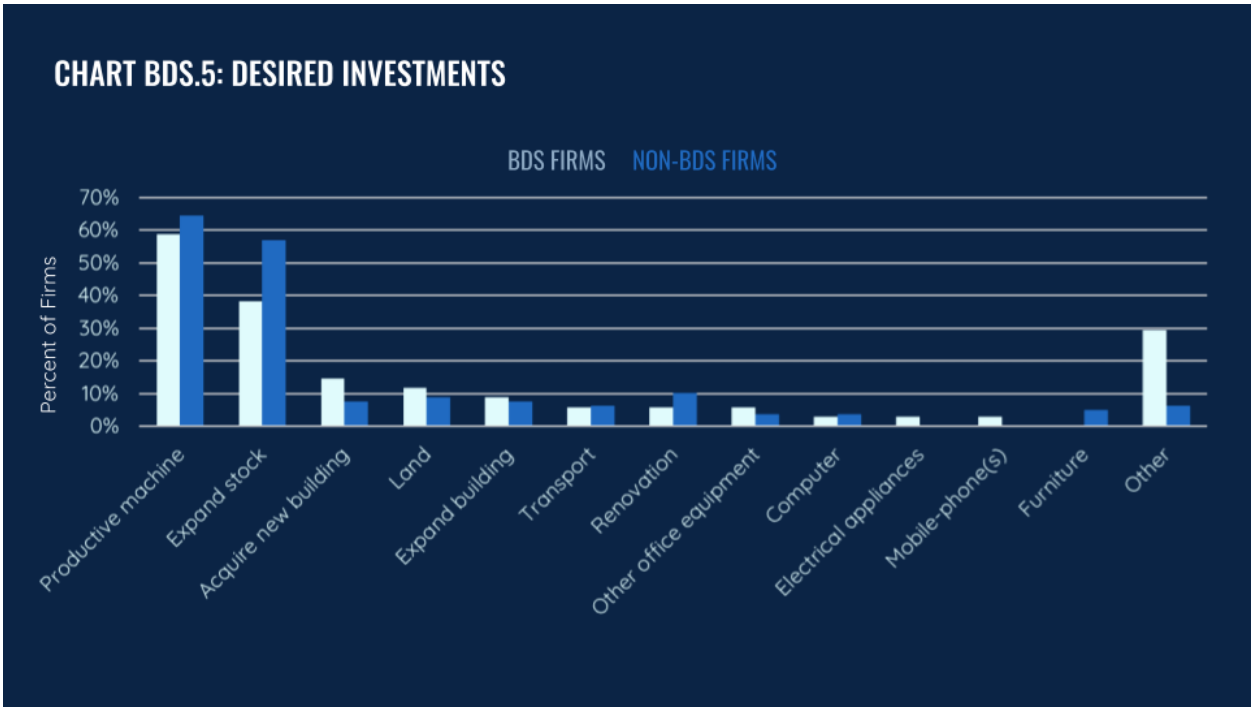
To explore business practices more generally we used McKenzie and Woodruff's Business Practices Index. Details on what is included in this index are in Section 8 on business practices. We find that our BDS firms score higher on this index, with a median of 0.62 out of one, compared to 0.5 for non-BDS firms.

ASPIRATIONS

In Section 9 of this report, we explore the intersection of the desire to grow profit and the desire to gain stability. BDS firms report desire to grow profit at a higher rate and desire for stability at a lower rate than non-BDS firms (Chart BDS.4), though a majority in both categories of firms aspired to growth and stability.



To grow, conventional business wisdom suggests investing in assets to increase productivity is necessary. As seen in Chart BDS.5, when asked about investments, there are a few notable differences: BDS firms are much less likely to report expanding stock, while choosing "other" at much higher rates. These "other" choices include R&D investments as well as marketing and advertising. We also ask about the barriers firms face to making these investments and find that both categories of firms report the same barriers.

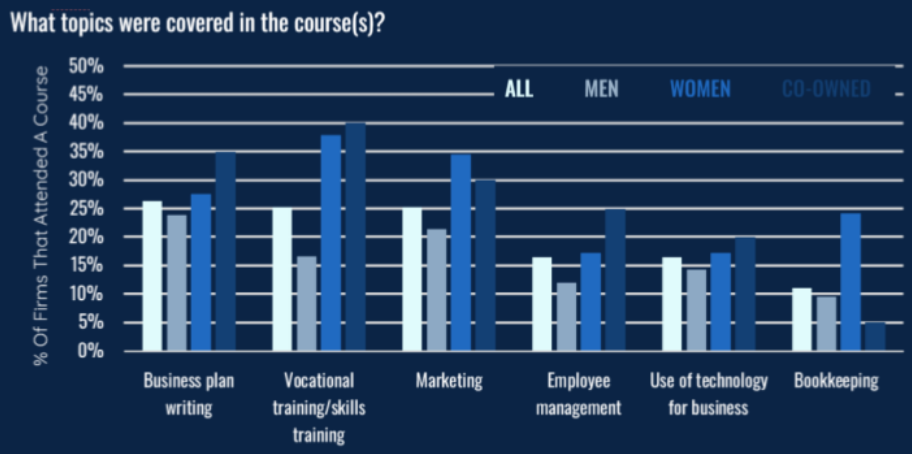


AREAS OF TRAINING INTEREST

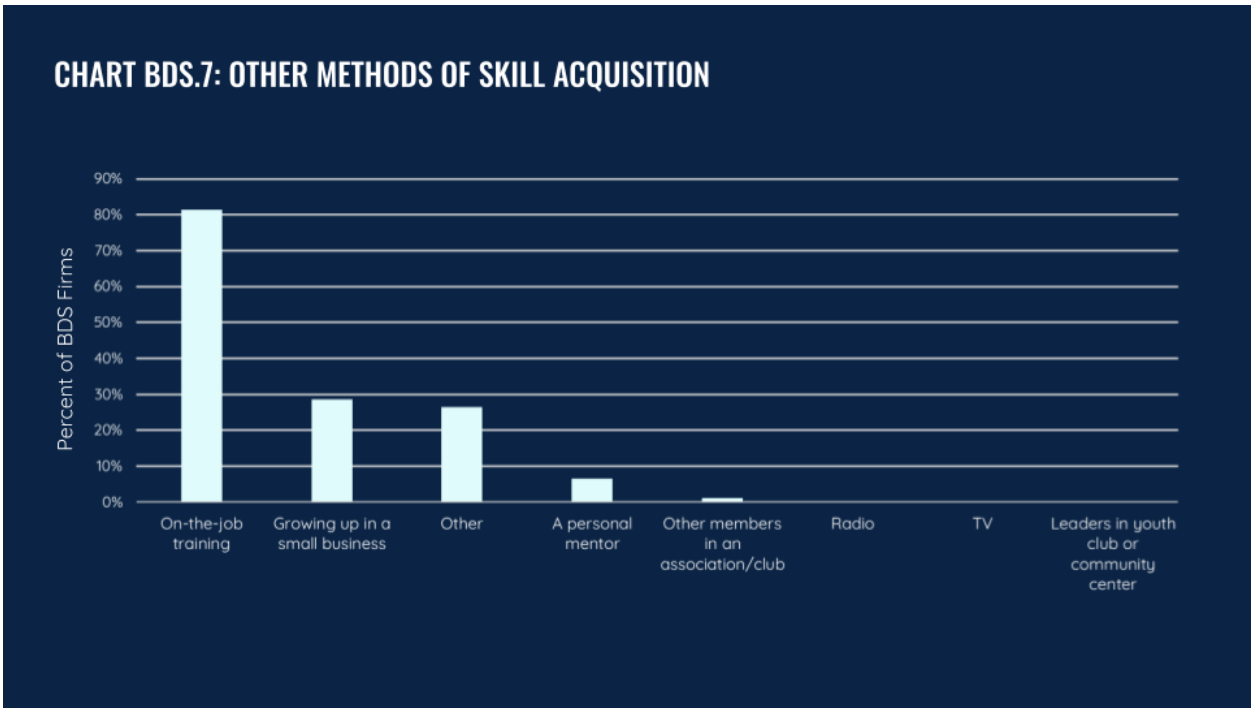
We asked firms about what topics their training programs had covered. The most common topics were business plan writing, vocational training, and marketing (Chart BDS.6). Significantly more women have received vocational, marketing, and bookkeeping training than men. When we asked about which topics they'd received training on was the most helpful, marketing and vocational training were reported by the highest proportion of firms (a quarter).

CHART BDS.6: TOPICS COVERED IN TRAINING COURSES (SAMPLE-WIDE)

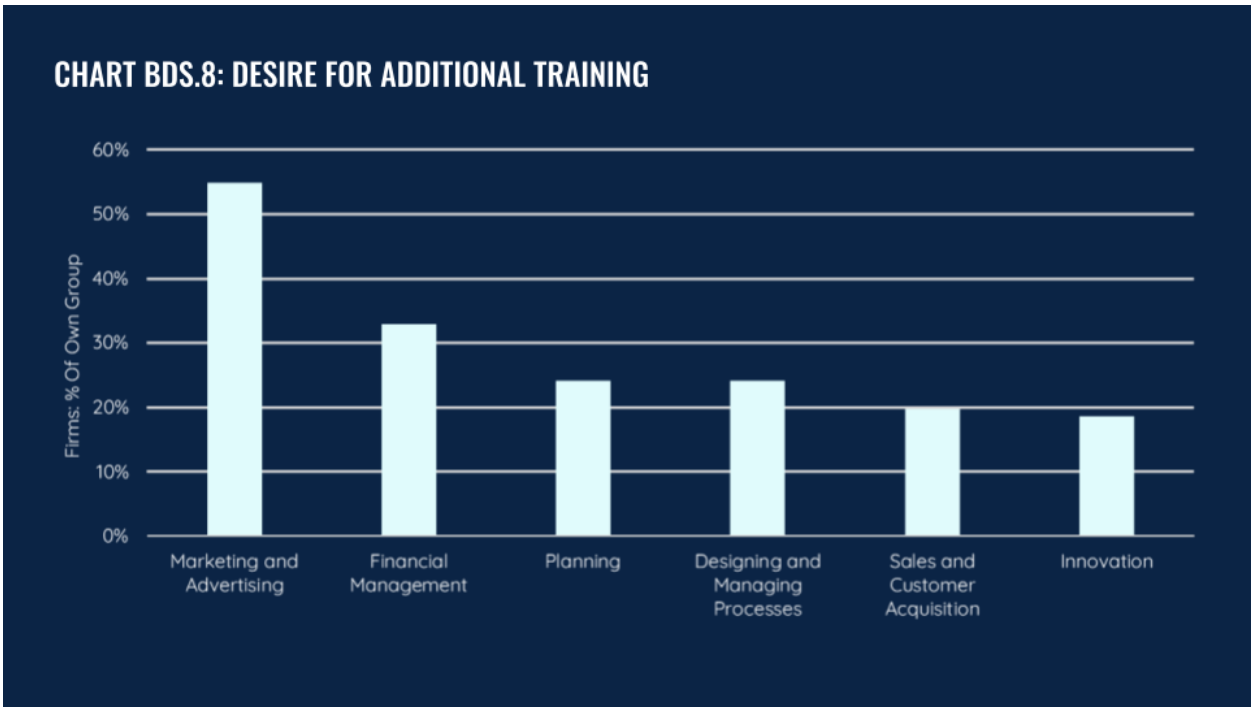
Among firms that reported ever attending a training course, what topics were covered in the course?



Outside of business training courses, the majority of our firms report that most of their business skills were gained through on the job training. About a third of the sample are second-generation business owners and grew up in a small business, although this was true for a higher proportion of female firm owners than male firm owners (40% vs. 15%) (Chart BDS.7).



In terms of areas for future training, the majority of firms desire training in marketing and advertising, followed by financial management. Areas of interest for future training are similar across BDS and non-BDS firms. The main difference being a higher desire for financial management training from non-BDS firms than BDS firms, and that BDS firms are more interested in training on managing taxes, as shown in Chart BDS.8. Perhaps surprisingly, desire for training in bookkeeping, raising capital, business registration, and worker management were chosen by less than 10% of all firms.



8. Business Practices

SUMMARY

The two main pillars of policy programs directed at supporting small businesses are access to credit and business training. Growing out of the narrative of the microfinance movement, the prevailing assumption is that most small businesses, particularly small businesses started by low- or middle-income people, are unaware of or do not implement business and management practices that would help them thrive and grow. Research on firms larger than those of the Small Firm Diaries finds there are management practices that have a material impact on firm performance, and that there are many firms who do not use these practices.[13] Research on the actual business and management practices in firms of the size that we study in the Small Firm Diaries is rare but McKenzie and Woodruff were able to assemble surveys of micro and small businesses from seven developing countries conducted for other purposes but which included data on business practices. They then show that these core business practices (such as bookkeeping, stock management, and marketing) are as important for small businesses as they are for larger firms based on the measures of firm performance that are available.[14]

Given the evidence on the importance of business practices and the policy focus on business training programs (see the section on BDS firms for a discussion about firms in the sample that had received business training/business development services), and the relative dearth of information specifically about this segment, we were very interested in better understanding the practices of small firms. To do so, we used the inventory of business practices created by McKenzie and Woodruff, and here we follow their calculations for an index score based on practices in use.

As noted in Section 3 on firm finances, the most basic business practice is the separation of business finances from household finances. We find that 82% of firms separate their finances at the start of the study. Beyond that, we find significant variation between firms in terms of the business practices they employ. Using the McKenzie and Woodruff Business Practices Index Score, our sample ranges from 0.08 to 1, with most firms clustered between 0.2 and 0.7, and half of them between 0.42 and 0.67. Consistent with the McKenzie and Woodruff findings, higher scores are correlated with higher monthly revenues. Of note, women in our sample typically score higher than men.

Looking at specific practices, the most common of these business practices are related to record keeping; stock control practices are also employed by about three quarters of the firms. Marketing

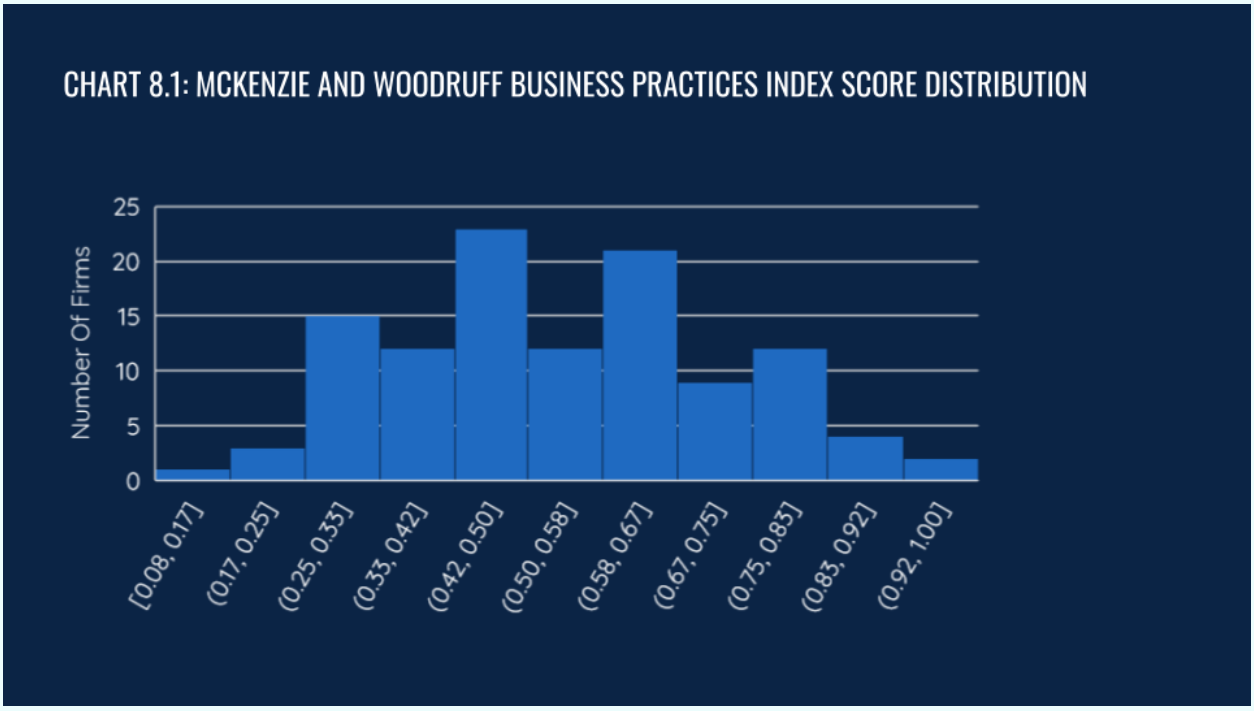
[13]Bloom & Van Reenen, 2007; Bloom, Nicholas, and John Van Reenen. 2010; Bloom, et al. 2011

[14] McKenzie & Woodruff, 2017

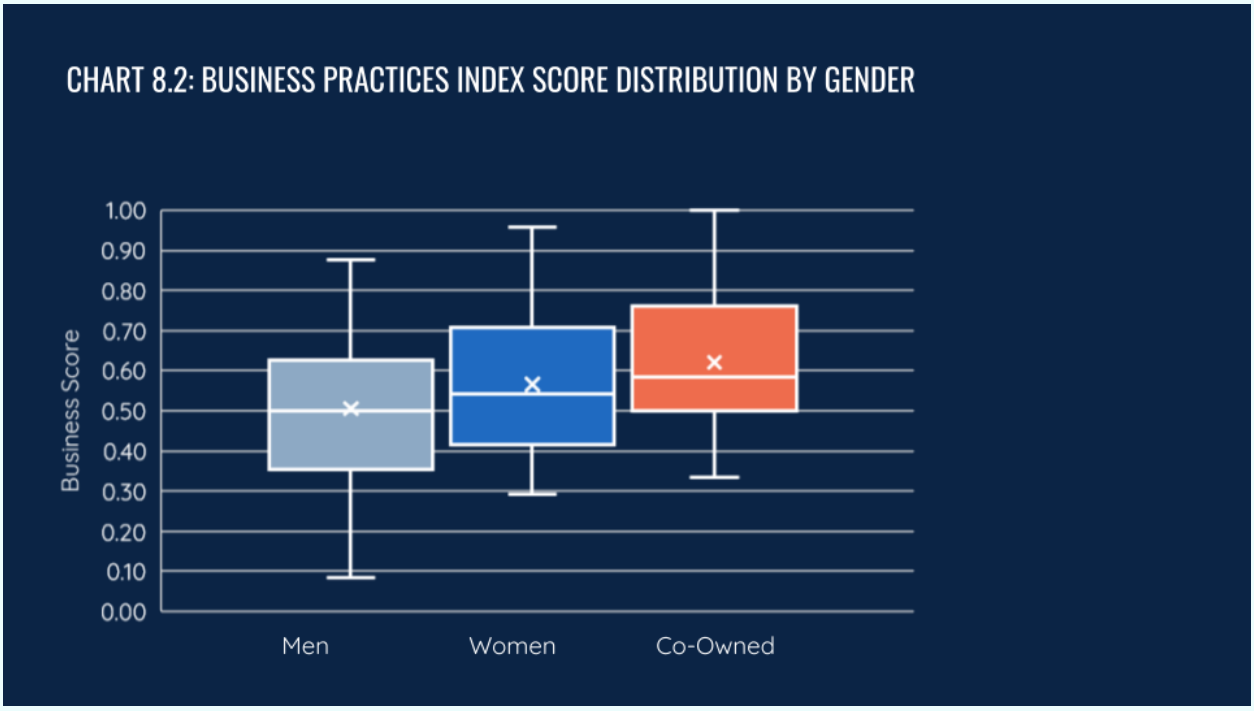
and planning practices were far less common. We find that less than half of the firms in our sample have used any of the standard marketing practices.

BUSINESS PRACTICE INDEX

On the McKenzie and Woodruff Business Practices Index Score our sample ranges from 0.08 to 1, with a majority of firms (75%) having a score between 0.20 and 0.70 (Chart 8.1).

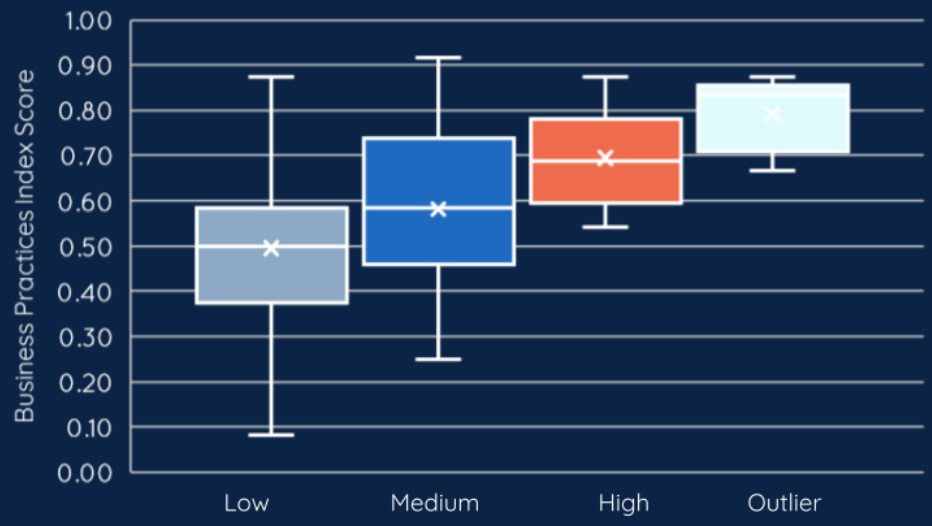


When analyzing the score distribution by gender (Chart 8.2), men-owned firms have a median score of 0.50, with half of the firms ranging between 0.35 and 0.63. Women-owned firms have a slightly higher median score of 0.54, with half of the firms ranging from 0.42 to 0.71. Co-owned firms have the highest median score of 0.58, with half of the firms ranging from 0.50 to 0.76. In the original study, comprising surveys from 7 countries (though different from the countries in the Small Firm Diaries) the median score is .39.



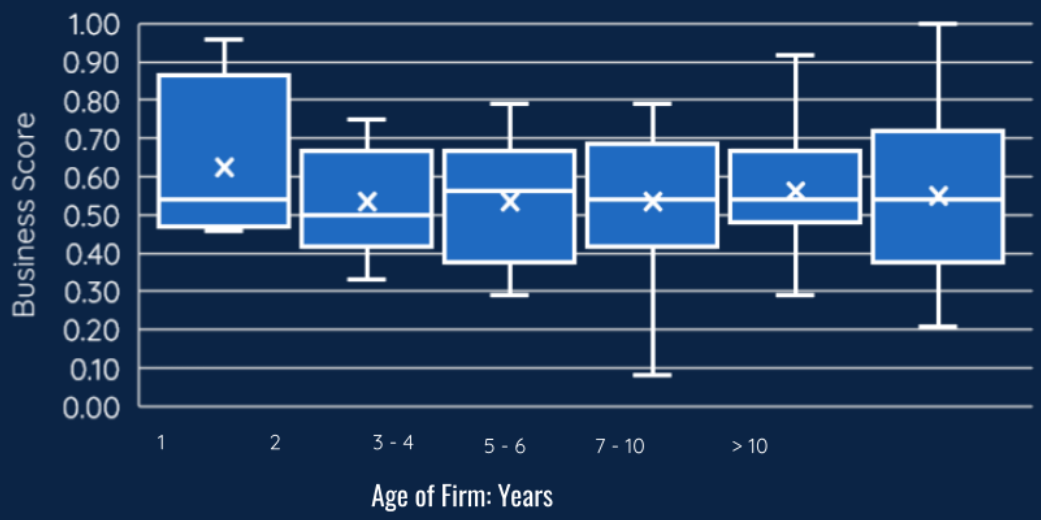
Furthermore, we analyze the relationship between revenue and the distribution of business scores in our sample: the median business score increases with increasing revenue levels. The median score of firms in our lowest income group (see Section 3 on firm finances) is 0.50, with half of the firms ranging between 0.38 and 0.58. Medium-income firms have a higher median business score of 0.58, while high-income firms have a median business score of 0.69. The highest income firms (which we call outliers) show the highest median business score of 0.83 (Chart 8.3 shows the distribution of scores). Unfortunately we cannot say whether the better practices led the firms to grow to these higher revenue levels or the firms adopted these practices because they were larger.

CHART 8.3: BUSINESS PRACTICES INDEX SCORE DISTRIBUTION BY INCOME BUCKET



Using our growth metric, we find similar median scores for growers and non-growers. Chart 8.4 shows that there is no meaningful learning effect: older firms have similar scores to younger firms (though it is possible that firms that implement better business practices grow to be larger than our sampling criteria and we only observe firms with enough good practices to survive, but not to grow beyond their current size).

CHART 8.4: BUSINESS PRACTICES INDEX SCORE DISTRIBUTION BY AGE OF FIRM



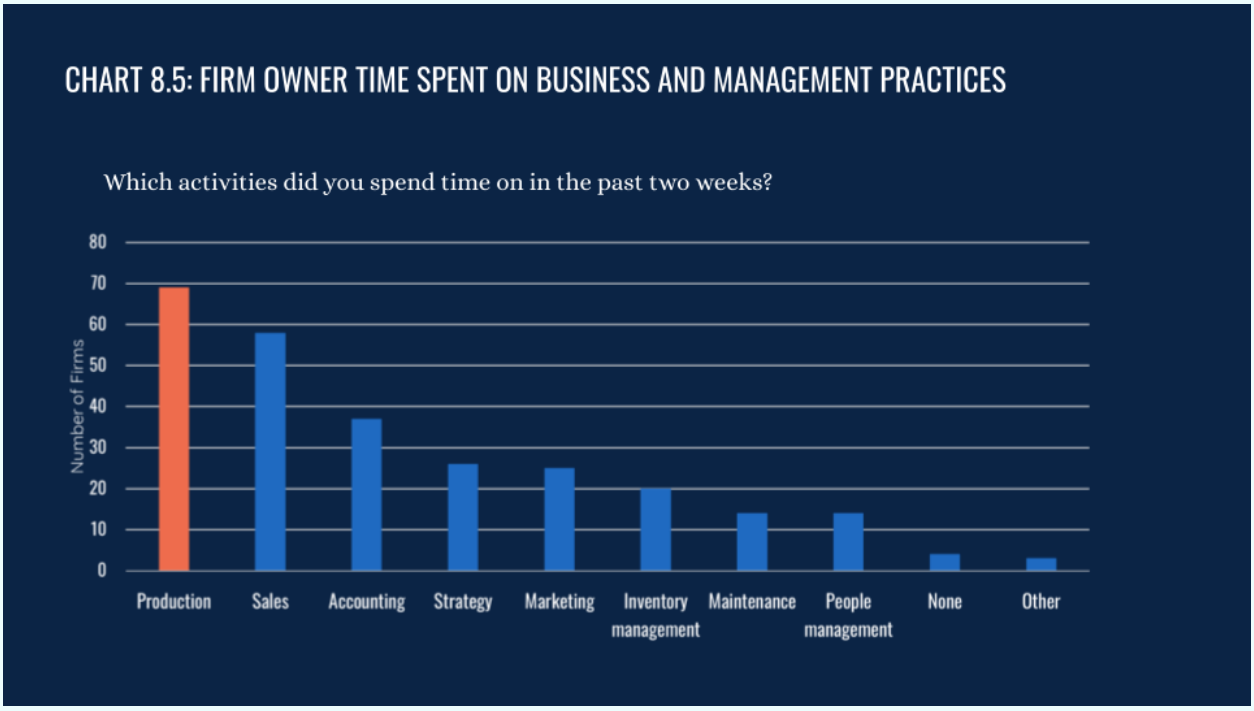
DETAILED BUSINESS PRACTICES

The 26 business practices that McKenzie and Woodruff track are divided into four categories: marketing, stock control, record keeping and financial planning. They find that stock control is the most common set of practices and financial planning is the least common.

Among our firms, record keeping was the most common set of practices. For example, roughly 80% of firms reported keeping written business records (compared to less than half in other surveys), with women being more likely to report doing so (86% of the women vs. 74% of the men). Knowing which products were most profitable (also in the record keeping category) was the single most common specific practice. Practices in the stock control category were also quite common (similar numbers of firms reported preventing stock outs as did tracking product profitability) though in this case male owners were more likely (75%) to report it than female owners (60%). Marketing and financial planning practices were far less common. Only a third of firms, for instance, reported that

they had ever engaged a former customer to learn why they had stopped purchasing; less than 25% reported having a budget forecast for the following year (though our findings on volatility suggest that this may be a futile gesture).

We separately asked about time use in relation to management and business tasks. Unsurprisingly, given the size of the firms, the most common task owners engaged in was production—these are firms where owners are managers and workers. The other two most common tasks owners reported engaging in were sales and accounting/bookkeeping (see Chart 8.5). Given that firms report marketing and advertising practices at relatively low rates, this likely reflects that owners feel the need to deal personally with customers, when their time could be more valuable invested in more strategic marketing tasks.



9. Aspirations and Growth

SUMMARY

Much of the discussion in development and poverty literature about MSMEs has focused on whether or not the firms grow, and if not, why not. Global work on microfinance and microenterprise has conclusively shown that the vast majority of microenterprises never grow enough to hire an employee; indeed, it appears that most do not aspire to grow and view a microenterprise as an alternative (and perhaps a second-best alternative) to wage employment. In high income countries there is a well-described class of small businesses which exist as an alternative to wage employment for owners, not because the business owners have classic entrepreneurial goals for growth. A central motivation for the Small Firm Diaries was uncovering more about the growth path and prospects for small firms, including their growth aspirations. To uncover firm aspirations, we ask firms specifically about their goals over the next year and next five years. We also ask about barriers to growth, desire to invest and other related questions. To measure growth, we use the slope for the best linear fit for monthly operating margin. We also look at our quantitative data on large purchases and investments, on negative operating margins and more to try to shed light on firms' choices related to growth. Finally we look at the comparisons between firms that did manage to grow during the study and those that didn't to look for any meaningful patterns.

The majority of firms in the Small Firm Diaries did not meaningfully grow (or shrink) based on our preferred measure of growth, though it is important to remember that the year of the study fell during a difficult and complicated time while the global economy was just starting to recover from pandemic shock but struggling to cope with supply disruptions, worker strikes, Russia's invasion of Ukraine and rising inflation. Nonetheless we don't find the general lack of growth to be mirrored by an absence of aspirations to grow. Roughly 70% of the firms in the study told us they aspired to grow (on at least one of several measures of growth). Perhaps the most important finding about aspirations however, was not about growth but about the aspiration to achieve stability.

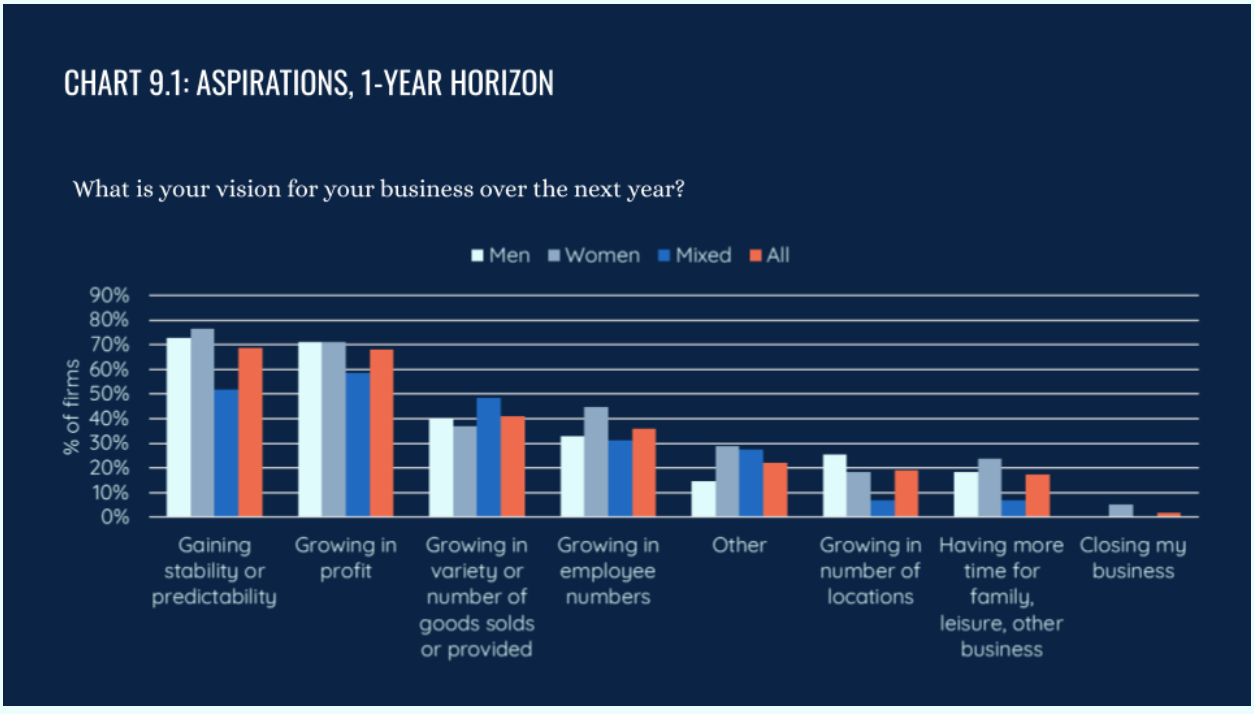
Almost 70% of firms say they aspire to increase stability. As the figures suggest, firms do not consider growth and stability to be opposing goals. In fact, more than 70% of firms who aspired to growth also aspired to stability. This very large segment belies typical binary categories for these businesses (e.g., reluctant vs. gung-ho entrepreneur; survivor vs. growth entrepreneur).

Reviewing our quantitative data, on most measures we do not find significant differences between firms that grew and firms that did not grow over the course of the study. Of particular note is that firms aspire to invest in raw materials just as much as in productive machinery. When it comes to actual behaviors, the vast majority of large expenditures in the study are for raw materials, and many of the expenditures that firms label "investments" are in fact for raw materials. Growers and

non-growers cite similar barriers and challenges. All firms' primary strategy for dealing with challenges is by attempting to save.

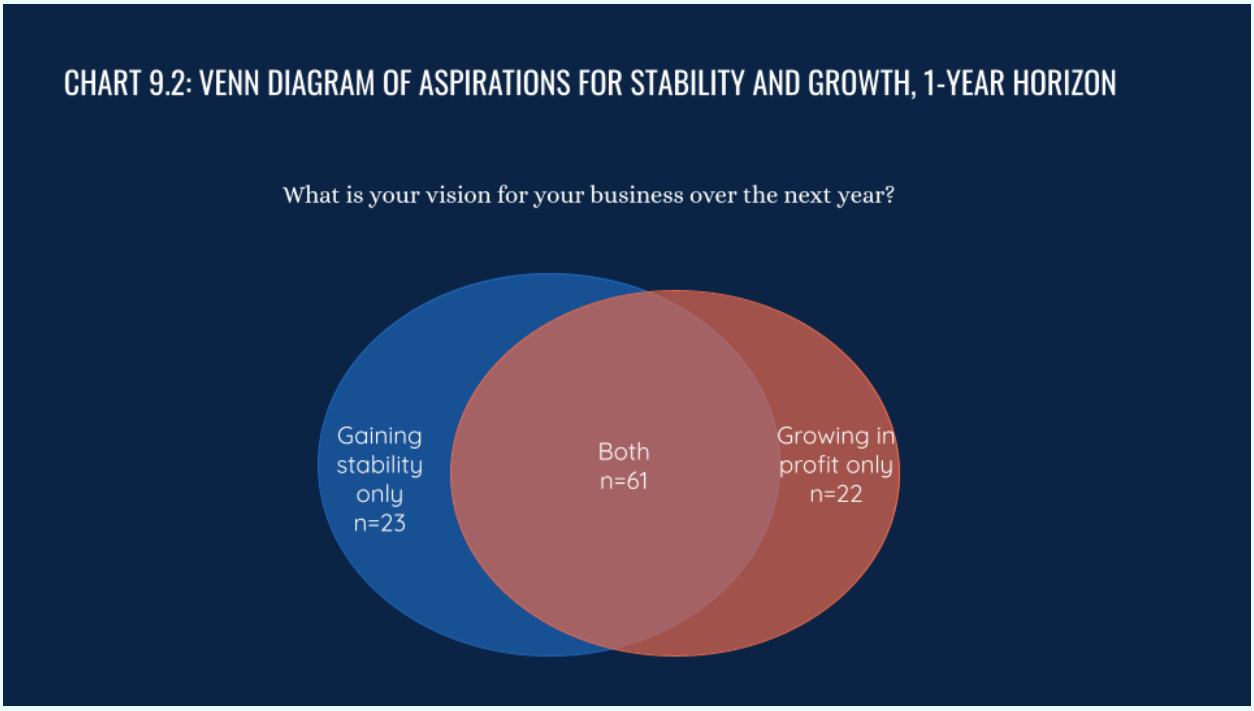
STABILITY ENTREPRENEURS

Near the middle of the study year, we asked firms about their vision for their firm over the next year and the next five years, giving them a variety of options related to growth, as well as some options to uncover if they did not aspire to grow: stability, closing the business, spending less time on the business. We designed the question expecting that "stability" and "growth" were opposing aspirations. However, the data shows that firm owners do not consider stability and growth to be in opposition but complements to each other. Growth in profit and stability were the two most common answers for every type of firm, without meaningful differences between firms based on gender of owners (see Chart 9.1), on industry, location or size. We asked about aspirations over the next year and over the next 5 years because we thought it might be likely, given Covid-19 disruptions, that firms would aspire to stability in the short-term and growth in the long-term, or vice versa. There are some curious differences between time horizons. Desire for stability was essentially unchanged with about 70% of firms aspiring to increased stability over the next year and over 5 years; however, the aspiration for profit growth over 5 years falls by more than half, while desire for growth on other metrics (employees, locations, variety) increases in the 5-year horizon.



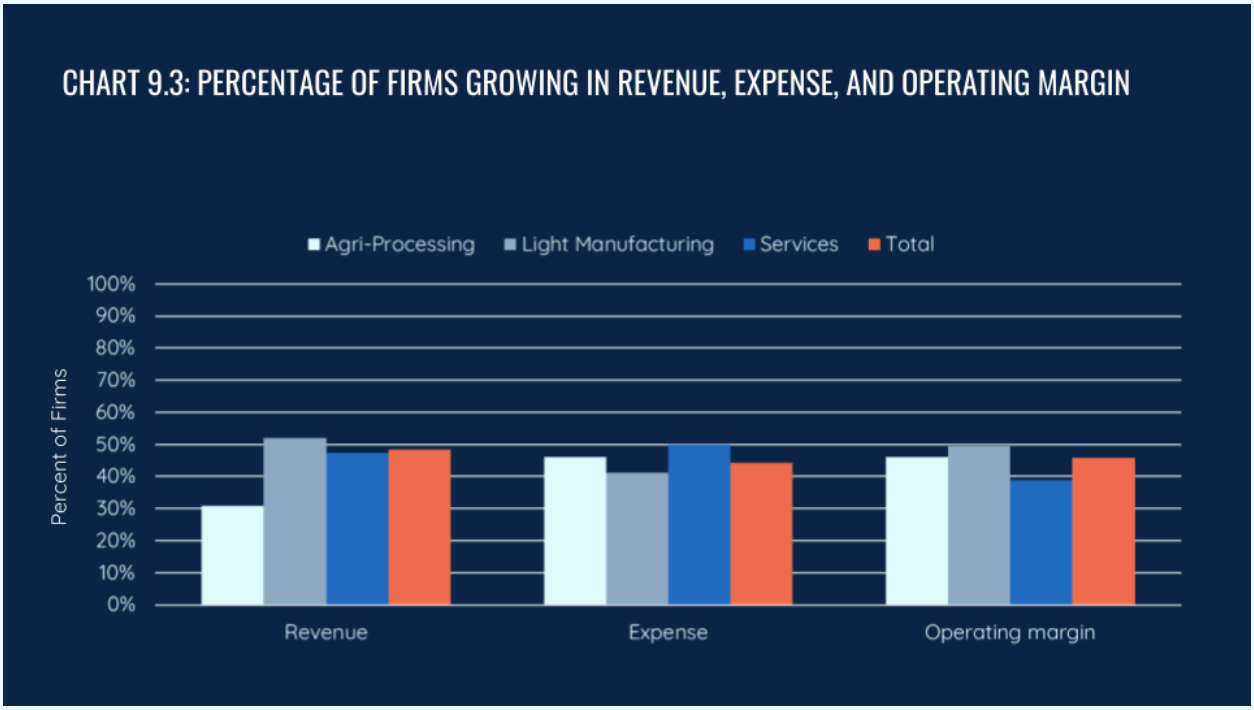
Of the firms that aspire to stability or profit growth, more than 70% of firms aspire to both, demonstrating that these aspirations are not only not mutually exclusive, but aspiring to both is by far the more common aspiration. In fact, of those that said they aspired to stability, 70% also chose at least one form of growth (profit, number of goods, employees, locations).

Schumpeter's popularization of the word entrepreneur emphasized the aspiration to create and grow something new, not just operate a small business. By that definition, our firms qualify as entrepreneurs—they take on risk in a volatile environment to create their businesses and aspire to grow them in the short- and long-term. However, they also have a significant desire to achieve greater stability at the same time rather than taking on additional risk to that which they already face. This category of Stability Entrepreneurs is the largest group of firms in the Small Firm Diaries.

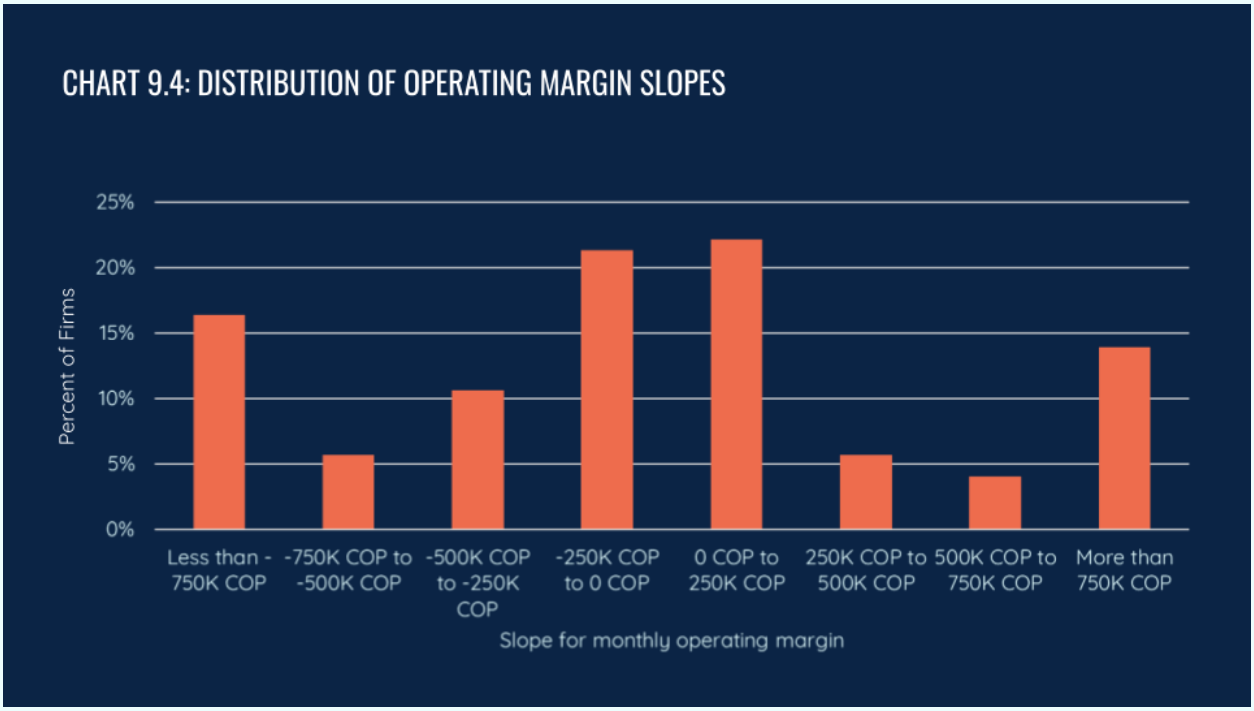


PERFORMANCE VS ASPIRATIONS

As discussed earlier, measuring whether firms "grew" in a year is difficult. By our preferred growth measurement, while more than 70% of the firms hoped to grow in profit over the course of the year, less than 50% of the firms were able to actually do so. The proportion of growing firms was largely the same across owner gender. Given the overall economic environment, with inflation rising globally, we also checked for growth in revenue only, with similar results.

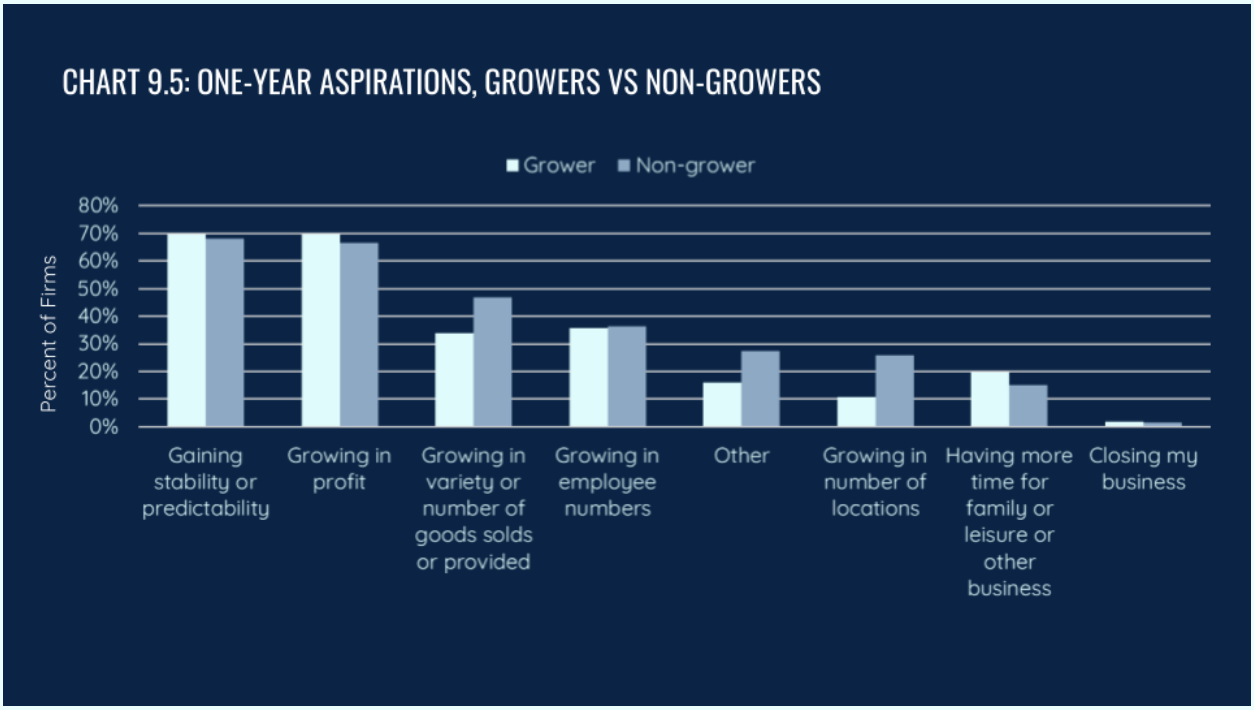


Our growth measure includes any firm with a positive slope, no matter how small. To better understand the amount of growth (or contraction) firms see over the course of the study, Chart 9.4 shows the distribution of firms based on the monetary amount of the change implied by the slope. More than half of the firms fall between -500.000 COP to +500.000 COP (-$100 USD to +$100 USD) monthly change in operating margin—these firms, given the volatility that we see, are neither achieving their aspirations for growth nor stability.



ASPIRATIONS AND GROWTH

The reason that we focus on aspirations is the possibility that firms of this size do not exhibit growth because they do not aspire to growth. Having established that the firms desire to grow, but at a measured pace that yields increased stability, we turn to whether aspirations for growth or actual measured growth correlate with other behaviors or outcomes. In this section, "grower" refers to firms that have a positive slope of operating margin. For the most part, there is not a difference in aspirations between firms that grew and those that didn't, though firms that did not grow in operating margin did express interest in growth in the variety of goods sold and number of locations at higher rates than those who did grow (Chart 9.5).



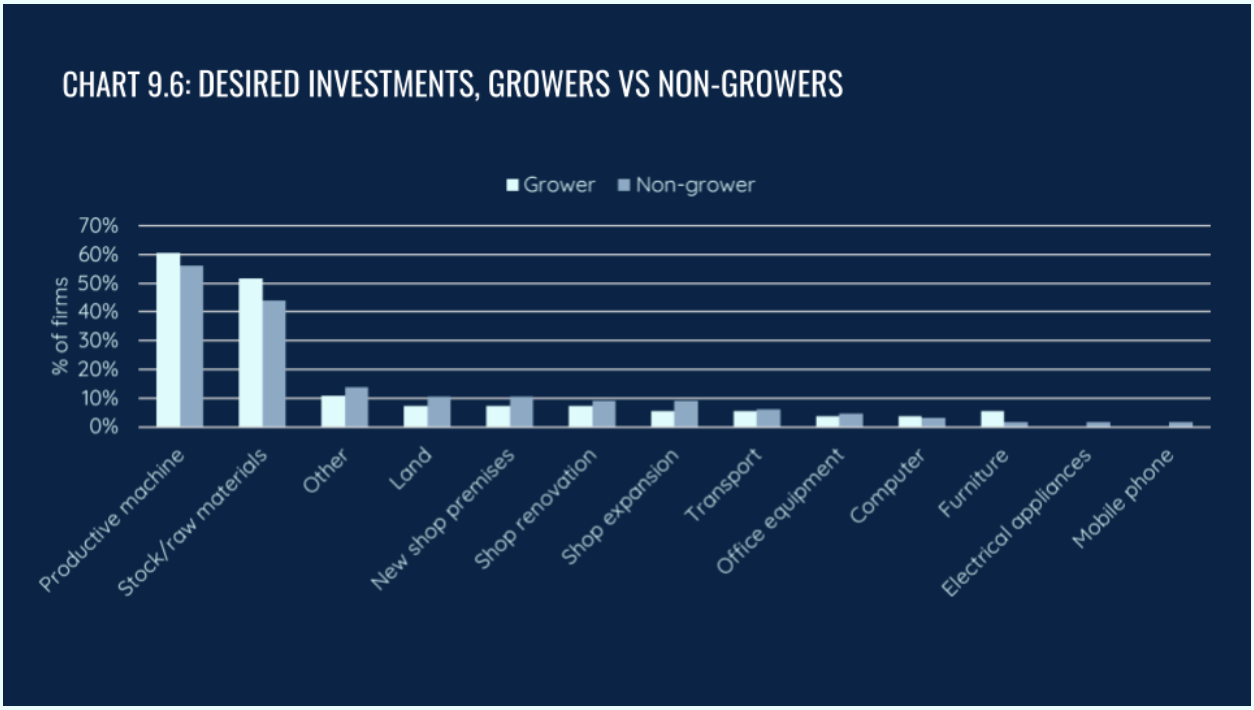
BUSINESS PRACTICES, INVESTMENTS, AND BARRIERS TO GROWTH

If aspirations do not make a difference to growth, it's natural to ask if other practices are more correlated with growth, and whether the growers perceive different barriers to growth than non-growers. In summary, there are no meaningful differences between growers and non-growers in business practices, employment, diversification, or investment behaviors.

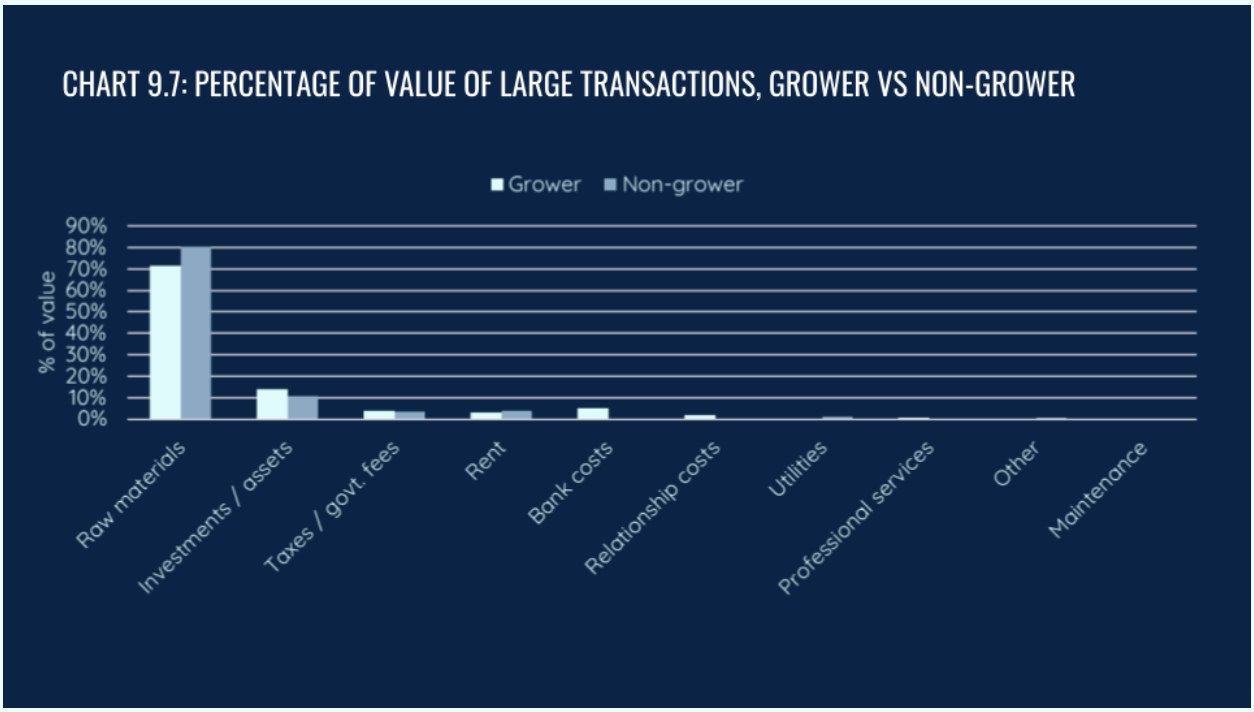
Since most policy efforts focused on growth in this segment of the economy prioritize investment (e.g., with policies to provide investment credit or subsidize investment credit), we looked especially at firms' investment behavior and intentions. To do so, during the study, we asked firms

to categorize their expenses with "investment" as one of the categories. With quantitative data we also looked at firm investments through a different lens: the relative size of expenses. Specifically, we looked at single expenses with an amount that is larger than the average plus 3 times the standard deviation of a single expense from the given firm. We classified these as "large purchases."

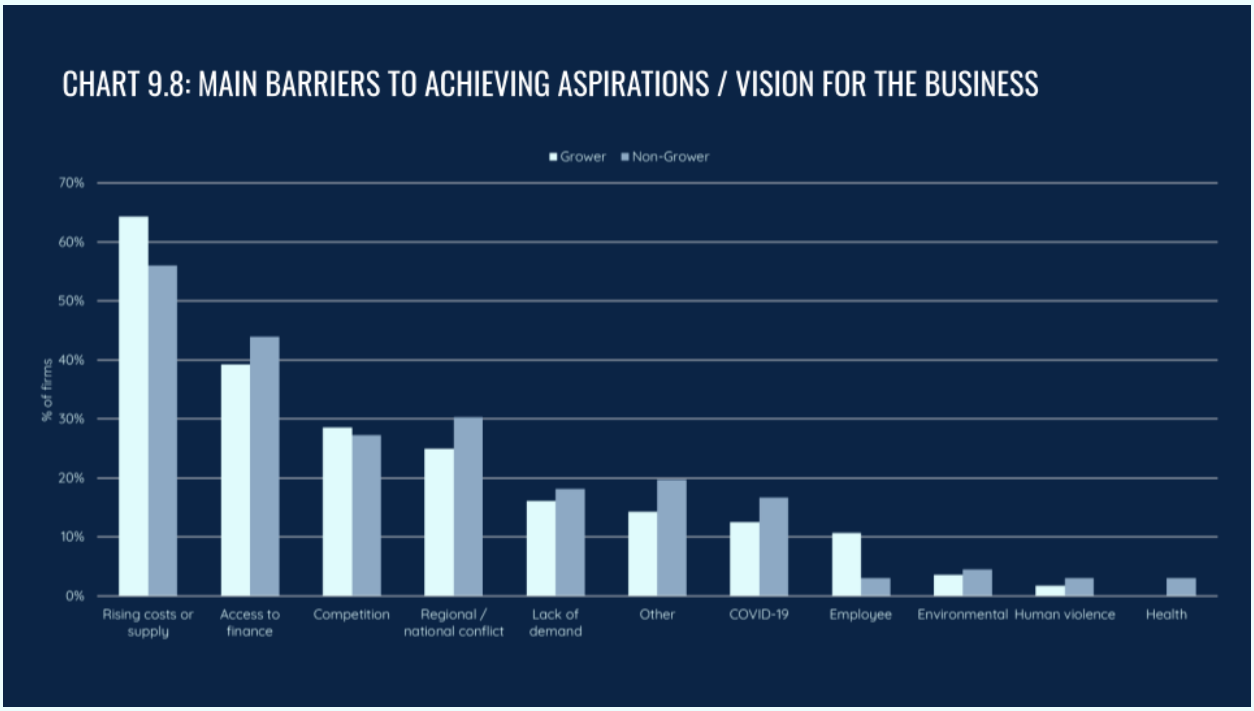
When we ask firms about investments that they would like to make, just under 60% of them report that they would like to invest in a productive machine. The only other investment that a significant portion of firms aspired to was raw materials, which nearly 50% of firms noted, though raw materials would not qualify as an investment in most small business credit programs. Interestingly, while there was not a gap between growers and non-growers in terms of desire to invest in a machine, growers reported interest in buying stocks of raw materials at a nearly 10% higher rate than non-growers.



Most firms — grower or not — made a "large purchase" at some point in the study period. When we look at these actual expenses during the year of the study we find that large purchases were overwhelmingly focused on raw materials, not assets; there were not differences between growers and non-growers in these terms.



Consistent with the value of large purchases being focused on raw materials, 60% of firms in Colombia report that the biggest barrier to achieving their aspirations is access to and rising costs of raw materials. Less than half of firms report that access to finance is a significant barrier to their aspirations (See Chart 9.8). When instead we ask firms about barriers to making their desired investments (which as noted above is often raw materials), more than three quarters say lack of capital is a major barrier. Together this suggests that firms do not perceive that additional assets are necessary to achieve their growth and stability goals. Instead, it is working capital that is a more significant barrier and they do not perceive that external finance is the path to improve working capital. Importantly, while we don't go into detail here, 60% of firms (with no difference between growers and non-growers) report that they reserve funds specifically for coping with risks, which may help explain why firms find it difficult to self-finance their desired levels of raw material "investments."



Credits

The principal investigators for the Small Firm Diaries global project are Timothy Ogden and Jonathan Morduch; and for the Colombian arm of the study, Luz Magdalena Salas Bahamón and Jana Schmutzler De Uribe. The principal investigators acknowledge the contributions of Rachael Eplee, Laura Freschi, Michelle Kempis, Yeji Lee, Camila Londoño Sanin, and David Pinedo de la Hoz in creating this Country Report.

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About the Study

The Small Firm Diaries is a global initiative to better understand small firms in low-income neighborhoods of developing countries.

Visit smallfirmdiaries.org for more information and additional publications.

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